Glen S RJZ

SPECK & AANESTAD EXTRA COPY
A PROFESSIONAL CORPORATION
ATTORNEYS

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POST OFFICE BOX 987
KETCHUM, IDAHO 83340

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FACSIMILE
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February 27, 2003

RECEIVED
MAR - 4 2003
Department of Water Resources

Mr. Karl J. Dreher, Director
Idaho Department of Water Resources
1301 North Orchard Street
Statehouse Mail
Boise ID 83720-9000

Re: In the Matter of Application for Permit No. 37-20742
Response to Petition for Review of Preliminary Order

Dear Director Dreher:

Enclosed is the original and one copy of the Response to Petition for Review of Preliminary Order of Applicant, Robert G. Friedman. Please receipt date stamp the copy and return it to me in the self-addressed, postage pre-paid envelope I have included for that purpose.

Sincerely yours,

SPECK & AANESTAD
A Professional Corporation

By: J. P. Speck
James P. Speck

JPS:sgg
Enclosures
cc: Client (w/enclosures) via fax
Chuck Brockway (w/enclosures) via fax
Everett Davis (w/enclosures) via fax
L. Glen Saxton (w/enclosures) via mail
Allen Merritt (w/enclosures) via mail
Doug Werth (w/enclosures) via mail

MICROFILMED
JUL 15 2004

Friedman Ditch Water Measurement
September 26, 2002





Flow = 0.18 cfs

Brockway Engineering, PLLC
November 2002

MICROFILMED
JUL 15 2003

EXHIBIT - 16-2

Friedman Ditch Water Measurement
July 19, 2000



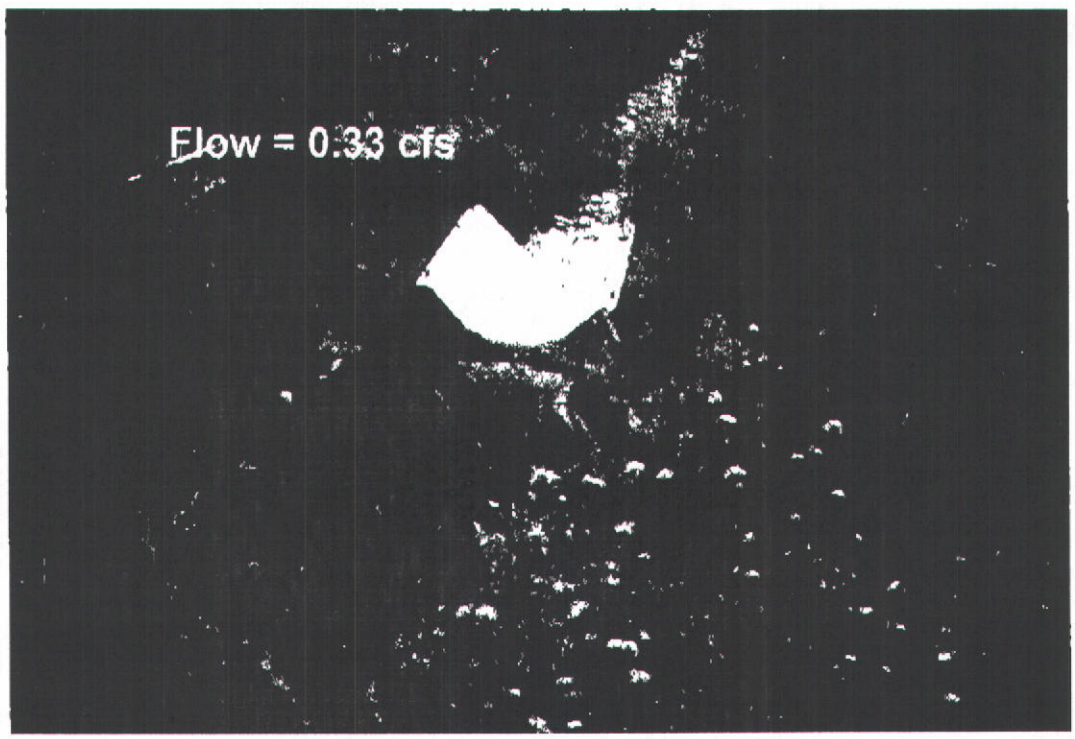
Brockway Engineering, PLLC
November 2002

JUL 15 2004

EXHIBIT - 16-3

Friedman Ditch Water Measurement
August 2, 2000





Brockway Engineering, PLLC
November 2002

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JUL 15 2004
EXHIBIT - 16-4

Eagle Cre[illegible]rigation Company - Section 14 and 2[illegible]5N, R17E
Amended Irrigation Claim - Place of Use, Acreage and Points of Diversions
Figure One



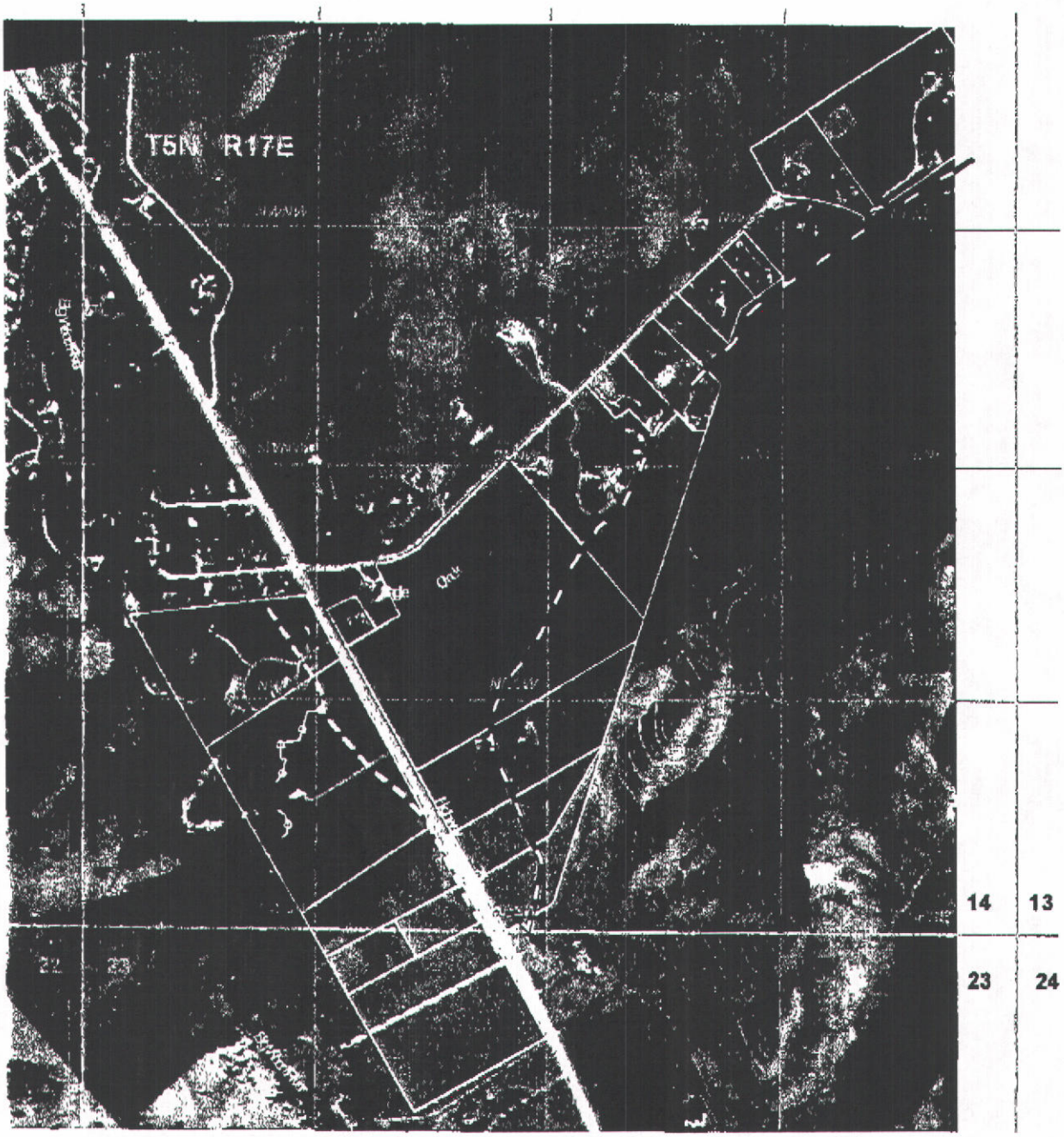
NOTE: Points of diversion noted along Eagle Creek (EC)

Rectified FSA Aerial Photos, 1999
Brockway Engineering, PLLC
Revised May, 2002

MICROFILMED
JUL 15 2004

EXHIBIT-17

Eagle Creek Irrigation Company - Section 14 and 23, T5N, R17E
Present Ditch Diversion System
Figure Two



SCALE 1:10,800
One Inch = 900 feet

N

1000 0 1000 Feet

Ponds

Pickrell Ditch
Main Ditch
West Ditch
Present Property Lines
Diversions by ECIC Members

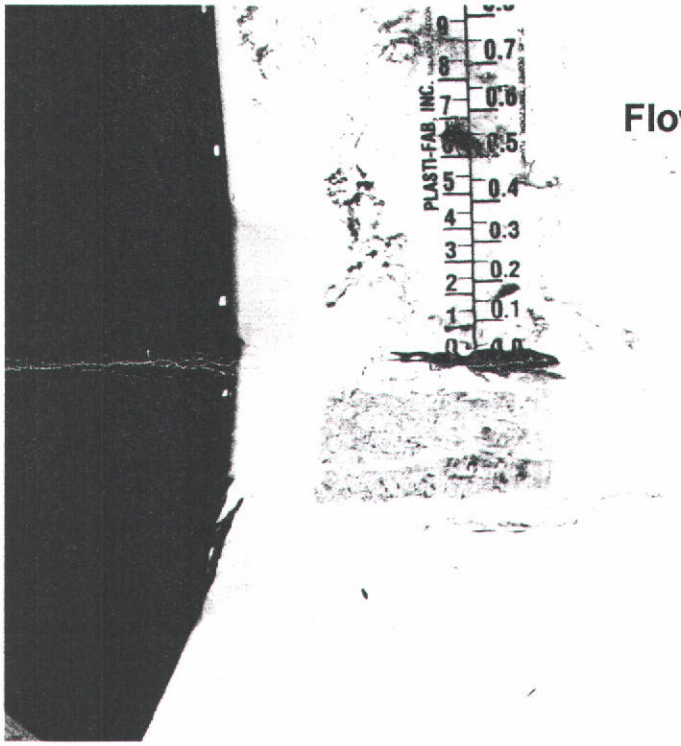
Rectified FSA Aerial Photos, 1999
Brockway Engineering, PLLC
Revised May, 2002

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JUL 15 2004

EXHIBIT - 18

Friedman Ditch Water Measurement
September 26, 2002





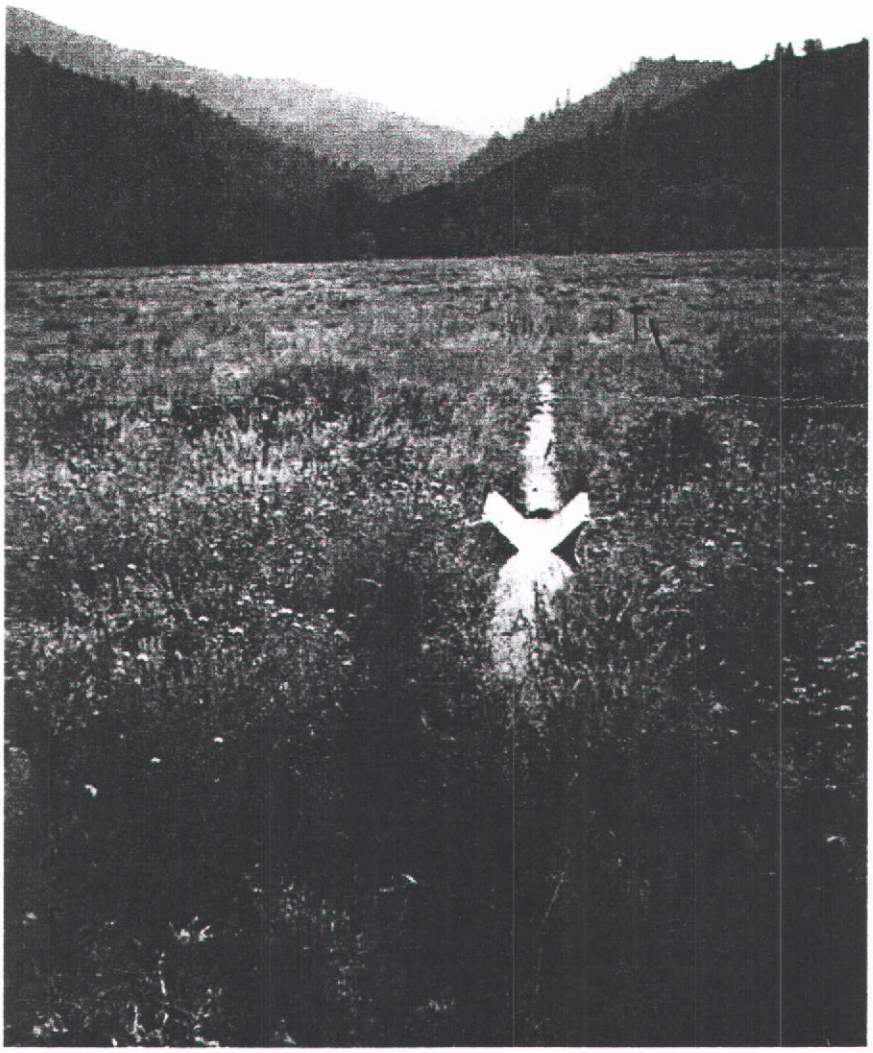
Flow = 0.18 cfs

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JUL 15 2004

Brockway Engineering, PLLC
November 2002

EXHIBIT - 16-2

Friedman Ditch Water Measurement
July 19, 2000



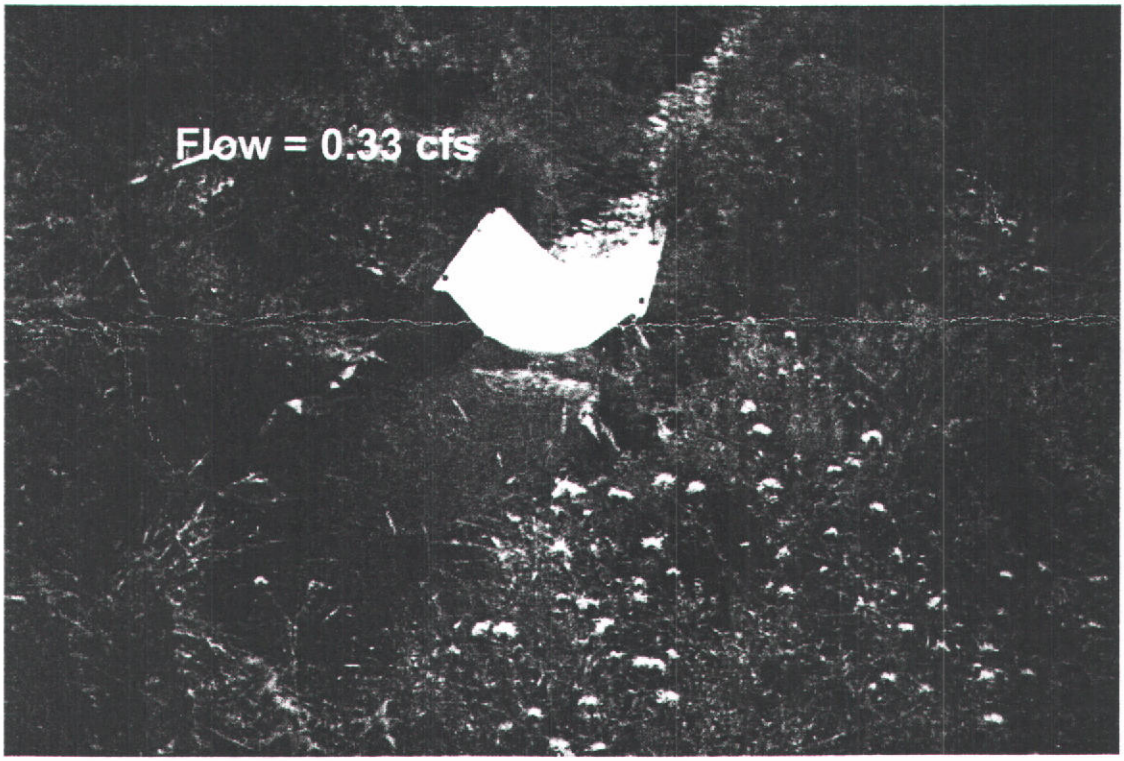
Brockway Engineering, PLLC
November 2002

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EXHIBIT - 16-3

[redacted]iedman Ditch Water Me[redacted]urement
August 2, 2000



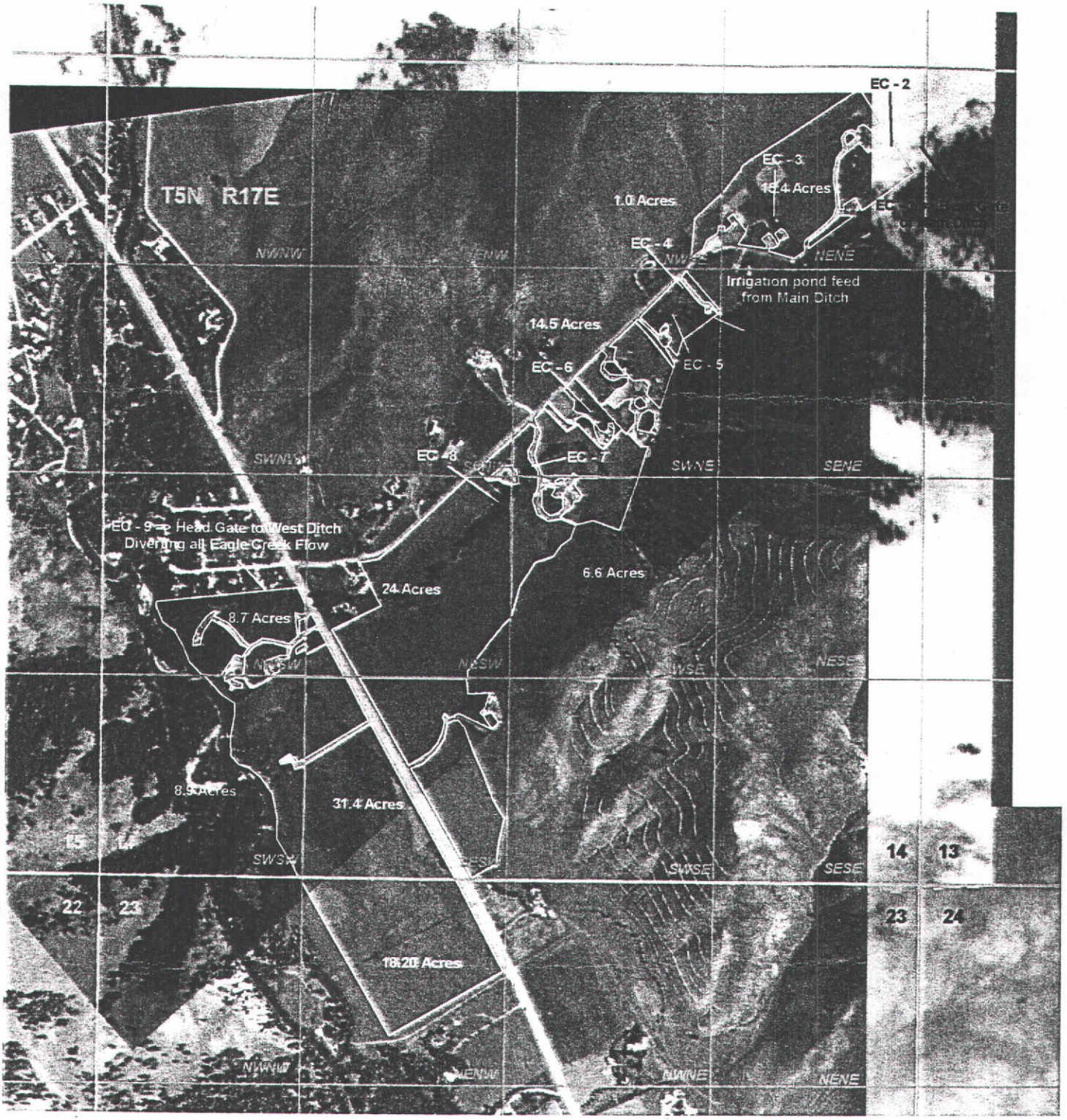


Brockway Engineering, PLLC
November 2002

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EXHIBIT - 16-4

Eagle Cre[illegible]rigation Company - Section 14 a[illegible] 5N, R17E
Amended Ir[illegible]tion Claim - Place of Use, Acreage an[illegible]oints of Diversions
Figure One



SCALE 1:11,000
One inch = 900 feet

900 0 900 1800 2700 3600 Feet

N

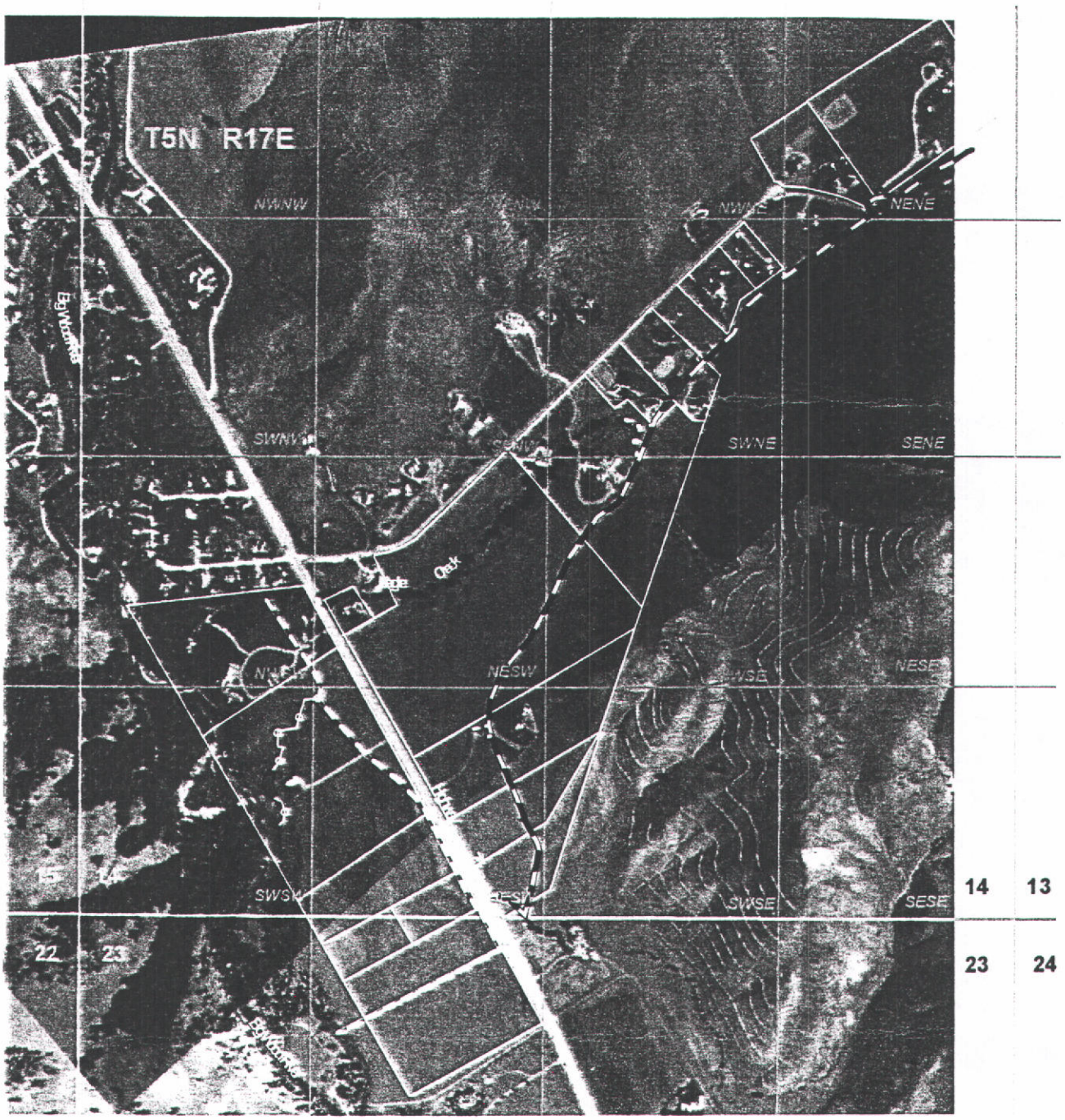
NOTE: Points of diversion noted along Eagle Creek (EC)

Rectified FSA Aerial Photos, 1999
Brockway Engineering, PLLC
Revised May, 2002

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EXHIBIT-17

Eagle Creek Irrigation Company - Section 14 and 23, T5N, R17E
Present Ditch Diversion System
Figure Two



SCALE 1:10,800
One Inch = 900 feet

N

1000 0 1000 Feet

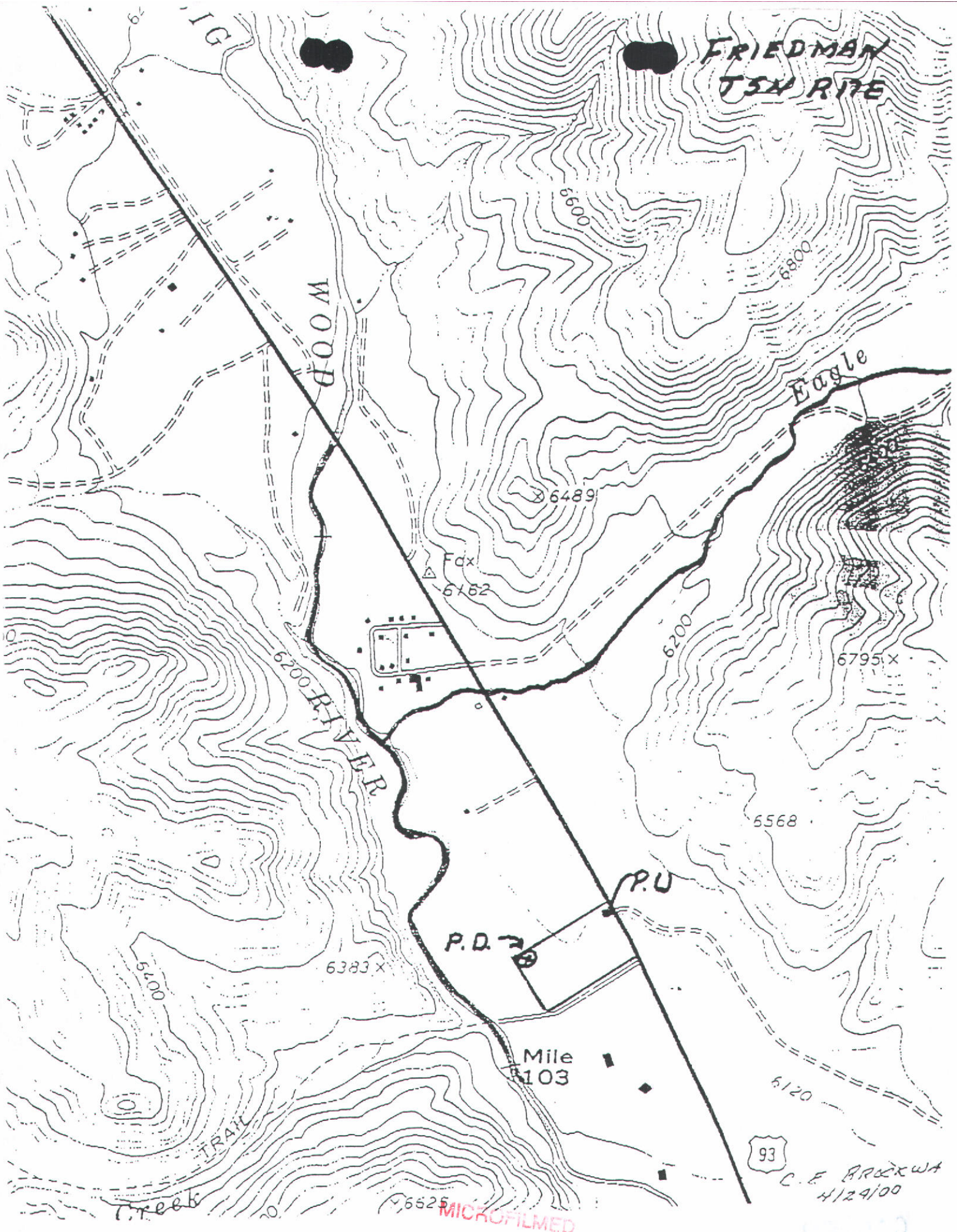
Ponds

Pickrell Ditch
Main Ditch
West Ditch
Present Property Lines
Diversions by ECIC Members

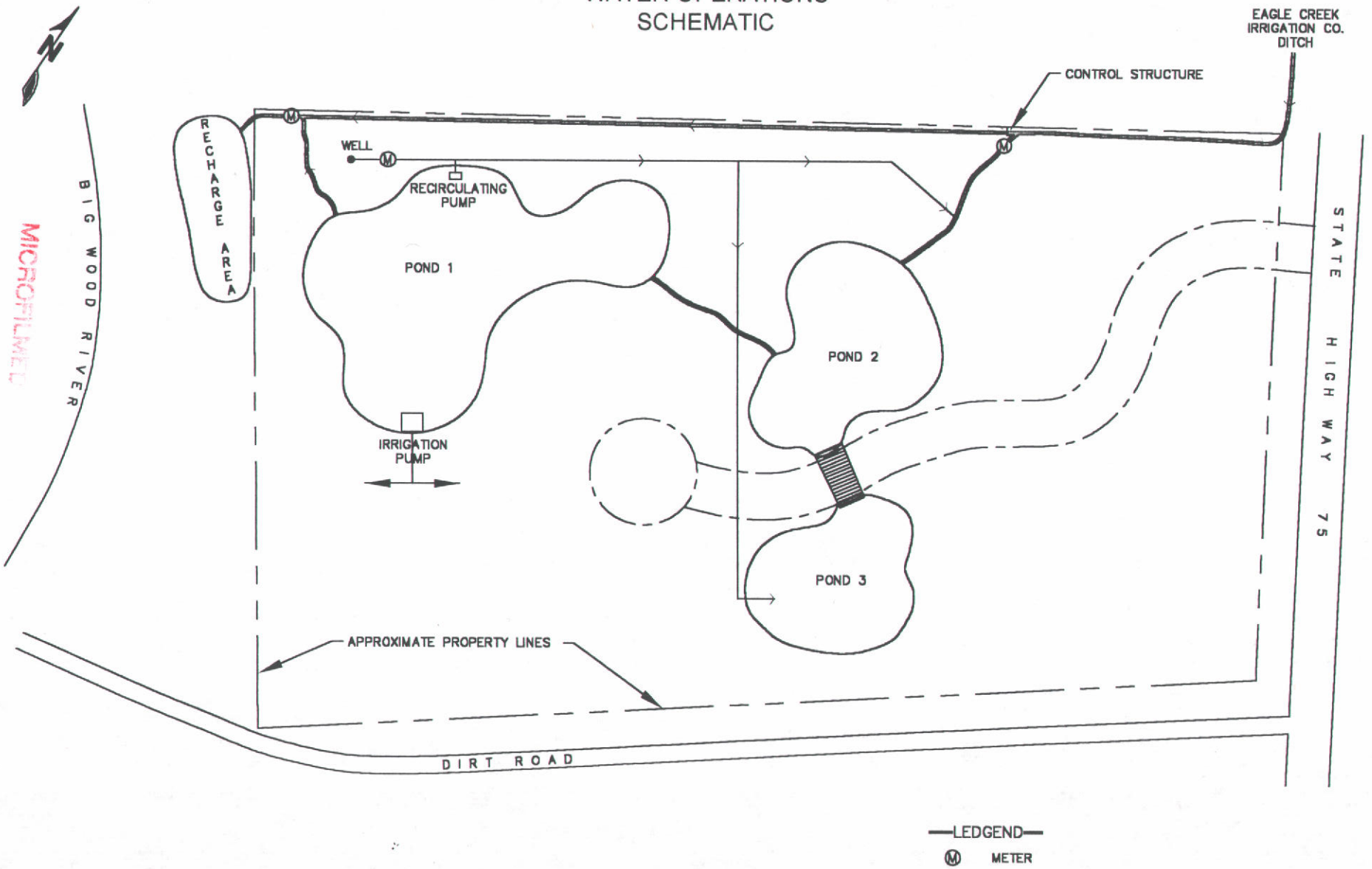
Rectified FSA Aerial Photos, 1999
Brockway Engineering, PLLC
Revised May, 2002

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JUL 15 2004

EXHIBIT – 18


FRIEDMAN
T5N R1E
6600
6800
Eagle
6489
Fax
6162
6200
6795 x
6200 RIVER
6568
P.U
P.D
6383 x
6400
Mile
103
6120
93
TRAIL
6625
MICROFILMED
JUL 15 2004
37-20742

FRIEDMAN FOX CREEK
WATER OPERATIONS
SCHEMATIC



MICROFILMED
JUN 15 2004

37-20742

37-20742

EXHIBIT B

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JUL 15 2004




00 8 2

00 8 2




00 8 2


00 8 2






00 8 2
















410-01-00
Freidman 9-28-01













Well Interference Analysis Friedman Project Well

Estimated Well Drawdown

C.E. BROCKWAY October 3, 2000 Brockway Engineering P.L.L.C. Wellint.xls

AQUIFER PROPERTIES BASED ON USBR GROUNDWATER MANUAL-SAND AND GRAVEL ALLUVIAL AQUIFER
AND PUMPING TESTS OF WELLS ON DIP CREEK SUBDIVISION
EST. HOLE DIA. 12 INCHES

USING THEIS FORMULA S=114.6*Q/T*W(U)
S= DRAWDOWN IN FT
Q= PUMPING RATE GPM
T= COEFFICIENT OF TRANSMISSIBILITY GPD/FT
W(U)= WELL FUNCTION OF 'U'

W(U)=-.5772-LOGeU +U-U^2/(2*2!)+U^3/(3*3!)-U^4/(4*4!) .....
U=1.87*r^2*S/(T*t)
r=DISTANCE IN FT. FROM CENTER OF PUMPED WELL TO DRAWDOWN POINT
S=COEFFICIENT OF STORAGE
T=COEFFICIENT OF TRANSMISSIBILITY, GPD/FT
t= TIME SINCE PUMPING STARTED, DAYS

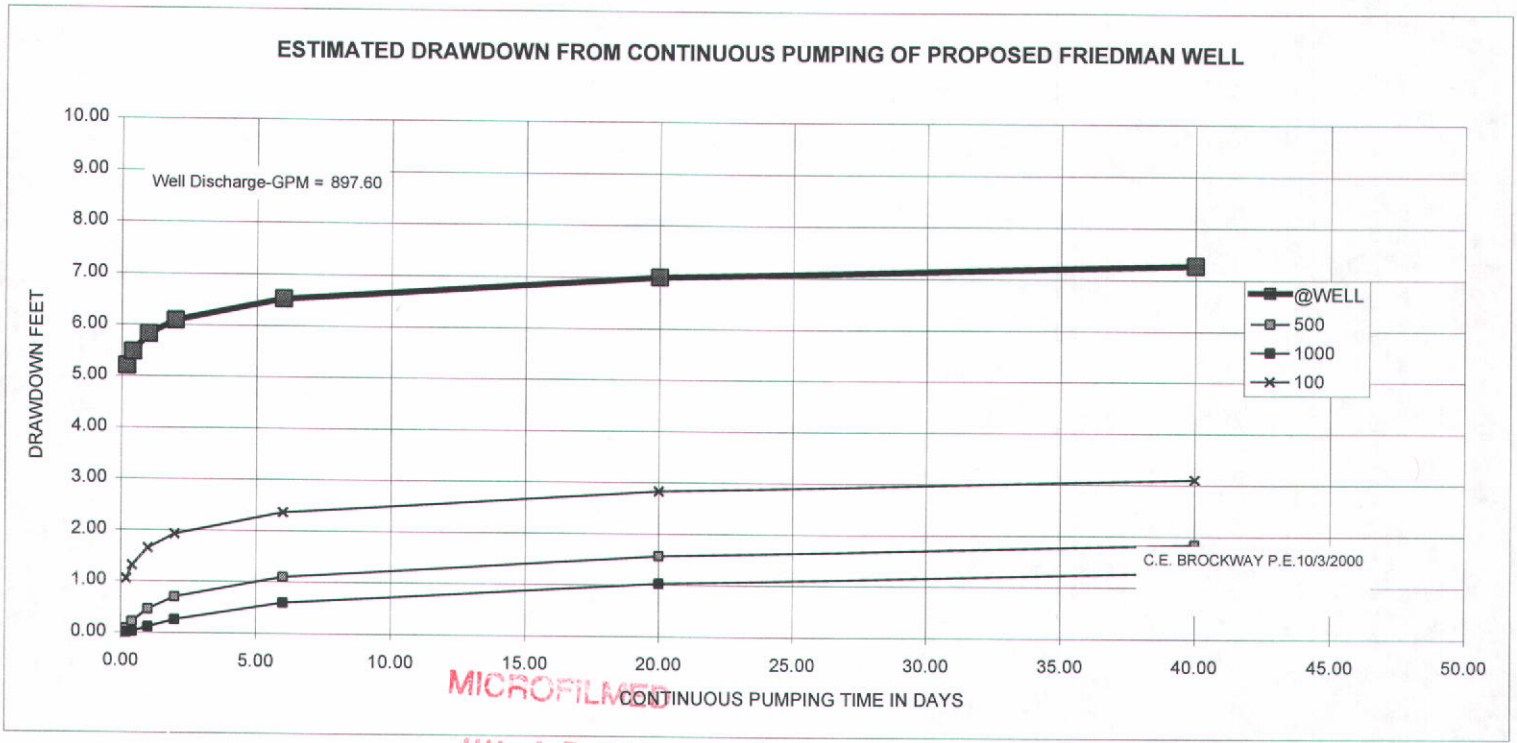
Department of Water Resources
APPLICANT'S
Exhibit 7
Date Admitted 11/13/02

INPUT

r1=	0.500	FT	K=	350.00	FT/DAY
r2=	100	FT	K=	0.00405093	CFS/FT^2
r3=	500	FT	K=	2.61E+03	GPD/FT^2
r4=	1000	FT	SAT. DEPTH EST.=	100	FT
r5=	5280	FT	TRANSMISSIVITY=	261100	GPD/FT
S=	0.12		TRANSMISSIVITY=	4.04E-01	FT^2/SEC
T=	261100	GPD/FT	TRANSMISSIVITY=	34906.4	FT^2/DAY
Q/WELL	897.60	GPM =	2.000 CFS		

TIME HOURS	TIME t DAYS	U w/r1 0.5	WELL FUNCT. W(U)1	DRAW DOWN @WELL	SPEC. CAP GPM/FT	U W/r2 100	WELL FUNCT. W(U)2	DRAW DOWN @ 100	U W/r3 500	WELL FUNCT. W(U)3	DRAW DOWN 500	U W/r4 1000	WELL FUNCT. W(U)4	DRAW DOWN @ 1000
5	0.21	1.031E-06	13.2075	5.20	173	4.125E-02	2.6517	1.04	1.031E+00	0.2082	0.08	4.125E+00	0.0000	0.00
10	0.42	5.157E-07	13.9006	5.48	164	2.063E-02	3.3245	1.31	5.157E-01	0.5412	0.21	2.063E+00	0.0449	0.02
24	1.00	2.149E-07	14.7761	5.82	154	8.594E-03	4.1880	1.65	2.149E-01	1.1644	0.46	8.594E-01	0.2793	0.11
48	2.00	1.074E-07	15.4692	6.09	147	4.297E-03	4.8769	1.92	1.074E-01	1.7583	0.69	4.297E-01	0.6551	0.26
144	6.00	3.581E-08	16.5678	6.53	138	1.432E-03	5.9726	2.35	3.581E-02	2.7878	1.10	1.432E-01	1.5043	0.59
480	20.00	1.074E-08	17.7718	7.00	128	4.297E-04	7.1756	2.83	1.074E-02	3.9670	1.56	4.297E-02	2.6125	1.03
960	40.00	5.372E-09	18.4650	7.27	123	2.149E-04	7.8685	3.10	5.372E-03	4.6548	1.83	2.149E-02	3.2845	1.29

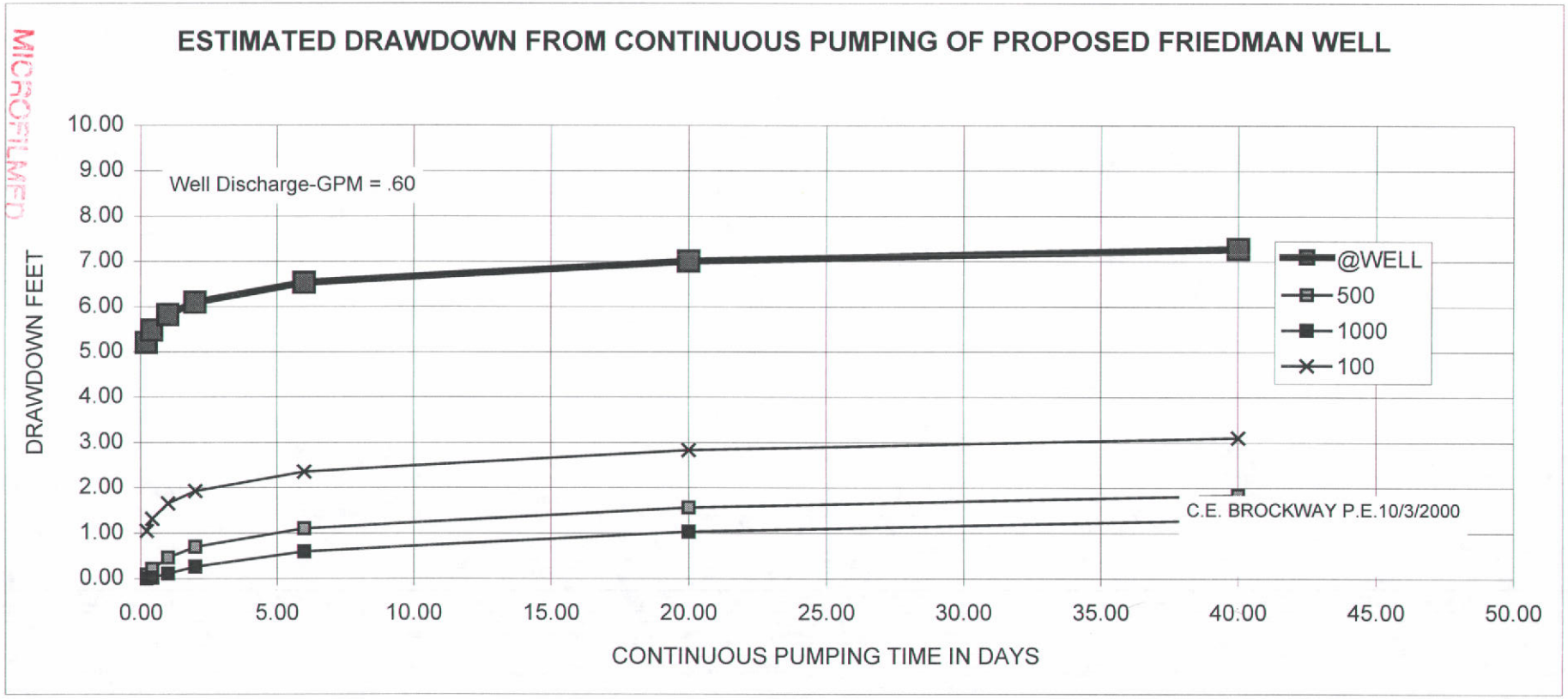
HOURS	DAYS	@WELL	100	500	1000 DISTANCE FEET
0	0.00	0	0	0	0
5	0.21	-5.20	-1.04	-0.08	0.00
10	0.42	-5.48	-1.31	-0.21	-0.02
24	1.00	-5.82	-1.65	-0.46	-0.11
48	2.00	-6.09	-1.92	-0.69	-0.26
144	6.00	-6.53	-2.35	-1.10	-0.59
480	20.00	-7.00	-2.83	-1.56	-1.03
960	40.00	-7.27	-3.10	-1.83	-1.29

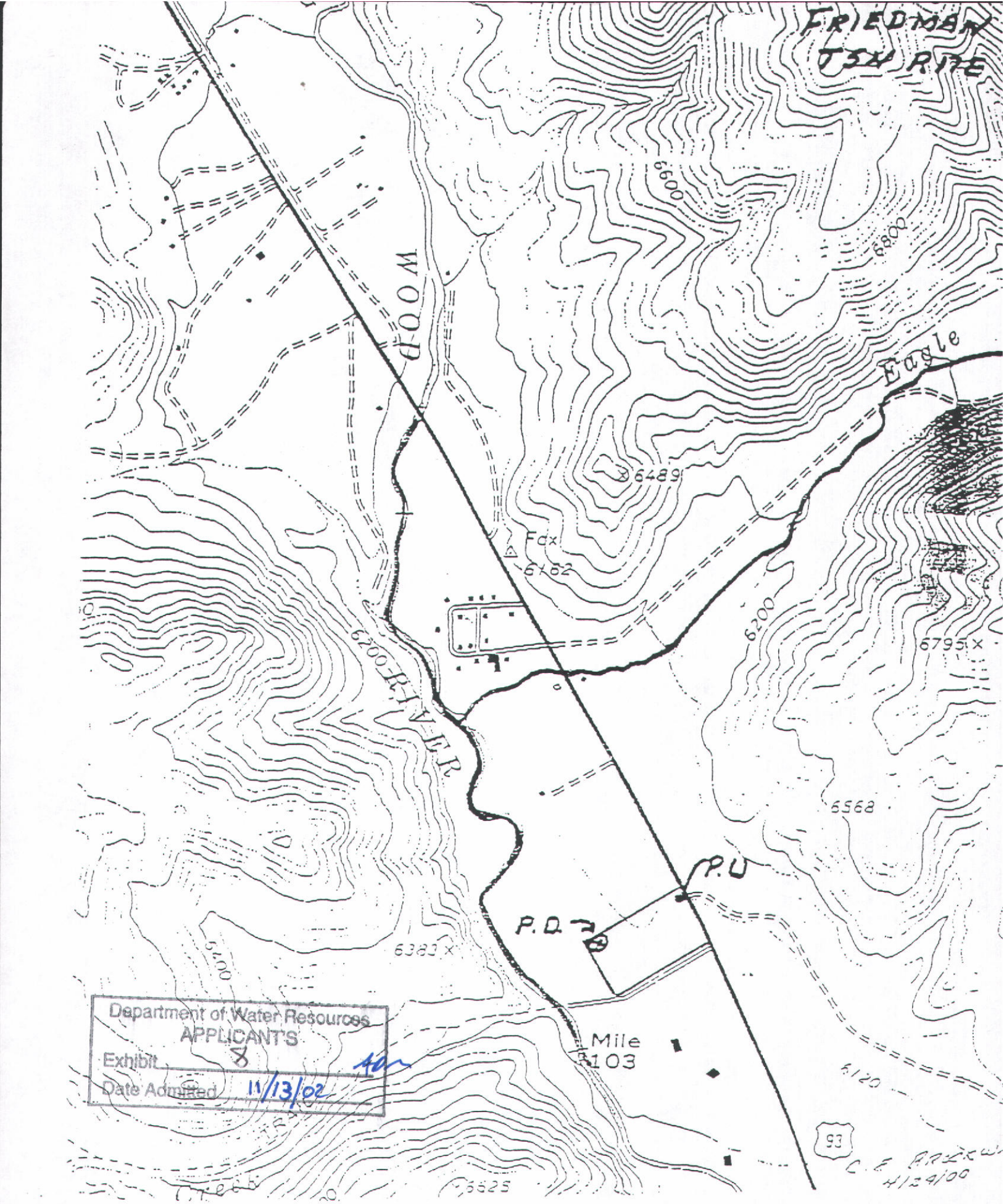


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EXHIBIT-7-1

MICROFILMED
JUL 15 2004

EXHIBIT - 7-8





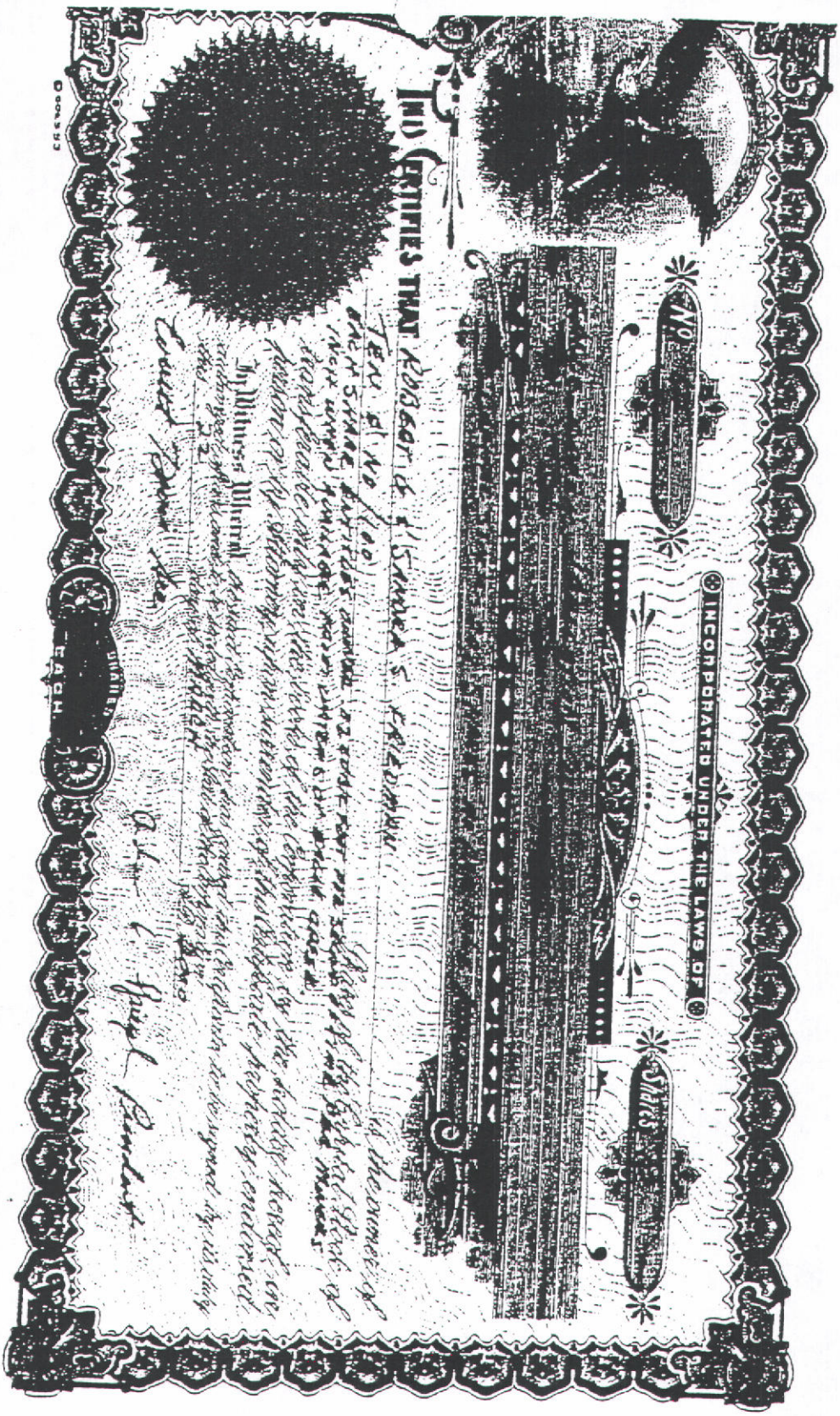
Department of Water Resources
APPLICANT'S
Exhibit 8
Date Admitted 11/13/02

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JUL 15 2004

EXHIBIT - 8

A00015
37-20742

37-20742



Department of Water Resources
APPLICANT'S
Exhibit 9
Date Admitted 11/13/02

MICROFILMED
JUL 15 2004

EXHIBIT - 9

FRIEDMAN FOX CREEK
WATER OPERATIONS
SCHEMATIC

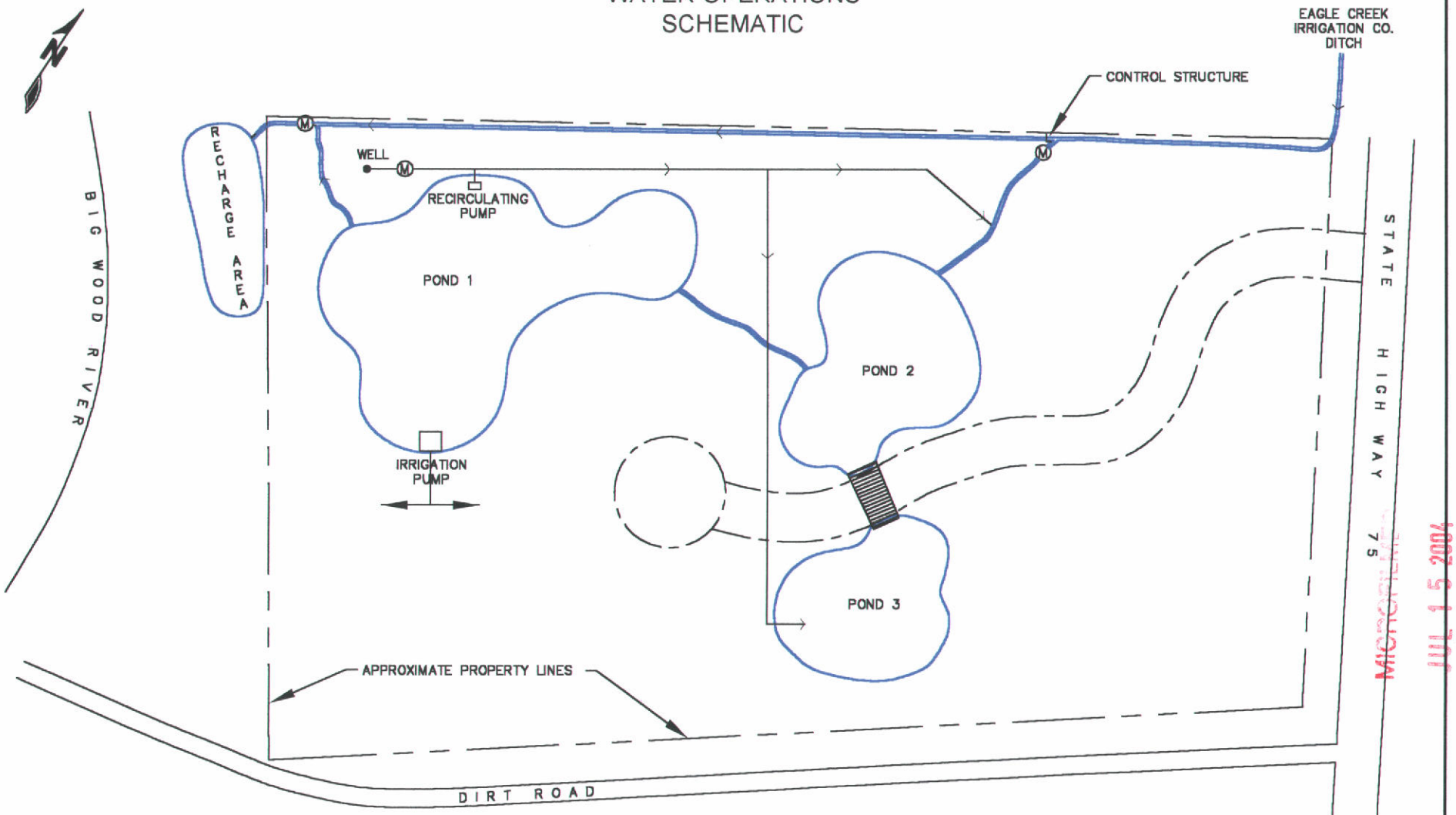
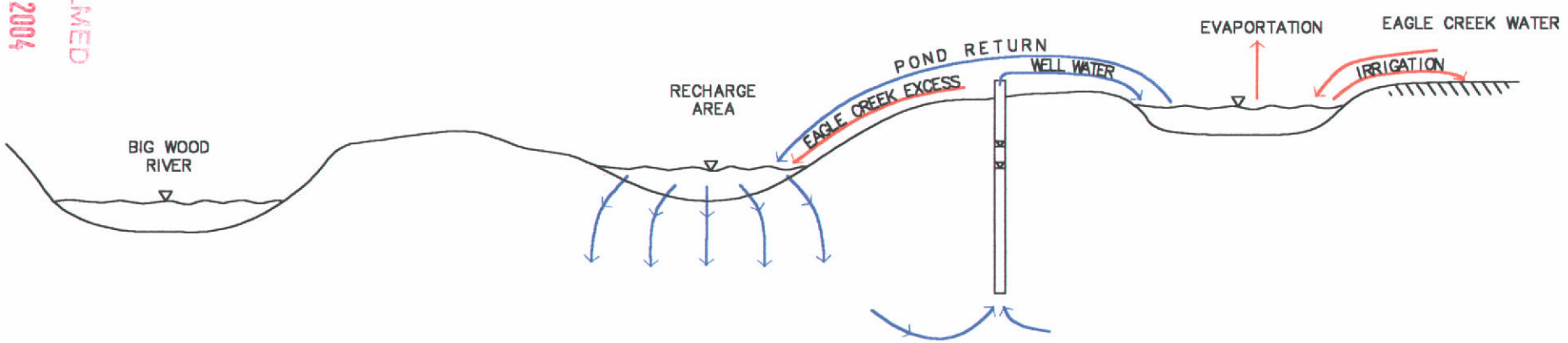


EXHIBIT - 10

Department of Water Resources
APPLICANT'S
Exhibit 10
Date Admitted 11/13/02

JUL 15 2004

FRIEDMAN FOX CREEK
WATER OPERATIONS
CROSS SECTION



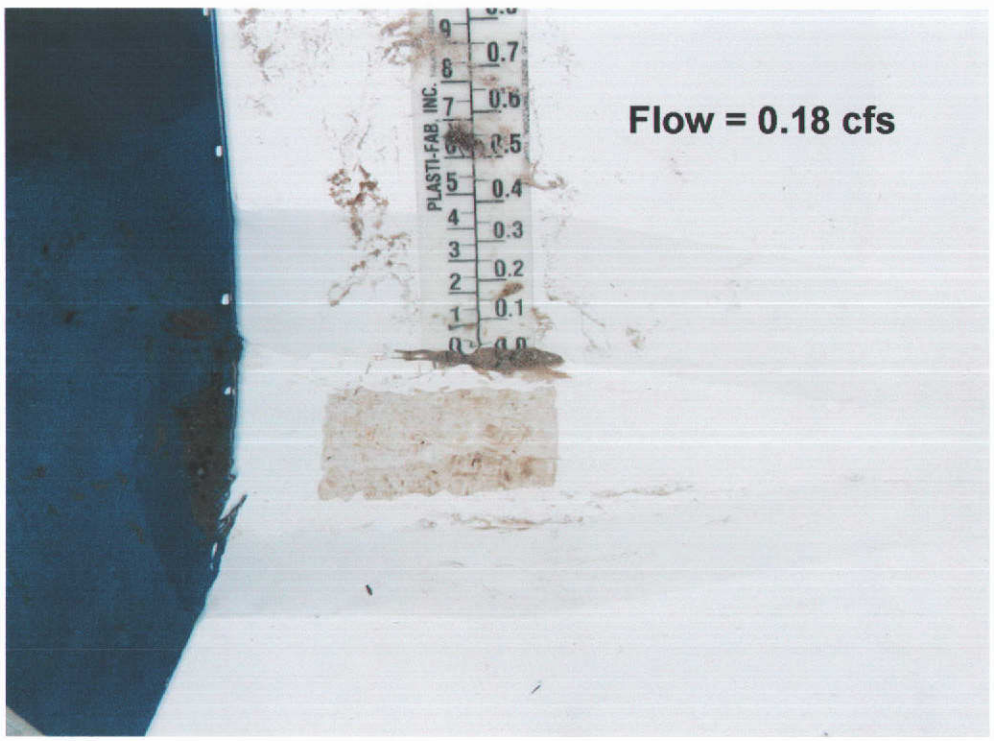
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JUL 15 2004

EXHIBIT - 11

Department of Water Resources
APPLICANT'S
Exhibit 11
Date Admitted 11/13/02

Friedman Ditch Water Measurement
September 26, 2002





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JUN 29 2004

Brockway Engineering, PLLC
November 2002

EXHIBIT - 16-2

Friedman Ditch Water Measurement
July 19, 2000



MICROFILMED
JUL 15 2002

Brockway Engineering, PLLC
November 2002

EXHIBIT - 16-3

Friedman Ditch Water Measurement
August 2, 2000





OCT 15 2004

Brockway Engineering, PLLC
November 2002

EXHIBIT - 16-4

CEB
9/26/02

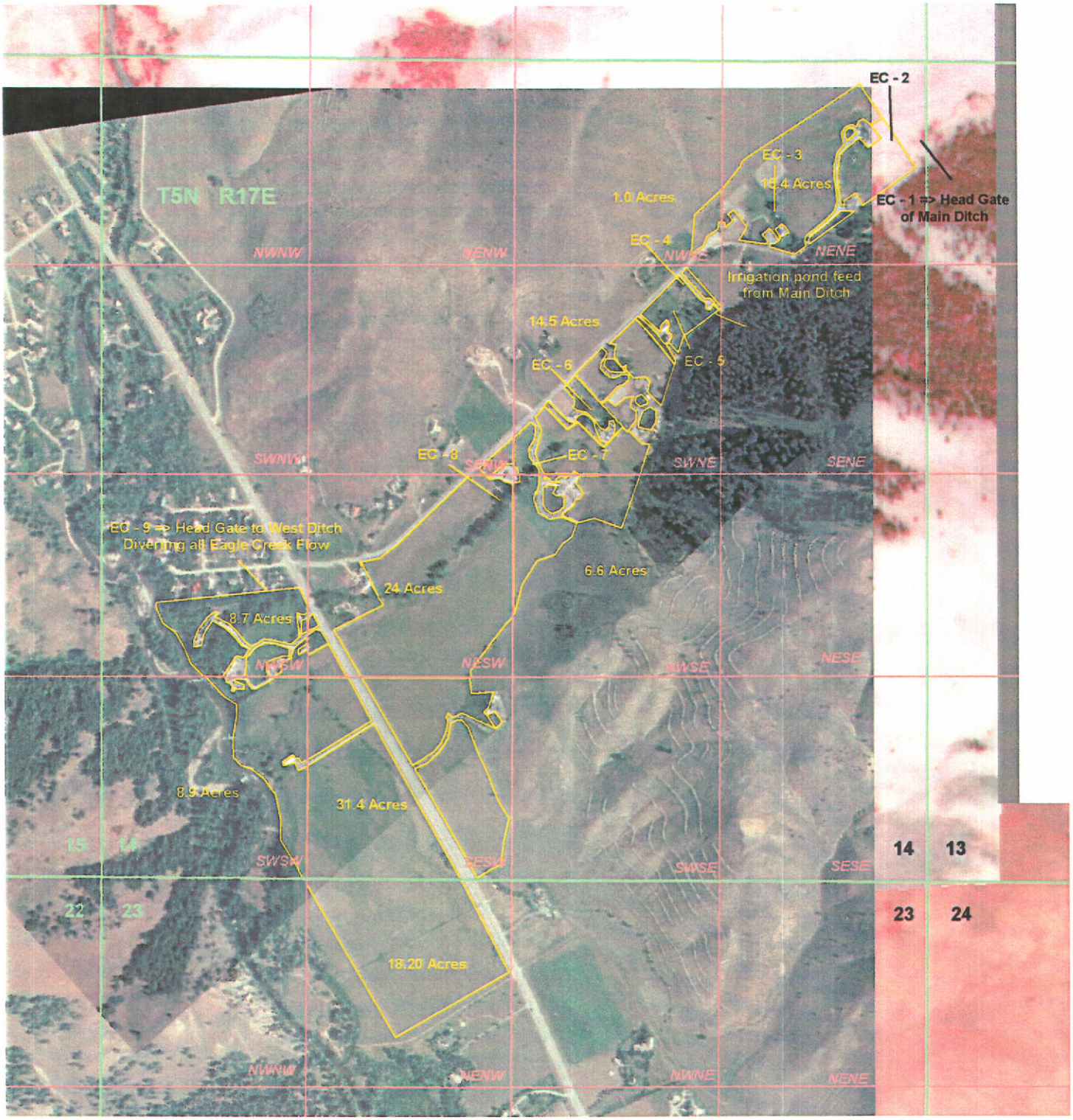




JUL 15 2004

16-5

Eagle Cre[illegible]rigation Company - Section 14 and 2[illegible]5N, R17E
Amended Irrigation Claim - Place of Use, Acreage and Points of Diversions
Figure One



SCALE 1:11,000
One inch = 900 feet

900 0 900 1800 2700 3600 Feet

N

NOTE: Points of diversion noted along Eagle Creek (EC)

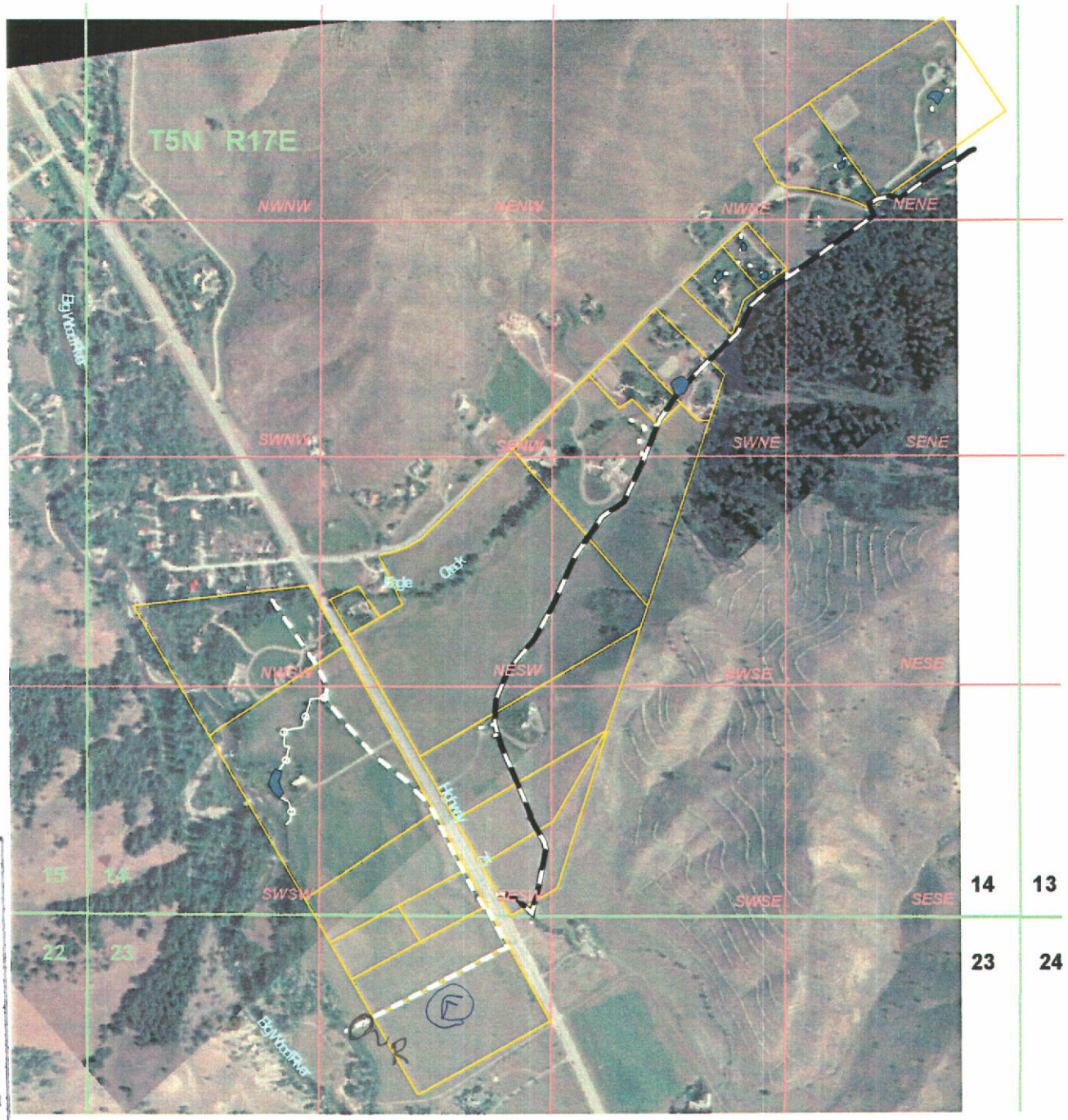
Rectified FSA Aerial Photos, 1999
Brockway Engineering, PLLC
Revised May, 2002

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JUL 15 2004

EXHIBIT-17

Department of Water Resources
APPLICANT'S
Exhibit 17
Date Admitted 11/13/02

Eagle Creek Irrigation Company - Section 14 and 23, T5N, R17E
Present Ditch Diversion System
Figure Two

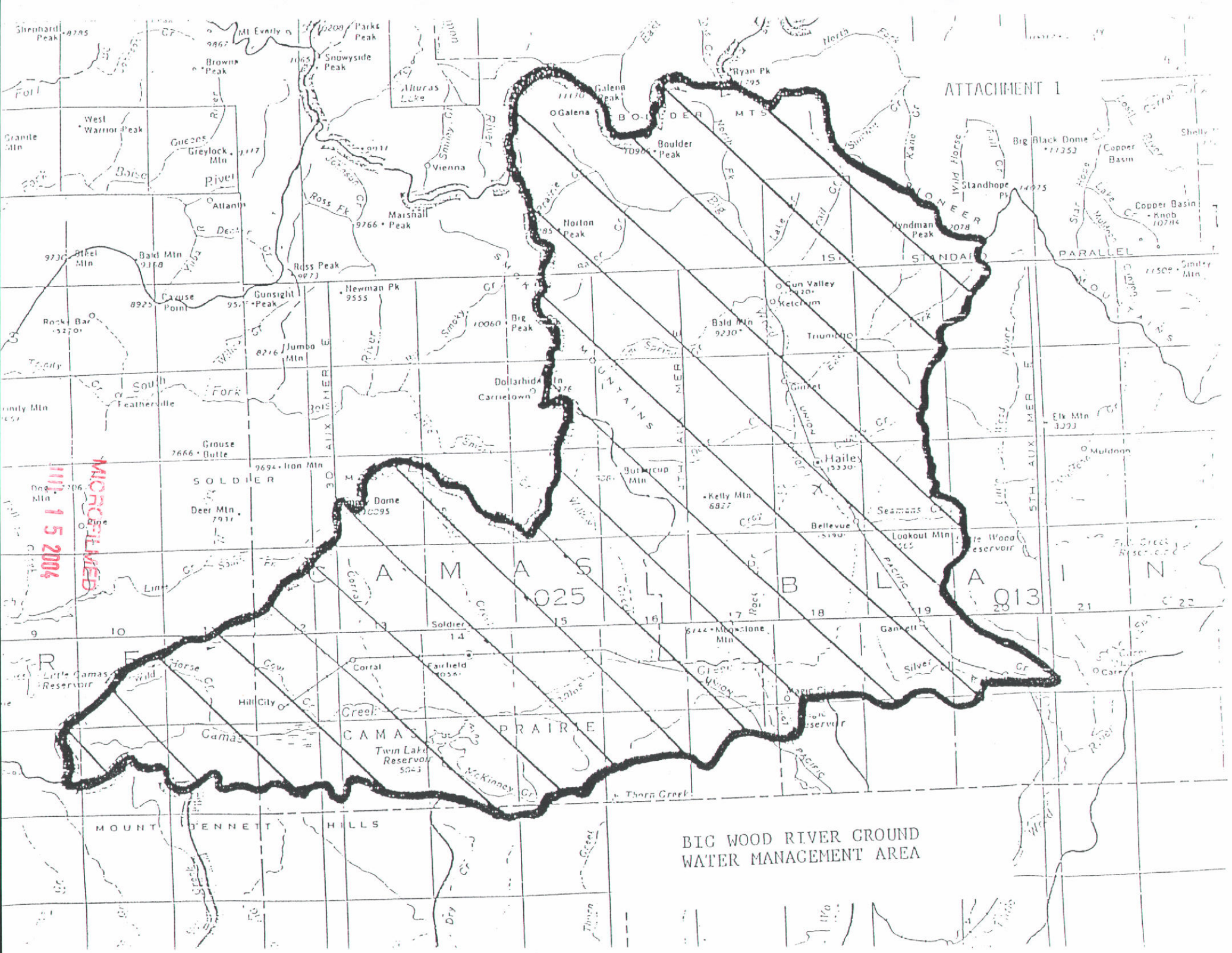


Rectified FSA Aerial Photos, 1999
Brockway Engineering, PLLC
Revised May, 2002

Department of Water Resources
APPLICANTS
Exhibit 18
Date Admitted 11/13/02

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EXHIBIT – 18


ATTACHMENT 1
BIG WOOD RIVER GROUND
WATER MANAGEMENT AREA
MICROFILMED
JUN 15 2006
CAMAS
PRAIRIE
SOLDIER
MOUNTAINS
BOULDER
MTS
PIONEER
MOUNTAINS
Hailey
Ketchum
Sun Valley
Carey
Picabo
Gannett
Bellevue
Fairfield
Hill City
Soldier
Corral
Vienna
Marshall
Carrietown
Featherville
Atlanta
Twin Lakes
Reservoir
Little Camas
Reservoir
Magic
Reservoir
Boulder
Peak
Galena
Peak
Norton
Peak
Big
Peak
Lyndman
Peak
Standhope
Pk
Big Black Dome
Copper
Basin
Knob
Ryan Pk
Parks
Peak
Snowyside
Peak
Brown
Peak
West
Warrior Peak
Greylock
Mtn
Marshall
Peak
Ross Peak
Newman Pk
Gunsight
Peak
Jumbo
Mtn
Bald Mtn
Dollarhide
Mtn
Iron Mtn
Deer Mtn
Grouse
Butte
Grouse
Point
Rocky Bar
Bald Mtn
Elk Mtn
Muldoon
Seamans
Lookout Mtn
Kelly Mtn
Buttercup
Mtn
Dome
Mtn
Mineslone
Mtn
Alturas
Lake
Wild Horse
Creek
Corral
Creek
Silver
Creek
Rock
Creek
Union
Creek
McKinney
Gr
Thorn Creek
Pacific
Creek
Camas
Creek
Big
Wood
River
Prairie
Creek
Smiley
Creek
Ross Fk
Warm
Springs
Creek
Deer
Creek
Willow
Creek
Lake
Creek
Star
Hope
Lake
Wildhorse
Creek
Kane
Spring
Creek
Muldoon
Creek
Fish Creek
Reservoir
Lake
Creek
Reservoir
Mt Evanly
9867
Alturas
Lake
Galena
Peak
11170
Boulder
Peak
10900
Ryan Pk
11295
Parks
Peak
10209
Snowyside
Peak
10065
Brown
Peak
West
Warrior Peak
Greylock
Mtn
9117
Marshall
Peak
9766
Norton
Peak
10185
Big
Peak
10060
Lyndman
Peak
10785
Standhope
Pk
11975
Big Black Dome
11352
Copper
Basin
Knob
10714
Ross Peak
9873
Newman Pk
9555
Gunsight
Peak
9511
Jumbo
Mtn
8216
Bald Mtn
9230
Bald Mtn
9368
Rocky Bar
9270
Grouse
Point
8925
Elk Mtn
9393
Dollarhide
Mtn
9376
Iron Mtn
9694
Deer Mtn
7931
Grouse
7666
Butte
Dome
10295
Buttercup
Mtn
Kelly Mtn
6827
Lookout Mtn
Mineslone
Mtn
6744
Fairfield
7056
Twin Lakes
Reservoir
5043
Sun Valley
5920
Ketchum
Hailey
5330
Bellevue
5190
Gannett
5805
Muldoon
Carey
Picabo
Vienna
Atlanta
Featherville
Carrietown
Rocky Bar
Little Camas
Reservoir
Magic
Reservoir
Wood
Reservoir
Fish Creek
Reservoir
Lake
Creek
Reservoir
Hill City
Soldier
Corral
Creek
Camas
Creek
Big
Wood
River
Prairie
Creek
Smiley
Creek
Ross Fk
Warm
Springs
Creek
Deer
Creek
Willow
Creek
Lake
Creek
Star
Hope
Lake
Wildhorse
Creek
Kane
Spring
Creek
Muldoon
Creek
Fish Creek
Reservoir
Lake
Creek
Reservoir
Mt Evanly
9867
Alturas
Lake
Galena
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11170
Boulder
Peak
10900
Ryan Pk
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Parks
Peak
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Snowyside
Peak
10065
Brown
Peak
West
Warrior Peak
Greylock
Mtn
9117
Marshall
Peak
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Norton
Peak
10185
Big
Peak
10060
Lyndman
Peak
10785
Standhope
Pk
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Big Black Dome
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Knob
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Ross Peak
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Carrietown
Rocky Bar
Little Camas
Reservoir
Magic
Reservoir
Wood
Reservoir
Fish Creek
Reservoir
Lake
Creek
Reservoir
Hill City
Soldier
Corral
Creek
Camas
Creek
Big
Wood
River
Prairie
Creek
Smiley
Creek
Ross Fk
Warm
Springs
Creek
Deer
Creek
Willow
Creek
Lake
Creek
Star
Hope
Lake
Wildhorse
Creek
Kane
Spring
Creek
Muldoon
Creek
Fish Creek
Reservoir
Lake
Creek
Reservoir
Mt Evanly
9867
Alturas
Lake
Galena
Peak
11170
Boulder
Peak
10900
Ryan Pk
11295
Parks
Peak
10209
Snowyside
Peak
10065
Brown
Peak
West
Warrior Peak
Greylock
Mtn
9117
Marshall
Peak
9766
Norton
Peak
10185
Big
Peak
10060
Lyndman
Peak
10785
Standhope
Pk
11975
Big Black Dome
11352
Copper
Basin
Knob
10714
Ross Peak
9873
Newman Pk
9555
Gunsight
Peak
9511
Jumbo
Mtn
8216
Bald Mtn
9230
Bald Mtn
9368
Rocky Bar
9270
Grouse
Point
8925
Elk Mtn
9393
Dollarhide
Mtn
9376
Iron Mtn
9694
Deer Mtn
7931
Grouse
7666
Butte
Dome
10295
Buttercup
Mtn
Kelly Mtn
6827
Lookout Mtn
Mineslone
Mtn
6744
Fairfield
7056
Twin Lakes
Reservoir
5043
Sun Valley
5920
Ketchum
Hailey
5330
Bellevue
5190
Gannett
5805
Muldoon
Carey
Picabo
Vienna
Atlanta
Featherville
Carrietown
Rocky Bar
Little Camas
Reservoir
Magic
Reservoir
Wood
Reservoir
Fish Creek
Reservoir
Lake
Creek
Reservoir
Hill City
Soldier
Corral
Creek
Camas
Creek
Big
Wood
River
Prairie
Creek
Smiley
Creek
Ross Fk
Warm
Springs
Creek
Deer
Creek
Willow
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Fish Creek
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Lake
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Reservoir



















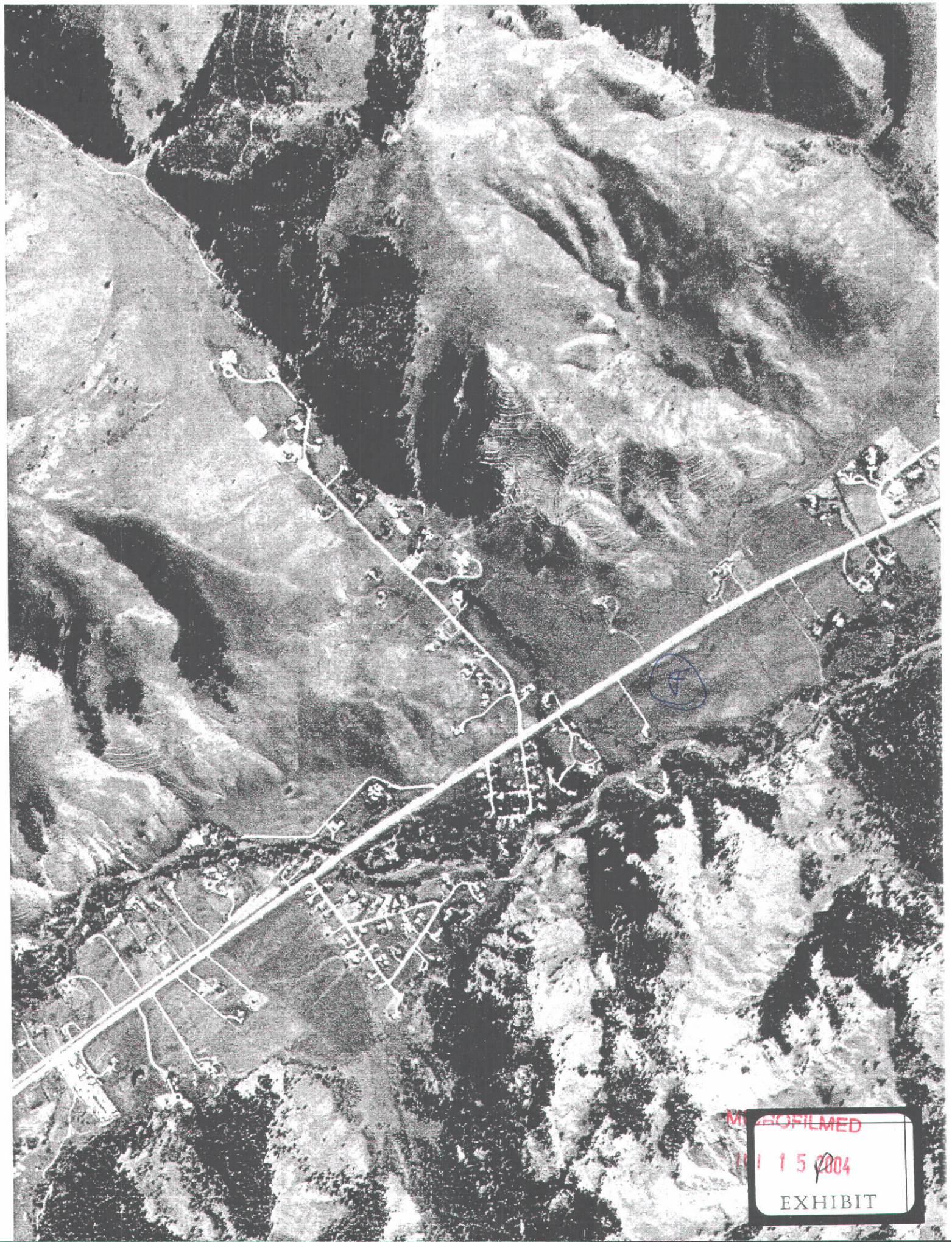










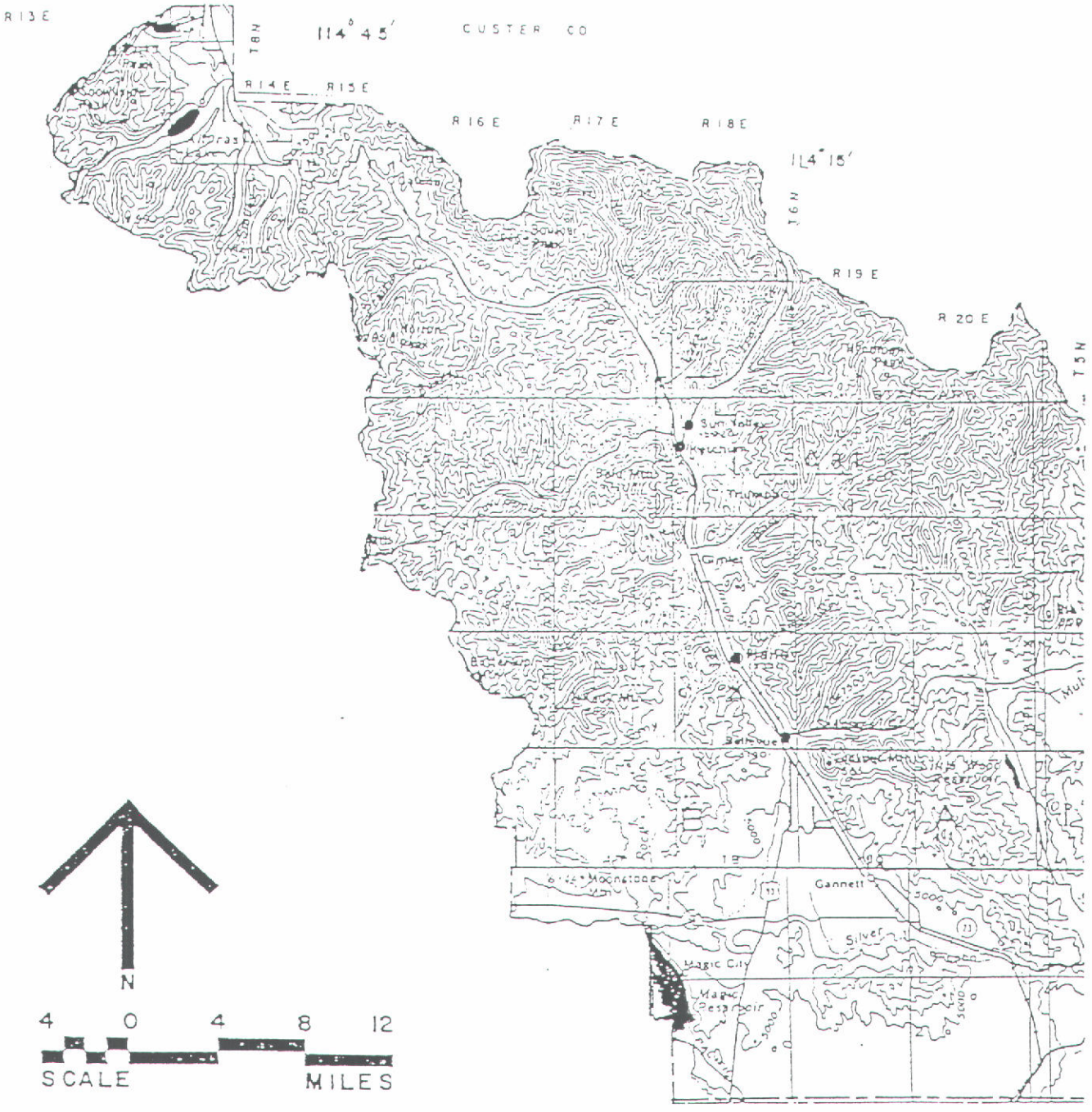


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EXHIBIT



Department of Water Resources
PROTESTANT'S
Exhibit Q
Date Admitted 11/13/02

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TOPOGRAPHIC MAP

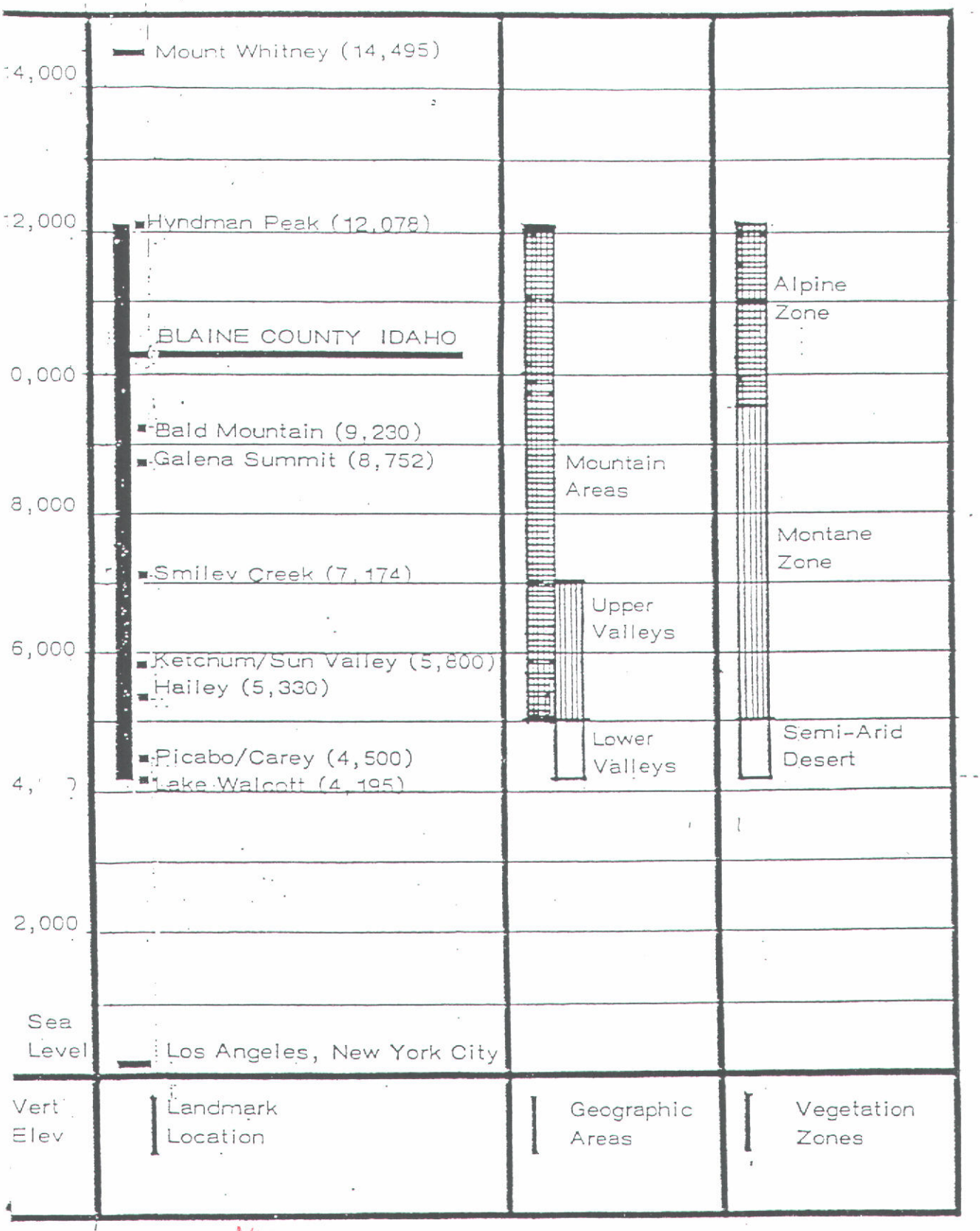
IBLAINE COUNTY
MAP

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2.21 A

JUL 15 2004

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COMPARATIVE ELEVATIONS

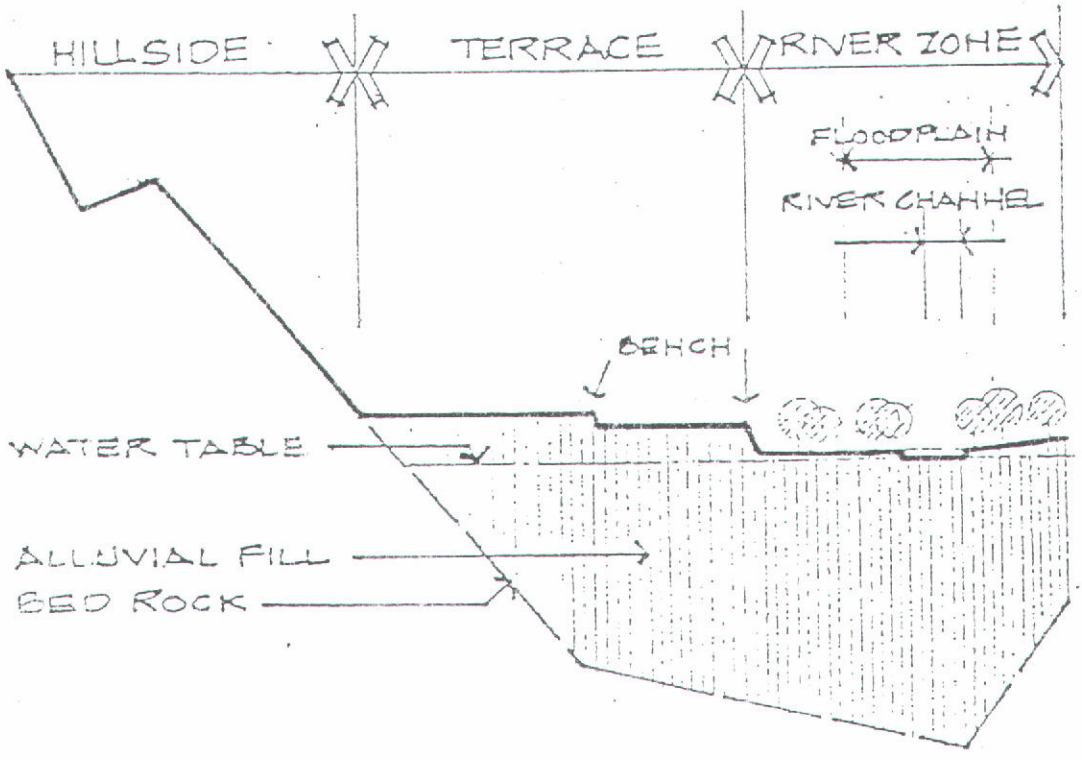


JUL 15 2004

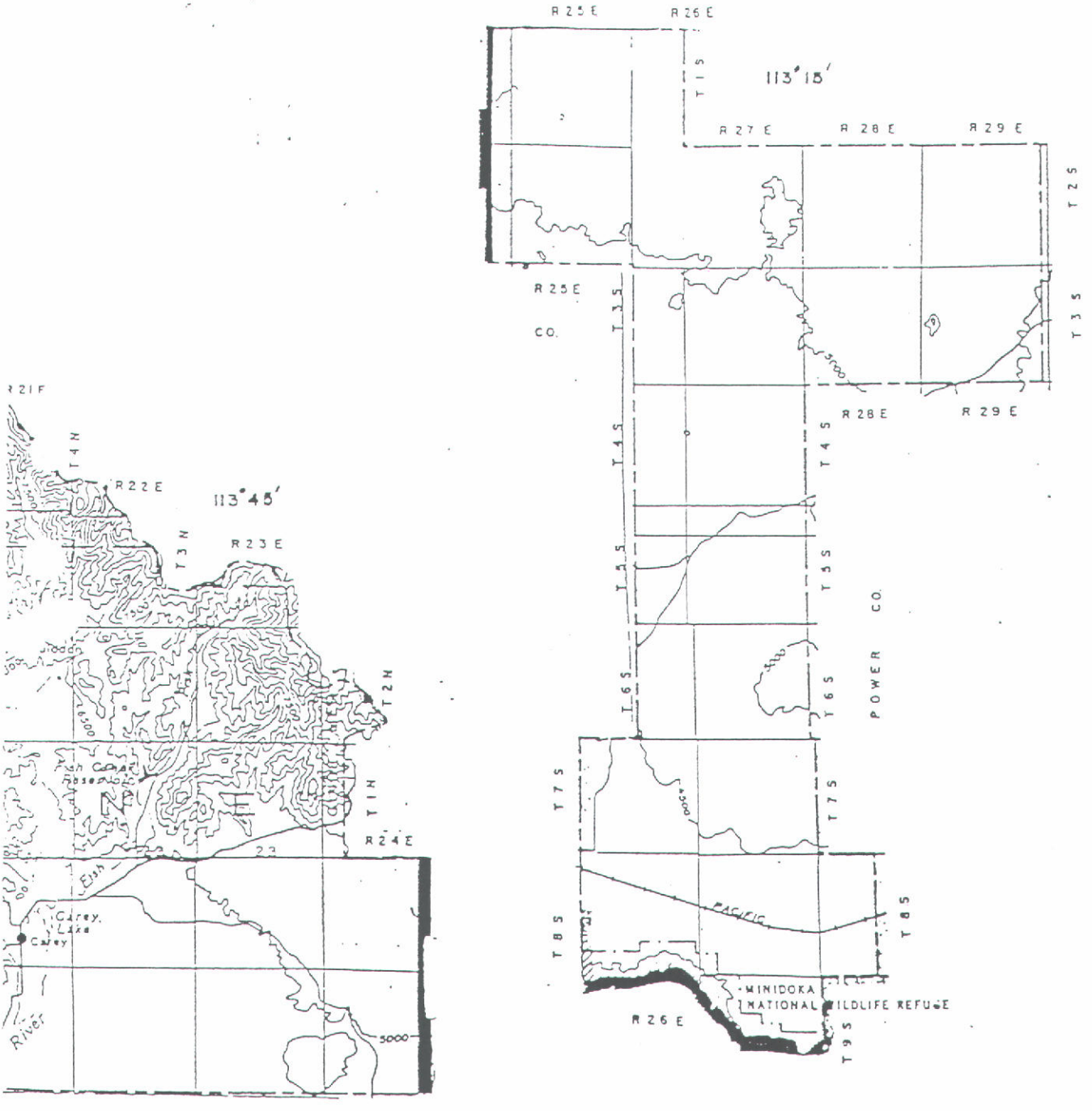
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TOPOGRAPHIC ANALYSIS

The topography of the Upper Wood River Valley can be divided into three general categories; mountainous hillside areas; terrace areas; river zone areas. These areas have distinct natural characteristics and are schematically illustrated in the following diagram:



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JUL 15 2004

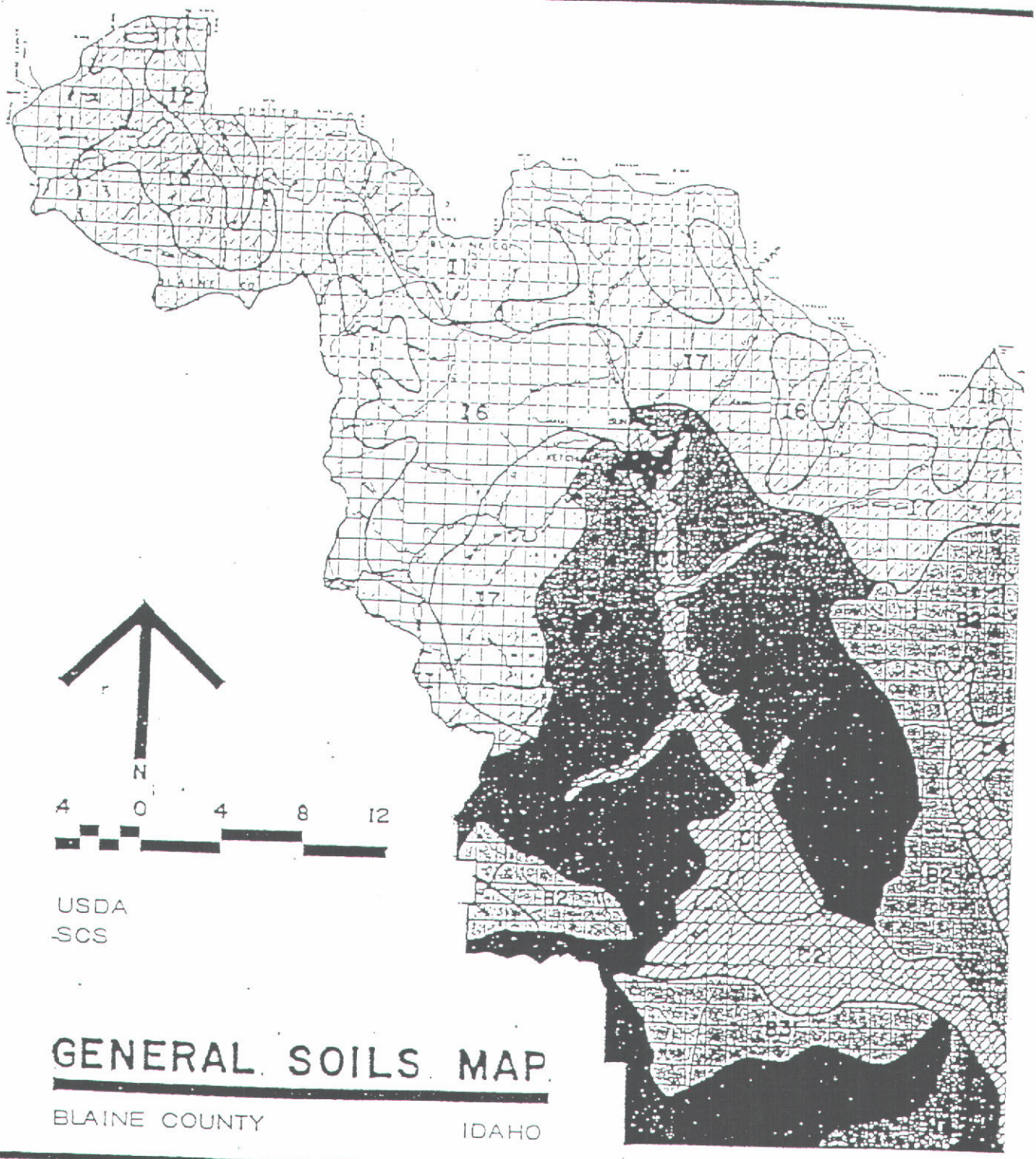


Legend

Contour Interval 500 feet

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3 D



GENERAL SOILS MAP

BLAINE COUNTY IDAHO

LEGEND Also, See Exhibit 2.418

A1-A5 Areas dominated by well-drained, dark and slightly dark-colored, shallow to deep, sandy to clayey soils, on strongly sloping or steep mountains.

B1-B5 Areas dominated by well-drained, slightly dark-colored, shallow to deep, loamy and clayey soils, on sloping foothills or steep mountains.

C1-C7 Areas dominated by well- moderately deep or deep, moderately sloping alluvi

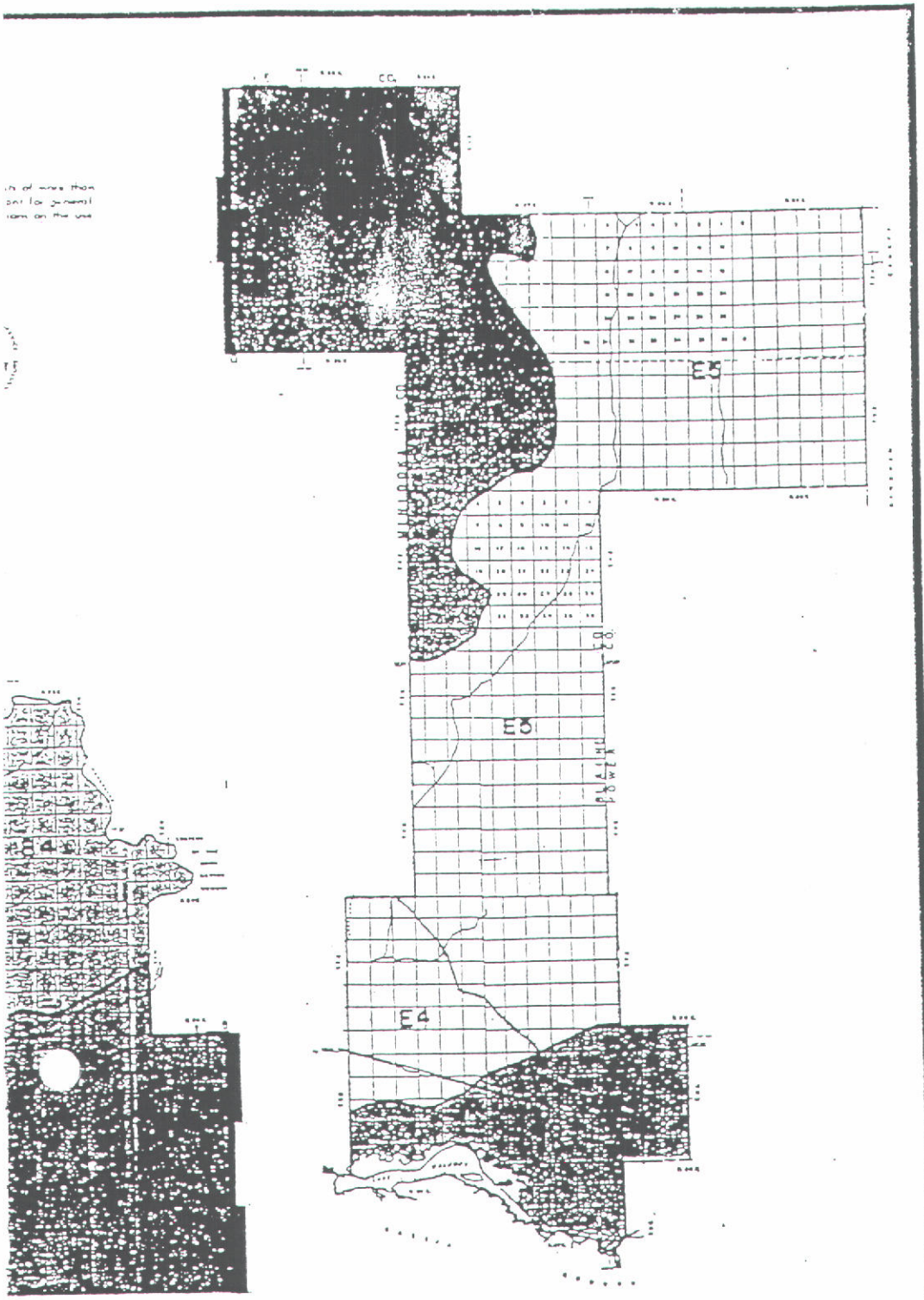
D1-D4 Areas dominated by well- loamy soils with clayey s foothills.

E1-E7 Areas dominated by well- soils, on nearly level and to hardpan.)

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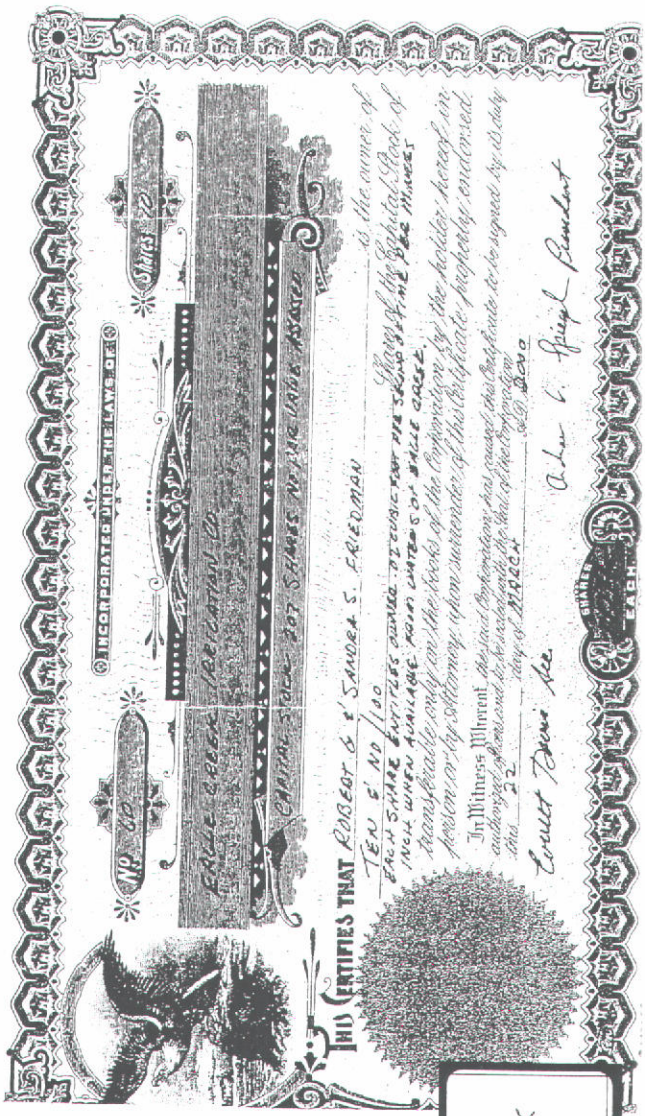
11 of



G1-G4		Areas dominated by excessively to well-drained, light colored, moderately deep or deep, sandy soils, on gently or moderately sloping plains.
H1-H5		Areas dominated by Rock outcrops, Lava Flows, and shallow soils.
I1-I7		Areas dominated by excessively to well-drained, slightly dark to dark-colored moderately deep to shallow, loamy to sandy soils on rolling hills and very steep mountains. These soils are in a cold climate having cool summers.

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X
EXHIBIT

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Department of Water Resources
PROTESTANT'S
Exhibit X
Date Admitted 11/13/02

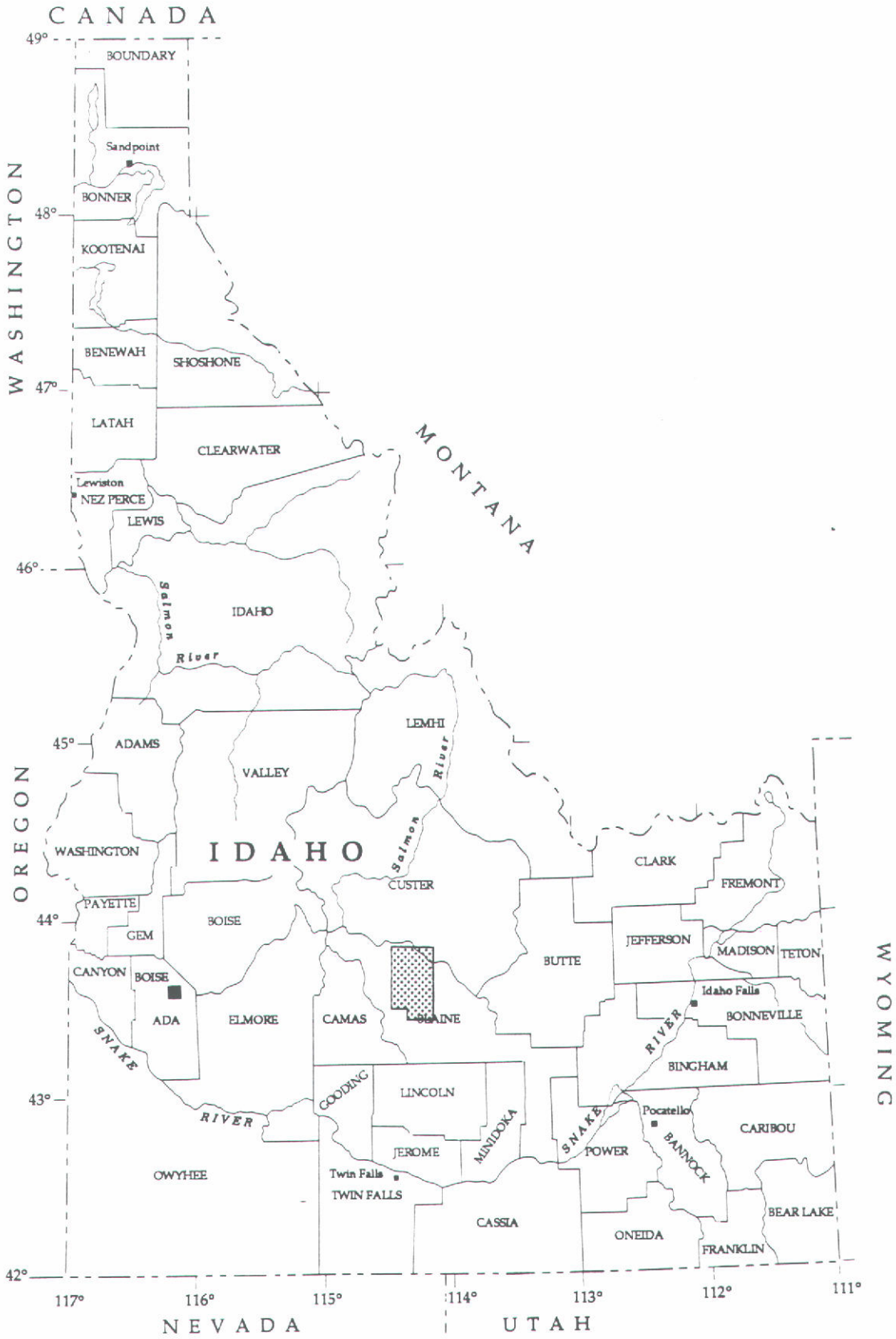
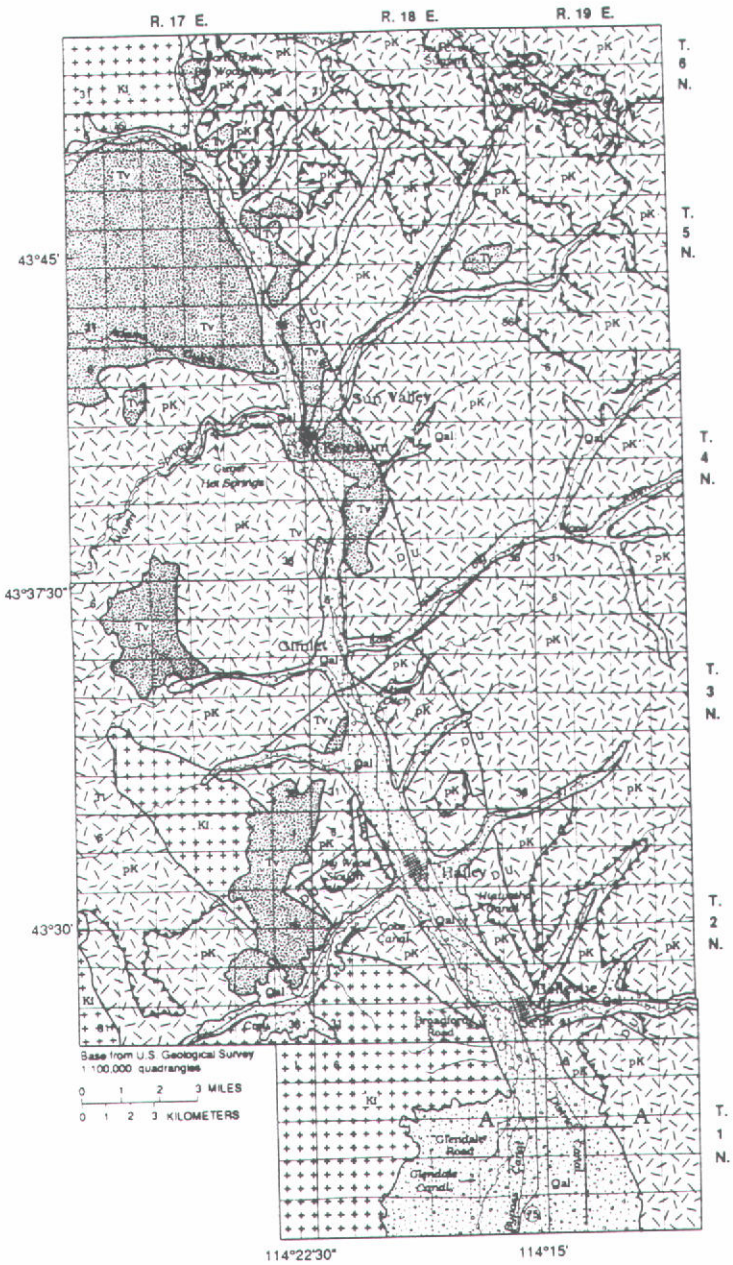


Figure 1.--Location of study area.

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Qal QUATERNARY SEDIMENTARY ROCKS--Chiefly unconsolidated deposits of stream alluvium and terrace gravels, primarily of fluvioglacial origin

Tv TERTIARY VOLCANIC ROCKS--Undifferentiated

Kt CRETACEOUS ROCKS--Chiefly granitic rocks of the Idaho batholith; may include some Tertiary rocks

pK PRE-CRETACEOUS SEDIMENTARY AND METAMORPHIC ROCKS--Undifferentiated

GEOLOGIC CONTACT

U/D FAULT--Dashed where inferred, dotted where concealed; U, upthrown side; D, downthrown side

THRUST FAULT--Teeth on upper plate

A — A' LINE OF GEOLOGIC SECTION

BOUNDARY OF STUDY AREA

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Figure 2.--Generalized geology.

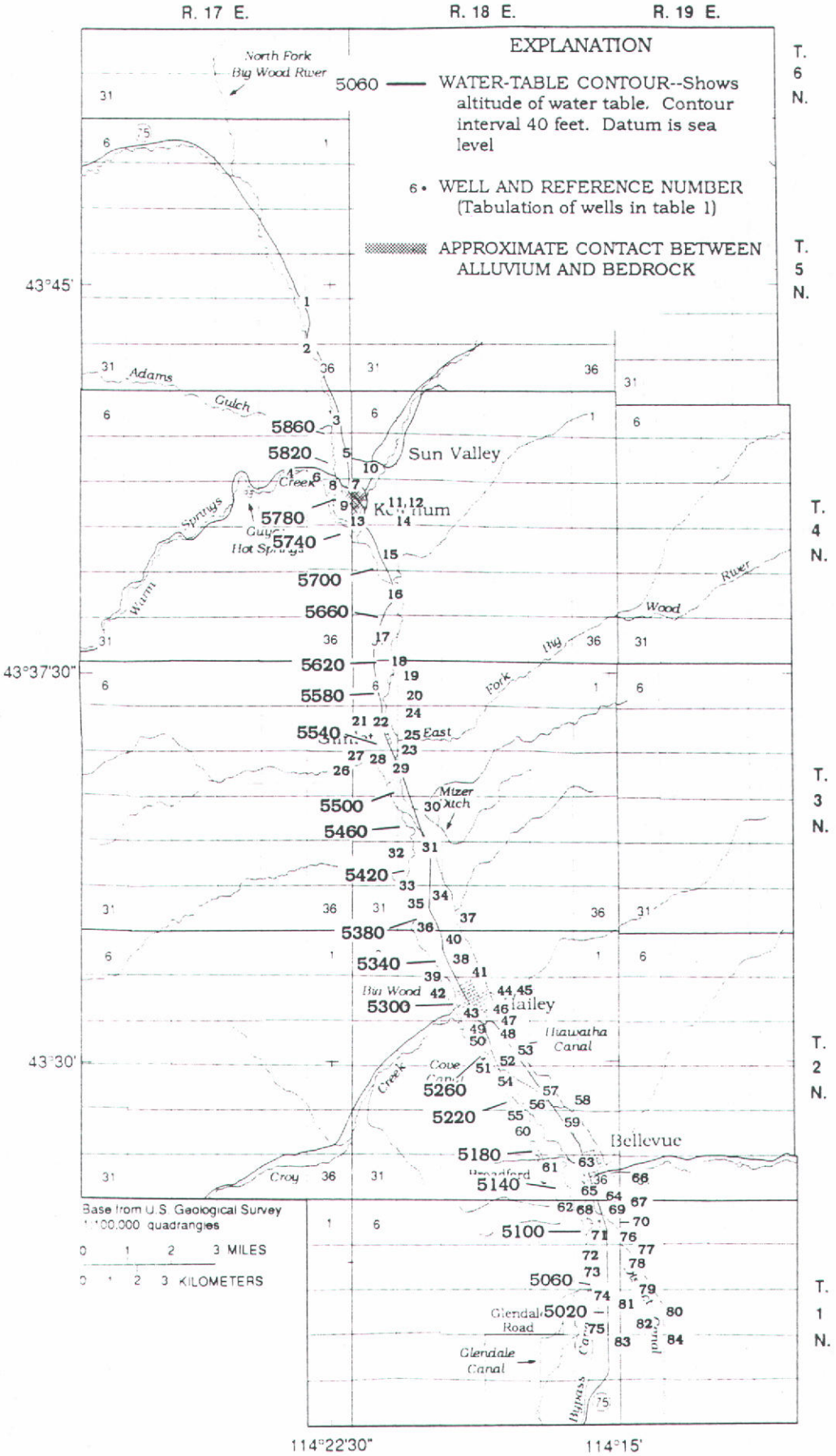


Figure 7.--Water-table contours in April 1986 and well locations

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JUL 15 2004

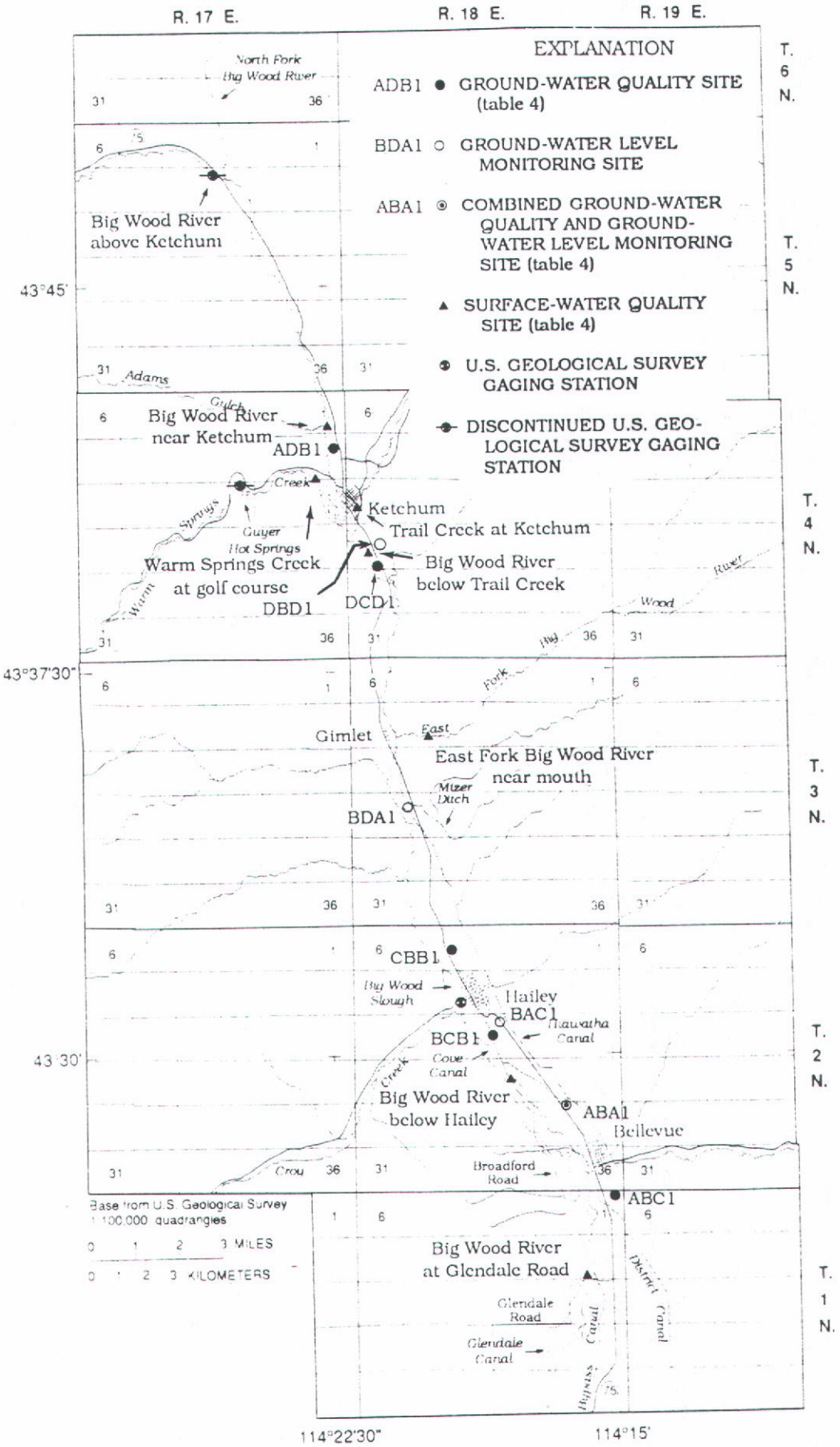


Figure 10.--Locations of water-quality and ground-water level monitoring sites.

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JUL 15 2004

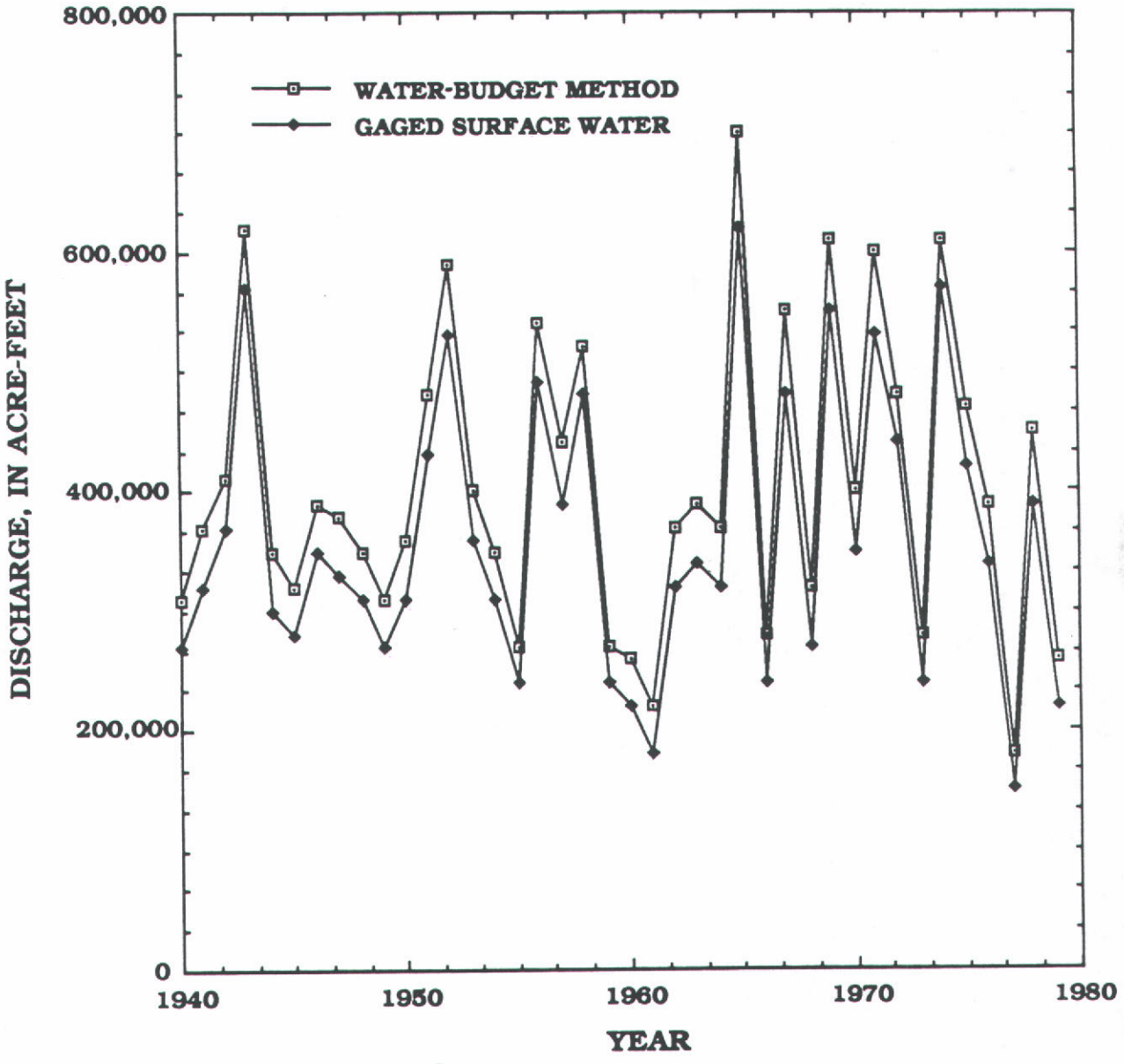


Figure 11.--Yield estimated by water-budget method and gaged surface-water discharge at Hailey, 1940-79.

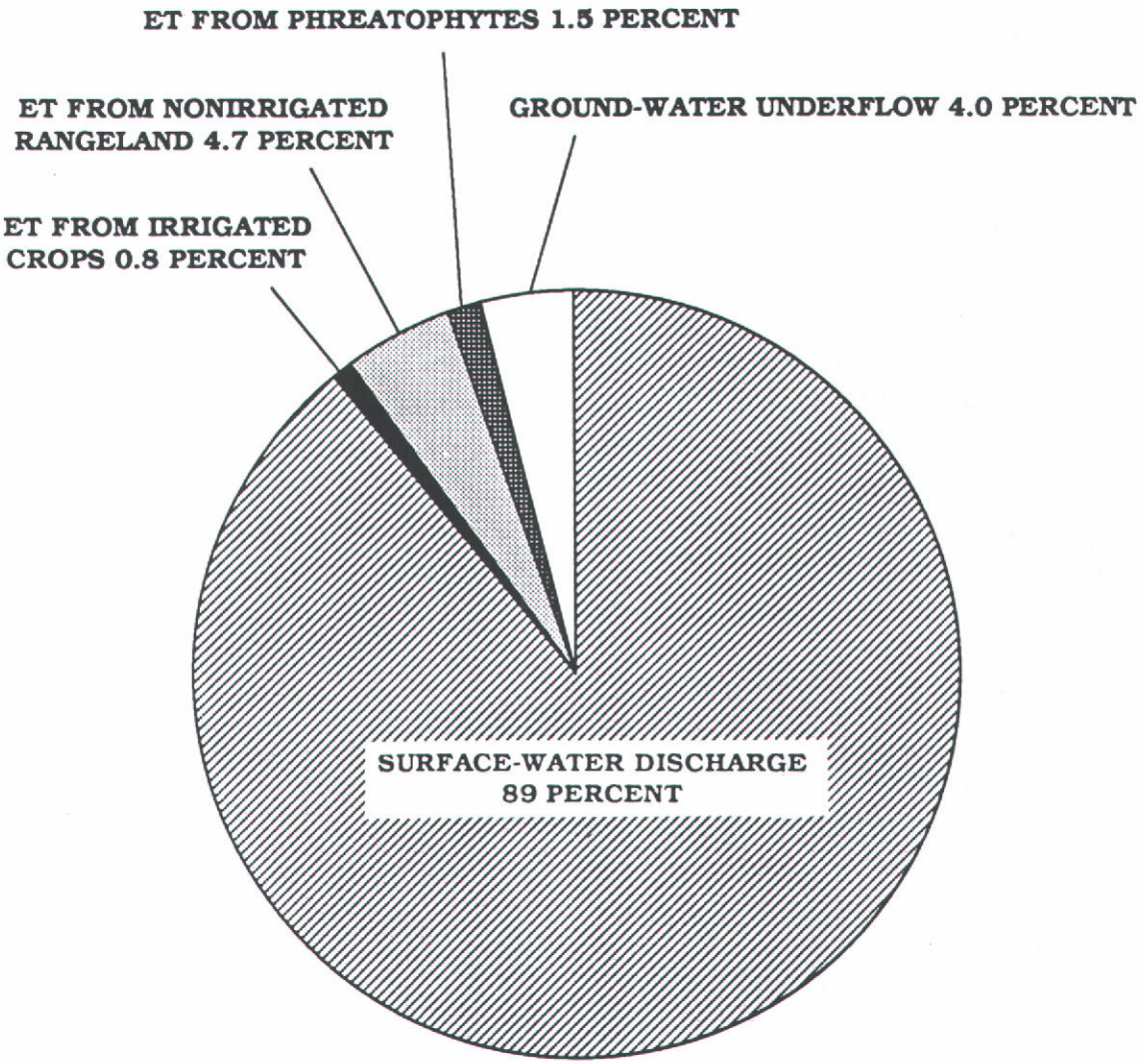


Figure 12.--Relative percentage of water-budget components for yield from basin above Hailey.

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JUL 1 5 2004

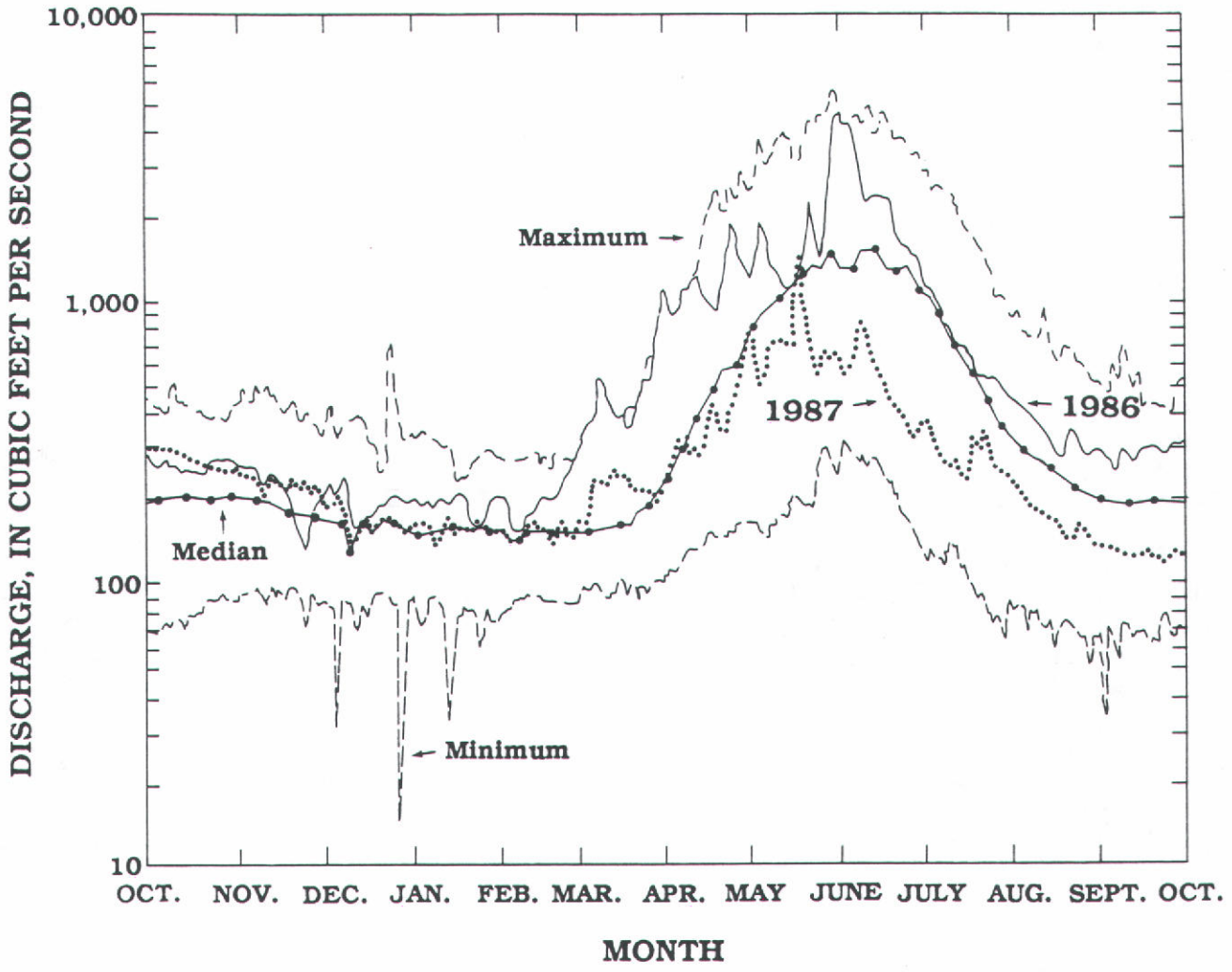


Figure 13.--Maximum, median, and minimum mean daily discharge of the Big Wood River at Hailey, water years 1915-86, compared with mean daily discharge during water years 1986 and 1987.

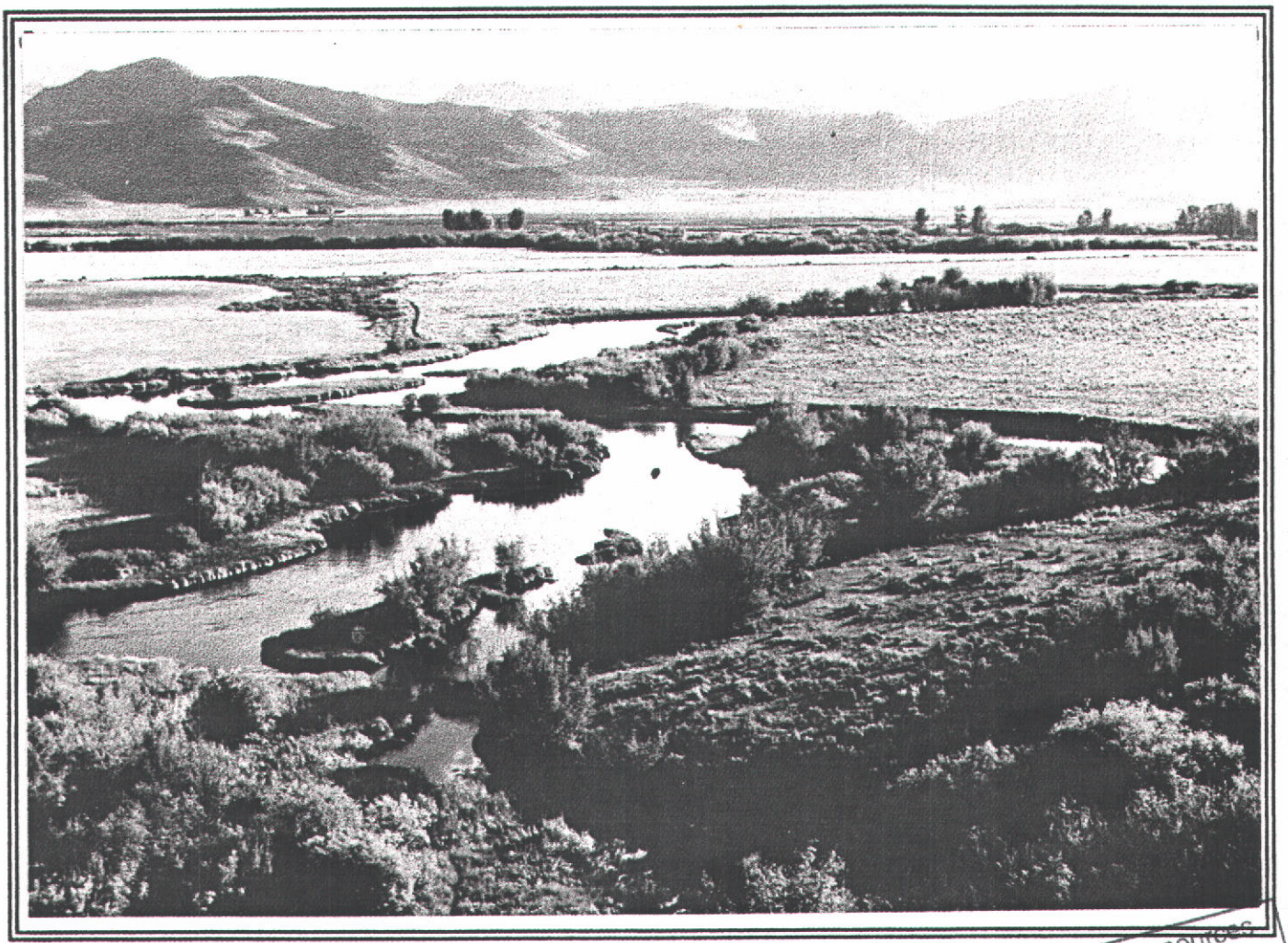
MICROFILMED
JUL 15 2004

Hydrologic Evaluation of The Big Wood River and Silver Creek Watersheds

Phase I
Final Report

submitted to

The Nature Conservancy of Idaho



by

C.E. Brockway, Ph.D.

M. Akram Kahlown, Ph.D.

University of Idaho

Idaho Water Resources Research Institute

Kimberly Research and Extension Center

Department of Water Resources
PROTESTANT'S
Exhibit AB
Date Admitted 11-13-02

MICROFILMED
Entire Book
JUN 15 2004

November 1994

Ex AB

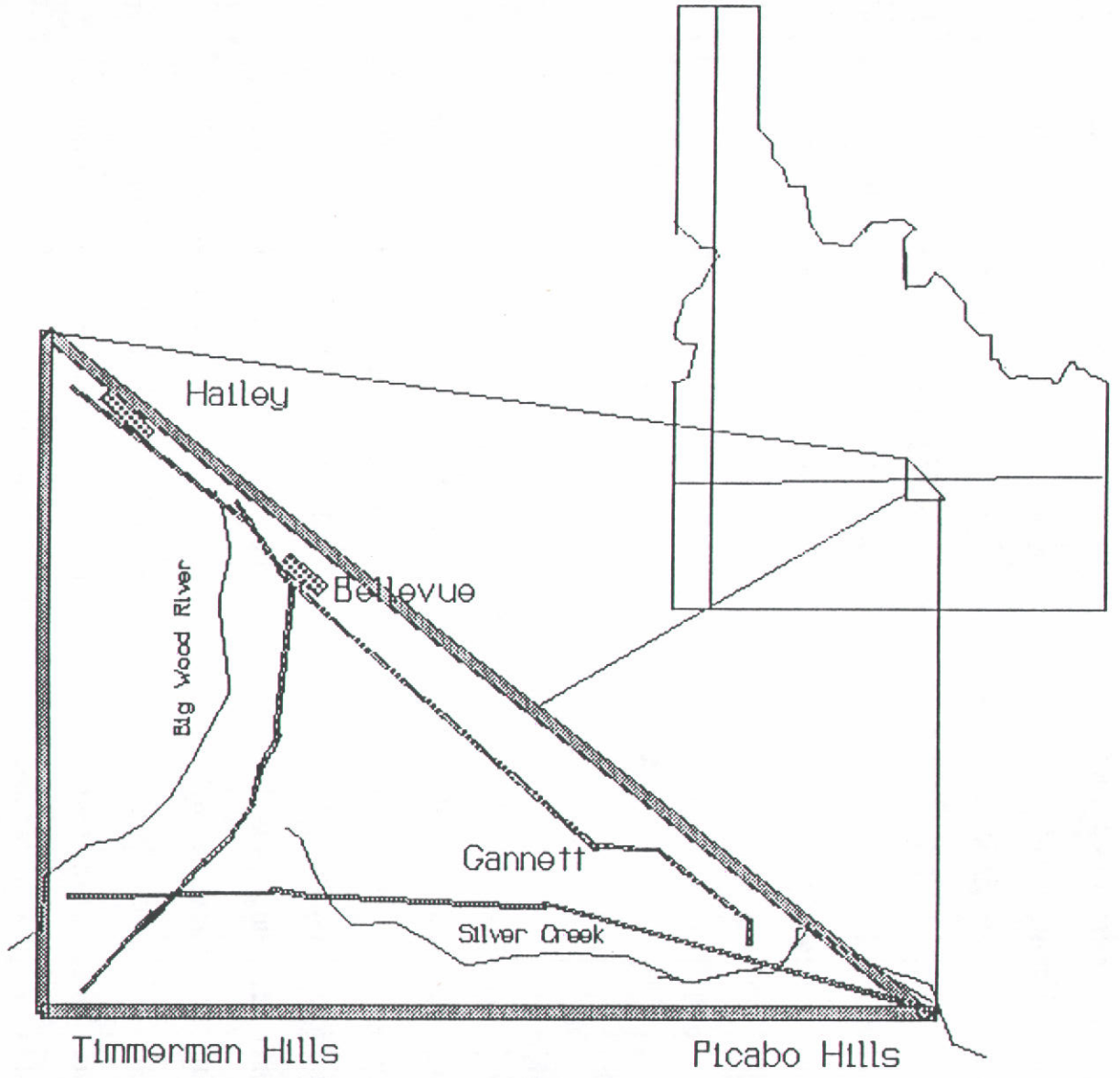


Figure 1. Location Of Study Area

Figure 2. Geologic Cross Section of Big Wood River-Silver Creek Area (north to south)

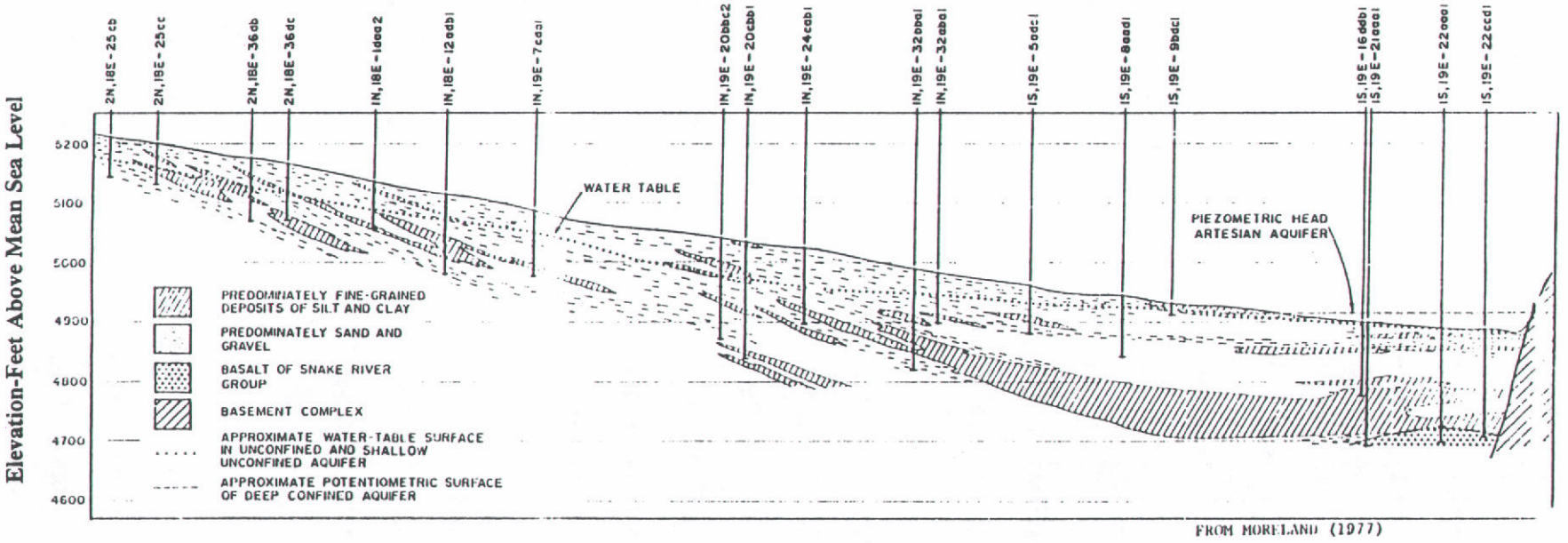


Figure 16. Water Budget for Aquifer System
Big Wood River -- Silver Creek Area
for 1993

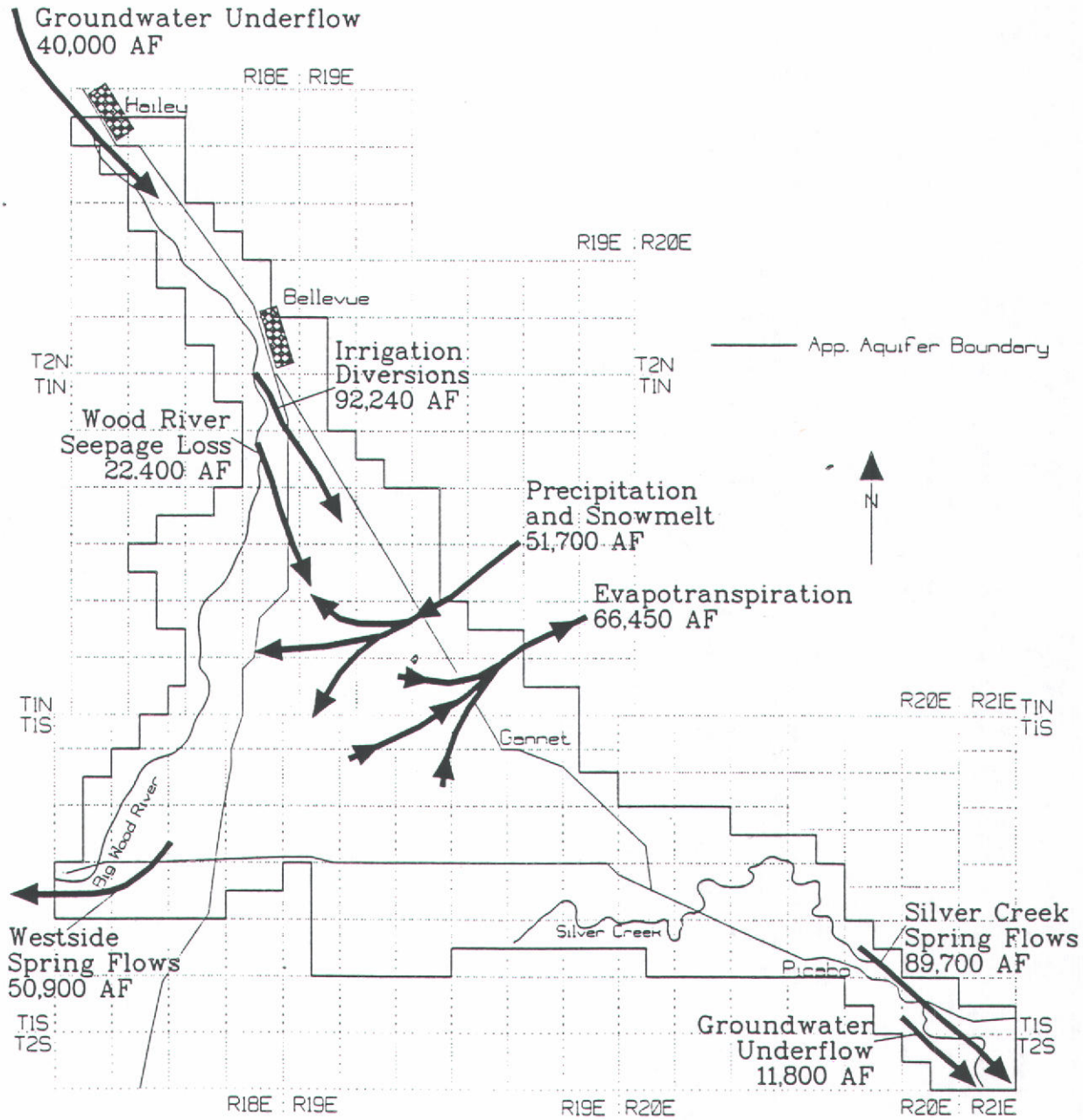
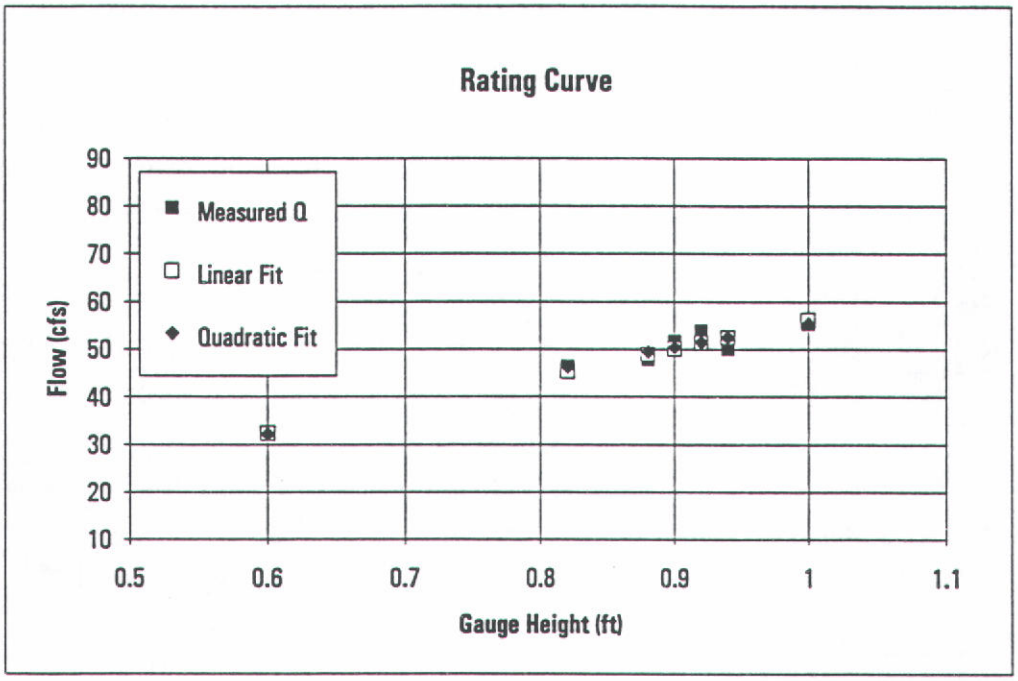
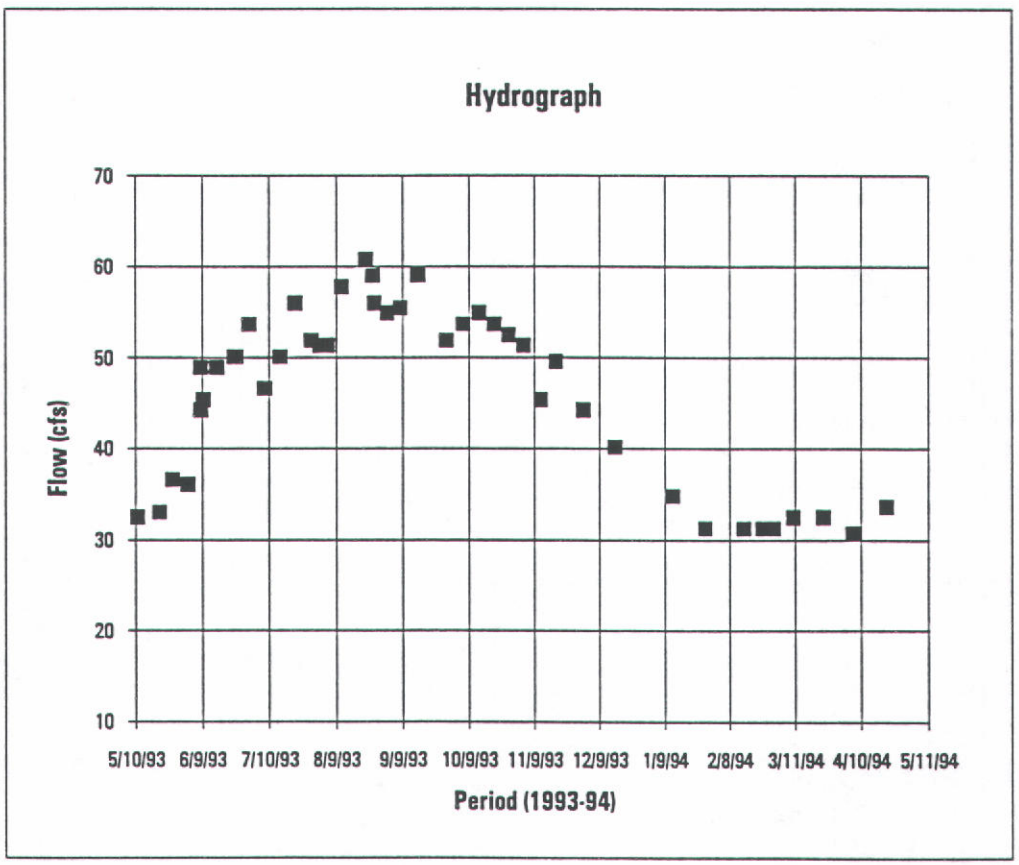


Figure 13. Rating Curve and Hydrograph for Loving Creek





Form No. 204
7/94 (Internet)

For Office Use Only
$50 Fee Receipted by MC
Date 2-23-05
Receipt No. 0076901

RECEIVED
FEB 23 2005
DEPARTMENT OF WATER RESOURCES

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

REQUEST FOR EXTENSION OF TIME

TO PROVIDE ADDITIONAL TIME IN WHICH TO SUBMIT PROOF OF BENEFICIAL USE FOR A WATER RIGHT PERMIT

The Idaho Department of Water Resources will consider this form as a request that the permit holder(s) be granted an additional period of time under the provisions of Section 42-204, Idaho Code in which to complete development of a water right.

Permit No. 37-20742

Name(s) of Permit Holder: ROBERT G. FRIEDMAN

Mailing Address: c/o JAMES P. SPECK, Post Office Box 987, Ketchum, Idaho 83340

Date Proof is Due: January 1, 2005 Telephone No. (208) 726-4421

Describe what work has been completed toward the development of this water right:
(This must be filled out! If no work has been completed, show "none".)

See Exhibit A attached hereto and made a part hereof by this reference for a description of the work that was completed as of December 31, 2004. See Exhibit B for an itemization of the budget for the project and the amount paid to date.

Costing $ 456,418.00

The permit holder(s) has been unable to complete the remainder of the work for the following reasons:

The permit allowed only one building season which, for a project of this magnitude, is not enough to complete all of the work.

Permit holder(s) request an extension to January 1 ,xx 2007 .

FEE: $50.00

(Signature)*

**If other than permit holder, Power of Attorney must be supplied.*

ACTION OF THE DEPARTMENT OF WATER RESOURCES

IT IS HEREBY ORDERED that the above request for extension of time be

REINSTATED with the priority advanced to September 2, 2002. IT IS FURTHER ORDERED that the time within which to submit proof of beneficial use is extended to January 1, 2007.

Signed this 7th day of April xx 2005 .

GARY SPACKMAN

Fox Creek Project-R. Friedman
Project Tasks Completed
C.E. Brockway February 8, 2005

This project is related to the use of part of water right 37- 00863 in the name of Eagle Creek Irrigation Company to provide mitigation for evaporation from ponds for the Friedman Residence , Blaine County, Idaho.
Transfer # 5748 which was approved by IDWR allows for construction and utilization of water from the Eagle Creek Irrigation Company for mitigation of evaporation from recreation and aesthetic ponds and irrigation of landscaping and turf. Permit # 37-20742, approved on August 25, 2003 allows the construction and utilization of a well for non-consumptive use in the pond/stream system for water quality and aesthetic quality control with recharge back into the aquifer near the point of extraction.

As of December 31, 2004 the following tasks were completed:

- Analysis and design of ponds, well, pumping and distribution system
- All building and regulatory permits secured
- Reconstruction of the supply ditch and measuring device from Eagle Creek Irrigation Company and construction of a new culvert and control structures for return of water to the recharge site
- Construction of the pond system and return flow stream
- Weir constructed on return flow stream
- Construction of a cased, 16 inch diameter well, 98 feet deep
- Pumping test of well and aquifer property determination
- Installation of well pump and VFD controller
- Installation of booster pumps and controllers and pipe distribution system for recirculation system.
- Installation of sprinkler distribution system pump
- Construction of well house, re-circulating sump and piping
- Construction of berms and grading around ponds and residential areas.
- Construction of flow measuring devices on well and return flow stream
- Installation of flow measuring device in Eagle Creek Irrigation supply.

EXHIBIT A

Robert Friedman
Fox Creek Construction

	Budget per contract	Draw #	Amount	Total paid	Balance due	
Erwin Excavation						
Item A - site grading	30,520	3	27,468			
		6	3,052	30,520	-	
Item B - lake excavation	96,690	3	4,835			
		5	48,345			
		6	33,842			
		6	9,669	96,690	-	
Item C - berm import	78,000	3	11,700			
		5	54,600			
		8	11,700	78,000	-	
Item D - place topsoil	44,392	10	29,392	29,392	15,000	
Item E - dozer finish	10,000	5	3,300	3,300	6,700	
Item F - on-site screening	18,500				18,500	
Item G - road base/driveway	6,950				6,950	
Item H - water system plan	76,406	6	38,203			
		8	11,742	49,945	26,461	
sub total Erwin	369,458					
extra Erwin						
extra berm import	3,000	10	3,000	3,000	-	
furnish ADS (pipeline)	14,789	8	14,789	14,789	-	
Total Erwin Excavation	$ 377,247			$ 305,636	$ 71,611	
Cox communication - cable	5,000			-	5,000	
Electric & telephone	5,000	9	471	471	4,529	
Eaton Drilling						
Drill	20,335			20,335	-	
Precision Pumping						
Mechanical eqip/pump house	67,000			40,639	26,361	
John Brashears						
Boat dock		11	11,500	6,862	4,638	(1,303 over budget)
Pump house, structure		7		29,055		
		10		13,281		
		11	64,895	22,559	-	
3-Phase power		4	16,905	16,905	-	
Total John Brashears	91,997			-	-	
Entryway stone	25,000		25,000		25,000	
					-	
Eagle Lift Gates	22,700		22,700		22,700	
					-	
Hailey Nursery					-	
Item A - lake & stream liner					95,000	
Geotextile liner				675	15,325	
Item B - river cobbles					40,000	
Item C - on-site boulders					12,000	
Item E - irrigation					73,500	
filter options					4,500	
Item D - trees					126,500	
weed control					2,000	
Item G - grading & seeding					45,500	
Total Hailey Nursery	415,000			-	-	
Total	1,029,279			456,418		

ITEMS NOT ON BUDGET, CONSULTANTS

Ruscitto Latham	5,273				
pump house redesign?	2,345	7,618			
Brockway Engineers	6,532				
	1,752				
	1,668				
	2,760				
	4,114				
	2,311				
	1,148	20,325			
GJ Vertaline, well test	3,075	3,075			
Galena Engineers	881				
	1,045				
	3,430				
	2,950				
	2,227				
	2,693	13,226			
Richard Emik	4,500				
	4,750				
	2,850				
	8,350				
	552	20,802	65,046		
Speck & Aanestad		1,003	1,003		
Bank interest		6,916	6,916		
Total, all		$ 1,102,248	$ 529,386	$ 574,164	(1,303 over budget)

EXHIBIT B

State of Idaho
Department of Water Resources

Permit to Appropriate Water

NO. 37-20742

Priority: July 11, 2002

Maximum Diversion Rate: 2.00 CFS
Maximum Diversion Volume: 16.0 AF

This is to certify, that ROBERT G FRIEDMAN
718 N CRESCENT DR
BEVERLY HILLS CA 90210

has applied for a permit to appropriate water from:

Source: GROUND WATER

and a permit is APPROVED for development of water as follows:

BENEFICIAL USE	PERIOD OF USE	RATE OF DIVERSION	ANNUAL VOLUME
DIVERSION TO STORAGE	01/01 to 12/31	2.00 CFS	
AESTHETIC STORAGE	01/01 to 12/31		16.0 AF
RECREATION STORAGE	01/01 to 12/31		16.0 AF
AESTHETIC	01/01 to 12/31	2.00 CFS	
RECREATION	01/01 to 12/31	2.00 CFS	

LOCATION OF POINT OF DIVERSION:
GROUND WATER NE¼NW¼ Sec. 23, Twp 05N, Rge 17E, B.M., BLAINE County

PLACE OF USE: AESTHETIC STORAGE, RECREATION STORAGE, AESTHETIC & RECREATION

Twp Rge Sec	NE				NW				SW				SE				Totals
	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
05N 17E 23					X												

CONDITIONS OF APPROVAL

1. Proof of application of water to beneficial use shall be submitted on or before **January 01, 2005.**
2. Subject to all prior water rights.
3. Project construction shall commence within one year from the date of permit issuance and shall proceed diligently to completion unless it can be shown to the satisfaction of the Director of the Department of Water Resources that delays were due to circumstances over which permit holder had no control.
4. Prior to diversion of water under this permit, the right holder shall install and maintain measuring devices at the point of diversion (at the well), on the ditch from Eagle Creek where the ditch enters the right holders property and at a location to measure pond outflow to the recharge area.
5. Use of water under this approval shall be non-consumptive. The right holder shall not divert ground water under this right unless the same or a larger amount of water is simultaneously discharged to the recharge site identified in the application.
6. The right holder shall retain ownership of the 10 shares of ECIC water stock and shall use two shares of water, to the extent the water is available, for use in the ponds.
7. This right does not convey any easement or right-of-way to the right holder to use the facilities or lands of others.

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JAN 15 2004

State of Idaho
Department of Water Resources

Permit to Appropriate Water

NO. 37-20742

8. The right holder shall grant reasonable access to Department staff to determine that terms of this approval are being met.
9. Failure of the right holder to comply with the conditions of this approval is cause for the Department to rescind approval of the right.
10. This approval does not waive other approvals that may be needed in connection with wetlands.
11. Use of water under this permit is rescinded if the portion of water right no. 37-00863 transferred under T5748 in the name of ECIC is determined in the Snake River Basin Adjudication to have been forfeited or to be otherwise invalid.

This permit is issued pursuant to the provisions of Section 42-204, Idaho Code. Witness the signature of the Director, affixed at Boise, this 14th day of October, 2003.

KARL J DREHER, Director

MICROFILMED
JUL 15 2004

BEFORE THE DEPARTMENT OF WATER RESOURCES

OF THE STATE OF IDAHO

IN THE MATTER OF APPLICATION FOR PERMIT NO. 37-20742 IN THE NAME OF ROBERT G. FRIEDMAN	))))	**FINAL ORDER**

INTRODUCTION

This matter is before the Director of the Idaho Department of Water Resources ("Director" or "Department") following the issuance of a "Preliminary Order" and an "Order Denying Petition for Reconsideration" by the Department's Hearing Officer, L. Glen Saxton. The action arises from an application for permit by Robert L. Friedman ("Friedman" or "applicant") to divert 2.0 cubic feet per second ("cfs") of ground water for use in three ponds. In a related transaction, Eagle Creek Irrigation Company ("ECIC" or "irrigation company") obtained approval under Transfer No. 5748 to change the nature of use for 0.04 cfs of its surface water rights from irrigation use to aesthetic purposes. Friedman is a shareholder in the irrigation company. Blaine County ("County" or "protestant") protested the application for permit, but not the transfer. The County challenged Friedman's application for permit on the grounds that Friedman had forfeited the right to use his ECIC water and that Friedman's proposed aesthetic ponds were contrary to the local public interest.

The Department's Hearing Officer heard the matter on November 13, 2002. Friedman was present and represented by counsel James P. Speck of Speck & Aansted. The County appeared through counsel Douglas A. Werth of Bieter, Werth, & Walker, PLLC. On January 2, 2003, the Hearing Officer issued a preliminary order approving Friedman's application for permit. On February 4, 2003, the Hearing Officer denied the County's petition for reconsideration. The County filed a petition for review with the Director on February 18, 2003. Friedman filed a response to the petition for review on March 4, 2003.

SUMMARY OF HEARING OFFICER'S DECISION

The Hearing Officer considered the challenges of the County and held that (1) Friedman had not forfeited his shares of stock in ECIC nor his right to use the water represented by those shares of stock; (2) there is sufficient ground water available to satisfy the proposed permit without reducing the stream flow in the Big Wood River; and (3) the evidence did not suggest

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that the proposed permit would violate the local public interest. The Hearing Officer approved the application subject to conditions.

The Director concurs with the decision of the Hearing Officer. The Director adopts the substance of the Hearing Officer's preliminary order in this matter and hereby enters a final order with the following findings of fact, analysis, conclusions of law, and order:

FINDINGS OF FACT

1. Friedman owns 10 acres of property located about six miles north of Ketchum, Idaho near the confluence of Eagle Creek with the Big Wood River ("river") in Blaine County. Friedman plans to build a residence, a guesthouse and a barn on the property and to construct three ponds. The estimated cost of the three buildings is about $2.5 million and the cost of landscaping is estimated to be in excess of $540,000. (See Applicant's Exhibit 13).

2. On July 11, 2002, Friedman submitted Application for Permit No. 37-20742 ("application") to the Department proposing the diversion of 2.0 cfs of ground water to be used year-round for recreation and aesthetic purposes within the NE1/4NW1/4 Section 23, T5N, R17E, B.M., Blaine County, Idaho in three ponds that will store 16 acre feet of water and will have a total surface area of about two acres.

(Note: The "1/4" designations will be omitted from subsequent legal descriptions in this order).

3. The Department published notice of the application and the County filed a protest in response.

4. On November 13, 2002, the Department conducted a hearing at which both the applicant and the protestant presented evidence through exhibits and testimony.

5. The issues considered by the Department in this matter are as follows:

a. Whether the appropriation will reduce the quantity of water under existing water rights;

b. Whether the water supply itself is insufficient for the purpose for which it is sought to be appropriated;

c. Whether the application is made in good faith, or is made for delay or speculative purposes;

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d. Whether the applicant has sufficient financial resources with which to complete the work involved therein;

e. Whether the proposed appropriation will conflict with the local public interest; and

f. Whether the proposed appropriation is contrary to conservation of water resources within the state of Idaho.

6. Exhibits premarked, offered, or accepted as a part of the record are as follows:

Applicant's Exhibits:

Exhibit 1 - Water Requirements and Use Data

Exhibit 2 - Pond and Irrigation System Inflow and Outflow Loss Estimates

Exhibit 3 - Estimated Maximum Net Groundwater Use for Residences

Exhibit 4 - Summary Operations Plan

Exhibit 5 - Friedman Property - Fox Creek Ranch, Survey From West Observation Well to Big Wood River

Exhibit 6 - Well Section & Configuration - Proposed New Well

Exhibit 7-1 - Well Interference Analysis Friedman Project Well

Exhibit 7-2 - Estimated Drawdown From Continuous Pumping of Proposed Friedman Well

Exhibit 8 - Vicinity Map

Exhibit 9 - Stock Certificate issued by Eagle Creek Irrigation Company (Same exhibit as Protestant's Exhibit X)

Exhibit 10 - Friedman Fox Creek Water Operations Schematic

Exhibit 11 - Friedman Fox Creek Water Operations Cross Section

Exhibit 12 - Well Driller Reports (75 reports)

Exhibit 13 - Webb Landscape, Inc., Estimate (5 pages)

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Exhibit 14 - NOT OFFERED

Exhibit 15 - Vitae for Charles E. Brockway, P.E., Ph.D.

Exhibit 16 - Flow measurements and copies of photographs (7)

Exhibit 17 - Map

Exhibit 18 - Map

Exhibit 19 - Photographs (10)

Exhibit 20 - Photographs (7)

Exhibit 21 - Photographs (7)

Protestant's Exhibits:

Exhibit A - Order - In the Matter of Designating the Big Wood River Ground Water Management Area, June 28, 1991

Exhibit B - Management Policy for the Big Wood River Ground Water Management Area, June 28, 1991

Exhibit C - Memorandum dated January 22, 1980, to Department staff from C. Stephen Allred, Re: Big Wood River Appropriations

Exhibit D - Memorandum dated February 1, 1980 from Dave Tuthill to Bob Fleenor and map

Exhibit E - Letter dated July 13, 2000 to Mary Ann Mix from Nick Purdy

Exhibit F - Letter dated July 17, 2000 to Dirk Kempthorne from the Board of Blaine County Commissioners

Exhibit G - Order Declaring Drought Emergency dated July 18, 2000

Exhibit H - Letter dated August 26, 1996 to Board of County Commissioners from Allen Merritt

Exhibit I - Blaine County Resolution 98-1 dated January 26, 1998 adopting a Blaine County Local Public Interest Water Policy

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Exhibit J - Local Public Interest Water Policy - Section 8, Chapter 3, Blaine County, April 2000

Exhibit K - Final Order - In the Matter of Applications for Transfer No. 5174 in the Name of Dennis M. Baker and No. 5175 in the Name of Huf-N-Puf Trust

Exhibit L - Order Declaring Drought Emergency dated April 19, 2001

Exhibit M - Order Declaring Drought Emergency dated May 13, 2002

Exhibit N - Photographs (Premarked as N-1 thru N-24)

N-1, N-2, N-3	NOT OFFERED
N-4, N-5, N-6	Admitted
N-7	NOT OFFERED
N-8 thru N-15	NOT ADMITTED
N-16 thru N-18	NOT OFFERED
N-19, N-20, N-21	Admitted
N-22 thru N-24	NOT OFFERED

Exhibit O - USGS Quadrangle sheet, (Amber Lakes, Idaho)

Exhibit P - Aerial Photograph

Exhibit Q - Tax Lot Vicinity Map

Exhibit R - Blaine County Comprehensive Plan

Exhibit S - Minutes of Blaine County Board of Commissioners' meeting held January 26, 1998, adopting Resolution 98-1

Exhibit T - Decree - Arthur J. Winslow v. S. H. Chapman, Watermaster, August 22, 1923

Exhibit U - Eagle Creek Irrigation Company, Certificate of Incorporation

Exhibit V - Articles of Incorporation of Eagle Creek Irrigation Company

Exhibit W - By-Laws of Eagle Creek Irrigation Company

Exhibit X - Stock Certificate issued by Eagle Creek Irrigation Company (Same exhibit as Applicant's Exhibit 9)

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Exhibit Y - Compilation of Priority Cuts on the Big Wood River above Magic Reservoir (1998 - 2002)

Exhibit Z - Letter dated December 22, 1997 to Board of County Commissioners from Norman C. Young

Exhibit AA - U.S. Geological Survey Report 89-4018 titled Water Resources of the Upper Big Wood River Basin, Idaho Department of Water Resources

Exhibit AB - Phase 1, Final Report titled "Hydrologic Evaluation of the Big Wood River and Silver Creek Watershed", November 1994

The hearing officer also took official notice of the following:

- The application for permit file and its contents as it existed at the close of the hearing together with any subsequent information that has been properly served on the parties;
- Water right records of the Department;
- Holdings in past decisions and orders of the Department including the Memorandum Decision and Order issued on June 8, 1993 for Transfer No. 3968 filed in the name of Dr. Lee Enright;
- Reports, water measurements and flow records in Department files;
- Well Driller Reports;
- Application for Transfer No. 5748 in the name of Eagle Creek Irrigation Company; and
- Application for Permit No. 37-08910 (Relinquished)

7. Water right no. 37-00863 was decreed on August 22, 1923, in *Arthur J. Winslow v. S.H. Chapman* ("Winslow decree"). The right authorizes the diversion of 4.6 cfs of water from Eagle Creek for the irrigation of parts of Sections 14, 15 and 23, T5N, R17E, B.M. also known as part of H.E.S. Nos. 129 and 329. The decree does not describe the location of the points of diversion of the water right. The priority of the water right is October 6, 1902. The decree enjoined the watermaster of the Big Wood River from exercising supervision over the water of Eagle Creek during the irrigation season and from interfering with the use of water right no. 37-00863.

8. ECIC is a mutual non-profit irrigation company incorporated in 1973 and is the successor-in-interest to all or a portion of decreed water right no. 37-00863. Each share of stock

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represents one miner's inch (0.02 cfs) of water when the water is available from Eagle Creek. The by-laws of ECIC provide that during times of water shortage, water will be distributed on a pro-rata basis according to the number of shares held. ECIC has issued 187 shares for which there are 17 shareholders.

9. The president of ECIC testified that the primary function of the company is to construct, maintain, and operate a private water distribution system for use by its shareholders. The president also testified that the company has no control over whether a shareholder uses or does not use the shares of water it owns.

10. The applicant owns 10 shares of surface water provided by ECIC. For initial filling of the ponds the applicant proposes to forego use of 16 acre feet of water from Eagle Creek for irrigation of the property during the first year and to impound the water in the ponds. In subsequent years, water lost from the ponds through seepage or evaporation will be mitigated by permanently drying up two acres of previously irrigated land on the 10-acre parcel. The applicant plans to pump water from the lower pond to the upper ponds to provide a flow through system using a recirculation pump that can operate independently from the pump diverting water from the proposed well. (See Applicant's Exhibit 10).

11. The applicant plans to periodically pump water from the proposed well in order to provide cooler water for recirculation through the ponds when air temperatures are high. Water discharging from the lower pond will recharge the aquifer near the southwest corner of the property. The applicant plans to only pump ground water during the irrigation season when there is sufficient surface water available from Eagle Creek to mitigate pond evaporation and only when water temperature becomes elevated or dissolved oxygen levels in the ponds are low. The recharge area is a natural area located about 300 to 400 feet from the river that has historically recharged surface water from the ECIC distribution system to the aquifer and ultimately to the river. Recharged water is estimated to reach the river within 4 to 6 hours within 1/4 mile of the recharge area.

12. The applicant's property is the last property served by the distribution system of ECIC and is located southerly of other shareholders served by ECIC. The ditch from Eagle Creek enters the northeast corner of the applicant's property and follows the north side of the property toward the Big Wood River. The applicant's property was not irrigated from about 1977 through 2000 although the ditch on the property carried water toward the Big Wood River during that time. During 2001 and 2002, the applicant irrigated about one third of the property using a 5-1/2 horsepower portable gas powered pump and 12 sprinkler lines. Each line had 12 to 15 sprinkler heads that were spaced about 20 feet apart. (See Applicant's Exhibit 21). Vegetation on the applicant's property includes native grasses and crested wheat.

13. After 40 days of pumping at a rate of 2.0 cfs, the estimated drawdown in a well located 500 feet from the applicant's proposed well would be about 2 feet. (See Applicant's Exhibit 7). The nearest well to the applicant's proposed well is a domestic well located 720 feet

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away. The 40-day period is the approximate time for the ground water system to reach equilibrium as a result of pumping the applicant's well.

14. The volume of Eagle Creek water used for the development proposed by the applicant, including evaporation losses from the three ponds during the irrigation season, will be less than the amount of water used historically to irrigate the approximately 10 acres. (See Applicant's Exhibit 3). Average precipitation during the non-irrigation season exceeds any evaporation and sublimation losses that may occur from the three ponds during the non-irrigation season. (See Applicant's Exhibit 1).

15. The applicant has measured the flow in the ECIC ditch where it enters the northeast corner of the applicant's property as follows:

July 19, 2000	0.22 cfs
August 2, 2000	0.33 cfs
July 26, 2002	0.18 cfs
September 26, 2002	0.18 cfs

A witness for the protestant testified that during the time he has observed Eagle Creek from 1977 to the present time, he has always observed some water in the creek.

16. Water recharged to the aquifer near the southwest corner of the applicant's property will not increase the temperature of the Big Wood River because of the larger amount of flow in the aquifer compared to the amount of water being recharged. Past monitoring of similar existing facilities in the Big Wood River drainage suggests that recharge likely will not increase the amount of nitrate or decrease the amount of dissolved oxygen in the Big Wood River.

17. On May 1, 2002, ECIC filed Application for Transfer No. 5748 proposing to change the nature of use of two shares of water (0.04 cfs) under right no. 37-00863 from irrigation use to recreation/aesthetic uses from April 15 to October 15 each year. The change in use was sought to mitigate water lost through evaporation from proposed ponds to be constructed on the Friedman property. The application for transfer was not protested and was approved by the Department on January 6, 2003, based upon the Department's determination that water from the two shares would cover the evaporation losses from the ponds when water is available under the shares.

18. On June 28, 1991, the Department designated the Big Wood River Ground Water Management Area ("management area") in order to provide for increased management of ground water resources. The Management Policy for the management area included provisions for continued processing of non-consumptive use applications. The policy also provides that "approvals of ground water for consumptive uses can be granted upon a showing by an applicant and a determination by the department that the water supply is adequate and other water rights will not be injured."

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19. After conducting three public hearings in 1997 and in 1998, the Board of County Commissioners for Blaine County adopted a "Local Public Interest Water Policy" on January 26, 1998. The policy is consistent with the Blaine County Comprehensive Plan but was not adopted as an ordinance of the county. Among other considerations, the policy states that water use "primarily for private recreation or private aesthetic purposes" is contrary to the county's local public interest policy. The policy goes on to say, however, that "When such uses are ... for ... providing water for non-profit public recreation facilities" the water use probably does not conflict with the county's public interest policy. (See Protestant's Exhibits I and J).

ANALYSIS

ECIC filed Application for Transfer No. 5748 to change the nature of use for two shares of its water right from irrigation to recreation/aesthetic uses. The filing was a "companion" application to Application for Permit No. 37-20742 filed by Friedman. The transfer allows for the use of two shares of ECIC's Eagle Creek water right to be used for recreation/aesthetic purposes in Friedman's ponds. The transfer is a change in use of an existing water right, not a new appropriation of water. There were no protests filed and the Department on January 6, 2003, approved the transfer. The purpose of Friedman's application is to provide cooler temperature ground water to the ponds when the water temperature in the ponds becomes elevated or the dissolved oxygen level in the ponds is low. The proposed use of ground water by Friedman is not intended to provide a new source of water to keep the ponds full. The non-consumptive purpose of the ground water appropriation is to provide a source of water to maintain the quality of the surface water already stored in the ponds.

Forfeiture

The County asserts that because of non-use Friedman has forfeited his right to the use of water represented by shares of stock in ECIC. The assertions are based on the County's position that Friedman as a shareholder is the appropriator of water right no. 37-00863, and not ECIC. It is well established in Idaho that a canal company, which is the holder of a water right, is the appropriator, not its shareholders. In this case, the records of the Department show that ECIC is the legal titleholder of water right no. 37-00863.

The County argues that *Aberdeen-Springfield Canal Company v. Peiper,* 133 Idaho 82, 982 P.2d 917 (1999), relied upon by Friedman, is not applicable under the facts of the present case. Friedman cites *Peiper* for its holding that the failure of a shareholder to apply canal company water to a beneficial use did not cause the canal company to forfeit its water right appurtenant to the shareholder's land when the non-use was beyond the control of the appropriator. The County contends that *Peiper* is inapplicable because the Aberdeen-Springfield Canal Company was created under the Carey Act and ECIC is not a Carey Act company. The County argues that *Peiper* cannot be applied to this case because there are factual differences

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between the operation of the Aberdeen-Springfield Canal Company and ECIC. Although factual differences may exist in the operation of the companies, the legal principle set forth by the Court in *Peiper* is controlling.

The County further argues, "because Friedman may have failed to use his share of those water rights does not mean that ECIC was prevented by circumstances over which it had no control from exercising its right to the water." The Hearing Officer found credible evidence that when water, represented by the shares of stock owned by a particular shareholder, is not used or called for by that shareholder, ECIC does, in fact, deliver that water to other shareholders for use on lands within the service area of ECIC. The record in this case does not support a determination of forfeiture for any portion of the water right held by ECIC that is represented by the shares of stock issued to Friedman.

The County also argues that the application for permit should be rejected because the *Winslow* decree governing Eagle Creek is "dubious" given its entry as a default judgment. Any concern regarding unique provisions of the *Winslow* decree may be addressed as a part of the ongoing Snake River Basin Adjudication. Unless the *Winslow* decree is modified through the judicial process, the Department is required to recognize the provisions of the decree in its administration of water rights.

Local Public Interest

The County argues that the permit proposed by Friedman violates the local public interest policy adopted by Blaine County. The County's public interest policy includes various factors that the Department is already statutorily required to consider, such as the potential injury to existing water users, water conservation, the use of measuring devices, and mitigation requirements. The County argues that evaporation from the impoundment of water in ponds is wasteful and violates the County's public interest policy to conserve water. Friedman's expert witness, Charles Brockway, however, testified that evaporative losses from an equivalent surface area of a pond are essentially the same as evapotransporation losses from a like area of irrigated land.

Regarding potential injury to existing water users, the County asserts that junior water right holders who divert water from the Big Wood River will be injured because the water that once reached the river, as a result of nonuse by Friedman, will no longer be available. The Hearing Officer rejected this argument based upon the testimony that ECIC delivers water not used by a shareholder to other shareholders within its distribution system. Any nonuse of water by Friedman and his predecessors from 1977 through 2000 may or may not have resulted in additional water being recharged to the aquifer and ultimately becoming available to water users with rights from the Big Wood River. However, the possible loss of such an incidental benefit to other water users is not a recognizable injury in the absence of a portion of ECIC's water right

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37-00863 being determined forfeited. Because forfeiture cannot be found under the facts of this case, the Director concurs with the Hearing Officer that approval of the permit does not violate the local public interest.

Statutory Compliance

The County argues that Friedman has failed to demonstrate compliance with the provisions of Idaho Code § 42-203A(5), which sets forth the criteria for approval of an application for permit to appropriate water. The Hearing Officer concluded that Friedman's proposal would not adversely affect the rights of existing water users. The evidence submitted showed that the water supply is sufficient and that the application was made in good faith. The parties stipulated that Friedman had adequate financial resources to complete the project. Friedman presented sufficient evidence to demonstrate that the proposed project does not conflict with the local public interest. Finally, Friedman supplied credible expert testimony that the proposed ponds are not inconsistent with state water conservation policies. The Director agrees with the Hearing Officer's determination that the applicant has satisfied the statutory criteria for issuance of a water right permit in this case.

As the Hearing Officer noted, Friedman did not demonstrate a right to the use of ECIC water for the purpose of initially filling the ponds. The County suggests that this should be a basis for rejecting the application. The Department, however, may properly condition its approval of the application upon the requirement that Friedman obtain the necessary authorization to fill the ponds with 16 acre-feet of ECIC water. The Director agrees with the Hearing Officer's determination that Friedman should be allowed the opportunity to satisfy this condition of the order.

Mitigation

The approved permit will authorize the non-consumptive use of ground water to regulate temperature and dissolved oxygen levels in the proposed ponds. The source of the water to maintain water levels in the ponds is from Eagle Creek. The water consumed through evaporation from the ponds during the irrigation season is to be mitigated by permanently drying up two of the ten acres that Friedman was authorized to irrigate with his ECIC shares. Friedman is to use surface water from two ECIC shares that have been changed to aesthetic use to maintain the water levels in the ponds. If ECIC surface water is not available, Friedman is not permitted to use ground water to maintain the water levels in the ponds. Ground water is not a source of mitigation water for the ponds, nor is it a source of water to maintain the water levels in the ponds. Rather, the use of ground water is for the sole purpose of regulating temperature and dissolved oxygen levels in the ponds.

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CONCLUSIONS OF LAW

1. Idaho Code § 42-203A(5), as amended by the 2003 Legislature, provides in pertinent part as follows:

> In all applications whether protested or not protested, where the proposed use is such (a) that it will reduce the quantity of water under existing water rights, or (b) that the water supply itself is insufficient for the purpose for which it is sought to be appropriated, or (c) where it appears to the satisfaction of the director that such application is not made in good faith, is made for delay or speculative purposes, or (d) that the applicant has not sufficient financial resources with which to complete the work involved therein, or (e) that it will conflict with the local public interest, as defined in section 42-202B, Idaho Code, or (f) that it is contrary to conservation of water resources within the state of Idaho; ... the director of the department of water resources may reject such application and refuse issuance of a permit therefor or may partially approve and grant a permit for a smaller quantity of water than applied for, or may grant a permit upon conditions.

2. The definition of the local public interest now codified at Idaho Code § 42-202B(3) is as follows:

> "Local public interest" is defined as the interests that the people in the area directly affected by a proposed water use have in the effects of such use on the public water resource.

3. Idaho Code § 42-108 provides in pertinent part as follows:

> [I]f the right to the use of such water, or the use of the diversion works or irrigation system is represented by shares of stock in a corporation or if such works or system is owned and/or managed by an irrigation district, no change in the point of diversion, place of use, period of use, or nature of use of such water shall be made or allowed without the consent of such corporation or irrigation district.

4. Use of water as proposed in the application is non-consumptive and will not reduce the quantity of water in Eagle Creek or in the Big Wood River.

5. The ground water supply itself is sufficient for the purposes intended.

6. The application is made in good faith and not for delay or speculative purposes.

7. The applicant has spent money on the proposed development and has sufficient financial resources with which to complete the project.

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8. The Local Public Interest Water Policy adopted by the Blaine County Commissioners requests the Department to consider water conservation and other issues in water right proceedings that the Department is already required to consider by statute, i.e., evaluate potential injury to other water rights, require measuring devices where appropriate, evaluate whether a right to be changed will be enlarged, and require recharge as appropriate in connection with mitigation or non-consumptive use proposals.

9. Based upon the evidence in the record it is concluded that construction of the proposed project would not adversely affect the public water resource in a manner inconsistent with the local public interest. The evidence does not demonstrate that the proposed project will adversely affect water quantity or water quality in a manner detrimental to other water users, to recreational users, or to the fish and wildlife resources in the area. The proposed project is consistent with the local public interest.

10. The application is not contrary to the conservation of water resources within Idaho.

11. The applicant complied with the consent requirement of Idaho Code § 42-108 as evidenced by ECIC having applied for and received approval to change the nature of use from irrigation to recreation/aesthetic use for the two shares of its water right to be used for this project.

12. The Idaho Supreme Court has held that the failure of a stockholder to apply canal company water to beneficial use did not cause the canal company to forfeit its water right appurtenant to the stockholder's land. *Aberdeen-Springfield Canal Co. v. Peiper*, 133 Idaho 82, 87, 982 P.2d 917, 921 (1999).

13. Neither Friedman nor ECIC forfeited the use of water represented by Friedman's shares of stock in ECIC. This conclusion is based primarily upon the evidence in the record that the water represented by the Friedman shares was made available to other ECIC shareholders when not used by Friedman, and alternatively on the Idaho Court's holding in the *Peiper* case.

14. The Department should approve the application with certain conditions.

ORDER

IT IS HEREBY ORDERED that Application for Permit No. 37-20742 in the name of Robert G. Friedman is APPROVED subject to the following conditions:

1. Proof of application of water to beneficial use shall be submitted to the Department on or before January 1, 2005.

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2. The right is subject to all prior water rights.

3. Project construction shall commence within one year from the date of permit issuance and shall proceed diligently to completion unless it can be shown to the satisfaction of the Director of the Department of Water Resources that delays were due to circumstances over which permit holder had no control.

4. Prior to diversion of water under this permit, the right holder shall install and maintain measuring devices at the point of diversion (at the well), on the ditch from Eagle Creek where the ditch enters the right holder's property and at a location to measure pond outflow to the recharge area.

5. Use of water under this approval shall be non-consumptive. The right holder shall not divert ground water under this right unless the same or a larger amount of water is simultaneously discharged to the recharge site identified in the application.

6. The right holder shall retain ownership of the 10 shares of ECIC water stock and shall use two shares of water, to the extent the water is available, for use in the ponds.

7. This right does not convey any easement or right-of-way to the right holder to use the facilities or land of others.

8. The right holder shall grant reasonable access to Department staff to determine that terms of this approval are being met.

9. Failure of the right holder to comply with the conditions of this approval is cause for the Department to rescind approval of the right.

10. This approval does not waive other approvals that may be needed in connection with wetlands.

11. Use of water under this permit is rescinded if the portion of water right no. 37-00863 transferred under T5748 in the name of ECIC is determined in the Snake River Basin Adjudication to have been forfeited or to be otherwise invalid.

Signed this 25th day of August 2003.

KARL J. DREHER
Director

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CERTIFICATE OF SERVICE

I HEREBY CERTIFY that on this 25th day of August, 2003, the above and foregoing document was served upon the following by placing a copy of the same in the United States Mail, postage prepaid and properly addressed to the following:

Jim Speck
Speck & Aanestad
P.O. Box 987
Ketchum, ID 83340

Doug Werth
Bieter & Werth
P.O. Box 2360
Ketchum, ID 83340

Allen D. Merritt
Southern Region Manager
Idaho Dept. of Water Resources
1341 Fillmore St., Ste 200
Twin Falls, ID 83301

Deborah J. Gibson
Deborah J. Gibson
Administrative Assistant
Water Allocation Bureau

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BEFORE THE DEPARTMENT OF WATER RESOURCES

OF THE STATE OF IDAHO

IN THE MATTER OF APPLICATION FOR PERMIT NO 37-20742 IN THE NAME OF ROBERT G. FRIEDMAN	))))	**ORDER DENYING PETITION FOR RECONSIDERATION**

On January 2, 2003, the Department of Water Resources ("Department") issued a Preliminary Order approving Application for Permit No. 37-20742 ("application") filed in the name of Robert G. Friedman ("applicant" or "Friedman"). On January 16, 2003, Blaine County ("protestant" or "County") filed a Petition for Reconsideration ("petition") with the Department seeking denial of the application, or alternatively the imposition of additional conditions on the permit approval. The applicant filed a response to the petition on January 31, 2003.

The hearing officer has reviewed the County's petition and Friedman's response and has determined that the County's petition for reconsideration should be denied.

The County argues that through this application for permit to appropriate ground water and the associated Application for Transfer No. 5748 filed by the Eagle Creek Irrigation Company ("ECIC"), the applicant is attempting to do indirectly what the law prohibits him from doing directly. ECIC filed the transfer application to change the nature of use of two shares of its water right from irrigation to aesthetic/recreational purposes. The applicant filed this application for permit to divert ground water for the purpose of maintaining temperature and dissolved oxygen at desired levels in the proposed aesthetic/recreational ponds.

The County's argument appears to be that if the portion of the ECIC water right transferred to aesthetic/recreational purposes were owned by Friedman, individually, rather than by the irrigation company, then past failure to make beneficial use of the water on the Friedman property would have resulted in forfeiture of the water right. In its approval of Transfer No. 5748, the Department considered the issue of forfeiture. The argument made by the County is not well founded.

The holding in Aberdeen-Springfield Canal Co. v. Peiper, 133 Idaho 82, 982 P.2d 917 (1999) appears to be directly applicable to the present actions. The County's argument that Peiper is not applicable, because ECIC was not created as a Carey Act Company or that there may have been a difference in the intent of the shareholders in the Peiper case versus the intent of Friedman, does not preclude application of the legal principles relied upon in Peiper. The Supreme Court held that failure of stockholders to apply canal company water to beneficial use did not cause the canal company to forfeit its water right appurtenant to a stockholder's land. Both Aberdeen Springfield Canal Company and ECIC are companies with shares of stock that

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shareholders may use. Shareholders in either company should not have the ability to cause part of the company's water rights to be forfeited through non-use.

The record establishes that ECIC does, in fact, deliver water represented by shares of stock that are not being used by a shareholder to other shareholders. Contrary to the protestant's position, this does not mean that the shares are forfeited or lost. This bolsters the defense that the shares have not been forfeited through non-use. The preliminary order need not address the issue of retroactive application of Section 42-233, Idaho Code, because under Peiper the right was not forfeited .

The Department is not required to deny the application because of the pending question regarding the initial filling of the ponds. Section 42-222, Idaho Code, authorizes the Department to approve a proposed transfer change "upon conditions" and the Department has specifically done this. The applicant has not yet demonstrated its right to initially fill the ponds in compliance with Idaho water law and will need to do so before filling the ponds. The applicant, however, should have the opportunity to make such a showing. If the applicant is unable to show or obtain a right to make the initial filling, the permit will lapse.

The Preliminary Order does not "only tentatively require mitigation for evaporative losses" as argued by the protestant. Condition of Approval No. 6 requires the applicant to use two shares of Eagle Creek water in the ponds when Eagle Creek water is available for aesthetic/recreation purposes and prevents the applicant from ceasing to use Eagle Creek water in the ponds in favor of ground water. At least the same amount of water that is being pumped must be simultaneously discharged to the recharge site. See Condition of Approval 5. If this condition does not occur, the volume of impounded water in the ponds will diminish. In addition, the use of ground water with Eagle Creek water in the ponds is not and should not be treated as a mitigation proposal. There are two sources of water, one being surface water to fill and maintain the level of the ponds and the other being ground water for the sole purpose of regulating temperature and dissolved oxygen in the ponds.

The protestant states that if the application is approved, certain conditions of approval should be imposed.

The first suggested approval condition appears to be directly counter to the position of the protestant, since the condition suggests that ground water will be used to replace water evaporated from the ponds. Since the applicant is not authorized to consumptively use ground water, there is no authorization to replace evaporated surface water with ground water. See Condition of Approval No. 5.

The second suggested approval condition does not adequately separate the sources of water and season of water use associated with the water impoundment project. Ground water is authorized for diversion year-round if the ground water does not increase the volume of water in storage and no consumption of ground water occurs. Eagle Creek water can only be diverted during the authorized irrigation season.

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Hence, depending on the particular water year and the amount of surface water available, the ponds at times may not be full.

The third suggested approval condition ignores the court's holdings relative to Eagle Creek in the case of Arthur J. Winslow v. S.H. Chapman, Water Master, decreed on August 22, 1923, that enjoined the watermaster of the Big Wood River from exercising supervision over the water of Eagle Creek during the irrigation season and from interfering with the use of water right no. 37-00863. Condition of Approval No. 8 makes provision for reasonable access by Department staff to determine compliance with terms of the approval.

The fourth suggested approval condition is moot, since the Department has now approved Transfer No. 5748.

The actions requested in the fifth suggested approval condition have been fully set forth in the conditions shown in the Preliminary Order approving the application.

ORDER

IT IS THEREFORE, hereby ORDERED that the Petition for Reconsideration is **DENIED**.

Dated this 4th day of February, 2003.

L. GLEN SAXTON, P.E.
Hearing Officer

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JUL 15 2003

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that on this 4th day of February, 2003, the above and foregoing document was served on the following by placing a copy of the same in the United States mail, postage prepaid and properly addressed to the following:

JAMES P SPECK
SPECK & AANESTAD
PO BOX 987
KETCHUM ID 83340

DOUGLAS A WERTH
BIETER WERTH & WALKER PLLC
PO BOX 2360
KETCHUM ID 83340

ALLEN M MERRITT
SOUTHERN REGION
IDAHO DEPT OF WATER RESOURCES
1341 FILLMORE ST
TWIN FALLS ID 83301-3380

Deborah J. Gibson
Administrative Assistant
Water Allocation Bureau

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JUL 15 2004

BEFORE THE DEPARTMENT OF WATER RESOURCES

OF THE STATE OF IDAHO

IN THE MATTER OF APPLICATION)
FOR PERMIT NO. 37-20742 IN THE)
NAME OF ROBERT G. FRIEDMAN) **PRELIMINARY ORDER**
_____)

This matter having come before the Idaho Department of Water Resources ("Department") as a protested application for permit and the Department having held a conference and a hearing in the matter, the hearing officer enters the following Findings of Fact, Conclusions of Law and Preliminary Order:

FINDINGS OF FACT

1. Robert G. Friedman ("applicant" or "Friedman") owns 10 acres of property located about 6 miles north of Ketchum, Idaho near the confluence of Eagle Creek ("creek") with the Big Wood River ("river") in Blaine County and plans to build a residence, a guest house and a barn on the property and to construct three ponds. The estimated cost of the three buildings is about 2.5 million dollars and the cost of landscaping is estimated to be in excess of $540,000. (See Applicant's Exhibit 13). The applicant has hired a local architectural firm for the design, intends to use local contractors for construction, and plans to buy building materials locally.

2. On July 11, 2002, Friedman submitted Application for Permit No. 37-20742 ("application") to the Department proposing the diversion of 2.0 cubic feet per second ("cfs") of ground water to be used year-round for recreation and aesthetic purposes within the NE1/4NW1/4 Section 23, T5N, R17E, B.M. Blaine County, Idaho in three ponds that will store 16 acre feet of water and will have a total surface area of about 2 acres.

(Note: The "1/4" designations will be omitted from subsequent legal descriptions in this order).

3. The Department published notice of the application that was subsequently protested by the Board of Blaine County Commissioners ("county").

4. On November 13, 2002, the Department conducted a hearing in the matter. The applicant was present and was represented by James P. Speck. Douglas A. Werth represented the protestant.

5. Issues the Department is required to consider in this matter are as follows:

a. Whether the appropriation will reduce the quantity of water under existing water rights;

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b. Whether the water supply itself is insufficient for the purpose for which it is sought to be appropriated;
c. Whether the application is made in good faith, or is made for delay or speculative purposes;
d. Whether the applicant has sufficient financial resources with which to complete the work involved therein;
e. Whether the proposed appropriation will conflict with the local public interest; and
f. Whether the proposed appropriation is contrary to conservation of water resources within the state of Idaho.

The Department must consider all the issues even though the protestant stipulated that the sufficiency of financial resources of the applicant was not an issue of concern.

6. Exhibits premarked, offered or accepted as a part of the record are as follows:

Applicant's:

Exhibit 1 - Water Requirements and Use Data
Exhibit 2 - Pond and Irrigation System Inflow and Outflow Loss Estimates
Exhibit 3 - Estimated Maximum Net Groundwater Use for Residences
Exhibit 4 - Summary Operations Plan
Exhibit 5 - Friedman Property - Fox Creek Ranch, Survey From West Observation Well to Big Wood River
Exhibit 6 - Well Section & Configuration - Proposed New Well
Exhibit 7-1 - Well Interference Analysis Friedman Project Well
Exhibit 7-2 - Estimated Drawdown From Continuous Pumping of Proposed Friedman Well
Exhibit 8 - Vicinity Map
Exhibit 9 - Stock Certificate issued by Eagle Creek Irrigation Company (Same exhibit as Protestant's Exhibit X)
Exhibit 10 - Friedman Fox Creek Water Operations Schematic
Exhibit 11 - Friedman Fox Creek Water Operations Cross Section
Exhibit 12 - Well Driller Reports (75 reports)
Exhibit 13 - Webb Landscape, Inc., Estimate (5 pages)
Exhibit 14 - NOT OFFERED
Exhibit 15 - Vitae for Charles E. Brockway, P.E., Ph.D.
Exhibit 16 - Flow measurements and copies of photographs (7)
Exhibit 17 - Map
Exhibit 18 - Map
Exhibit 19 - Photographs (10)
Exhibit 20 - Photographs (7)
Exhibit 21 - Photographs (7)

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Protestant's:

Exhibit A - Order - In the Matter of Designating the Big Wood River Ground Water Management Area, June 28, 1991
Exhibit B - Management Policy for the Big Wood River Ground Water Management Area, June 28, 1991
Exhibit C - Memorandum dated January 22, 1980 to Department staff from C. Stephen Allred, Re: Big Wood River Appropriations
Exhibit D - Memorandum dated February 1, 1980 from Dave Tuthill to Bob Fleenor and map
Exhibit E - Letter dated July 13, 2000 to Mary Ann Mix from Nick Purdy
Exhibit F - Letter dated July 17, 2000 to Dirk Kempthorne from the Board of Blaine County Commissioners
Exhibit G - Order Declaring Drought Emergency dated July 18, 2000
Exhibit H - Letter dated August 26, 1996 to Board of County Commissioners from Allen Merritt
Exhibit I - Blaine County Resolution 98-1 dated January 26, 1998 adopting a Blaine County Local Public Interest Water Policy
Exhibit J - Local Public Interest Water Policy - Section 8, Chapter 3, Blaine County, April 2000
Exhibit K - Final Order - In the Matter of Applications for Transfer No. 5174 in the Name of Dennis M. Baker and No. 5175 in the Name of Huf-N-Puf Trust
Exhibit L - Order Declaring Drought Emergency dated April 19, 2001
Exhibit M - Order Declaring Drought Emergency dated May 13, 2002
Exhibit N - Photographs (Premarked as N-1 thru N-24)

N-1, N-2, N-3	NOT OFFERED
N-4, N-5, N-6	Admitted
N-7	NOT OFFERED
N-8 thru N-15	NOT ADMITTED
N-16 thru N-18	NOT OFFERED
N-19, N-20, N-21	Admitted
N-22 thru N-24	NOT OFFERED

Exhibit O - USGS Quadrangle sheet, (Amber Lakes, Idaho)
Exhibit P - Aerial Photograph
Exhibit Q - Tax Lot Vicinity Map
Exhibit R - Blaine County Comprehensive Plan
Exhibit S - Minutes of Blaine County Board of Commissioners' meeting held January 26, 1998, adopting Resolution 98-1
Exhibit T - Decree - Arthur J. Winslow v. S. H. Chapman, Watermaster, August 22, 1923
Exhibit U - Eagle Creek Irrigation Company, Certificate of Incorporation
Exhibit V - Articles of Incorporation of Eagle Creek Irrigation Company
Exhibit W - By-Laws of Eagle Creek Irrigation Company
Exhibit X - Stock Certificate issued by Eagle Creek Irrigation Company (Same exhibit as Applicant's Exhibit 9)

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Exhibit Y - Compilation of Priority Cuts on the Big Wood River above Magic Reservoir (1998 - 2002)
Exhibit Z - Letter dated December 22, 1997 to Board of County Commissioners from Norman C. Young
Exhibit AA - U.S. Geological Survey Report 89-4018 titled Water Resources of the Upper Big Wood River Basin, Idaho Department of Water Resources
Exhibit AB - Phase 1, Final Report titled "Hydrologic Evaluation of the Big Wood River and Silver Creek Watershed", November 1994

The hearing officer also took official notice of the following:

- The application for permit file and its contents as it existed at the close of the hearing together with any subsequent information that has been properly served on the parties
- Water right records of the Department
- Holdings in past decisions and orders of the Department including the Memorandum Decision and Order issued on June 8, 1993 for Transfer No. 3968 filed in the name of Dr. Lee Enright
- Reports, water measurements and flow records in Department files
- Well Driller Reports
- Application for Transfer No. 5748 in the name of Eagle Creek Irrigation Company
- Application for Permit No. 37-08910 (Relinquished)

7. Water right no. 37-00863 was decreed on August 22, 1923 in the case of Arthur J. Winslow v. S.H. Chapman, watermaster. The right authorizes the diversion of 4.6 cfs of water from Eagle Creek for the irrigation of parts of Sections 14, 15 and 23, T5N, R17E, B.M. also known as part of H.E.S. Nos. 129 and 329. The location of the points of diversion was not described in the decree. The priority of the water right is October 6, 1902. The decree enjoined the watermaster of the Big Wood River from exercising supervision over the water of Eagle Creek during the irrigation season and from interfering with the use of water right no. 37-00863.

8. Eagle Creek Irrigation Company ("ECIC" or "company") is a mutual non-profit irrigation company incorporated in 1973 and is the successor-in-interest to all or a portion of decreed water right no. 37-00863. Each share of stock represents one miner's inch (0.02 cfs) of water when the water is available from Eagle Creek. The by-laws of ECIC provide that during times of water shortage, water will be distributed on a pro-rata basis according to the number of shares held. ECIC has issued 187 shares for which there are 17 shareholders.

9. The president of ECIC testified that the primary function of the company is to construct, maintain and operate a private water distribution system for use by its shareholders. The president also testified that the company has no control over whether a shareholder uses or does not use the shares of water it owns.

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10. The applicant owns 10 shares of surface water provided by ECIC. For initial filling of the ponds the applicant proposes to forego use of 16 acre feet of water from Eagle Creek for irrigation of the property during the first year and to impound the water in the ponds. In subsequent years, water lost from the ponds through seepage or evaporation will be mitigated by permanently drying up 2 acres of previously irrigated land on the 10-acre parcel. The applicant plans to pump water from the lower pond to the upper ponds to provide a flow through system using a recirculation pump that can operate independently from the pump diverting water from the proposed well. (See Applicant's Exhibit 10).

11. The applicant plans to periodically pump water from the proposed well in order to provide cooler water for recirculation through the ponds when air temperatures are high. Water discharging from the lower pond will recharge the aquifer near the southwest corner of the property. The applicant plans to only pump ground water during the irrigation season when there is sufficient surface water available from Eagle Creek to mitigate pond evaporation and only when water temperature becomes elevated or dissolved oxygen levels in the ponds are low. The recharge area is a natural area located about 300 to 400 feet from the river that has historically recharged surface water from the ECIC distribution system to the aquifer and ultimately to the river. Recharged water is estimated to reach the river within 4 to 6 hours within 1/4 mile of the recharge area.

12. The applicant's property is the last property served by the distribution system of ECIC and is located southerly of other shareholders served by ECIC. The ditch from Eagle Creek enters the northeast corner of the applicant's property and follows the north side of the property toward the Big Wood River. The applicant's property was not irrigated from about 1977 through 2000 although the ditch on the property carried water toward the Big Wood River during that time. During 2001 and 2002, the applicant irrigated about one third of the property using a 5 1/2 horsepower portable gas powered pump and 12 sprinkler lines. Each line had 12 to 15 sprinkler heads that were spaced about 20 feet apart. (See Applicant's Exhibit 21). Vegetation on the applicant's property includes native grasses and crested wheat.

13. After 40 days of pumping at a rate of 2 cfs, the estimated drawdown in a well located 500 feet from the applicant's proposed well would be about 2 feet. (See Applicant's Exhibit 7). The nearest well to the applicant's proposed well is a domestic well located 720 feet away. The 40-day period is the approximate time for the ground water system to reach equilibrium as a result of pumping the applicant's well.

14. The volume of Eagle Creek water used for the development proposed by the applicant, including evaporation losses from the three ponds, will be less than the amount of water used to irrigate the approximate 10 acres. (See Applicant's Exhibit 3)

15. The applicant has measured the flow in the ECIC ditch where it enters the northeast corner of the applicant's property as follows:

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August 2, 2000	0.33 cfs
July 19, 2000	0.22
July 26, 2002	0.18
September 26, 2002	0.18

A witness for the protestant testified that during the time he has observed Eagle Creek from 1977 to the present time, he has always observed some water in the creek.

16. Water recharged to the aquifer near the southwest corner of the applicant's property will not increase the temperature of the Big Wood River because of the larger amount of flow in the aquifer compared to the amount of water being recharged. Past monitoring of similar existing facilities in the Big Wood River drainage, suggests that recharge likely will not increase the amount of nitrate or decrease the amount of dissolved oxygen in the Big Wood River.

17. On May 1, 2002, ECIC filed Application for Transfer No. 5748 proposing to change the nature of use of 2 shares of water (0.04 cfs) of water right no. 37-0863 from irrigation use to recreation/aesthetic uses from April 15 to October 15 each year. The change in use was sought to mitigate water lost through evaporation from proposed ponds to be constructed on the Friedman property. The application for transfer was not protested and presently is pending before the Department.

18. On June 28, 1991, the Department designated the Big Wood River Ground Water Management Area ("management area") in order to provide for increased management of ground water resources. The Management Policy for the management area included provisions for continued processing of non-consumptive use applications. The policy also provides that "approvals of ground water for consumptive uses can be granted upon a showing by an applicant and a determination by the department that the water supply is adequate and other water rights will not be injured."

19. After conducting three public hearings in 1997 and in 1998, the Board of County Commissioners for Blaine County adopted a "Local Public Interest Water Policy" on January 26, 1998. The policy is consistent with the Blaine County Comprehensive Plan but was not adopted as an ordinance of the county. Among other considerations, the policy states that water use "primarily for private recreation or private aesthetic purposes" is contrary to the county's local public interest policy. The policy goes on to say, however, that "When such uses are ... for ... providing water for non-profit public recreation facilities" the water use probably does not conflict with the county's public interest policy. (See Protestant's Exhibits I and J).

ANALYSIS

Application for Transfer No. 5748 filed by ECIC to change the nature of use of two shares of ECIC water use from irrigation to recreation/aesthetic uses, is a "companion" application to application for permit no. 37-20742 filed by Friedman. If approved, the transfer application would allow use of 2 shares of Eagle Creek water for

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recreation/aesthetic purposes in the applicant's ponds. The transfer application is a change in use of an existing water right, not a new appropriation of water. The purpose of the Friedman application is to provide water to the ponds when water temperature becomes elevated or dissolved oxygen levels in the ponds are low. The use of the well is not to provide a new source of water for the ponds to keep them full. Use of water from the well must be so conditioned that it is non-consumptive and not a new source of water to fill the ponds. Stated another way, the purpose of the well is to provide water to maintain the quality of surface water already stored in the ponds.

ECIC testified that it delivers shares of water that are not called for to other shareholders under its distribution system. Nonuse of water during the 1977 through 2000 period by the applicant or predecessors may have resulted in additional water being recharged to the aquifer and ultimately becoming available to water users in the Big Wood River drainage. The loss of an incidental benefit to water users in the drainage, however, should not be considered as an injury when the water users do not have a right to demand or expect to receive wastewater resulting from use of water right 37-00863.

The part of the ECIC water right to be changed to recreation/aesthetic uses by ECIC has not been forfeited through nonuse, even though the shareholders have not exercised use of the irrigation shares to the extent they could have. The recent case of Aberdeen-Springfield Canal Co. v. Peiper, 133 Idaho 82, 982 P.2d 917 (1999), held that failure of stockholders to apply canal company water to beneficial use did not cause the canal company to forfeit its water right appurtenant to stockholder's land. This case appears to be directly applicable to the history of water use on the Friedman property.

The right of the applicant to initially fill the ponds during the first year by foregoing the use of 16 acre feet of water from Eagle Creek for irrigation of the property may not be authorized by either ECIC or by the water right. The applicant needs to research the authority to use the shares of irrigation water for the initial filling of the ponds.

The Local Public Interest Water Policy adopted by the Blaine County Commissioners is an expression of public interest in the county. Other facets of local public interest include the effect of the project on the economy of the area as determined by employment opportunities, both short and long term, the effect the project will have on recreation, fish and wildlife resources in the area, compliance with applicable air, water and hazardous substance standards and compliance with planning and zoning ordinances of state government jurisdictions. If the project is constructed, there will be short-term economic benefits that are positive in terms of local public interest. None of the parties showed that the proposed project will adversely affect recreation, fish and wildlife resources in the area, will not comply with applicable air, water and hazardous substance standards and will not comply with planning and zoning ordinances of state government jurisdictions. In balance, the proposed project is in the local public interest.

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As the application and approval are structured, there will be no consumptive commitment of ground water to the proposed project. The source of water for the ponds is surface water from Eagle Creek. The ground water pumped to the ponds has to be non-consumptive, with the benefit to the project being to provide water to the ponds with increased dissolved oxygen and to replace surface water in the ponds with water at a lower temperature.

CONCLUSIONS OF LAW

1. Section 42-203A, Idaho Code, provides in pertinent part as follows:
In all applications whether protested or not protested where the proposed use is such (a) that it will reduce the quantity of water under existing water rights, or (b) that the water supply itself is insufficient for the purpose for which it is sought to be appropriated, or (c) where it appears to the satisfaction of the director that such application is not made in good faith, is made for delay or speculative purposes, or (d) that the applicant has not sufficient financial resources with which to complete the work involved therein, or (e) that it will conflict with the local public interest, where the local public interest is defined as the affairs of the people in the area directly affected by the proposed use, or (f) that it is contrary to conservation of water resources within the state of Idaho; the director of the department of water resources may reject such application and refuse issuance of a permit therefor... .

2. Section 42-108, Idaho Code, provides in pertinent part as follows:

> [I]f the right to the use of such water, or the use of the diversion works or irrigation system is represented by shares of stock in a corporation or if such works or system is owned and/or managed by an irrigation district, no change in the point of diversion, place of use, period of use, or nature of use of such water shall be made or allowed without the consent of such corporation or irrigation district.

3. The Supreme Court of Idaho has held that failure of stockholders to apply canal company water to beneficial use did not cause the canal company to forfeit its water right appurtenant to stockholder's land. Aberdeen-Springfield Canal Co. v. Peiper, 133 Idaho 82, 982 P.2d 917 (1999).

4. Section 42-223(7), Idaho Code, provides the following:

> No portion of a water right held by an irrigation district, a Carey Act operating company, or any other company, corporation, association, or entity which holds water rights for distribution to its landowners, shareholders or members shall be lost or forfeited due to nonuse by such landowners, shareholders or members, unless the nonuse is subject to the

JUL 15 2004

control of such entity.

5. The filing of application for transfer no. 5748 by ECIC meets the consent requirement described in Section 42-108, Idaho Code, that otherwise would have to be met by the applicant if ECIC had not filed the application for transfer.

6. Use of water as proposed in the application is non-consumptive and will not reduce the quantity of water in Eagle Creek or in the Big Wood River.

7. The ground water supply itself is sufficient for the purposes intended.

8. The applicant has hired local architectural and landscaping design firms to prepare preliminary designs of the buildings and proposed water related amenities on the applicant's property. The application is made in good faith and not for delay or speculative purposes.

9. The applicant has spent money on the proposed development and has sufficient financial resources with which to complete the project.

10. Among other considerations, the Local Public Interest Water Policy adopted by the Blaine County Commissioners requests the Department to consider issues in the evaluation of transfers that the Department is already required to do by statute, i.e. evaluate potential injury to other water rights, require measuring devices where appropriate, evaluate whether a right to be changed will be enlarged and require recharge as appropriate in connection with mitigation or non-consumptive use proposals.

11. If the applicant's project is constructed, there will be short-term economic benefits that are positive in terms of local public interest. None of the parties showed that the proposed project will adversely affect recreation, or fish and wildlife resources in the area, will not comply with applicable air, water and hazardous substance standards, and will not comply with planning and zoning ordinances of state government jurisdictions. In balance, the proposed project is in the local public interest.

12. The application is not contrary to the conservation of water resources within Idaho.

13. The Department should approve the application with certain conditions.

ORDER

IT IS THEREFORE, hereby ORDERED that Application for Permit No. 37-20742 in the name of Robert G. Friedman is **APPROVED** subject to the following conditions:

1. Proof of application of water to beneficial use shall be submitted to the Department on or before **January 1, 2005**.

2. Subject to all prior water rights.

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3. Project construction shall commence within one year from the date of permit issuance and shall proceed diligently to completion unless it can be shown to the satisfaction of the Director of the Department of Water Resources that delays were due to circumstances over which permit holder had no control.

4. Prior to diversion of water under this permit, the right holder shall install and maintain measuring devices at the point of diversion (at the well), on the ditch from Eagle Creek where the ditch enters the right holder's property and at a location to measure pond outflow to the recharge area.

5. Use of water under this approval shall be non-consumptive. The right holder shall not divert ground water under this right unless the same or a larger amount of water is simultaneously discharged to the recharge site identified in the application.

6. The right holder shall retain ownership of the 10 shares of ECIC water stock and shall use 2 shares of water to the extent it is available for use in the ponds.

7. This right does not convey any easement or right-of-way to the right holder to use the facilities or land of others.

8. The right holder shall grant reasonable access to Department staff to determine that terms of this approval are being met.

9. Failure of the right holder to comply with the conditions of this approval is cause for the Department to rescind approval of the right.

10. This approval does not waive other approvals that may be needed in connection with wetlands.

11. Use of water under this permit is rescinded if the portion of water right no. 37-00863 transferred under T5748 in the name of ECIC is determined in the Snake River Basin Adjudication to have been forfeited or to be otherwise invalid.

Signed this 2nd day of January, 2003.

L. GLEN SAXTON, P.E.
Hearing Officer

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JUL 15 2003

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that on this 2nd day of January, 2003, the above and foregoing document was served on the following by placing a copy of the same in the United States mail, postage prepaid and properly addressed to the following:

JAMES P SPECK
SPECK & AANESTAD
PO BOX 987
KETCHUM ID 83340

DOUGLAS A WERTH
BIETER WERTH & WALKER PLLC
PO BOX 2360
KETCHUM ID 83340

ALLEN M MERRITT
SOUTHERN REGION
IDAHO DEPT OF WATER RESOURCES
1341 FILLMORE ST
TWIN FALLS ID 83301-3380

Deborah J. Gibson
Administrative Assistant
Water Allocation Bureau

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JUL 15 2003

MAILING LIST, APP 37-20742

Applicant:

ROBERT G. FRIEDMAN
718 NORTH CRESCENT DRIVE
BEVERLY HILLS CA 90210

Tele# 323-956-5060

Attorney for Applicant:

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SPECK & AANESTAD
PO BOX 987
KETCHUM ID 83340

Tele # 726-4421, Fax # 726-0752

Consultant for Applicant:

C E BROCKWAY P E
BROCKWAY ENGINEERING
2016 NORTH WASHINGTON ST-STE 4
TWIN FALLS ID 83301

TELE# 736-8543
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Protestant:

ATTN MARY ANN MIX
BLAINE COUNTY COMMISSIONERS
206 FIRST AVENUE SOUTH, STE# 300
HAILEY ID 83333

Tele# 788-5500
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Legal Counsel for Protestant:

DOUGLAS A. WERTH
BIETER WERTH & WALKER PLLC
PO BOX 2360
KETCHUM ID 83340

Tele# 726-0847
Fax# 727-6853

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RECEIVED
JUL 28 2005
DEPARTMENT OF
WATER RESOURCES

Looks like this goes with Permit 37-20742.

July 25, 2005

Trish Fawcett
State of Idaho
Department of Water Resources
1341 Fillmore Street
Suite 200
Twin Falls, ID 83301-3380

RE: CHANGE OF ADDRESS

Dear Ms. Fawcett:

Per your conversation with my assistant, Celia, following is my new address for your records:

Robert G. Friedman
9455 Lloydcrest Drive
Beverly Hills, CA 90210

The old address was 718 N. Crescent Drive, Beverly Hills.

I would appreciate your help in updating your records.

Sincerely,

Robert G. Friedman

State of Idaho
DEPARTMENT OF WATER RESOURCES
322 East Front Street, P.O. Box 83720, Boise, ID 83720-0098
Phone: (208) 287-4800 Fax: (208) 287-6700 Web Site: www.idwr.idaho.gov.

DIRK KEMPTHORNE
Governor

KARL J. DREHER
Director

April 11, 2005

ROBERT G FRIEDMAN
C/O JAMES P SPECK
PO BOX 987
KETCHUM ID 83340

RE: PERMIT NO. 37-20742

Dear Permit Holder:

Enclosed is a copy of the approved request for extension of time submitted in connection with the above referenced permit which extends the proof due date to **January 1, 2007.** Please note that the approved request reinstates the permit, however, since your request was submitted after the proof due date the priority of the permit advances to September 2, 2002, as referenced in Section 42-218a, Idaho Code.

Please note that the department has granted this extension based on **due diligence.** It is important that you work diligently toward the completion of the development during the construction period allowed since the department may not be able to grant additional extensions based on due diligence.

Section 42-248, Idaho Code, requires you or the owner of this water right to maintain current ownership and address records on file with the department. Please contact any office of the department for the proper form to file a change of ownership of a water right and/or a change in the address of the owner.

Please feel free to contact the department if you have questions.

Sincerely,

Deborah J. Gibson
Administrative Assistant
Water Allocation Bureau

Enclosure
c: IDWR - Regional Office

ANALYSIS SHEET FOR EXTENSION OF TIME

Permit No.: 37-20742 Reviewed By: dgibson Date: April 7, 2005

	Yes	No		Yes	No
Request received timely?		X	Is delay by a government agency?		X
Appropriate fee	X		Is supporting documentation needed to support the file?		X
Additional Amount Due:					
Receipt No.:	S025060, C076901		Has the permit been involved in litigation?		X
Name and signature same as permit?	X		Is supporting documentation needed to support the file?		X
Is address same as permit?		X	Is the project more than 25,000 acre feet for irrigation or 10,000 acre feet for a reservoir?		X
Has adequate work been completed to demonstrate due diligence?	X				

Priority Calculation

Extension request received		02/23/2005	New proof due date	01/01/2007
Date proof due	-	01/01/2005		
Lapse notice sent	-			
No. of days late	=	53		
Holiday allowance	+			
Priority date	+	07/11/2002		
New priority date	=	09/02/2002		

Action Taken

Acknowledge extension request and grant extension to January 1, 2007. Adjustment of priority date is appropriate, and based on Gary Spackman's instructions to advance the priority of this permit with consideration of Mr. Speck's request.

RECEIVED
FEB 23 2005
DEPARTMENT OF WATER RESOURCES

IDAHO DEPARTMENT OF WATER RESOURCES
SOUTHERN REGION
1341 FILLMORE ST., STE .200
TWIN FALLS, ID 83301-3380
(208) 736-3033

NOTICE OF CHANGE IN ADDRESS

☐ Water Right Number(s): Permit No. 37-20742

☐ Old Mailing Address: Robert G. Friedman
718 North Crescent Drive
Beverly Hills, CA 98010

☐ New Mailing Address: c/o James P. Speck
Post Office Box 987
Ketchum, Idaho 83340

☐ New Telephone Number: (208) 788-4421

☐Signature of Claimant(s):

Robert G. Friedman

Date: 2-15-05

FOR IDWR USE ONLY

INITIAL Review and Data Entry
Date: 4/1/05 By: D. Gibson
Further Action Needed:

Further Action Taken:
Date: By:
Final Review and Data Entry

Date: By:

RECEIVED
FEB 2 3 2005
DEPARTMENT OF
WATER RESOURCES

SPECK & AANESTAD
A PROFESSIONAL CORPORATION
ATTORNEYS
120 EAST AVENUE
POST OFFICE BOX 987
KETCHUM, IDAHO 83340

JAMES P. SPECK
jimspeck@cox-internet.com
DOUGLAS J. AANESTAD
aanestad@cox-internet.com

TELEPHONE
(208) 726-4421
FACSIMILE
(208) 726-0752

February 17, 2005

Gary Spackman
Idaho Department of Water Resources
322 E. Front St.
P.O. Box 83720
Boise ID 83720-0098

Re: Permit No. 37-20742
Our File No.: 91/00144

Dear Gary:

As you know I represent Mr. Robert G. Friedman, the holder of Permit No. 37-20742. Enclosed you will find the original and one copy each of a Notice of Change in Address and an Request for Extension of Time together with my firm's check payable to the Department for the $50 fee for the latter filing. Since these documents are being submitted within the required 60 day time frame from the mailing of the Lapse Notice I understand this Permit will be re-instated.

I also want to request that the priority date for this Permit not be advanced as the result of the lapse. The reasons for this request were described in my January 28, 2005 email to you, a copy of which I have also enclosed for your easy reference. If you have any questions at all about this request, please call me right away.

Thank you very much for your continuing cooperation and assistance in these matters.

Sincerely yours,

SPECK & AANESTAD
A Professional Corporation

By: _____
James P. Speck

JPS:jal
Enclosures
cc: Robert Friedman (w/encl.)
Chuck Brockway (w/encl.)

January 5, 2005

ROBERT G FRIEDMAN
718 N CRESCENT DR
BEVERLY HILLS, CA 90210

LAPSE NOTICE

RE: PERMIT NO. 37-20742

Dear Permit Holder:

You are hereby notified that under the provisions of Section 42-218A, Idaho Code, the above referenced permit has lapsed and is of no further force nor effect. The department provided the proper forms to you in the proof due notice dated October 31, 2004. No further construction or additional development is authorized under this permit unless it is reinstated.

The permit can only be reinstated if you submit an acceptable proof of beneficial use or an acceptable request for extension of time to the department within sixty (60) days of the mailing of this lapse notice. An acceptable proof of beneficial use submittal must include the examination fee or a completed field examination report. A request for extension of time must be accompanied by a fifty dollar ($50.00) fee.

Enclosed again for your use are a proof of beneficial use form and a request for extension of time form. Please note that only one extension of time can be granted unless the project has not been completed because of lack of a necessary approval by a government agency or by litigation which may bring title to the water in question.

Sincerely,

Gary Spackman
Water Allocation Bureau

Enclosures

CERTIFICATION OF MAILING
I hereby certify that on 1/5/05

State of Idaho
DEPARTMENT OF WATER RESOURCES
322 East Front Street, P.O. Box 83720, Boise, ID 83720-0098
Phone: (208) 287-4800 Fax: (208) 287-6700 Web Site: www.idwr.idaho.gov.

DIRK KEMPTHORNE
Governor

KARL J. DREHER
Director

October 31, 2004

ROBERT G FRIEDMAN
718 N CRESCENT DR
BEVERLY HILLS, CA 90210

PROOF DUE NOTICE

RE: PERMIT NO. 37-20742

Dear Permit Holder:

One of the conditions of approval of the above referenced water permit was that proof of the extent of your beneficial use must be submitted to this office on or before January 01, 2005. (See last page of your approval permit or your last approved extension request.) Enclosed is a form which when accompanied by the license examination fee or a completed field examination report prepared by a certified water right examiner may be used to submit the required proof.

If you have not fully completed your project, and you or a previous owner of this permit have not received a prior extension of time, you may request an extension of time if the delay is for reasonable cause as provided in Section 42-204, Idaho Code. If you have been prevented from proceeding by a governmental agency or by litigation which might bring title to the water in question, more than one extension of time can be granted. An extension of time request form is enclosed for your convenience.

Either an acceptable proof of beneficial use submittal or an acceptable request for an extension of time must be received by this department on or before the above described proof due date. If neither is received, the department will send you a lapse notice. Within sixty (60) days of the mailing of the lapse notice, the permit will no longer be of any force nor effect.

Sincerely,

Deborah J. Gibson, Administrative Assistant
Water Allocation Bureau

Enclosures

CERTIFIED MAIL

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
East Front Street, P.O. Box 83720
Boise, Idaho 83720-0098

Return Service Requested

7003 0500 0003 1890 3179

UNCLAIMED
ATTEMPTED - NOT KNOWN
INSUFFICIENT ADDRESS
NO SUCH STREET
NO SUCH OCCUPANT
DO NOT REMAIL

11-16-04
11-16-04

37-20742

WA

RECEIVED
DEC - 6 2004
DEPARTMENT OF WATER RESOURCES

9590 9402 0332 26

October 31, 2004

ROBERT G FRIEDMAN
718 N CRESCENT DR
BEVERLY HILLS, CA 90210

PROOF DUE NOTICE

RE: PERMIT NO. 37-20742

Dear Permit Holder:

One of the conditions of approval of the above referenced water permit was that proof of the extent of your beneficial use must be submitted to this office on or before January 01, 2005. (See last page of your approval permit or your last approved extension request.) Enclosed is a form which when accompanied by the license examination fee or a completed field examination report prepared by a certified water right examiner may be used to submit the required proof.

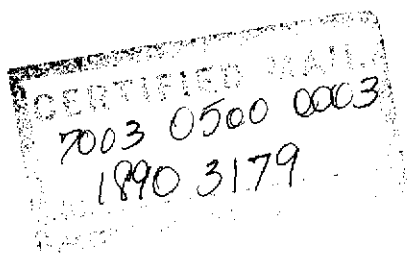
If you have not fully completed your project, and you or a previous owner of this permit have not received a prior extension of time, you may request an extension of time if the delay is for reasonable cause as provided in Section 42-204, Idaho Code. If you have been prevented from proceeding by a governmental agency or by litigation which might bring title to the water in question, more than one extension of time can be granted. An extension of time request form is enclosed for your convenience.

Either an acceptable proof of beneficial use submittal or an acceptable request for an extension of time must be received by this department on or before the above described proof due date. If neither is received, the department will send you a lapse notice. Within sixty (60) days of the mailing of the lapse notice, the permit will no longer be of any force nor effect.

Sincerely,

Deborah J. Gibson, Administrative Assistant
Water Allocation Bureau

Enclosures



State of Idaho
DEPARTMENT OF WATER RESOURCES
1301 North Orchard Street, Boise, ID 83706 - P.O. Box 83720, Boise, ID 83720-0098
Phone: (208) 327-7900 Fax: (208) 327-7866 Web Site: www.idwr.state.id.us

DIRK KEMPTHORNE
Governor

KARL J. DREHER
Director

October 15, 2003

ROBERT G FRIEDMAN
718 N CRESCENT DR
BEVERLY HILLS CA 90210

RE: Permit No. 37-20742

Permit Approval Notice

Dear Permit Holder:

The Department of Water Resources has issued the enclosed permit in connection with the final order issued on August 25, 2003.

As a permit owner you must commence the excavation or construction of the diverting works within one year of the date the permit was issued, and you must proceed diligently until the project is completed. The date shown under condition no. 1 is the date when the project must be completed.

The Department will send you a 'Proof Due Notice' approximately 60 days prior to the above referenced date requesting you to file either a Proof of Beneficial Use form or a Request for Extension of Time form.

The right to drill a well is not a part of this permit to appropriate water. Beginning in July of 1987, a statute was enacted which requires a drilling permit for new well construction and deepening of existing wells. If the well(s) proposed for use under this water right permit were drilled or deepened after July 1, 1987, a separate drilling permit must be obtained from this Department. Please contact the Ground Water Protection Section located here at this office or our regional office nearest you.

Also, please note that water right owners are required to report any change of water right ownership and/or mailing address to the Department within 120 days of the change. Failure to report these changes could result in a $100 late filing fee. Contact any office of the Department or visit the Department's homepage on the Internet to obtain the proper forms and instructions.

MICROFILMED
JUL 2 5 2004

If you have any questions, please contact me at 208-327-7946.

Sincerely,

Shelley W. Keen

Shelley W. Keen
Water Rights Supervisor

SWK:klt

Enclosures

cc: Jim Speck, Speck & Aanestad
Doug Werth, Bieter & Werth

MICROFILMED
JUL 15 2004

CERTIFICATE OF SERVICE

I hereby certify that on **October 15, 2003** I mailed a true and correct copy, certified, postage prepaid, of the foregoing **PERMIT APPROVAL NOTICE** (Approved Permit) to the person(s) listed below:

RE: Water Right 37-20742

ROBERT G FRIEDMAN
718 N CRESCENT DR
BEVERLY HILLS CA 90210

JIM SPECK
SPECK & AANESTAD
PO BOX 987
KETCHUM ID 83340

DOUG WERTH
BIETER & WERTH
PO BOX 2360
KETCHUM ID 83340

Kari Lynn Townsend
Secretary

MICROFILMED
JUL 2004

State of Idaho
DEPARTMENT OF WATER RESOURCES
1301 North Orchard Street, Boise, ID 83706 - P.O. Box 83720, Boise, ID 83720-0098
Phone: (208) 327-7900 Fax: (208) 327-7866 Web Site: www.idwr.state.id.us

DIRK KEMPTHORNE
Governor

KARL J. DREHER
Director

August 25, 2003

RE: In The Matter Of Application for Permit No. 37-20742 in the name of Robert G. Friedman

Dear Interested Parties:

The Department of Water Resources (department) has issued the accompanying order as a **"Final Order"** pursuant to section 67-5246 or 67-5247, Idaho Code. **Enclosed is an informational sheet that explains how to respond to final orders.**

If you have any questions, please call me at (208) 327-7953.

Sincerely,

Deborah J. Gibson

Deborah J. Gibson
Administrative Assistant
Water Allocation Bureau

Enclosure

c: IDWR – Southern Region

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JUL 15 2004

EXPLANATORY INFORMATION
TO ACCOMPANY A
FINAL ORDER

(Required by Rule of Procedure 740.02)

The accompanying order is a "**Final Order**" issued by the department pursuant to section 67-5246 or 67-5247, Idaho Code.

Section 67-5246 provides as follows:

(1) If the presiding officer is the agency head, the presiding officer shall issue a final order.

(2) If the presiding officer issued a recommended order, the agency head shall issue a final order following review of that recommended order.

(3) If the presiding officer issued a preliminary order, that order becomes a final order unless it is reviewed as required in section 67-5245, Idaho Code. If the preliminary order is reviewed, the agency head shall issue a final order.

(4) Unless otherwise provided by statute or rule, any party may file a petition for reconsideration of any order issued by the agency head within fourteen (14) days of the issuance of that order. The agency head shall issue a written order disposing of the petition. The petition is deemed denied if the agency head does not dispose of it within twenty-one (21) days after the filing of the petition.

(5) Unless a different date is stated in a final order, the order is effective fourteen (14) days after its issuance if a party has not filed a petition for reconsideration. If a party has filed a petition for reconsideration with the agency head, the final order becomes effective when:

(a) the petition for reconsideration is disposed of; or

(b) the petition is deemed denied because the agency head did not dispose of the petition within twenty-one (21) days.

(6) A party may not be required to comply with a final order unless the party has been served with or has actual knowledge of the order. If the order is mailed to the last known address of a party, the service is deemed to be sufficient.

(7) A non-party shall not be required to comply with a final order unless the agency has made the order available for public inspection or the nonparty has actual knowledge of the order.

JUL 13 2004

(8) The provisions of this section do not preclude an agency from taking immediate action to protect the public interest in accordance with the provisions of section 67-5247, Idaho Code.

PETITION FOR RECONSIDERATION

Any party may file a petition for reconsideration of a final order within fourteen (14) days of the service date of this order as shown on the certificate of service. **Note: the petition must be received by the Department within this fourteen (14) day period.** The department will act on a petition for reconsideration within twenty-one (21) days of its receipt, or the petition will be considered denied by operation of law. See section 67-5243(4) Idaho Code.

APPEAL OF FINAL ORDER TO DISTRICT COURT

Pursuant to sections 67-5270 and 67-5272, Idaho Code, any party aggrieved by a final order or orders previously issued in a matter before the department may appeal the final order and all previously issued orders in the matter to district court by filing a petition in the district court of the county in which:

i. A hearing was held,
ii. The final agency action was taken,
iii. The party seeking review of the order resides, or
iv. The real property or personal property that was the subject of the agency action is located.

The appeal must be filed within twenty-eight (28) days a) of the service date of the final order, b) of an order denying petition for reconsideration, or c) the failure within twenty-one (21) days to grant or deny a petition for reconsideration, whichever is later. See section 67-5273, Idaho Code. The filing of an appeal to district court does not in itself stay the effectiveness or enforcement of the order under appeal.

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JUL 15 2004

RJZ

SPECK & AANESTAD Extra Copy

A PROFESSIONAL CORPORATION
ATTORNEYS

JAMES P. SPECK
jimspeck@cox-internet.com
DOUGLAS J. AANESTAD
aanestad@cox-internet.com

120 EAST AVENUE
POST OFFICE BOX 987
KETCHUM, IDAHO 83340

TELEPHONE
(208) 726-4421
FACSIMILE
(208) 726-0752

February 27, 2003

RECEIVED
MAR - 4 2003
Department of Water Resources

Mr. Karl J. Dreher, Director
Idaho Department of Water Resources
1301 North Orchard Street
Statehouse Mail
Boise ID 83720-9000

Re: In the Matter of Application for Permit No. 37-20742
Response to Petition for Review of Preliminary Order

Dear Director Dreher:

Enclosed is the original and one copy of the Response to Petition for Review of Preliminary Order of Applicant, Robert G. Friedman. Please receipt date stamp the copy and return it to me in the self-addressed, postage pre-paid envelope I have included for that purpose.

Sincerely yours,

SPECK & AANESTAD
A Professional Corporation

By: J. P. Speck
James P. Speck

JPS:sgg
Enclosures
cc: Client (w/enclosures) via fax
Chuck Brockway (w/enclosures) via fax
Everett Davis (w/enclosures) via fax
~~Lt. Glen Saxton (w/enclosures) via mail~~
Allen Merritt (w/enclosures) via mail
Doug Werth (w/enclosures) via mail

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JUL 15 2004

James P. Speck, Esq., ISB #2067
SPECK & AANESTAD,
A Professional Corporation
Post Office Box 987
Ketchum, Idaho 83340
Telephone (208) 726-4421
Facsimile (208)726-0752

Attorneys for Applicant Robert G. Friedman

BEFORE THE IDAHO DEPARTMENT OF WATER RESOURCES

IN THE MATTER OF APPLICATION FOR PERMIT NO. 37-20742:	)	
Robert G. Friedman, Applicant.	)	**RESPONSE TO PETITION FOR REVIEW OF PRELIMINARY ORDER**
Blaine County,	)	
Protestant.	)	

Applicant, Robert G. Friedman ("Friedman"), hereby responds to and opposes the Petition for Review of Preliminary Order ("Petition") filed herein by Protestant, Blaine County ("Protestant").

The purpose of Application for Permit No. 37-20742 (the "Application") is accurately

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JUL 15 2004

summarized in the Preliminary Order issued by the Idaho Department of Water Resources (the "Department") on January 2, 2003 approving the Application (the "Preliminary Order"):

> The purpose of the Friedman application is to provide water to the ponds when water temperature becomes elevated or dissolved oxygen levels in the ponds are kept low. The use of the well is not to provide a new source of water for the ponds to keep them full. Use of water from the well must be so conditioned that it is non-consumptive and not a new source of water to fill the ponds. Stated another way, the purpose of the well is to provide water to maintain the quality of the surface water already stored in the ponds.

Preliminary Order, p. 7. Protestant filed a Motion for Reconsideration of Preliminary Order requesting the Department to reverse its position and deny the Application or, alternatively, impose certain conditions on its approval. That Motion was summarily denied by the Department's Order Denying Petition for Reconsideration issued February 4, 2003. Protestant has now filed its Petition for Review of Preliminary Order (the "Petition") asserting essentially the same arguments it made in its previous Motion. This Petition should be promptly denied by the Director of the Department as Protestant's arguments are completely without merit.

1. Facts and Compliance with I.C. §42-203A(5).

Friedman has previously submitted his written summary of the facts adduced at the hearing and his argument that he has fully complied with the requirements of I.C. §42-203A(5) for approval of the Application and issuance of a permit to divert groundwater. The Director is referred to Friedman's Post Hearing Brief, filed December 5, 2002 for these matters. Friedman submits he has satisfied his burden of presenting sufficient evidence for the Department to find he has met all of the conditions for issuing a permit to divert groundwater pursuant to the project proposed by his Application.

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JUL 15 2004

2. The *Winslow v. Chapman* Decree

Finding of Fact No. 7 of the Preliminary Order accurately summarizes the Decree of Water Right No. 37-00863 in *Winslow v. Chapman*. Protestant argues this Decree is "of dubious factual and legal validity" since it was entered by default and the Department is not bound by the Decree as it was not a party to the action. This argument is simply preposterous when one considers the proceedings in *In Re: The General Adjudication of Rights to the Use of Water From the Snake River Basin Water System*, Twin Falls District Court Case No. 3956 (the "SRBA"). The Department is not a party in the SRBA. Most of the partial decrees for water rights in the SRBA will be entered "by default" when protests to the Director's Reports are not filed. Apparently, Protestant believes all of these partial decrees will be of "dubious factual and legal validity." Moreover, to be consistent, Protestant must also assert that the Department, since it is not a party to the action, will not be bound by a single Decree issued in the SRBA - one can only imagine the consequences!

Protestant goes on to assert that the *Winslow v. Chapman* Decree is based on inaccurate findings with respect to the flows of Eagle Creek. Absolutely no evidence was presented at the hearing that Eagle Creek flows into the Big Wood River. Instead, Finding of Fact No. 12 in the Preliminary Order correctly states that when Friedman's property was not irrigated a ditch, which is part of the Eagle Creek Irrigation Company (the "Company") ditch system, carried water across his property "toward the Big Wood River". Further, on page 7 of the Preliminary Order, it is correctly stated that such non-use of water diverted out of Eagle Creek and through Company's irrigation ditch system "may have resulted in additional water being recharged to the aquifer and ultimately becoming available to water users in the Big Wood River drainage." However, the hearing officer goes on to point out that this is "wastewater" which users of water from the Big

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JUL 15 2004

Wood River have no right to demand or expect to receive. Friedman further refers the Director to his arguments on this point set forth on pages 1 through 3 of his Post Hearing Reply Brief.

The *Winslow* Decree is valid, binding on the Department and there is simply no basis in law or in fact to support the Protestant's arguments on this point.

2. Forfeiture

On pages 10-13 in its Brief in Support of the Petition, Protestant has merely cut and paste the identical argument on forfeiture it made in support of its Motion to Reconsider the Preliminary Order. Friedman refers the Director to pages 1 through 5 of his Response to Motion for Reconsideration of Preliminary Order which refutes this argument. Protestant, however, adds a new and rather novel argument that "Friedman's shares in the Eagle Creek Irrigation Company should be found to forfeited." In other words, the Company does not lose or forfeit any portion of its water right, but Friedman must lose or forfeit his shares of stock in the Company so that he no longer has a right to use any of the Company's water on his property. Where is the legal support for such a position? The simple answer - - there is none! Idaho Code §§42-222 and 42-223 apply to forfeiture of a water right and have absolutely nothing to do with forfeiture of shares of stock in a corporation. Protestant's arguments on forfeiture have absolutely no basis in the law and should be summarily dismissed.[1]

3. Protestant's Other Arguments

Once again, Protestant claims the evaporative losses associated with aesthetic ponds are wasteful and, in Blaine County, the cumulative effect of such ponds compounds that waste. There

[1]Protestant refuses to acknowledge that Transfer No. 5748 has been approved by the Department and, as stated in the Order Denying Petition for Reconsideration, the issue of forfeiture was considered by the Department in that approval.

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JUL 15 2004

is absolutely not one shred of evidence in this proceeding to support that statement. It ignores the extensive and uncontroverted expert testimony of Dr. Brockway on how the evaporative losses from the proposed ponds will be mitigated by drying up two acres of irrigation pursuant to approved Transfer No. 5748.

Protestant argues the approval of the Application will result in an expansion of a period of use of an existing water right. This is a ridiculous assertion. The Eagle Creek water right, which is the only existing water right in question, will continue to be diverted and used only during the irrigation season. If groundwater is to be diverted pursuant to the approved Application during the non-irrigation season, it can only occur when there is no loss measured in the system. This groundwater diversion must be non-consumptive and the appropriate conditions of approval of the Application will assure that is the case.

Last, Protestant returns to its stated concerns about the initial filling of the ponds. The unrefuted expert testimony of Dr. Brockway established that foregoing the use of water represented by Friedman's 10 shares of stock in the Company for irrigation during the season in which the ponds are filled will more than compensate for the volume of water that will be withdrawn from the system and stored in the ponds by this filling. In his Order Denying Petition for Reconsideration, the hearing officer correctly states that Friedman must establish the right to initially fill the ponds in compliance with Idaho water law using the Company's irrigation water right and with the approval and consent of the Company. In order words, Friedman must obtain the consent of the Company and find a way, under Idaho water low, to use that portion of the Company's water right represented by Friedman's 10 shares of stock to fill the ponds. This an appropriate condition and Friedman fully intends to make that showing and comply as soon as these proceedings are completed.

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JUL 15 2004

Protestant has once again failed to demonstrate any basis for which the Director should review and change any part of the Preliminary Order. The Petition should be summarily and promptly denied to prevent any further delays in this matter. The Preliminary Order should become a final Order approving the Application subject to those conditions set forth in the Preliminary Order.

Dated this 27 day of February, 2003.

SPECK & AANESTAD
A Professional Corporation
Attorneys for Applicant

By _____
James P. Speck

CERTIFICATE OF SERVICE

I hereby certify that on the 27 day of February, 2003, I served a true and correct copy of the within and foregoing document upon the persons named below in the manner noted:

Douglas A. Werth, Esq. Post Office Box 2360 Ketchum, ID 83340 FAX (208) 727-6853	☑ ☐ ☐	United States Mail, Postage Prepaid Hand Delivery Facsimile, with copy by United States Mail, Postage Prepaid
Mr. L. Glen Saxton Idaho Department of Water Resources 1301 North Orchard Street Statehouse Mail Boise, Idaho 83720-9000 FAX (208) 327-7866	☑ ☐ ☐	United States Mail, Postage Prepaid Hand Delivery Facsimile, with copy by United States Mail, Postage Prepaid
Mr. Allen Merritt Idaho Department of Water Resources 1341 Fillmore, Suite 200 Twin Falls, ID 83301 FAX (208) 736-3037	☑ ☐ ☐	United States Mail, Postage Prepaid Hand Delivery Facsimile, with copy by United States Mail, Postage Prepaid

_____
JAMES P. SPECK

MICROFILMED
MAR 05 2003

RECEIVED
MAR - 3 2003
Department of Water Resources

SPECK & AANESTAD
A PROFESSIONAL CORPORATION
ATTORNEYS
120 EAST AVENUE
POST OFFICE BOX 987
KETCHUM, IDAHO 83340

JAMES P. SPECK
jimspeck@cox-internet.com
DOUGLAS J. AANESTAD
aanestad@cox-internet.com

TELEPHONE
(208) 726-4421
FACSIMILE
(208) 726-0752

February 27, 2003

Mr. Karl J. Dreher, Director
Idaho Department of Water Resources
1301 North Orchard Street
Statehouse Mail
Boise ID 83720-9000

Re: In the Matter of Application for Permit No. 37-20742
Response to Petition for Review of Preliminary Order

Dear Director Dreher:

Enclosed is the original and one copy of the Response to Petition for Review of Preliminary Order of Applicant, Robert G. Friedman. Please receipt date stamp the copy and return it to me in the self-addressed, postage pre-paid envelope I have included for that purpose.

Sincerely yours,

SPECK & AANESTAD
A Professional Corporation

By: _____
James P. Speck

JPS:sgg
Enclosures
cc: Client (w/enclosures) via fax
Chuck Brockway (w/enclosures) via fax
Everett Davis (w/enclosures) via fax
L. Glen Saxton (w/enclosures) via mail
Allen Merritt (w/enclosures) via mail
Doug Werth (w/enclosures) via mail

MICROFILMED
JUL 15 2004

RECEIVED
MAR - 3 2003
Department of Water Resources

James P. Speck, Esq., ISB #2067
SPECK & AANESTAD,
A Professional Corporation
Post Office Box 987
Ketchum, Idaho 83340
Telephone (208) 726-4421
Facsimile (208)726-0752

Attorneys for Applicant Robert G. Friedman

BEFORE THE IDAHO DEPARTMENT OF WATER RESOURCES

IN THE MATTER OF APPLICATION FOR PERMIT NO. 37-20742:	)	
Robert G. Friedman, Applicant.	)	**RESPONSE TO PETITION FOR REVIEW OF PRELIMINARY ORDER**
Blaine County,	)	
Protestant.	)	

Applicant, Robert G. Friedman ("Friedman"), hereby responds to and opposes the Petition for Review of Preliminary Order ("Petition") filed herein by Protestant, Blaine County ("Protestant").

The purpose of Application for Permit No. 37-20742 (the "Application") is accurately

MICROFILMED
JAN 15 2004

summarized in the Preliminary Order issued by the Idaho Department of Water Resources (the "Department") on January 2, 2003 approving the Application (the "Preliminary Order"):

> The purpose of the Friedman application is to provide water to the ponds when water temperature becomes elevated or dissolved oxygen levels in the ponds are kept low. The use of the well is not to provide a new source of water for the ponds to keep them full. Use of water from the well must be so conditioned that it is non-consumptive and not a new source of water to fill the ponds. Stated another way, the purpose of the well is to provide water to maintain the quality of the surface water already stored in the ponds.

Preliminary Order, p. 7. Protestant filed a Motion for Reconsideration of Preliminary Order requesting the Department to reverse its position and deny the Application or, alternatively, impose certain conditions on its approval. That Motion was summarily denied by the Department's Order Denying Petition for Reconsideration issued February 4, 2003. Protestant has now filed its Petition for Review of Preliminary Order (the "Petition") asserting essentially the same arguments it made in its previous Motion. This Petition should be promptly denied by the Director of the Department as Protestant's arguments are completely without merit.

1. Facts and Compliance with I.C. §42-203A(5).

Friedman has previously submitted his written summary of the facts adduced at the hearing and his argument that he has fully complied with the requirements of I.C. §42-203A(5) for approval of the Application and issuance of a permit to divert groundwater. The Director is referred to Friedman's Post Hearing Brief, filed December 5, 2002 for these matters. Friedman submits he has satisfied his burden of presenting sufficient evidence for the Department to find he has met all of the conditions for issuing a permit to divert groundwater pursuant to the project proposed by his Application.

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2. The *Winslow v. Chapman* Decree

Finding of Fact No. 7 of the Preliminary Order accurately summarizes the Decree of Water Right No. 37-00863 in *Winslow v. Chapman*. Protestant argues this Decree is "of dubious factual and legal validity" since it was entered by default and the Department is not bound by the Decree as it was not a party to the action. This argument is simply preposterous when one considers the proceedings in *In Re: The General Adjudication of Rights to the Use of Water From the Snake River Basin Water System*, Twin Falls District Court Case No. 3956 (the "SRBA"). The Department is not a party in the SRBA. Most of the partial decrees for water rights in the SRBA will be entered "by default" when protests to the Director's Reports are not filed. Apparently, Protestant believes all of these partial decrees will be of "dubious factual and legal validity." Moreover, to be consistent, Protestant must also assert that the Department, since it is not a party to the action, will not be bound by a single Decree issued in the SRBA - one can only imagine the consequences!

Protestant goes on to assert that the *Winslow v. Chapman* Decree is based on inaccurate findings with respect to the flows of Eagle Creek. Absolutely no evidence was presented at the hearing that Eagle Creek flows into the Big Wood River. Instead, Finding of Fact No. 12 in the Preliminary Order correctly states that when Friedman's property was not irrigated a ditch, which is part of the Eagle Creek Irrigation Company (the "Company") ditch system, carried water across his property "toward the Big Wood River". Further, on page 7 of the Preliminary Order, it is correctly stated that such non-use of water diverted out of Eagle Creek and through Company's irrigation ditch system "may have resulted in additional water being recharged to the aquifer and ultimately becoming available to water users in the Big Wood River drainage." However, the hearing officer goes on to point out that this is "wastewater" which users of water from the Big

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Wood River have no right to demand or expect to receive. Friedman further refers the Director to his arguments on this point set forth on pages 1 through 3 of his Post Hearing Reply Brief.

The *Winslow* Decree is valid, binding on the Department and there is simply no basis in law or in fact to support the Protestant's arguments on this point.

2. Forfeiture

On pages 10-13 in its Brief in Support of the Petition, Protestant has merely cut and paste the identical argument on forfeiture it made in support of its Motion to Reconsider the Preliminary Order. Friedman refers the Director to pages 1 through 5 of his Response to Motion for Reconsideration of Preliminary Order which refutes this argument. Protestant, however, adds a new and rather novel argument that "Friedman's shares in the Eagle Creek Irrigation Company should be found to forfeited." In other words, the Company does not lose or forfeit any portion of its water right, but Friedman must lose or forfeit his shares of stock in the Company so that he no longer has a right to use any of the Company's water on his property. Where is the legal support for such a position? The simple answer - - there is none! Idaho Code §§42-222 and 42-223 apply to forfeiture of a water right and have absolutely nothing to do with forfeiture of shares of stock in a corporation. Protestant's arguments on forfeiture have absolutely no basis in the law and should be summarily dismissed.[1]

3. Protestant's Other Arguments

Once again, Protestant claims the evaporative losses associated with aesthetic ponds are wasteful and, in Blaine County, the cumulative effect of such ponds compounds that waste. There

[1]Protestant refuses to acknowledge that Transfer No. 5748 has been approved by the Department and, as stated in the Order Denying Petition for Reconsideration, the issue of forfeiture was considered by the Department in that approval.

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is absolutely not one shred of evidence in this proceeding to support that statement. It ignores the extensive and uncontroverted expert testimony of Dr. Brockway on how the evaporative losses from the proposed ponds will be mitigated by drying up two acres of irrigation pursuant to approved Transfer No. 5748.

Protestant argues the approval of the Application will result in an expansion of a period of use of an existing water right. This is a ridiculous assertion. The Eagle Creek water right, which is the only existing water right in question, will continue to be diverted and used only during the irrigation season. If groundwater is to be diverted pursuant to the approved Application during the non-irrigation season, it can only occur when there is no loss measured in the system. This groundwater diversion must be non-consumptive and the appropriate conditions of approval of the Application will assure that is the case.

Last, Protestant returns to its stated concerns about the initial filling of the ponds. The unrefuted expert testimony of Dr. Brockway established that foregoing the use of water represented by Friedman's 10 shares of stock in the Company for irrigation during the season in which the ponds are filled will more than compensate for the volume of water that will be withdrawn from the system and stored in the ponds by this filling. In his Order Denying Petition for Reconsideration, the hearing officer correctly states that Friedman must establish the right to initially fill the ponds in compliance with Idaho water law using the Company's irrigation water right and with the approval and consent of the Company. In order words, Friedman must obtain the consent of the Company and find a way, under Idaho water low, to use that portion of the Company's water right represented by Friedman's 10 shares of stock to fill the ponds. This an appropriate condition and Friedman fully intends to make that showing and comply as soon as these proceedings are completed.

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Protestant has once again failed to demonstrate any basis for which the Director should review and change any part of the Preliminary Order. The Petition should be summarily and promptly denied to prevent any further delays in this matter. The Preliminary Order should become a final Order approving the Application subject to those conditions set forth in the Preliminary Order.

Dated this 27 day of February, 2003.

SPECK & AANESTAD
A Professional Corporation
Attorneys for Applicant

By _____
James P. Speck

CERTIFICATE OF SERVICE

I hereby certify that on the 27 day of February, 2003, I served a true and correct copy of the within and foregoing document upon the persons named below in the manner noted:

Douglas A. Werth, Esq. Post Office Box 2360 Ketchum, ID 83340 FAX (208) 727-6853	☑ ☐ ☐	United States Mail, Postage Prepaid Hand Delivery Facsimile, with copy by United States Mail, Postage Prepaid
Mr. L. Glen Saxton Idaho Department of Water Resources 1301 North Orchard Street Statehouse Mail Boise, Idaho 83720-9000 FAX (208) 327-7866	☑ ☐ ☐	United States Mail, Postage Prepaid Hand Delivery Facsimile, with copy by United States Mail, Postage Prepaid
Mr. Allen Merritt Idaho Department of Water Resources 1341 Fillmore, Suite 200 Twin Falls, ID 83301 FAX (208) 736-3037	☑ ☐ ☐	United States Mail, Postage Prepaid Hand Delivery Facsimile, with copy by United States Mail, Postage Prepaid

_____
JAMES P. SPECK

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Attorneys for Protestant

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FEB 18 2003
Department of Water Resources

BEFORE THE DEPARTMENT OF WATER RESOURCES

OF THE STATE OF IDAHO

IN THE MATTER OF APPLICATION FOR PERMIT NO. 37-20742, ROBERT G. FRIEDMAN, Applicant, BLAINE COUNTY, Protestant.	PETITION FOR REVIEW OF PRELIMINARY ORDER

Protestant Blaine County (hereinafter "County"), by and through its undersigned counsel of record, pursuant to Idaho Code § 67-5245 and Rule 730 of the Rules of Procedure of the Idaho Department of Water Resources, IDAPA 37.01.01.730, petitions the Director of the Idaho Department of Water Resources for review of, and files its exceptions to, the preliminary order dated January 2, 2003, issued in the above-captioned proceeding.

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The grounds for said petition are set forth in the Brief in Support of Petition for Review of Preliminary Order filed on even date herewith.

DATED this 18th day of February, 2003.

Douglas A. Werth, Attorney for
Protestant Blaine County

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CERTIFICATE OF SERVICE

I HEREBY CERTIFY that on this 18th day of February, 2003, I caused a true and correct copy of the within and foregoing document to be served by the method(s) indicated below, and addressed to each of the following:

James P. Speck SPECK & AANESTAD P.O. Box 987 Ketchum, ID 83340 Fax: 208-726-0752	✓	U.S. Mail Overnight Delivery Hand Delivery Facsimile
Blaine County Board of Commissioners Old Blaine County Courthouse 206 1st Avenue South, Suite 300 Hailey, ID 83333 Fax: 208-788-5576	✓	U.S. Mail Overnight Delivery Hand Delivery Facsimile
Idaho Department of Water Resources Southern Regional Office 1341 Fillmore Street Suite 200 Twin Falls, ID 83301-3380 Fax: 208-736-3037	✓	U.S. Mail Overnight Delivery Hand Delivery Facsimile
Mr. Karl J. Dreher Director Idaho Department of Water Resources 1301 N. Orchard P.O. Box 83720 Boise, ID 83720-0098 Fax 208-327-7866	✓	U.S. Mail Overnight Delivery Hand Delivery Facsimile

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Attorneys for Protestant

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FEB 18 2003
Department of Water Resources

BEFORE THE DEPARTMENT OF WATER RESOURCES

OF THE STATE OF IDAHO

IN THE MATTER OF APPLICATION FOR PERMIT NO. 37-20742, ROBERT G. FRIEDMAN, Applicant, BLAINE COUNTY, Protestant.	BRIEF IN SUPPORT OF PETITION FOR REVIEW OF PRELIMINARY ORDER

Robert G. Friedman filed Application for Permit No. 37-20742 ("the Application") in conjunction with a proposal to create several ponds on ten (10) acres of property near the Big Wood River six miles north of Ketchum, Idaho. The ponds would have a total surface area of about two (2) acres and a storage capacity of about 16 acre feet of water. They would serve aesthetic/recreational purposes in connection with a private

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residence and associated buildings to be constructed on the property. The Application proposed diversion of 2.0 cubic feet per second of ground water to be used year-round.[1]

Blaine County protested the Application. Following a hearing, the hearing officer issued a preliminary order dated January 2, 2003, conditionally approving the Application.

Blaine County's request for reconsideration was denied by order dated February 4, 2003.

Blaine County now petitions the Director of the Idaho Department of Water Resources ("IDWR" or "the Department") for review of the hearing officer's preliminary order pursuant to Idaho Code § 67-5245 and Rule 730 of the Rules of Procedure of the Idaho Department of Water Resources, IDAPA 37.01.01.730.

Friedman owns ten (10) shares of surface water from Eagle Creek, part of the totality of shares of the Eagle Creek Irrigation Company. These shares comprise water right no. 37-00863, which was decreed on August 22, 1923, in the case of Winslow v. Chapman. This was an action filed against the watermaster of the Big Wood River. When the watermaster failed to appear and defend in the action, a judgment or decree by default was entered which authorized the diversion of 4.6 cfs of water from Eagle Creek during the irrigation season for irrigation purposes. The decree purported to perpetually restrain and enjoin the watermaster "from and in any manner exercising supervision over the waters of Eagle Creek during the irrigation season . . . or in any manner attempting to regulate or regulating the use by plaintiff upon said land of the said 4.6 second feet of water."

[1] The Application is related to Application for Transfer No. 5748, which proposed to change the nature of use of two (2) shares of water (.04 cfs) of water right no. 37-0863 from irrigation use to recreation/aesthetic uses from April 15th to October 15th of each year.

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The Winslow decree recited that use of the Eagle Creek water began October 6, 1902, and that the waters of Eagle Creek did not flow into the Big Wood River. The hearing officer's preliminary order recites that "[t]he priority of the water right is October 6, 1902." Preliminary Order, p.4. Notwithstanding this "priority", the watermaster testified that on almost an annual basis he has been required to establish priority cuts on the Big Wood River because of water scarcity, yet the waters of Eagle Creek have not been subject to those cut-offs. The watermaster testified that he does not regulate Eagle Creek water, although it was undisputed that those waters eventually reach the Big Wood River.

The hearing officer suggested the Department was without authority to make the applicant's use of groundwater and surface water subject to priority cuts of the watermaster as a condition of approval as had been suggested by Blaine County.[2]

I.

GENERAL LEGAL STANDARDS

Idaho Code § 42-203A(5) provides that:

> In all applications whether protested or not protested, where the proposed use is such (a) that it will reduce the quantity of water under existing water rights, or (b) that the water supply itself is insufficient for the purpose for which it is sought to be appropriated, or (c) where it appears to the satisfaction of the director that such application is not made in good faith,

---

[2] Blaine County had suggested a condition "[t]hat the applicant's use of ground water and surface water for his ponds would be subject to a priority date of October 6, 1902, and that when surface water rights in the Big Wood drainage with the same priority date are cut-off by the watermaster, the applicant shall abide by the same cut-off date; (This would give effect to Idaho Code § 42-106 – "As between appropriators, the first in time is the first in right.")."

In response to this suggested condition of approval, the hearing officer wrote: "The third suggested approval condition ignores the court's holdings relative to Eagle Creek in the case of Arthur J. Winslow v. S.H. Chapman, Water Master, decreed on August 22, 1923, that enjoined the watermaster of the Big Wood River from exercising supervision over the water of Eagle Creek during the irrigation season and from interfering with the use of water right no. 37-00863." Order Denying Petition for Reconsideration, p.3.

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> is made for delay or speculative purposes, or (d) that the applicant has not sufficient financial resources with which to complete the work involved therein, or (e) that it will conflict with the local public interest, where the local public interest is defined as the affairs of the people in the area directly affected by the proposed use, or (f) that it is contrary to conservation of water resources within the state of Idaho; the director of the department of water resources may reject such application and refuse issuance of a permit therefor, or may partially approve and grant a permit for a smaller quantity of water than applied for, or may grant a permit upon conditions.

Case law has fleshed out the local public interest standard:

> Under I.C. § 42-203A, any application to appropriate water in Idaho is subject to the local public interest standard. Likewise, any change to a water right under I.C. § 42-222 is also subject to a determination that the change is in the local public interest as stated in I.C. § 42-203A. To say that an amendment to a water permit under I.C. § 42-211 is not subject to a local public interest investigation would allow a prospective water user to circumvent this criterion. It is clear from the legislative scheme that this result was not intended.

Hardy v. Higginson, 123 Idaho 485, 849 P.2d 946 (1993). It is clear that the applicant here has the burden with respect to all of the issues described in Idaho Code § 42-203A(5):

> [I]t is not [the] protestant's burden of proof to establish that the project is not in the local public interest. The burden of proof is upon the applicant to show that the project is either in the local public interest or that there are factors that overweigh the local public interest in favor of the project.

Shokal v. Dunn, 109 Idaho 330, 339, 707 P.2d 441, 450 (1985) (describing non-exclusive list of factors bearing upon local public interest).

II.

THE APPLICANT FAILED TO DEMONSTRATE COMPLIANCE WITH THE STANDARDS OF IDAHO CODE SECTION 42-203A(5)

Friedman failed to demonstrate a requisite basis for approval of the Application. The facts clearly demonstrate that waters from Eagle Creek have historically flowed to the Big Wood River and continue to flow to the Big Wood River. It was further shown

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that the ground water from which the applicant seeks to divert water is hydrologically linked to the Big Wood River. The evidence also showed that the Eagle Creek water rights are based upon a decree of dubious factual and legal validity. Protestant contends that the Department, an agency of the State of Idaho, is not bound by a decree of this sort, which was entered on a default basis, without a contested hearing, because the watermaster, an individual, never appeared in the action. The IDWR was not a party to that action and therefore is not bound by the judgment therein.

The factual basis set forth in the decree that allegedly supports its conclusion is that:

> the water flowing from said Eagle Creek did not, when permitted to flow down the natural channel thereof, reach [the] Big Wood River during the irrigation season; and the use of the said amount of water during the said period by this plaintiff, and his predecessors in interest, did not diminish or affect the flow of water in said Big Wood River and the said plaintiff's use of said waters does not and has not interfered with the use of said water of said Big Wood River by other appropriators.

Winslow v. Chapman Decree. The record in the instant proceeding demonstrates the factual inaccuracy of these "findings." Water from Eagle Creek does in fact reach the Big Wood River. This is extremely relevant because it demonstrates that an impact can occur with respect to appropriators from the Big Wood River.

It is beyond dispute that for many, many years water rights in the Big Wood River drainage have been subject to priority cuts because of a dramatic lack of the water resource. As stated above, the current watermaster testified that the diversions from Eagle Creek are not subject to his jurisdiction and his priority cuts because the rights are based the Winslow decree. The direct consequence of this is that during these years of scarcity, which have been an all-too-frequent occurrence, when many water right holders with a priority date preceding 1902 have had their water cut off, the users

of the Eagle Creek water can continue their diversions without consequence. Approval of the Application without conditions subjecting Friedman to the watermaster's priority cuts would perpetuate this inequality, would cause injury to senior water rights holders and would be inconsistent with the conservation of water resources in the State of Idaho.

Further, the testimony demonstrated the history of Blaine County's local interest water policy and the negative impact of this application upon the local public interest. Allowing such an expansion under the circumstances here for what essentially are aesthetic ponds directly contravenes the local public interest. The Department is asked to consider, as it has in the past, the language of Section 8-3-1 of the Blaine County Code (Protestant's Exhibit "J"). The instant application conflicts with that local public interest and therefore should be denied.

It is respectfully suggested that the finding in the preliminary order relating to the local public interest is the wrong finding. The mere fact that there may be some short-term economic benefit to a handful does not demonstrate compliance with this standard. The Friedman application is not consistent with the conservation of water resources within the state. The evaporative losses associated with aesthetic ponds are wasteful and, in a County like Blaine County, the cumulative effect of such ponds only compounds that waste, even if, with regard to a particular pond project, no direct degradation of water quality can be shown.

There also is a question concerning whether the water supply itself is sufficient for the purpose for which it is sought to be appropriated because of the nature of the

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shares of the Eagle Creek Irrigation Company, being essentially an undivided interest in the water rights up to a certain quantity on, apparently, a first-come, first-serve basis.

With regard to the applicant's calculation of mitigation there is no question but that the net effect of approving this application will be to reduce the water flowing into the Big Wood River. The applicant argued that "drying up" two acres that have been dry for decades (with the exception of the efforts to avoid forfeiture that took place in 2001 and 2002) would mitigate the two acres of aesthetic ponds he proposes. His expert also uses water consumption figures for irrigated alfalfa, when it is evident that no alfalfa has been grown on the property since anyone can remember, if ever. The bottom line, however, is that the water historically flowed across the applicant's property, sank into the ground, and then flowed into the Big Wood River. There was no beneficial use. The water that went into the Big Wood River was then available for appropriators downstream. If this application is approved, less water will be available for appropriators downstream. Furthermore, the applicant would be expanding the period of use of the water to encompass an entire year. On top of that, he would be allowed to perpetuate, and we would submit expand, rights based upon a dubious decree involving a failure of the watermaster to appear in the case and a patently false factual premise (that the waters of Eagle Creek do not flow into the Big Wood River).

The preliminary order points out that "[t]he right of the applicant to initially fill the ponds during the first year by foregoing the use of 16 acre feet of water from Eagle Creek for irrigation of the property may not be authorized by either [the Company] or by the water right." Preliminary Order, p.7. This is a question that the preliminary order suggested the applicant "needs to research." *Id.* This is a very significant question and

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cannot be left open. At present, the applicant has not demonstrated his right to such a use and therefore the application should have been denied. The shares owned by Friedman simply state that each share entitles him to ".02 cubic feet per second of time per miner's inch when available from waters of Eagle Creek." Exhibit X. Given that the Company is not subject to the local watermaster, and has not employed its own watermaster, which it has the power to do; given further that each shareholder appears to own an interest in water "when available" and without any priority among users, how can it be concluded that applicant has demonstrated a right to use the Eagle Creek waters to fill his pond? On the record, there appears to be no legal basis for doing so. Further, in the year when the applicant proposes to fill his ponds, he will be taking more water out of the Big Wood River system that otherwise would be the case. Surely this would cause injury.

Because Friedman has failed to demonstrate compliance with the mandatory requirements of Section 42-203A(5), his application should have been denied.

III.

FRIEDMAN'S SHARES IN THE EAGLE CREEK IRRIGATION COMPANY SHOULD HAVE BEEN FOUND TO HAVE BEEN FORFEITED

Idaho Code § 42-222 provides that all rights to use water shall be forfeited if not put to beneficial use for a five (5) year period:

> (2) All rights to the use of water acquired under this chapter or otherwise shall be lost and forfeited by a failure for the term of five (5) years to apply it to the beneficial use for which it was appropriated and when any right to the use of water shall be lost through nonuse or forfeiture such rights to such water shall revert to the state and be again subject to appropriation under this chapter; except that any right to the use of water shall not be lost through forfeiture by the failure to apply the water to beneficial use under certain circumstances as specified in section 42-223, Idaho Code.

Case law also describes the standards for judicial review of findings of forfeiture

by the Department:

> Forfeiture of water rights is governed by Idaho Code section 42-222(2), which provides that water rights may be lost if they are not applied to the beneficial use for which the rights were appropriated for five continuous years. I.C. § 42-222(2). However, this Court has often repeated its position that forfeiture of water rights is not favored in Idaho. Aberdeen-Springfield Canal Co. v. Peiper, 133 Idaho 82, 87, 982 P.2d 917, 922 (1999). Because of its disfavor for water right forfeiture, Idaho law requires that such actions be proved by the heightened evidentiary standard of clear and convincing evidence. *Id.*
>
> Here, the special master found by clear and convincing evidence that the water rights had been abandoned and/or forfeited. This finding must then be accepted by the trial court "unless clearly erroneous." I.R.C.P. 53(e)(2). To determine whether the special master's findings are clearly erroneous, "the trial court must independently review the evidence to determine whether the Findings were supported by substantial evidence." Seccombe v. Weeks, 115 Idaho 433, 435, 767 P.2d 276, 278 (Ct. App. 1989). On appeal from decisions of the district court, this Court again applies a substantial and competent evidence standard. Jenkins v. State, Dep't of Water Resources, 103 Idaho 384, 389, 647 P.2d 1256, 1261 (1999).

McCray v. Rosenkrance (In re SRBA Case No. 39576), 135 Idaho 509, 20 P.3d 693 (2001). However, in a case like the instant one, where the underlying water right is of dubious validity (factually and legally) and quite clearly takes water from senior water rights holders, the Department should take those facts into consideration when determining whether a forfeiture has occurred. (At the very least, the Department should decline the offer to use such a "right" for mitigation.)

It is beyond cavil that not until after the Friedman's first application for water right was filed with the Department, was there any active irrigation of the Friedman parcel, and then it was only for a small part of the parcel. Water was not being put to beneficial use on the property for many, many years, well in excess of the five (5) years required for a forfeiture under Idaho Code § 42-222.

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Leonard Harlig's testimony established clearly that no use was being made of water on the premises; that there was no cultivation of crops, nor grazing of livestock; nor any other beneficial use. The Friedman parcel for more than a decade consisted of only sagebrush, and native grasses, and there was no active irrigation of the parcel. While it is true that water from Eagle Creek ran across the parcel and eventually flowed into the Big Wood River, this was through the Eagle Creek Irrigation Company's ditch, and was in no way an instance of the water being put to beneficial use by Friedman or his predecessor. If allowing water to run across an otherwise dry sagebrush parcel constitutes sufficient beneficial use, then it is difficult to fathom how there could ever be a forfeiture in the arid landscape of Southern Idaho.

Based upon this clear evidence, the hearing officer correctly found that the Friedman parcel "was not irrigated from about 1977 through 2000." Preliminary Order, p.5. If this matter had been an application by Friedman to "transfer" water rights from his fallow parcel, it seems clear that the "shape file" prepared by the Department would not support such a transfer. Yet that is precisely what Friedman is attempting to do with this application for permit and its companion application, Application for Transfer No. 5748. The maxim that the law does not allow a party to do indirectly what it is prohibited from doing directly is applicable here. *E.g.* Sencerbox v. First Nat'l Bank, 14 Idaho 95, 93 P. 369 (1908) (Ailshie, C.J., dissenting) ("It is a common maxim that things which cannot be lawfully done directly cannot be lawfully done by indirection and circumvention.").

The preliminary order does not give effect to the clear forfeiture that has occurred. Its failure to do so appears to be based upon two sources of law: Aberdeen-

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Springfield Canal Company v. Peiper, 133 Idaho 82, 982 P.2d 917 (1999); and Idaho Code § 42-223. As discussed below, neither of these sources of law are applicable to the Friedman application.

First, Aberdeen-Springfield is a wholly different case. It involved an operating company created under the Carey Act of 1894, 43 U.S.C. § 641. The Eagle Creek Irrigation Company was not organized under that act. The policies underlying support for the broad purposes of the Carey Act simply have no bearing upon this application. In Friedman, the Eagle Creek Irrigation Company only holds the water rights "in trust" for the shareholders as a whole, and shareholders, like Friedman, are the appropriators. The following language from the Company's by-laws show that this situation here differs:

> "At any time when there is insufficient water to meet the demands of all of the shareholders in the Company, all shareholders share pro rata in the water available, according to the number of shares they possess. No priority of right shall obtain to any shareholder for any reason."

Exhibit W, Art XV, § 1.

Second, even if one were to argue that the Eagle Creek Irrigation Company was the actual "appropriator," there is nothing to suggest the Company could not have used elsewhere Friedman's share of the water rights held in trust. The instant case is a unique situation in that the shareholders have a pro rata share of the water rights that the Company holds in trust. The fact that Friedman may have failed to use his share of those water rights does not mean that the Company was prevented by circumstances over which it had no control from exercising its right to the water. The Company's articles of incorporation give it broad powers:

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> "to construct, maintain, and operate a private water system for the distribution of water for domestic and irrigation purposes to its shareholders; [and] to engage in any activity related thereto."

Exhibit V, Art. II(a) (emphasis added). Notwithstanding Mr. Davis's general testimony, the Company's articles of incorporation clearly show that the Company has the broadest of powers relating to the water rights at issue.

Further, in Aberdeen-Springfield, part of the basis for the Court's decision was that the shareholders "wish[ed] to use forfeiture only to avoid paying maintenance assessments." This instant case is a different case.

Finally, the Eagle Creek Irrigation Company regulations specifically provide for cancellation of shares of stock if they are not transferred with a sale of the real property. In effect, they would revert to the Company. *See* Exhibit W, Art. II, § 3. This cancellation provision did not apply to the Carey Act organization at issue in Aberdeen-Springfield.

The bottom line in Aberdeen-Springfield as expressed by the Court was that "[a] finding of forfeiture here would do nothing to advance the policy reasons that motivate the statute's existence." The opposite is true here: the policy considerations favoring conservation of the scarce water resource, protection of senior water right holders, and serving the maximum use and benefit of Idaho's water resources are furthered, not hindered, by giving effect to the forfeiture that has occurred with respect to the Friedman parcel's water rights. Those rights had not been used appurtenant to that parcel for over 20 years and should be deemed forfeited.

The other source of law cited in the preliminary order in regard to this issue, Idaho Code § 42-223, should not be applied. This statute was added to the Idaho Code by the Idaho legislature effective July 1, 2000. *See* 2000 Idaho Session Laws, ch.84,

p.181. This enactment appears to be a codification and enlargement of the forfeiture holding in Aberdeen-Springfield. This statute has no application to the Friedman parcel, because the forfeiture of water rights here took place before enactment of the statute. The legislature cannot pass statutes having retroactive application where they directly affect a substantive right. By analogy, the case law governing the abandonment of public roads is instructive. Those cases hold that you look to the law in effect at the time of the claimed abandonment to determine if an abandonment of a public road has in fact occurred, and a subsequently enacted statute is not given retroactive effect. *See* Brown Properties v. Blaine County, 2002 Slip Op. No. 136, Docket No. 27647 (Idaho S.Ct. 11/26/02). The same principles should apply to legislative enactments purporting to the change the rules governing forfeiture of water rights. Thus, Idaho Code § 42-223 has no application to the Friedman application because the forfeiture here occurred before the statute was enacted.

Furthermore, a careful reading of Idaho Code § 42-223(7) shows that it only applies where the water right of "[the] company, corporation, association, or entity" is being lost or forfeited. This statute reads:

> (7) No portion of a water right held by an irrigation district, a Carey Act operating company, or any other company, corporation, association, or entity which holds water rights for distribution to its landowners, shareholders or members shall be lost or forfeited due to nonuse by such landowners, shareholders or members, unless the nonuse is subject to the control of such entity.

This case involves a single shareholder's right to use water relating to his shares and would not effect a forfeiture of the right of the Eagle Creek Irrigation Company or other of its shareholders to appropriate water.

For all of these reasons, Friedman's shares in the Eagle Creek Irrigation

JUL 15 2003

Company should be found to be forfeited under the unique facts and circumstances of this case. Again, at the very least, such "rights" should not be accepted as mitigation.

IV.

THE HEARING OFFICER HAD DISCRETION TO CONDITION APPROVAL UPON FRIEDMAN'S AGREEMENT TO BE BOUND BY THE WATERMASTER'S PRIORITY CUTS

At most, the Eagle Creek appropriation should have a priority date of October 6, 1902. The decree itself recites the legal conclusion (again based upon a default judgment) that the appropriation of water in the case began "on or about the 6th day of October, 1902" and that the water "since said date, [was] continuously during the irrigation season of each and every year". Yet, this water is not subject to priority cuts. Clearly, senior water right holders suffer injury as a result of this, year in and year out. Moreover, even junior water right holders would suffer injury if this application were approved, notwithstanding the forfeiture that quite plainly has occurred. *E.g.*, Jenkins v. State, Dep't of Water Resources, 103 Idaho 384, 647 P.2d 1256 (1982).

The IDWR was not a party to Winslow v. Chapman and is not bound by the decree entered in the case. If it was, then under the terms of the decree the Department would have no power to regulate any portion of the Eagle Creek water, begging the question: why would Friedman have to file the Application in the first place? The hearing officer did not apprehend that he had discretion to condition approval upon Friedman's compliance with the watermaster's priority cuts. Such a condition was within the power of the IDWR, yet the hearing officer failed to acknowledge that power. The Director is respectfully requested to confirm the Department's power to impose such a condition and force Friedman's water rights to get in line with the rest of the

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appropriators from the Big Wood River who abide by the statutory maxim, "first in time, first in right."

CONCLUSION

In this Application, Friedman is seeking to take a dubious water right, a water right that clearly takes water from the holders of senior water rights, and a water right (his shares of the Eagle Creek Irrigation Company) that have been forfeited through non-use, and is seeking to expand it to a year-round ground water appropriation. The requisites of Section 42-203A(5) have not been demonstrated and, accordingly, the Application should be denied.

For the foregoing reasons, Blaine County respectfully requests that the Director grant this petition for review and issue a Final Order denying the Application or, alternatively, conditioning Friedman's continued use of water pursuant to the Department's approval subject to the priority cut-offs of the watermaster.

DATED this 18 day of February, 2003.

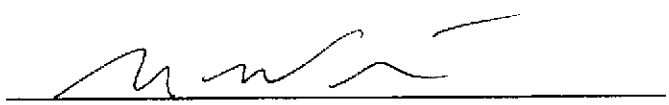
Douglas A. Werth, Attorney for
Protestant Blaine County

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CERTIFICATE OF SERVICE

I HEREBY CERTIFY that on this 18 day of February, 2003, I caused a true and correct copy of the within and foregoing document to be served by the method(s) indicated below, and addressed to each of the following:

James P. Speck SPECK & AANESTAD P.O. Box 987 Ketchum, ID 83340 Fax: 208-726-0752	✓	U.S. Mail Overnight Delivery Hand Delivery Facsimile
Blaine County Board of Commissioners Old Blaine County Courthouse 206 1st Avenue South, Suite 300 Hailey, ID 83333 Fax: 208-788-5576	✓	U.S. Mail Overnight Delivery Hand Delivery Facsimile
Idaho Department of Water Resources Southern Regional Office 1341 Fillmore Street Suite 200 Twin Falls, ID 83301-3380 Fax: 208-736-3037	✓	U.S. Mail Overnight Delivery Hand Delivery Facsimile
Mr. Karl J. Dreher Director Idaho Department of Water Resources 1301 N. Orchard P.O. Box 83720 Boise, ID 83720-0098 Fax 208-327-7866	✓	U.S. Mail Overnight Delivery Hand Delivery Facsimile



Douglas A. Werth

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1. Article Addressed to:

DOUGLAS A WERTH
BIETER WERTH & WALKER
PO BOX 2360
KETCHUM ID 83340

37-20742

COMPLETE THIS SECTION ON DELIVERY

A. Received by *(Please P[redacted]early)*: Kathleen Tepe

B. Date of Delivery: 2-5-3

C. Signature: X [signature] ☐ Agent ☐ Addressee

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

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IDAHO DEPT OF WATER
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ATTN DEBORAH GIBSON
1301 N ORCHARD ST
BOISE ID 83706

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1. Article Addressed to:

JAMES P SPECK
SPECK & AANESTAD
PO BOX 987
KETCHUM ID 83340

37-20742

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C. Signature
X Jan Latham ☑ Agent ☐ Addressee

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If YES, enter delivery address below: ☑ No

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1301 N ORCHARD ST
BOISE ID 83706

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State of Idaho
DEPARTMENT OF WATER RESOURCES
1301 North Orchard Street, Boise, ID 83706 - P.O. Box 83720, Boise, ID 83720-0098
Phone: (208) 327-7900 Fax: (208) 327-7866 Web Site: www.idwr.state.id.us

DIRK KEMPTHORNE
Governor

KARL J. DREHER
Director

February 4, 2003

Re: Application for Permit No. 37-20742 in the name of Robert G. Friedman

Dear Interested Parties:

The Department of Water Resources (department) has issued the enclosed **Order Denying Petition for Reconsideration** pursuant to section 67-5243, Idaho Code. **It can and will become a final order without further action of the Department unless a party files an exception and/or brief as described in the enclosed information sheet.**

If you have any questions, please call me at (208) 327-7953.

Sincerely,

Deborah J. Gibson

Deborah J. Gibson
Administrative Assistant
Water Allocation Bureau

Enclosures
c: IDWR - Regional Office

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EXPLANATORY INFORMATION

The accompanying order is an **Order Denying Petition for Reconsideration** of the "preliminary order" issued previously in this proceeding by the department pursuant to section 67-5243, Idaho Code.

EXCEPTIONS AND BRIEFS

Within fourteen (14) days after the service date of this denial of petition for reconsideration of the preliminary order, any party may in writing file exceptions to any part of the preliminary order and file a brief in support of the party's position on any issue in the proceeding with the Director. Otherwise, this preliminary order will become a final order of the agency.

If any party appeals or takes exceptions to the preliminary order, opposing parties shall have fourteen (14) days to respond to any party's appeal. Written briefs in support of or taking exceptions to the preliminary order shall be filed with the Director. The Director retains the right to review the preliminary order on his own motion.

ORAL ARGUMENT

If the Director grants a petition to review the preliminary order, the Director shall allow all parties an opportunity to file briefs in support of or taking exceptions to the preliminary order and may schedule oral argument in the matter before issuing a final order. If oral arguments are to be heard, the Director will within a reasonable time period notify each party of the place, date and hour for the argument of the case. Unless the Director orders otherwise, all oral arguments will be heard in Boise, Idaho.

CERTIFICATE OF SERVICE

All exceptions, briefs, requests for oral argument and any other matters filed with the Director in connection with the preliminary order shall be served on all other parties to the proceedings in accordance with Rules of Procedure 302 and 303.

FINAL ORDER

The Director will issue a final order within fifty-six (56) days of receipt of the written briefs, oral argument or response to briefs, whichever is later, unless waived by the parties or for good cause shown. The Director may remand the matter for further evidentiary hearings if further factual development of the record is necessary before issuing a final order. The department will serve a copy of the final order on all parties of record.

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Section 67-5246(5), Idaho Code, provides as follows:

Unless a different date is stated in a final order, the order is effective fourteen (14) days after its issuance if a party has not filed a petition for reconsideration. If a party has filed a petition for reconsideration with the agency head, the final order becomes effective when:

(a) the petition for reconsideration is disposed of; or
(b) the petition is deemed denied because the agency head did not dispose of the petition within twenty-one (21) days.

APPEAL OF FINAL ORDER TO DISTRICT COURT

Pursuant to sections 67-5270 and 67-5272, Idaho Code, if this preliminary order becomes final, any party aggrieved by the final order or orders previously issued in this case may appeal the final order and all previously issued orders in this case to district court by filing a petition in the district court of the county in which:

i. A hearing was held,
ii. The final agency action was taken,
iii. The party seeking review of the order resides, or
iv. The real property or personal property that was the subject of the agency action is located.

The appeal must be filed within twenty-eight (28) days of this preliminary order becoming final. See section 67-5273, Idaho Code. The filing of an appeal to district court does not itself stay the effectiveness or enforcement of the order under appeal.

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SPECK & AANESTAD
A PROFESSIONAL CORPORATION
ATTORNEYS
120 EAST AVENUE
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JAMES P. SPECK
jimspeck@cox-internet.com
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aanestad@cox-internet.com

TELEPHONE
(208) 726-4421
FACSIMILE
(208) 726-0752

January 31, 2003

VIA FACSIMILE - (208) 327-7866
ORIGINAL WILL FOLLOW
VIA REGULAR MAIL

Mr. L. Glen Saxton
Idaho Department of Water Resources
1301 North Orchard Street
Statehouse Mail
Boise ID 83720-9000

Re: ***In the Matter of Application for Permit No. 37-20742***
Robert G. Friedman, Applicant - Blaine County, Protestant

Dear Glen:

Enclosed is the Response to Motion for Reconsideration of Preliminary Order of Applicant, Robert G. Friedman. The original and one copy will follow by mail. Please receipt date stamp the copy and return the copy to me in the self-addressed, postage pre-paid envelope I will include for that purpose.

Sincerely yours,

SPECK & AANESTAD
A Professional Corporation

By: _____
James P. Speck

JPS:sgg
Enclosures
cc: Client (w/enclosures) via fax
Chuck Brockway (w/enclosures) via fax
Allen Merritt (w/enclosures) via mail
Doug Werth (w/enclosures) via mail

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James P. Speck, Esq., ISB #2067
SPECK & AANESTAD,
A Professional Corporation
Post Office Box 987
Ketchum, Idaho 83340
Telephone (208) 726-4421
Facsimile (208)726-0752

Attorneys for Applicant Robert G. Friedman

BEFORE THE IDAHO DEPARTMENT OF WATER RESOURCES

IN THE MATTER OF APPLICATION FOR PERMIT NO. 37-20742:	)	
Robert G. Friedman, Applicant.	)	**RESPONSE TO MOTION FOR RECONSIDERATION OF PRELIMINARY ORDER**
Blaine County,	)	
Protestant.	)	

Applicant, Robert G. Friedman ("Friedman"), hereby responds to and opposes the Motion for Reconsideration of Preliminary Order ("Motion") filed herein by Protestant, Blaine County ("Protestant").

The primary focus of the Motion is the Protestant's argument that the Hearing Officer failed to conclude that a portion of Water Right 37-863 owned by Eagle Creek Irrigation Company (the "Company") was forfeited. Friedman once again points out that the issue of forfeiture of all or any

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portion of the Company's water right is not to be resolved in this proceeding. Instead, it is ultimately a matter to be determined by the SRBA Court. That said, Friedman responds below to Protestant's arguments on forfieture.

Protestant contends *Aberdeen-Springfield Canal Co. v. Peiper*, 133 Idaho 82, 982 P.2d 917 (1999), a case involving a Carey Act operating company, does not apply to the present case. The basis of the ruling in *Aberdeen-Springfield* is that the "appropriator" of the water right (the canal company) did nothing to cause the non-use of the water. The Court stated that the canal company "holds title to the canal system and is the appropriator of the water rights involved in this case." *Id.* at 86. Protestant submits that, in contrast, the shareholders of the Company, such as Friedman, and not the Company, are the appropriators of the Company's water right. There is simply no basis for this position. As stated in the Company's Articles of Incorporation, one of its specific purposes is "the acquisition of water by appropriation, drilling, pumping or purchase". (*See* Exhibit V, page 1.) Those Articles of Incorporation further state that the Company, like Aberdeen-Springfield Canal Company, is to own, control, operate and maintain the water distribution system. *Id.* This was corroborated by the uncontroverted testimony of Mr. Everett Davis, President of the Company, at the hearing. Furthermore, as correctly pointed out by Protestant, the Company holds its water rights "in trust" for its shareholders. (*Id.* at page 3.) Idaho case law treats Carey Act operating companies (e.g. Aberdeen-Springfield Canal Company) as trustees of the water rights they deliver to their shareholders. *Big Wood Canal Co. v. Chapman*, 45 Idaho 380, 263 P. 45 (1927), a point Protestant neglects to mention. In other words, there is simply no basis to distinguish the structure of the Carey Act operating company in *Aberdeen-Springfield* and the Company in the present case as grounds for concluding that a Carey Act operating company is the appropriator of its water rights, but the

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Company is not the appropriator of its water right.

Nonetheless, Protestant continues its argument by citing a provision from the Bylaws of the Company to mysteriously support this proposition. This provision requiring a pro rata reduction in water delivered to all shareholders in the event of insufficient water is somehow supposed to distinguish this case from *Aberdeen-Springfield.* A careful reading of *Aberdeen-Springfield* finds that this is never even discussed. There is nothing in *Aberdeen-Springfield* to indicate that canal company's bylaws do not contain a similar provision. Friedman submits that just the opposite is true and that a pro rata reduction of water available to all shareholders is the rule for virtually any company which owns water rights and distributes water pursuant to stockholder ownership.[1] This argument simply has no merit.

Protestant also contends that the Company's bylaw provision requiring cancellation of shares of stock if they are not transferred with the sale of the real property is another basis for distinguishing this case from *Aberdeen-Springfield.* One is left merely to guess how this provision gives the Company in the instant case control over the use of the water to which Friedman is entitled by virtue of his ownership of ten shares of stock. Assuming the bylaws of Aberdeen-Springfield Canal Company do not contain a similar provision (and a close reading of the decision in that case does not find a reference one way or the other to such a provision in the bylaws, which is not surprising since it would have no relevance to the issues in that case), such a distinction is entirely irrelevant

[1]The Court in *Aberdeen-Springfield* cites *Idaho Farm Co. v. Northside Canal Co.*, 24 F.Supp. 189 (D.Ida. 1938) for the proposition that the forfeiture statute was not intended to apply to settlers within a Carey Act project who were not themselves the appropriators of water. It is a well known fact and the subject of numerous articles in newspapers around the State that in times of water shortage, the Northside Canal Co., another Carey Act operating company, reduces the water available to its shareholders on a pro rata basis. There is no reason to believe that Aberdeen-Springfield Canal Company handles its water distribution in a different manner.

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to the issues at hand.

The Preliminary Order states that *Aberdeen-Springfield* "appears to be directly applicable to the history of water use on the Friedman property. Protestant has not, and cannot, present any facts from the hearing record or legal authority to change this conclusion. In fact, the legal authority supports the conclusion that the Company should be treated the same as the canal company in *Aberdeen-Springfield* for the purpose of applying the relevant forfeiture defense.

Protestant next argues that Idaho Code Section 42-223(7) has no application to the present case. Protestant misses the point. It is a well accepted principle of statutory construction that you assume the legislature knew all relevant legal precedent at the time the statute was passed. *D & M Country Estates Homeowner's Association v. Romriell*, _____ Idaho _____ , 59 P.3d 965 (2002); *City of Sandpoint v. Sandpoint Ind. Hwy.*, 126 Idaho 145, 879 P.2d 1078 (1994). More importantly, courts are required to presume that the legislature did not intend to change the common law unless the language of the statute clearly indicates the legislature's intent to do so. *Thomson v. City of Lewiston*, 137 Idaho 473, 50 P.3d 488 (2002); *George W. Watkins Family v. Messenger*, 118 Idaho 537 , 797 P.2d 1385 (1990); *Cox v. St. Anthony Bank & Trust Co.*, 41 Idaho 776, 242 P. 785 (1925). It has long been the rule in Idaho that there can be no forfeiture of a water right if non-use of the water right is a result of circumstances over which the appropriator has no control. *Jenkins v. State*, 103 Idaho 384, 647 P.2d 1256 (1982); *Hodges v. Trail Creek Irrigation Company*, 78 Idaho 10, 297 P.2d 524 (1956); *Welch v. Garrett*, 5 Idaho 639, 51 P. 405 (1897). In enacting Idaho Code Section 42- 223(7) in 2002, the Idaho Legislature was well aware of this legal precedent as well as the *Aberdeen-Springfield* case. It is clear the Legislature believed the logic of such a defense to forfeiture should extend to other entity owners of water rights held for distribution to its landowners

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shareholders or members unless the non-use is subject to the control of that entity. Therefore, this statute is merely a recognition of the common law which culminated in the *Aberdeen-Springfield* case and which is directly applicable to the present case.

Protestant contends that the filling of the ponds on the Friedman property with Eagle Creek water pursuant to Friedman shares of stock in the Company is a significant point and a basis for denial of the Application. The Company has clearly indicated its approval of this project by its submittal and processing of Application for Transfer No. 5748, which was approved by IDWR on December 31, 2002 by a preliminary order which has now become final. Consequently there is little doubt that the initial filling of the ponds is authorized by the Company. Protestant also contends that filling the ponds will result in "taking more water out of the Big Wood River system that (sic) otherwise would be the case." Once again, Protestant simply ignores the uncontested testimony of Dr. Brockway and the fact that this water will otherwise be used for irrigation if it is not used to fill the ponds.

As further support for its Motion, Protestant comes back to its mantra that the evaporative losses from aesthetic ponds are wasteful and the cumulative effect of such ponds compounds that waste. This simply flies in the face of the uncontroverted expert testimony that evaporative losses from an equivalent surface area of a pond are essentially the same as evapotransporation losses from a like area of irrigated land. Simply put, this argument is flat out wrong.

Protestant has demonstrated absolutely no basis on which the Department should reconsider any part of its Preliminary Order in this matter. That Preliminary Order should stand and become a final order approving the Application for Permit No. 37-20742, subject to those conditions set forth in the Preliminary Order.

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Dated this 31 day of January, 2003.

SPECK & AANESTAD
A Professional Corporation
Attorneys for Applicant

By _____
James P. Speck

CERTIFICATE OF SERVICE

I hereby certify that on the 31 day of January, 2003, I served a true and correct copy of the within and foregoing document upon the persons named below in the manner noted:

Douglas A. Werth, Esq. Post Office Box 2360 Ketchum, ID 83340 FAX (208) 727-6853	☐ United States Mail, Postage Prepaid ☐ Hand Delivery ☑ Facsimile, with copy by United States Mail, Postage Prepaid
Mr. L. Glen Saxton Idaho Department of Water Resources 1301 North Orchard Street Statehouse Mail Boise, Idaho 83720-9000 FAX (208) 327-7866	☐ United States Mail, Postage Prepaid ☐ Hand Delivery ☑ Facsimile, with copy by United States Mail, Postage Prepaid
Mr. Allen Merritt Idaho Department of Water Resources 1341 Fillmore, Suite 200 Twin Falls, ID 83301 FAX (208) 736-3037	☐ United States Mail, Postage Prepaid ☐ Hand Delivery ☑ Facsimile, with copy by United States Mail, Postage Prepaid

JAMES P. SPECK

JUL 15 2004

SPECK & AANESTAD
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ATTORNEYS

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Jimspeck@cox-internet.com
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TELEPHONE
(208) 726-4431
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(208) 726-0752

January 31, 2003

VIA FACSIMILE - (208) 327-7866
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Department of Water Resources

Mr. L. Glen Saxton
Idaho Department of Water Resources
1301 North Orchard Street
Statehouse Mail
Boise ID 83720-9000

Re: In the Matter of Application for Permit No. 37-20742
Robert G. Friedman, Applicant - Blaine County, Protestant

Dear Glen:

This morning I faxed the Response to Motion for Reconsideration of Preliminary Order of Applicant. Later, I realized that although the correspondence was signed by Jim Speck, the signature page of the Response was unsigned and so I am faxing the signature page to you.

As stated in Jim's letter, the original will follow by mail.

Thank you.

Sincerely yours,

SPECK & AANESTAD
A Professional Corporation

By: _____
S. Galene Gonzales, Paralegal

JPS:sgg
Enclosures
cc: Client (w/enclosures) via fax
Chuck Brockway (w/enclosures) via fax

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JUL 25 2004

Dated this 31 day of January, 2003.

SPECK & AANESTAD
A Professional Corporation
Attorneys for Applicant

By _____
James P. Speck

CERTIFICATE OF SERVICE

I hereby certify that on the 31 day of January, 2003, I served a true and correct copy of the within and foregoing document upon the persons named below in the manner noted:

Douglas A. Werth, Esq.
Post Office Box 2360
Ketchum, ID 83340
FAX (208) 727-6853

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- ☐ Hand Delivery
- ☑ Facsimile, with copy by United States Mail, Postage Prepaid

Mr. L. Glen Saxton
Idaho Department of Water Resources
1301 North Orchard Street
Statehouse Mail
Boise, Idaho 83720-9000
FAX (208) 327-7866

- ☐ United States Mail, Postage Prepaid
- ☐ Hand Delivery
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Mr. Allen Merritt
Idaho Department of Water Resources
1341 Fillmore, Suite 200
Twin Falls, ID 83301
FAX (208) 736-3037

- ☐ United States Mail, Postage Prepaid
- ☐ Hand Delivery
- ☑ Facsimile, with copy by United States Mail, Postage Prepaid

_____
JAMES P. SPECK

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January 31, 2003

VIA FACSIMILE - (208) 327-7866
ORIGINAL WILL FOLLOW
VIA REGULAR MAIL

Mr. L. Glen Saxton
Idaho Department of Water Resources
1301 North Orchard Street
Statehouse Mail
Boise ID 83720-9000

Re: In the Matter of Application for Permit No. 37-20742
Robert G. Friedman, Applicant - Blaine County, Protestant

Dear Glen:

Enclosed is the Response to Motion for Reconsideration of Preliminary Order of Applicant, Robert G. Friedman. The original and one copy will follow by mail. Please receipt date stamp the copy and return the copy to me in the self-addressed, postage pre-paid envelope I will include for that purpose.

Sincerely yours,

SPECK & AANESTAD
A Professional Corporation

By: _____
James P. Speck

JPS:sgg
Enclosures
cc: Client (w/enclosures) via fax
Chuck Brockway (w/enclosures) via fax
Allen Merritt (w/enclosures) via mail
Doug Werth (w/enclosures) via mail

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JUL 1 3 2004

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Attorneys for Applicant Robert G. Friedman

BEFORE THE IDAHO DEPARTMENT OF WATER RESOURCES

IN THE MATTER OF APPLICATION FOR PERMIT NO. 37-20742:	)	
Robert G. Friedman, Applicant.	)	**RESPONSE TO MOTION FOR RECONSIDERATION OF PRELIMINARY ORDER**
Blaine County,	)	
Protestant.	)	

Applicant, Robert G. Friedman ("Friedman"), hereby responds to and opposes the Motion for Reconsideration of Preliminary Order ("Motion") filed herein by Protestant, Blaine County ("Protestant").

The primary focus of the Motion is the Protestant's argument that the Hearing Officer failed to conclude that a portion of Water Right 37-863 owned by Eagle Creek Irrigation Company (the "Company") was forfeited. Friedman once again points out that the issue of forfeiture of all or any

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portion of the Company's water right is not to be resolved in this proceeding. Instead, it is ultimately a matter to be determined by the SRBA Court. That said, Friedman responds below to Protestant's arguments on forfieture.

Protestant contends *Aberdeen-Springfield Canal Co. v. Peiper*, 133 Idaho 82, 982 P.2d 917 (1999), a case involving a Carey Act operating company, does not apply to the present case. The basis of the ruling in *Aberdeen-Springfield* is that the "appropriator" of the water right (the canal company) did nothing to cause the non-use of the water. The Court stated that the canal company "holds title to the canal system and is the appropriator of the water rights involved in this case." *Id.* at 86. Protestant submits that, in contrast, the shareholders of the Company, such as Friedman, and not the Company, are the appropriators of the Company's water right. There is simply no basis for this position. As stated in the Company's Articles of Incorporation, one of its specific purposes is "the acquisition of water by appropriation, drilling, pumping or purchase". (*See* Exhibit V, page 1.) Those Articles of Incorporation further state that the Company, like Aberdeen-Springfield Canal Company, is to own, control, operate and maintain the water distribution system. *Id.* This was corroborated by the uncontroverted testimony of Mr. Everett Davis, President of the Company, at the hearing. Furthermore, as correctly pointed out by Protestant, the Company holds its water rights "in trust" for its shareholders. (*Id.* at page 3.) Idaho case law treats Carey Act operating companies (e.g. Aberdeen-Springfield Canal Company) as trustees of the water rights they deliver to their shareholders. *Big Wood Canal Co. v. Chapman*, 45 Idaho 380, 263 P. 45 (1927), a point Protestant neglects to mention. In other words, there is simply no basis to distinguish the structure of the Carey Act operating company in *Aberdeen-Springfield* and the Company in the present case as grounds for concluding that a Carey Act operating company is the appropriator of its water rights, but the

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Company is not the appropriator of its water right.

Nonetheless, Protestant continues its argument by citing a provision from the Bylaws of the Company to mysteriously support this proposition. This provision requiring a pro rata reduction in water delivered to all shareholders in the event of insufficient water is somehow supposed to distinguish this case from *Aberdeen-Springfield*. A careful reading of *Aberdeen-Springfield* finds that this is never even discussed. There is nothing in *Aberdeen-Springfield* to indicate that canal company's bylaws do not contain a similar provision. Friedman submits that just the opposite is true and that a pro rata reduction of water available to all shareholders is the rule for virtually any company which owns water rights and distributes water pursuant to stockholder ownership.[1] This argument simply has no merit.

Protestant also contends that the Company's bylaw provision requiring cancellation of shares of stock if they are not transferred with the sale of the real property is another basis for distinguishing this case from *Aberdeen-Springfield*. One is left merely to guess how this provision gives the Company in the instant case control over the use of the water to which Friedman is entitled by virtue of his ownership of ten shares of stock. Assuming the bylaws of Aberdeen-Springfield Canal Company do not contain a similar provision (and a close reading of the decision in that case does not find a reference one way or the other to such a provision in the bylaws, which is not surprising since it would have no relevance to the issues in that case), such a distinction is entirely irrelevant

[1]The Court in *Aberdeen-Springfield* cites *Idaho Farm Co. v. Northside Canal Co.*, 24 F.Supp. 189 (D.Ida. 1938) for the proposition that the forfeiture statute was not intended to apply to settlers within a Carey Act project who were not themselves the appropriators of water. It is a well known fact and the subject of numerous articles in newspapers around the State that in times of water shortage, the Northside Canal Co., another Carey Act operating company, reduces the water available to its shareholders on a pro rata basis. There is no reason to believe that Aberdeen-Springfield Canal Company handles its water distribution in a different manner.

to the issues at hand.

The Preliminary Order states that *Aberdeen-Springfield* "appears to be directly applicable to the history of water use on the Friedman property. Protestant has not, and cannot, present any facts from the hearing record or legal authority to change this conclusion. In fact, the legal authority supports the conclusion that the Company should be treated the same as the canal company in *Aberdeen-Springfield* for the purpose of applying the relevant forfeiture defense.

Protestant next argues that Idaho Code Section 42-223(7) has no application to the present case. Protestant misses the point. It is a well accepted principle of statutory construction that you assume the legislature knew all relevant legal precedent at the time the statute was passed. *D & M Country Estates Homeowner's Association v. Romriell*, _____ Idaho _____, 59 P.3d 965 (2002); *City of Sandpoint v. Sandpoint Ind. Hwy.*, 126 Idaho 145, 879 P.2d 1078 (1994). More importantly, courts are required to presume that the legislature did not intend to change the common law unless the language of the statute clearly indicates the legislature's intent to do so. *Thomson v. City of Lewiston*, 137 Idaho 473, 50 P.3d 488 (2002); *George W. Watkins Family v. Messenger*, 118 Idaho 537, 797 P.2d 1385 (1990); *Cox v. St. Anthony Bank & Trust Co.*, 41 Idaho 776, 242 P. 785 (1925). It has long been the rule in Idaho that there can be no forfeiture of a water right if non-use of the water right is a result of circumstances over which the appropriator has no control. *Jenkins v. State*, 103 Idaho 384, 647 P.2d 1256 (1982); *Hodges v. Trail Creek Irrigation Company*, 78 Idaho 10, 297 P.2d 524 (1956); *Welch v. Garrett*, 5 Idaho 639, 51 P. 405 (1897). In enacting Idaho Code Section 42- 223(7) in 2002, the Idaho Legislature was well aware of this legal precedent as well as the *Aberdeen-Springfield* case. It is clear the Legislature believed the logic of such a defense to forfeiture should extend to other entity owners of water rights held for distribution to its landowners

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shareholders or members unless the non-use is subject to the control of that entity. Therefore, this statute is merely a recognition of the common law which culminated in the *Aberdeen-Springfield* case and which is directly applicable to the present case.

Protestant contends that the filling of the ponds on the Friedman property with Eagle Creek water pursuant to Friedman shares of stock in the Company is a significant point and a basis for denial of the Application. The Company has clearly indicated its approval of this project by its submittal and processing of Application for Transfer No. 5748, which was approved by IDWR on December 31, 2002 by a preliminary order which has now become final. Consequently there is little doubt that the initial filling of the ponds is authorized by the Company. Protestant also contends that filling the ponds will result in "taking more water out of the Big Wood River system that (sic) otherwise would be the case." Once again, Protestant simply ignores the uncontested testimony of Dr. Brockway and the fact that this water will otherwise be used for irrigation if it is not used to fill the ponds.

As further support for its Motion, Protestant comes back to its mantra that the evaporative losses from aesthetic ponds are wasteful and the cumulative effect of such ponds compounds that waste. This simply flies in the face of the uncontroverted expert testimony that evaporative losses from an equivalent surface area of a pond are essentially the same as evapotransporation losses from a like area of irrigated land. Simply put, this argument is flat out wrong.

Protestant has demonstrated absolutely no basis on which the Department should reconsider any part of its Preliminary Order in this matter. That Preliminary Order should stand and become a final order approving the Application for Permit No. 37-20742, subject to those conditions set forth in the Preliminary Order.

JUL 15 2004

Dated this ____ day of January, 2003.

SPECK & AANESTAD
A Professional Corporation
Attorneys for Applicant

By_____
James P. Speck

CERTIFICATE OF SERVICE

I hereby certify that on the ____ day of January, 2003, I served a true and correct copy of the within and foregoing document upon the persons named below in the manner noted:

Douglas A. Werth, Esq. Post Office Box 2360 Ketchum, ID 83340 FAX (208) 727-6853	❑ ❑ ❑	United States Mail, Postage Prepaid Hand Delivery Facsimile, with copy by United States Mail, Postage Prepaid
Mr. L. Glen Saxton Idaho Department of Water Resources 1301 North Orchard Street Statehouse Mail Boise, Idaho 83720-9000 FAX (208) 327-7866	❑ ❑ ❑	United States Mail, Postage Prepaid Hand Delivery Facsimile, with copy by United States Mail, Postage Prepaid
Mr. Allen Merritt Idaho Department of Water Resources 1341 Fillmore, Suite 200 Twin Falls, ID 83301 FAX (208) 736-3037	❑ ❑ ❑	United States Mail, Postage Prepaid Hand Delivery Facsimile, with copy by United States Mail, Postage Prepaid

_____
JAMES P. SPECK

JUL 15 2004

BIETER WERTH & WALKER, PLLC
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JAN 17 2003
Department of Water Resources

January 16, 2003

VIA FACSIMILE & U.S. MAIL
Fax No. 208-327-7866

Mr. Karl J. Dreher
Director
Idaho Department of Water Resources
1301 N. Orchard
P.O. Box 83720
Boise, ID 83720-0098

RE: *In the Matter of Application for Permit No. 37-20742 (Robert G. Friedman)*

Dear Director Dreher:

I have enclosed for filing in the above-referenced case the following document:

MOTION FOR RECONSIDERATION OF PRELIMINARY ORDER.

Sincerely yours,

Douglas A. Werth
BIETER WERTH & WALKER, PLLC

enclosure
cc/encl(s):Blaine County Board of Commissioners
IDWR Southern Regional Office (by fax & mail)
James P. Speck, Esq. (by fax & mail)

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JAN 15 2004

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James P. Speck, Esq. (by fax & mail)

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JAN 15 2003

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Attorneys for Protestant

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JAN 17 2003
Department of Water Resources

BEFORE THE DEPARTMENT OF WATER RESOURCES

OF THE STATE OF IDAHO

IN THE MATTER OF APPLICATION FOR PERMIT NO. 37-20742,

ROBERT G. FRIEDMAN,

Applicant,

BLAINE COUNTY,

Protestant.

MOTION FOR RECONSIDERATION OF PRELIMINARY ORDER

Protestant Blaine County (hereinafter "County"), by and through its undersigned counsel of record, pursuant to Idaho Code § 67-5243 and Rule 730 of the Rules of Procedure of the Idaho Department of Water Resources, IDAPA 37.01.01.730, moves the hearing officer for reconsideration of its preliminary order dated January 2, 2003, issued in the above-captioned proceeding.

The motion is based upon the record in this matter, and the prior briefing and argument of the parties, and the following additional comments and argument.

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The hearing officer correctly found that the Friedman parcel "was not irrigated from about 1977 through 2000." Preliminary Order, p.5. If this matter had been an application by Friedman to "transfer" water rights from his fallow parcel, it seems beyond cavil that the "shape file" prepared by the department would not support such a transfer. Yet that is precisely what Friedman is attempting to do with this application for permit and its companion application, Application for Transfer No. 5748. The maxim that the law does not allow a party to do indirectly what it is prohibited from doing directly is applicable here. *E.g.* Sencerbox v. First Nat'l Bank, 14 Idaho 95, 93 P. 369 (1908) (Ailshie, C.J., dissenting) ("It is a common maxim that things which cannot be lawfully done directly cannot be lawfully done by indirection and circumvention.").

The preliminary order does not give effect to the clear forfeiture that has occurred. Its failure to do so appears to be based upon two sources of law: Aberdeen-Springfield Canal Company v. Peiper, 133 Idaho 82, 982 P.2d 917 (1999); and Idaho Code § 42-223. As discussed below, neither of these sources of law are applicable to the Friedman application.

First, Aberdeen-Springfield is a wholly different case. It involved an operating company created under the Carey Act of 1894, 43 U.S.C. § 641. The Eagle Creek Irrigation Company was not organized under that act. The policies underlying support for the broad purposes of the Carey Act simply have no bearing upon this application. In Friedman, the Eagle Creek Irrigation Company only holds the water rights "in trust" for the shareholders as a whole, and shareholders, like Friedman, are the appropriators. The following language from the Company's by-laws show that this situation here differs:

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> "At any time when there is insufficient water to meet the demands of all of the shareholders in the Company, all shareholders share pro rata in the water available, according to the number of shares they possess. No priority of right shall obtain to any shareholder for any reason."

Exhibit W, Art XV, § 1.

Second, even if one were to argue that the Eagle Creek Irrigation Company was the actual "appropriator," there is nothing to suggest the Company could not have used elsewhere Friedman's share of the water rights held in trust. The instant case is a unique situation in that the shareholders have a pro rata share of the water rights that the Company holds in trust. The fact that Friedman may have failed to use his share of those water rights does not mean that the Company was prevented by circumstances over which it had no control from exercising its right to the water. The Company's articles of incorporation give it broad powers:

> "to construct, maintain, and operate a private water system for the distribution of water for domestic and irrigation purposes to its shareholders; [and] to engage in any activity related thereto."

Exhibit V, Art. II(a) (emphasis added). Notwithstanding Mr. Davis's general testimony, the Company's articles of incorporation clearly show that the Company has the broadest of powers relating to the water rights at issue.

Further, in Aberdeen-Springfield, part of the basis for the Court's decision was that the shareholders "wish[ed] to use forfeiture only to avoid paying maintenance assessments." This instant case is a different case.

Finally, the Eagle Creek Irrigation Company regulations specifically provide for cancellation of shares of stock if they are not transferred with a sale of the real property. In effect, they would revert to the Company. *See* Exhibit W, Art. II, § 3. This

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cancellation provision did not apply to the Carey Act organization at issue in Aberdeen-Springfield.

The bottom line in Aberdeen-Springfield as expressed by the Court was that "[a] finding of forfeiture here would do nothing to advance the policy reasons that motivate the statute's existence." The opposite is true here: the policy considerations favoring conservation of the scarce water resource, protection of senior water right holders, and serving the maximum use and benefit of Idaho's water resources are furthered, not hindered, by giving effect to the forfeiture that has occurred with respect to the Friedman parcel's water rights. Those rights had not been used appurtenant to that parcel for over 20 years and should be deemed forfeited.

From this, it follows that allowing Friedman to "mitigate" the evaporative losses from his ponds by "drying up" two acres that have been dry for decades is contrary to the conservation of water resources within the state of Idaho.

The other source of law cited in the preliminary order in regard to this issue, Idaho Code § 42-223, should not be applied. This statute was added to the Idaho Code by the Idaho legislature effective July 1, 2000. *See* 2000 Idaho Session Laws, ch.84, p.181. This enactment appears to be a codification and enlargement of the forfeiture holding in Aberdeen-Springfield. This statute has no application to the Friedman parcel, because the forfeiture of water rights here took place before enactment of the statute. The legislature cannot pass statutes having retroactive application where they directly affect a substantive right. By analogy, the caselaw governing the abandonment of public roads is instructive. Those cases hold that you look to the law in effect at the time of the claimed abandonment to determine if an abandonment of a public road has

JUL 15 2014

in fact occurred, and a subsequently enacted statute is not given retroactive effect. See Brown Properties v. Blaine County, 2002 Slip Op. No. 136, Docket No. 27647 (Idaho S.Ct. 11/26/02). The same principles should apply to legislative enactments purporting to the change the rules governing forfeiture of water rights. Thus, Idaho Code § 42-223 has no application to the Friedman application because the forfeiture here occurred before the statute was enacted.

The preliminary order points out that "[t]he right of the applicant to initially fill the ponds during the first year by foregoing the use of 16 acre feet of water from Eagle Creek for irrigation of the property may not be authorized by either [the Company] or by the water right." Preliminary Order, p.7. This is a question that the preliminary order suggested the applicant "needs to research." *Id.* This is a very significant question and cannot be left open. At present, the applicant has not demonstrated his right to such a use and therefore the application should have been denied. The shares owned by Friedman simply state that each share entitles him to ".02 cubic feet per second of time per miner's inch when available from waters of Eagle Creek." Exhibit X. Given that the Company is not subject to the local watermaster, and has not employed its own watermaster, which it has the power to do; given further that each shareholder appears to own an interest in water "when available" and without any priority among users, how can it be concluded that applicant has demonstrated a right to use the Eagle Creek waters to fill his pond? On the record, there appears to be no legal basis for doing so. Further, in the year when the applicant proposes to fill his ponds, he will be taking more water out of the Big Wood River system that otherwise would be the case. Surely this would cause injury.

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It also is respectfully suggested that the finding in the preliminary order relating to the local public interest is the wrong finding. The mere fact that there may be some short-term economic benefit to a handful does not demonstrate compliance with this standard. The Friedman application is not consistent with the conservation of water resources within the state. The evaporative losses associated with aesthetic ponds are wasteful and in a County like Blaine County the cumulative effect of such ponds only compounds that waste, even if, with regard to a particular pond project, no direct degradation of water quality was shown.

Another point. The preliminary order, read closely, only tentatively requires mitigation for evaporative losses. The order states "[t]he right holder shall retain ownership of the 10 shares of [Company] water stock and shall use 2 shares of water to the extent it is available for use in the ponds." This language "to the extent it is available" underscores the important questions that remain unanswered, and should be answered before approval of this application.

Although the County does not believe that the Friedman application should be approved, if it is, then it seems the following should be imposed as conditions:

1. That the applicant may only pump ground water for the sole purpose of mitigating pond evaporation and then only when water temperature becomes elevated or dissolved oxygen levels in the ponds are low (with a requirement of period testing);

2. That the applicant, in addition to the above, may only pump ground water during the irrigation season (with dates specified consistent with the use indicated in the decree), and only if there is sufficient surface water available from Eagle Creek that he otherwise would have a right to appropriate pursuant to his shares of stock;

3. That the applicant's use of ground water and surface water for his ponds would be subject to a priority date of October 6, 1902, and that when surface water rights in the Big Wood River drainage with the same priority date are cut-off by the watermaster, the applicant

shall abide by that same cut-off date; (This would give effect to Idaho Code § 42-106 – "As between appropriators, the first in time is first in right.");

4. That approval is conditioned on the approval of Application for Transfer No. 5748; and

5. That the approval be subject to the other conditions specified in the preliminary order.

These conditions will make it more likely that: (1) the applicant will only be taking water that is available and will not be enlarging the Eagle Creek decreed water rights; (2) the applicant will not be injuring other shareholders of the Company; and (3) the applicant will not be injuring senior water right holders and will be subject to the same priority cuts that they are.

DATED this 16 day of January, 2003.

Douglas A. Werth, Attorney for
Protestant Blaine County

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that on this 16 day of January, 2003, I caused a true and correct copy of the within and foregoing document to be served by the method(s) indicated below, and addressed to each of the following:

James P. Speck SPECK & AANESTAD P.O. Box 987 Ketchum, ID 83340 Fax: 208-726-0752	✓ ✓	U.S. Mail Overnight Delivery Hand Delivery Facsimile
Blaine County Board of Commissioners Old Blaine County Courthouse 206 1st Avenue South, Suite 300 Hailey, ID 83333 Fax: 208-788-5576	✓ 	U.S. Mail Overnight Delivery Hand Delivery Facsimile

Idaho Department of Water Resources Southern Regional Office 1341 Fillmore Street Suite 200 Twin Falls, ID 83301-3380 Fax: 208-736-3037	✓	U.S. Mail
		Overnight Delivery
		Hand Delivery
	✓	Facsimile
Mr. Karl J. Dreher Director Idaho Department of Water Resources 1301 N. Orchard P.O. Box 83720 Boise, ID 83720-0098 Fax 208-327-7866	✓	U.S. Mail
		Overnight Delivery
		Hand Delivery
	✓	Facsimile

Douglas A. Werth

BIETER WERTH & WALKER PLLC

ATTORNEYS & COUNSELORS AT LAW

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JAN 16 2003
Department of Water Resources

January 16, 2003

TO: Mr. Karl J. Dreher
Director
Idaho Department of Water Resources
Fax 208-327-7866

Idaho Department of Water Resources
Southern Regional Office
Fax: 208-736-3037

James P. Speck
SPECK & AANESTAD
Fax: 208-726-0752

FROM: Douglas A. Werth

SUBJECT: Friedman Application for Permit No. 37-20742

ENCLOSED: Cover letter; Motion for Reconsideration of Preliminary Order

PAGES: 10 (including this cover page)

COMMENTS:

CONFIDENTIALITY NOTICE: The contents of this fax transmission are confidential, intended only for the use of the above-named recipient, and also may be the subject of attorney-client privilege. Any distribution, dissemination, copying or other use of this communication by anyone other than the above-named recipient is strictly prohibited and no privilege is waived. If you received this fax transmission in error, please notify us at 208-726-0847. Thank you.

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JUL 16 2004

BIETER WERTH & WALKER, PLLC
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Boise, ID 83720-0098

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(Robert G. Friedman)

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Sincerely yours,

Douglas A. Werth
BIETER WERTH & WALKER, PLLC

enclosure
cc/encl(s):Blaine County Board of Commissioners
IDWR Southern Regional Office (by fax & mail)
James P. Speck, Esq. (by fax & mail)

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JUL 15 2004

Douglas A. Werth
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Idaho State Bar No. 3660

Attorneys for Protestant

BEFORE THE DEPARTMENT OF WATER RESOURCES

OF THE STATE OF IDAHO

IN THE MATTER OF APPLICATION FOR PERMIT NO. 37-20742, ROBERT G. FRIEDMAN, Applicant, BLAINE COUNTY, Protestant.	MOTION FOR RECONSIDERATION OF PRELIMINARY ORDER

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> "At any time when there is insufficient water to meet the demands of all of the shareholders in the Company, all shareholders share pro rata in the water available, according to the number of shares they possess. No priority of right shall obtain to any shareholder for any reason."

Exhibit W, Art XV, § 1.

Second, even if one were to argue that the Eagle Creek Irrigation Company was the actual "appropriator," there is nothing to suggest the Company could not have used elsewhere Friedman's share of the water rights held in trust. The instant case is a unique situation in that the shareholders have a pro rata share of the water rights that the Company holds in trust. The fact that Friedman may have failed to use his share of those water rights does not mean that the Company was prevented by circumstances over which it had no control from exercising its right to the water. The Company's articles of incorporation give it broad powers:

> "to construct, maintain, and operate a private water system for the distribution of water for domestic and irrigation purposes to its shareholders; [and] to engage in any activity related thereto."

Exhibit V, Art. II(a) (emphasis added). Notwithstanding Mr. Davis's general testimony, the Company's articles of incorporation clearly show that the Company has the broadest of powers relating to the water rights at issue.

Further, in Aberdeen-Springfield, part of the basis for the Court's decision was that the shareholders "wish[ed] to use forfeiture only to avoid paying maintenance assessments." This instant case is a different case.

Finally, the Eagle Creek Irrigation Company regulations specifically provide for cancellation of shares of stock if they are not transferred with a sale of the real property. In effect, they would revert to the Company. See Exhibit W, Art. II, § 3. This

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cancellation provision did not apply to the Carey Act organization at issue in Aberdeen-Springfield.

The bottom line in Aberdeen-Springfield as expressed by the Court was that "[a] finding of forfeiture here would do nothing to advance the policy reasons that motivate the statute's existence." The opposite is true here: the policy considerations favoring conservation of the scarce water resource, protection of senior water right holders, and serving the maximum use and benefit of Idaho's water resources are furthered, not hindered, by giving effect to the forfeiture that has occurred with respect to the Friedman parcel's water rights. Those rights had not been used appurtenant to that parcel for over 20 years and should be deemed forfeited.

From this, it follows that allowing Friedman to "mitigate" the evaporative losses from his ponds by "drying up" two acres that have been dry for decades is contrary to the conservation of water resources within the state of Idaho.

The other source of law cited in the preliminary order in regard to this issue, Idaho Code § 42-223, should not be applied. This statute was added to the Idaho Code by the Idaho legislature effective July 1, 2000. See 2000 Idaho Session Laws, ch.84, p.181. This enactment appears to be a codification and enlargement of the forfeiture holding in Aberdeen-Springfield. This statute has no application to the Friedman parcel, because the forfeiture of water rights here took place before enactment of the statute. The legislature cannot pass statutes having retroactive application where they directly affect a substantive right. By analogy, the caselaw governing the abandonment of public roads is instructive. Those cases hold that you look to the law in effect at the time of the claimed abandonment to determine if an abandonment of a public road has

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in fact occurred, and a subsequently enacted statute is not given retroactive effect. See Brown Properties v. Blaine County, 2002 Slip Op. No. 136, Docket No. 27647 (Idaho S.Ct. 11/26/02). The same principles should apply to legislative enactments purporting to the change the rules governing forfeiture of water rights. Thus, Idaho Code § 42-223 has no application to the Friedman application because the forfeiture here occurred before the statute was enacted.

The preliminary order points out that "[t]he right of the applicant to initially fill the ponds during the first year by foregoing the use of 16 acre feet of water from Eagle Creek for irrigation of the property may not be authorized by either [the Company] or by the water right." Preliminary Order, p.7. This is a question that the preliminary order suggested the applicant "needs to research." *Id.* This is a very significant question and cannot be left open. At present, the applicant has not demonstrated his right to such a use and therefore the application should have been denied. The shares owned by Friedman simply state that each share entitles him to ".02 cubic feet per second of time per miner's inch when available from waters of Eagle Creek." Exhibit X. Given that the Company is not subject to the local watermaster, and has not employed its own watermaster, which it has the power to do; given further that each shareholder appears to own an interest in water "when available" and without any priority among users, how can it be concluded that applicant has demonstrated a right to use the Eagle Creek waters to fill his pond? On the record, there appears to be no legal basis for doing so. Further, in the year when the applicant proposes to fill his ponds, he will be taking more water out of the Big Wood River system that otherwise would be the case. Surely this would cause injury.

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It also is respectfully suggested that the finding in the preliminary order relating to the local public interest is the wrong finding. The mere fact that there may be some short-term economic benefit to a handful does not demonstrate compliance with this standard. The Friedman application is not consistent with the conservation of water resources within the state. The evaporative losses associated with aesthetic ponds are wasteful and in a County like Blaine County the cumulative effect of such ponds only compounds that waste, even if, with regard to a particular pond project, no direct degradation of water quality was shown.

Another point. The preliminary order, read closely, only tentatively requires mitigation for evaporative losses. The order states "[t]he right holder shall retain ownership of the 10 shares of [Company] water stock and shall use 2 shares of water to the extent it is available for use in the ponds." This language "to the extent it is available" underscores the important questions that remain unanswered, and should be answered before approval of this application.

Although the County does not believe that the Friedman application should be approved, if it is, then it seems the following should be imposed as conditions:

1. That the applicant may only pump ground water for the sole purpose of mitigating pond evaporation and then only when water temperature becomes elevated or dissolved oxygen levels in the ponds are low (with a requirement of period testing);

2. That the applicant, in addition to the above, may only pump ground water during the irrigation season (with dates specified consistent with the use indicated in the decree), and only if there is sufficient surface water available from Eagle Creek that he otherwise would have a right to appropriate pursuant to his shares of stock;

3. That the applicant's use of ground water and surface water for his ponds would be subject to a priority date of October 6, 1902, and that when surface water rights in the Big Wood River drainage with the same priority date are cut-off by the watermaster, the applicant

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shall abide by that same cut-off date; (This would give effect to Idaho Code § 42-106 – "As between appropriators, the first in time is first in right.");

4. That approval is conditioned on the approval of Application for Transfer No. 5748; and

5. That the approval be subject to the other conditions specified in the preliminary order.

These conditions will make it more likely that: (1) the applicant will only be taking water that is available and will not be enlarging the Eagle Creek decreed water rights; (2) the applicant will not be injuring other shareholders of the Company; and (3) the applicant will not be injuring senior water right holders and will be subject to the same priority cuts that they are.

DATED this 16 day of January, 2003.

Douglas A. Werth, Attorney for
Protestant Blaine County

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that on this 16 day of January, 2003, I caused a true and correct copy of the within and foregoing document to be served by the method(s) indicated below, and addressed to each of the following:

James P. Speck SPECK & AANESTAD P.O. Box 987 Ketchum, ID 83340 Fax: 208-726-0752	✓ ✓	U.S. Mail Overnight Delivery Hand Delivery Facsimile
Blaine County Board of Commissioners Old Blaine County Courthouse 206 1st Avenue South, Suite 300 Hailey, ID 83333 Fax: 208-788-5576	✓ 	U.S. Mail Overnight Delivery Hand Delivery Facsimile

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JAN 15 2003

Idaho Department of Water Resources
Southern Regional Office
1341 Fillmore Street
Suite 200
Twin Falls, ID 83301-3380
Fax: 208-736-3037

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Mr. Karl J. Dreher
Director
Idaho Department of Water Resources
1301 N. Orchard
P.O. Box 83720
Boise, ID 83720-0098
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Douglas A. Werth

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1301 N ORCHARD ST
BOISE ID 83706

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BIETER WERTH & WALKER PLL[redacted]
PO BOX 2360
KETCHUM ID 8334[redacted]

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State of Idaho
DEPARTMENT OF WATER RESOURCES
1301 North Orchard Street, Boise, ID 83706 - P.O. Box 83720, Boise, ID 83720-0098
Phone: (208) 327-7900 Fax: (208) 327-7866 Web Site: www.idwr.state.id.us

DIRK KEMPTHORNE
Governor

KARL J. DREHER
Director

January 2, 2003

Re: In the matter of Application for Permit No. 37-20742 in the name of the Robert G. Friedman

Dear Interested Parties:

The Department of Water Resources (department) has issued the enclosed **Preliminary Order** pursuant to section 67-5243, Idaho Code. **It can and will become a final order without further action of the Department unless a party petitions for reconsideration or files an exception and/or brief as described in the enclosed information sheet.**

Please note that water right owners are required to report any change of water right ownership and/or change of mailing address to the department within 120 days of the change. Failure to report these changes could result in a $100 late filing fee. Contact any office of the department or visit our homepage on the Internet to obtain the proper reporting form.

If you have any questions, please call me at (208) 327-7953.

Sincerely,

Deborah J. Gibson

Deborah J. Gibson
Administrative Assistant
Water Allocation Bureau

Enclosures
c: Service List

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Responding To Preliminary Orders Issued By The Idaho Department Of Water Resources

The accompanying order is a **Preliminary Order** issued by the Idaho Department of Water Resources (department) pursuant to section 67-5243, Idaho Code. **It can and will become a final order without further action of the department unless a party petitions for reconsideration within fourteen (14) days after issuance as further described below:**

PETITION FOR RECONSIDERATION

Any party may file a petition for reconsideration of a preliminary order with the hearing officer within fourteen (14) days of the service date of this order. The hearing officer will act on a petition for reconsideration within twenty-one (21) days of its receipt, or the petition will be considered denied by operation of law. See section 67-5243(3) Idaho Code.

EXCEPTIONS AND BRIEFS

Within fourteen (14) days after (a) the service date of a preliminary order, (b) the service date of a denial of a petition for reconsideration from this preliminary order, or (c) the failure within twenty-one (21) days to grant or deny a petition for reconsideration from this preliminary order, any party may in writing support or take exceptions to any part of a preliminary order and may file briefs in support of the party's position on any issue in the proceeding to the Director. Otherwise, this preliminary order will become a final order of the agency.

If any party appeals or takes exceptions to this preliminary order, opposing parties shall have fourteen (14) days to respond to any party's appeal. Written briefs in support of or taking exceptions to the preliminary order shall be filed with the Director. The Director retains the right to review the preliminary order on his own motion.

ORAL ARGUMENT

If the Director grants a petition to review the preliminary order, the Director shall allow all parties an opportunity to file briefs in support of or taking exceptions to the preliminary order and may schedule oral argument in the matter before issuing a final order. If oral arguments are to be heard, the Director will within a reasonable time period notify each party of the place, date and hour for the argument of the case. Unless the Director orders otherwise, all oral arguments will be heard in Boise, Idaho.

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CERTIFICATE OF SERVICE

All exceptions, briefs, requests for oral argument and any other matters filed with the Director in connection with the preliminary order shall be served on all other parties to the proceedings in accordance with Rules of Procedure 302 and 303.

FINAL ORDER

The Department will issue a final order within fifty-six (56) days of receipt of the written briefs, oral argument or response to briefs, whichever is later, unless waived by the parties or for good cause shown. The Director may remand the matter for further evidentiary hearings if further factual development of the record is necessary before issuing a final order. The department will serve a copy of the final order on all parties of record.

Section 67-5246(5), Idaho Code, provides as follows:

> Unless a different date is stated in a final order, the order is effective fourteen (14) days after its issuance if a party has not filed a petition for reconsideration. If a party has filed a petition for reconsideration with the agency head, the final order becomes effective when:
>
> (a) the petition for reconsideration is disposed of; or
> (b) the petition is deemed denied because the agency head did not dispose of the petition within twenty-one (21) days.

APPEAL OF FINAL ORDER TO DISTRICT COURT

Pursuant to sections 67-5270 and 67-5272, Idaho Code, if this preliminary order becomes final, any party aggrieved by the final order or orders previously issued in this case may appeal the final order and all previously issued orders in this case to district court by filing a petition in the district court of the county in which:

i. A hearing was held,
ii. The final agency action was taken,
iii. The party seeking review of the order resides, or
iv. The real property or personal property that was the subject of the agency action is located.

The appeal must be filed within twenty-eight (28) days of this preliminary order becoming final. See section 67-5273, Idaho Code. The filing of an appeal to district court does not itself stay the effectiveness or enforcement of the order under appeal.

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January 2, 2003

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aanestad@cox-internet.com

TELEPHONE
(208) 726-4421
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Idaho Department of Water Resources
1301 North Orchard Street
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Boise ID 83720-9000

Re: ***In the Matter of Application for Permit No. 37-20742***
Robert G. Friedman, Applicant - Blaine County, Protestant

Dear Glen:

Enclosed is the Post Hearing Reply Brief of Applicant, Robert G. Friedman. The original and one copy will follow by mail. Please receipt date stamp the copy and return the copy to me in the self-addressed, postage pre-paid envelope I will include for that purpose.

Sincerely yours,

SPECK & AANESTAD
A Professional Corporation

By: _____
James P. Speck

JPS:sgg
Enclosures
cc: Client (w/enclosures) via fax
Chuck Brockway (w/enclosures) via fax
Allen Merritt (w/enclosures) via mail
Dough Werth (w/enclosures) via mail

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James P. Speck, Esq., ISB #2067
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Ketchum, Idaho 83340
Telephone (208) 726-4421
Facsimile (208)726-0752

Attorneys for Applicant Robert G. Friedman

BEFORE THE IDAHO DEPARTMENT OF WATER RESOURCES

IN THE MATTER OF APPLICATION FOR PERMIT NO. 37-20742:	)	
Robert G. Friedman, Applicant.	)	**APPLICANT'S POST HEARING REPLY BRIEF**
Blaine County,	)	
Protestant.	)	

Applicant, Robert G. Friedman ("Friedman"), respectfully submits his Post Hearing Reply Brief in this matter.

I.

There is no evidence that Eagle Creek flows into the Big Wood River.

Protestant, Blaine County ("Protestant") claims in its Initial Post-Hearing Memorandum that, "The facts clearly demonstrate that waters from Eagle Creek have historically flowed to the Big Wood River and continue to flow to the Big Wood River." However, there is not one shred of evidence in the record to support this statement.

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This issue was previously addressed in the *Winslow v. Chapman* Decree (Hearing Exhibit 9 - the "Winslow Decree")[1]. In the Winslow Decree Judge Adair made the following finding:

> That for many years prior to said appropriation and for many years subsequent thereto, the water flowing in said Eagle Creek did not, when permitted to flow down the natural channel thereof, reach Big Wood River during the irrigation season; and the use of the said amount of water during the said period by this plaintiff, and his predecessors in interest, did not diminish or affect the flow of water in said Big Wood River and the said plaintiff's use of said waters does not and has not interfered with the use of the said water of said Big Wood River by other appropriators therefrom.

(Winslow Decree, page 2). The Winslow Decree therefore establishes that, from many years prior to the October 6, 1902 appropriation by Winslow through the date of the Winslow Decree, August 22, 1923, water flowing in the natural channel of Eagle Creek did not reach the Big Wood River during the irrigation season. Lee Peterson, Watermaster for Water District 37 and 37M, testified Eagle Creek is and always has been considered by persons holding his office a "dry stream." No other witness testifying or document presented at the Hearing addressed this matter. Thus, contrary to Protestant's assertion, the "facts" presented at the Hearing establish that water flowing in the natural channel of Eagle Creek has not reached the Big Wood River during the irrigation season at least since sometime prior to October 6, 1902.

Perhaps one of the "facts" alluded to by Protestant is Dr. Brockway's testimony that "waste

---

[1] Protestant asserts the Idaho Department of Water Resources ("IDWR") should not be bound by the Winslow Decree as it was entered by default and based upon a suspect set of facts. In other words, Protestant claims the Winslow Decree should be set aside almost 80 years after it was entered and without presenting any facts to support such an allegation. Requests to set aside judgments must be made within a reasonable time. I.R.C.P. 60(b). Protestant's claim does not even come close to meeting this requirement. Absent the proper showing to set aside the Winslow Decree, it remains a valid judgment of a court of law in the state of Idaho and binding on IDWR.

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water" from the Eagle Creek Irrigation Company (the "Company") diversions flows into the same recharge area currently proposed for the pending Application. However, Protestant misunderstands the significance of this testimony. Water flowing in the Company's system of ditches is clearly not flowing in the "natural channel" of Eagle Creek. Instead, it is water diverted pursuant to the Company's water right and not consumed by the irrigation uses of the Company's shareholders. It may include water flowing back into the ditch after application to shareholder lands. According to the Idaho Supreme Court in *Hidden Springs Trout Ranch v. Hagerman Water Users, Inc.*, 101 Idaho 677, 619 P.2d 1130 (1980), water diverted from its source and then lost either before or after its application to a beneficial use such as irrigation is "waste water" which may be reclaimed by the original appropriator. The Court stated,

> [I]t has long been settled law in Idaho that a senior appropriator of water retains his right to surface waste and seepage water, and may reclaim it, even though such water has been used by a junior appropriator, even for as long as forty years.

Id. at 680. If not reclaimed by the original appropriator, any subsequent appropriator of waste water can only acquire a water right which is subject to the right of the owner to cease the waste and apply the water to a beneficial use. *Id.*; *Sebern v. Moore*, 44 Idaho 410, 258 P.176 (1927). Therefore, no Big Wood River water right holder has the right to rely on the continued flow of "waste water" through the Company's ditch system and back to the River through the recharge area.

II.

Protestant has not presented clear and convincing evidence that any portion of Water Right No. 37-863 has been forfeited.

The Idaho Supreme Court has often stated that forfeiture of water rights is not favored , is abhorrent and all intendments are to be indulged against a forfeiture. *Application of* Boyer, 73 Idaho

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152, 248 P.2d 540 (1952); *Dovel v. Dobson*, 122 Idaho 59, 831 P.2d 527 (1992); *Aberdeen - Springfield Canal Company v. Peiper*, 133 Idaho 82, 982 P.2d 917 (1999); *McCray v. Rosenkrance*, 135 Idaho 509, 20 P.3rd 693 (2001). A finding of forfeiture must be based upon clear and convincing evidence. *Id.*

The only evidence presented by Protestant is the testimony by Mr. Leonard Harlig that he did not observe any cultivation of crops, grazing of livestock or active irrigation of the Friedman property while running past it along Highway 75 over an extended period of time. Friedman has previously addressed the issue of forfeiture in his Post Hearing Brief and will not repeat those arguments here. In addition, Dr. Brockway testified that, in his expert opinion, based on the presence of lateral irrigation ditches throughout the Friedman property, the Friedman property had historically been flood irrigated. Mr. Everett Davis, President of Eagle Creek Irrigation Company, testified that when water represented by the shares of stock owned by a particular shareholder is not used or called for by that shareholder, the Company has allowed other shareholders to use it on other lands within the Company's service area. In this case, there is not clear and convincing evidence of forfeiture of the portion of the Company's water right represented by the shares of stock owned by Friedman.

Finally, and perhaps most importantly, the issue of forfeiture of all or any portion of the Company's water right is not to be resolved in this proceeding. Instead, it is ultimately a matter to be determined by the SRBA Court.

III.

CONCLUSION

Friedman has met his burden of presenting evidence to satisfy all of the requirements of I.C. §42-203A(5) and the Big Wood River Groundwater Management Area Management Plan.

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Protestant has failed to present any evidence that should lead IDWR to a different conclusion. The Application should be approved and a Permit issued subject to and conditioned upon both the approval of the Company's Application for Transfer No. 5748 and the ultimate determination of the validity of Water Right No. 37-863 in the SRBA.

Dated this 18 day of December, 2002.

SPECK & AANESTAD
A Professional Corporation
Attorneys for Applicant

By _____
James P. Speck

CERTIFICATE OF SERVICE

I hereby certify that on the 18 day of December, 2002, I served a true and correct copy of the within and foregoing document upon the persons named below in the manner noted:

Douglas A. Werth, Esq. Post Office Box 2360 Ketchum, ID 83340 FAX (208) 727-6853	☑ United States Mail, Postage Prepaid ☐ Hand Delivery ☐ Facsimile, with copy by United States Mail, Postage Prepaid
Mr. L. Glen Saxton Idaho Department of Water Resources 1301 North Orchard Street Statehouse Mail Boise, Idaho 83720-9000 FAX (208) 327-7866	☐ United States Mail, Postage Prepaid ☐ Hand Delivery ☑ Facsimile, with copy by United States Mail, Postage Prepaid

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Mr. Allen Merritt
Idaho Department of Water Resources
1341 Fillmore, Suite 200
Twin Falls, ID 83301
FAX (208) 736-3037

☑ United States Mail, Postage Prepaid
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JAMES P. SPECK

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Department of Water Resources

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Attorneys for Protestant

BEFORE THE DEPARTMENT OF WATER RESOURCES

OF THE STATE OF IDAHO

IN THE MATTER OF APPLICATION FOR PERMIT NO. 37-20742, ROBERT G. FRIEDMAN, Applicant, BLAINE COUNTY, Protestant.	PROTESTANT'S REPLY MEMORANDUM

COMES NOW Protestant Blaine County and submits its reply memorandum in the above-captioned proceeding.

Nowhere in the applicant's initial brief does he dispute the lack of use of water on the pertinent property for many years in excess of five (5) years. Simply put, the shares of the Eagle Creek Irrigation Company involved with this application were not put to beneficial use and are abandoned and subject to forfeiture under Idaho law.

In response to this inevitable conclusion, the applicant argues the case of

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Aberdeen-Springfield Canal Company v. Peiper, 133 Idaho 82, 982 P.2d 917 (1999), and Idaho Code § 42-223. To begin with, Aberdeen-Springfield, did not involve the unique circumstances we have here involving a decreed water right issued based upon a default judgment entered after the watermaster failed to make an appearance in the case. Such a decision should not be binding upon a state agency like the IDWR because the state was not a party. Further, where, as here, water rights are essentially treated as exempt from the constitutional priority principles, *see* Idaho Const. Art. 15, §§ 3 and 5, they should be narrowly construed and their transfer and use as mitigation elsewhere disfavored. These constitutional provisions should prevail and the general rule disfavoring forfeiture should have no application.

Aberdeen-Springfield involved a Carey Act operating company and a situation where a shareholder who had not remained current on assessments was claiming a forfeiture. The instant case is different because forfeiture is being considered not in isolation, but in the context of a pending application for water right and related transfer application. (With regard to the transfer application, it was filed before pertinent amendments to Idaho Code § 42-223 became effective.) Further, because of the nature of the shares as explained by the testimony of Everrett Davis, if the instant application is denied based in part upon a forfeiture, it will not affect the overall right of the Eagle Creek Irrigation Company to appropriate its water; it will only affect this particular shareholder's use of a portion of that water. As you will recall, the applicant is at the end of the line for water subject to the Eagle Creek Irrigation Company. In the years that the applicant and his predecessors did not put any water to beneficial use, the water simply returned to the Big Wood River and there was no effect at all upon the

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other shareholders of the Eagle Creek Irrigation Company. The same will hold true if the IDWR confirms the forfeiture that has occurred here with respect to the applicant's shares.

Furthermore, a careful reading of Idaho Code § 42-223(7) shows that it only applies where the water right of "[the] company, corporation, association, or entity" is being lost or forfeited. This statute reads:

> (7) No portion of a water right held by an irrigation district, a Carey Act operating company, or any other company, corporation, association, or entity which holds water rights for distribution to its landowners, shareholders or members shall be lost or forfeited due to nonuse by such landowners, shareholders or members, unless the nonuse is subject to the control of such entity.

This case involves a single shareholder's right to use water relating to his shares and would not effect a forfeiture of the right of the Eagle Creek Irrigation Company or other of its shareholders to appropriate water.

At most, the Eagle Creek appropriation should have a priority date of October 6, 1902. The decree itself recites the legal conclusion (again based upon a default judgment) that the appropriation of water in the case began "on or about the 6th day of October, 1902" and that the water "since said date, [was] continuously during the irrigation season of each and every year". Yet, this water is not subject to priority cuts. Clearly, senior water right holders suffer injury as a result of this, year in and year out. Moreover, even junior water right holders would suffer injury if this application were approved, notwithstanding the forfeiture that quite plainly has occurred. *E.g.*, Jenkins v. State, Dep't of Water Resources, 103 Idaho 384, 647 P.2d 1256 (1982).

Further, as for applicant's resumption of use argument, it is clear that senior and junior water rights holders diverting from the Big Wood River will suffer injury if the

forfeiture is allowed to be avoided by the anemic attempted use in 2001 and 2002. The record is very clear that the water applicant and his predecessor failed to put to beneficial use went directly into the Big Wood River. The record also very plainly shows that the waters of the Big Wood River have been subject to priority cuts every year in recent memory.

With regard to the applicant's calculation of mitigation there is no question but that the net effect of approving this application will be to reduce the water flowing into the Big Wood River. The applicant argues that "drying up" two acres that have been dry for decades (with the exception of the efforts to avoid forfeiture that took place in 2001 and 2002) will mitigate the two acres of aesthetic ponds he proposes. His expert also uses water consumption figures for irrigated alfalfa, when it is evident that no alfalfa has been grown on the property since anyone can remember, if ever. The bottom line, however, is that the water used to flow across the applicant's property, sink into the ground, and the flow into the Big Wood River. There was no beneficial use. The water that went into the Big Wood River was then available for appropriators downstream. If this application is approved, less water will be available for appropriators downstream. Furthermore, the applicant would be expanding the period of use of the water to encompass an entire year. Further, he would be allowed to perpetuate, and we would submit expand, rights based upon a dubious decree involving a failure of the watermaster to appear in the case and a patently false factual premise (that the waters of Eagle Creek do not flow into the Big Wood River).

For these reasons, and those set forth in protestant's initial post-trial memorandum, the IDWR is respectfully requested to deny this application for water right.

DATED this 18th day of December, 2002.

Douglas A. Werth, Attorney for
Protestant Blaine County

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that on this 18th day of December, 2002, I caused a true and correct copy of the within and foregoing document to be served by the method(s) indicated below, and addressed to each of the following:

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Blaine County Board of Commissioners Old Blaine County Courthouse 206 1st Avenue South, Suite 300 Hailey, ID 83333 Fax: 208-788-5576	✓ 	U.S. Mail Overnight Delivery Hand Delivery Facsimile
Idaho Department of Water Resources Southern Regional Office 1341 Fillmore Street Suite 200 Twin Falls, ID 83301-3380 Fax: 208-736-3037	✓ ✓	U.S. Mail Overnight Delivery Hand Delivery Facsimile

Mr. Karl J. Dreher
Director
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Southern Region

December 18, 2002

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TO: Idaho Department of Water Resources
Fax No. 208-736-3037

James P. Speck
Fax No. 726-0752

FROM: Douglas A. Werth

SUBJECT: Application of Friedman (37-20742)

ENCLOSED: Protestant's Reply Memorandum

PAGES: 7

COMMENTS:

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To Glen Saxton	From Allen Merritt	
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BEFORE THE DEPARTMENT OF WATER RESOURCES

OF THE STATE OF IDAHO

IN THE MATTER OF APPLICATION FOR PERMIT NO. 37-20742, ROBERT G. FRIEDMAN, Applicant, BLAINE COUNTY, Protestant.	PROTESTANT'S REPLY MEMORANDUM

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For these reasons, and those set forth in protestant's initial post-trial memorandum, the IDWR is respectfully requested to deny this application for water right.

DATED this 18th day of December, 2002.

Douglas A. Werth, Attorney for
Protestant Blaine County

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December 18, 2002

VIA FACSIMILE - (208) 327-7866
ORIGINAL WILL FOLLOW
VIA REGULAR MAIL

Mr. L. Glen Saxton
Idaho Department of Water Resources
1301 North Orchard Street
Statehouse Mail
Boise ID 83720-9000

Re: In the Matter of Application for Permit No. 37-20742
Robert G. Friedman, Applicant - Blaine County, Protestant

Dear Glen:

Enclosed is the Post Hearing Reply Brief of Applicant, Robert G. Friedman. The original and one copy will follow by mail. Please receipt date stamp the copy and return the copy to me in the self-addressed, postage pre-paid envelope I will include for that purpose.

Sincerely yours,

SPECK & AANESTAD
A Professional Corporation

By: _____
James F. Speck

JPS:sgg
Enclosures
cc: Client (w/enclosures) via fax
Chuck Brockway (w/enclosures) via fax
Allen Merritt (w/enclosures) via mail
Dough Werth (w/enclosures) via mail

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JUL 15 2004

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Attorneys for Applicant Robert G. Friedman

BEFORE THE IDAHO DEPARTMENT OF WATER RESOURCES

IN THE MATTER OF APPLICATION FOR PERMIT NO. 37-20742:	)	
Robert G. Friedman, Applicant.	)	**APPLICANT'S POST HEARING REPLY BRIEF**
Blaine County,	)	
Protestant.	)	

Applicant, Robert G. Friedman ("Friedman"), respectfully submits his Post Hearing Reply Brief in this matter.

I.

There is no evidence that Eagle Creek flows into the Big Wood River.

Protestant, Blaine County ("Protestant") claims in its Initial Post-Hearing Memorandum that, "The facts clearly demonstrate that waters from Eagle Creek have historically flowed to the Big Wood River and continue to flow to the Big Wood River." However, there is not one shred of evidence in the record to support this statement.

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This issue was previously addressed in the *Winslow v. Chapman* Decree (Hearing Exhibit 9 - the "Winslow Decree")[1]. In the Winslow Decree Judge Adair made the following finding:

> That for many years prior to said appropriation and for many years subsequent thereto, the water flowing in said Eagle Creek did not, when permitted to flow down the natural channel thereof, reach Big Wood River during the irrigation season; and the use of the said amount of water during the said period by this plaintiff, and his predecessors in interest, did not diminish or affect the flow of water in said Big Wood River and the said plaintiff's use of said waters does not and has not interfered with the use of the said water of said Big Wood River by other appropriators therefrom.

(Winslow Decree, page 2). The Winslow Decree therefore establishes that, from many years prior to the October 6, 1902 appropriation by Winslow through the date of the Winslow Decree, August 22, 1923, water flowing in the natural channel of Eagle Creek did not reach the Big Wood River during the irrigation season. Lee Peterson, Watermaster for Water District 37 and 37M, testified Eagle Creek is and always has been considered by persons holding his office a "dry stream." No other witness testifying or document presented at the Hearing addressed this matter. Thus, contrary to Protestant's assertion, the "facts" presented at the Hearing establish that water flowing in the natural channel of Eagle Creek has not reached the Big Wood River during the irrigation season at least since sometime prior to October 6, 1902.

Perhaps one of the "facts" alluded to by Protestant is Dr. Brockway's testimony that "waste

---

[1] Protestant asserts the Idaho Department of Water Resources ("IDWR") should not be bound by the Winslow Decree as it was entered by default and based upon a suspect set of facts. In other words, Protestant claims the Winslow Decree should be set aside almost 80 years after it was entered and without presenting any facts to support such an allegation. Requests to set aside judgments must be made within a reasonable time. I.R.C.P. 60(b). Protestant's claim does not even come close to meeting this requirement. Absent the proper showing to set aside the Winslow Decree, it remains a valid judgment of a court of law in the state of Idaho and binding on IDWR.

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water" from the Eagle Creek Irrigation Company (the "Company") diversions flows into the same recharge area currently proposed for the pending Application. However, Protestant misunderstands the significance of this testimony. Water flowing in the Company's system of ditches is clearly not flowing in the "natural channel" of Eagle Creek. Instead, it is water diverted pursuant to the Company's water right and not consumed by the irrigation uses of the Company's shareholders. It may include water flowing back into the ditch after application to shareholder lands. According to the Idaho Supreme Court in *Hidden Springs Trout Ranch v. Hagerman Water Users, Inc.*, 101 Idaho 677, 619 P.2d 1130 (1980), water diverted from its source and then lost either before or after its application to a beneficial use such as irrigation is "waste water" which may be reclaimed by the original appropriator. The Court stated,

> [I]t has long been settled law in Idaho that a senior appropriator of water retains his right to surface waste and seepage water, and may reclaim it, even though such water has been used by a junior appropriator, even for as long as forty years.

Id. at 680. If not reclaimed by the original appropriator, any subsequent appropriator of waste water can only acquire a water right which is subject to the right of the owner to cease the waste and apply the water to a beneficial use. *Id.*; *Sebern v. Moore*, 44 Idaho 410, 258 P.176 (1927). Therefore, no Big Wood River water right holder has the right to rely on the continued flow of "waste water" through the Company's ditch system and back to the River through the recharge area.

II.

Protestant has not presented clear and convincing evidence that any portion of Water Right No. 37-863 has been forfeited.

The Idaho Supreme Court has often stated that forfeiture of water rights is not favored , is abhorrent and all intendments are to be indulged against a forfeiture. *Application of* Boyer, 73 Idaho

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152, 248 P.2d 540 (1952); *Dovel v. Dobson*, 122 Idaho 59, 831 P.2d 527 (1992); *Aberdeen - Springfield Canal Company v. Peiper*, 133 Idaho 82, 982 P.2d 917 (1999); *McCray v. Rosenkrance*, 135 Idaho 509, 20 P.3rd 693 (2001). A finding of forfeiture must be based upon clear and convincing evidence. *Id.*

The only evidence presented by Protestant is the testimony by Mr. Leonard Harlig that he did not observe any cultivation of crops, grazing of livestock or active irrigation of the Friedman property while running past it along Highway 75 over an extended period of time. Friedman has previously addressed the issue of forfeiture in his Post Hearing Brief and will not repeat those arguments here. In addition, Dr. Brockway testified that, in his expert opinion, based on the presence of lateral irrigation ditches throughout the Friedman property, the Friedman property had historically been flood irrigated. Mr. Everett Davis, President of Eagle Creek Irrigation Company, testified that when water represented by the shares of stock owned by a particular shareholder is not used or called for by that shareholder, the Company has allowed other shareholders to use it on other lands within the Company's service area. In this case, there is not clear and convincing evidence of forfeiture of the portion of the Company's water right represented by the shares of stock owned by Friedman.

Finally, and perhaps most importantly, the issue of forfeiture of all or any portion of the Company's water right is not to be resolved in this proceeding. Instead, it is ultimately a matter to be determined by the SRBA Court.

III.

CONCLUSION

Friedman has met his burden of presenting evidence to satisfy all of the requirements of I.C. §42-203A(5) and the Big Wood River Groundwater Management Area Management Plan.

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Protestant has failed to present any evidence that should lead IDWR to a different conclusion. The Application should be approved and a Permit issued subject to and conditioned upon both the approval of the Company's Application for Transfer No. 5748 and the ultimate determination of the validity of Water Right No. 37-863 in the SRBA.

Dated this 18 day of December, 2002.

SPECK & AANESTAD
A Professional Corporation
Attorneys for Applicant

By _____
James P. Speck

CERTIFICATE OF SERVICE

I hereby certify that on the 18 day of December, 2002, I served a true and correct copy of the within and foregoing document upon the persons named below in the manner noted:

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Mr. L. Glen Saxton Idaho Department of Water Resources 1301 North Orchard Street Statehouse Mail Boise, Idaho 83720-9000 FAX (208) 327-7866	☐ United States Mail, Postage Prepaid ☐ Hand Delivery ☑ Facsimile, with copy by United States Mail, Postage Prepaid

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Idaho Department of Water Resources
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Department of Water Resources

December 3, 2002

Mr. Karl J. Dreher
Director
Idaho Department of Water Resources
1301 N. Orchard
P.O. Box 83720
Boise, ID 83720-0098

RE: *In the Matter of Application for Permit No. 37-20742 (Robert G. Friedman)*

Dear Director Dreher:

I have enclosed for filing in the above-referenced case the following document:

PROTESTANT'S INITIAL POST-HEARING MEMORANDUM.

Sincerely yours,

Douglas A. Werth
BIETER WERTH & WALKER, PLLC

enclosure
cc/encl(s):Blaine County Board of Commissioners
IDWR Southern Regional Office (by fax & mail)
James P. Speck, Esq.

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COMES NOW Protestant Blaine County and submits its initial post-hearing memorandum in the above-captioned proceeding.

Idaho Code § 42-203A(5) provides that:

> In all applications whether protested or not protested, where the proposed use is such (a) that it will reduce the quantity of water under existing water rights, or (b) that the water supply itself is insufficient for the purpose for which it is sought to be appropriated, or (c) where it appears to the satisfaction of the director that such application is not made in good faith, is made for delay or speculative purposes, or (d) that the applicant has not sufficient financial resources with which to complete the work involved

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> therein, or (e) that it will conflict with the local public interest, where the local public interest is defined as the affairs of the people in the area directly affected by the proposed use, or (f) that it is contrary to conservation of water resources within the state of Idaho; the director of the department of water resources may reject such application and refuse issuance of a permit therefor, or may partially approve and grant a permit for a smaller quantity of water than applied for, or may grant a permit upon conditions.
>
> Caselaw has fleshed out the local public interest standard:
>
> Under I.C. § 42-203A, any application to appropriate water in Idaho is subject to the local public interest standard. Likewise, any change to a water right under I.C. § 42-222 is also subject to a determination that the change is in the local public interest as stated in I.C. § 42-203A. To say that an amendment to a water permit under I.C. § 42-211 is not subject to a local public interest investigation would allow a prospective water user to circumvent this criterion. It is clear from the legislative scheme that this result was not intended.

Hardy v. Higginson, 123 Idaho 485, 849 P.2d 946 (1993). It is clear that the applicant here has the burden with respect to all of the issues described in Idaho Code § 42-203A(5):

> [I]t is not [the] protestant's burden of proof to establish that the project is not in the local public interest. The burden of proof is upon the applicant to show that the project is either in the local public interest or that there are factors that overweigh the local public interest in favor of the project.

Shokal v. Dunn, 109 Idaho 330, 339, 707 P.2d 441, 450 (1985) (describing non-exclusive list of factors bearing upon local public interest).

Idaho Code § 42-222 provides that all rights to use water shall be forfeited if not put to beneficial use for a five (5) year period:

> (2) All rights to the use of water acquired under this chapter or otherwise shall be lost and forfeited by a failure for the term of five (5) years to apply it to the beneficial use for which it was appropriated and when any right to the use of water shall be lost through nonuse or forfeiture such rights to such water shall revert to the state and be again subject to appropriation under this chapter; except that any right to the use of water shall not be lost through forfeiture by the failure to apply the water to beneficial use under certain circumstances as specified in section 42-223, Idaho Code.

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Case law also describes the standards for judicial review of findings of forfeiture by the Department:

> Forfeiture of water rights is governed by Idaho Code section 42-222(2), which provides that water rights may be lost if they are not applied to the beneficial use for which the rights were appropriated for five continuous years. I.C. § 42-222(2). However, this Court has often repeated its position that forfeiture of water rights is not favored in Idaho. Aberdeen-Springfield Canal Co. v. Peiper, 133 Idaho 82, 87, 982 P.2d 917, 922 (1999). Because of its disfavor for water right forfeiture, Idaho law requires that such actions be proved by the heightened evidentiary standard of clear and convincing evidence. *Id.*
>
> Here, the special master found by clear and convincing evidence that the water rights had been abandoned and/or forfeited. This finding must then be accepted by the trial court "unless clearly erroneous." I.R.C.P. 53(e)(2). To determine whether the special master's findings are clearly erroneous, "the trial court must independently review the evidence to determine whether the Findings were supported by substantial evidence." Seccombe v. Weeks, 115 Idaho 433, 435, 767 P.2d 276, 278 (Ct. App. 1989). On appeal from decisions of the district court, this Court again applies a substantial and competent evidence standard. Jenkins v. State, Dep't of Water Resources, 103 Idaho 384, 389, 647 P.2d 1256, 1261 (1999).

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The applicant has failed to demonstrate a requisite basis for approval of his application. The facts clearly demonstrate that waters from Eagle Creek have historically flowed to the Big Wood River and continue to flow to the Big Wood River. It is further shown that the ground water from which the applicant seeks to divert water is hydrologically linked to the Big Wood River. The evidence also shows that the Eagle Creek water rights are based upon a decree of dubious factual and legal validity.

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Protestant contends that the Department, an agency of the State of Idaho, should not be bound by a decree of this sort, which was entered on a default basis, without a contested hearing, because the watermaster, an individual, never appeared in the action. The factual basis set forth in the decree that allegedly supports its conclusion is that:

> the water flowing from said Eagle Creek did not, when permitted to flow down the natural channel thereof, reach [the] Big Wood River during the irrigation season; and the use of the said amount of water during the said period by this plaintiff, and his predecessors in interest, did not diminish or affect the flow of water in said Big Wood River and the said plaintiff's use of said waters does not and has not interfered with the use of said water of said Big Wood River by other appropriators.

Winslow v. Chapman Decree. The decree itself recites further that the appropriation of water in the case began "on or about the 6th day of October, 1902" and that the water "since said date, [was] continuously during the irrigation season of each and every year".

It also has not been disputed that for many, many years water rights in the Big Wood River drainage have been subject to priority cuts because of a dramatic lack of the water resource. The current watermaster testified that the diversions from Eagle Creek are not subject to his jurisdiction and those priority cuts because the rights are based the Winslow decree. The direct consequence of this is that during extreme drought years, which have been an all-too frequent occurrence, when many water right holders with a priority date preceding 1902 have had their water cut off, the users of the Eagle Creek water can continue their diversions without consequence.

Protestant asks the Department to overlay these background facts with the specifics of the Friedman application. First, it is beyond cavil that not until after the Friedman's first application for water right was filed with the Department, was there any

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active irrigation of the Friedman parcel, and then it was only for a small part of the parcel. Water was not being put to beneficial use on the property for many, many years, well in excess of the five (5) years required for a forfeiture under Idaho Code § 42-222.

Leonard Harlig's testimony established clearly that no use was being made of water on the premises; that there was no cultivation of crops, nor grazing of livestock; nor any other beneficial use. The Friedman parcel for more than a decade consisted of only sagebrush, and native grasses, and there was no active irrigation of the parcel. While it is true that water from Eagle Creek ran across the parcel and eventually flowed into the Big Wood River, this was through the Eagle Creek Irrigation Company's ditch, and was in no way an instance of the water being put to beneficial use by Friedman or his predecessor. If allowing water to run across an otherwise dry sagebrush parcel constitutes sufficient beneficial use, then it is difficult to fathom how there could ever be a forfeiture in the arid landscape of Southern Idaho.

In this application, Friedman is seeking to take a dubious water right, a water right that clearly takes water from the holders of senior water rights, and a water right (his shares of the Eagle Creek Irrigation Company) that have been forfeited through non-use, and is seeking to expand it to a year-round ground water appropriation.

Further, the testimony demonstrated the history of Blaine County's local interest water policy and the negative impact of this application upon the local public interest. Allowing such an expansion under the circumstances here for what essentially are aesthetic ponds directly contravenes the local public interest. The Department is asked to consider, as it has in the past, the language of Section 8-3-1 of the Blaine County

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Code (Protestant's Exhibit "J"). The instant application conflicts with that local public interest and therefore should be denied.

It also is plain that this application will reduce the quantity of water under existing water rights and would not conserve the water resources of the State.

There also is a question concerning whether the water supply itself is sufficient for the purpose for which it is sought to be appropriated because of the nature of the shares of the Eagle Creek Irrigation Company, being essentially an undivided interest in the water rights up to a certain quantity on, apparently, a first-come, first-serve basis.

As stated above, the applicant bears the burden of proof on the issues raised herein. Protestant Blaine County respectfully submits that the applicant has failed to meet his burden of proof and requests that the application be denied.

DATED this 3rd day of December, 2002.

Douglas A. Werth, Attorney for
Protestant Blaine County

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that on this 3rd day of December, 2002, I caused a true and correct copy of the within and foregoing document to be served by the method(s) indicated below, and addressed to each of the following:

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____ Hand Delivery
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Blaine County Board of Commissioners Old Blaine County Courthouse 206 1st Avenue South, Suite 300 Hailey, ID 83333 Fax: 208-788-5576	✓	U.S. Mail
		Overnight Delivery
		Hand Delivery
		Facsimile
Idaho Department of Water Resources Southern Regional Office 1341 Fillmore Street Suite 200 Twin Falls, ID 83301-3380 Fax: 208-736-3037	✓	U.S. Mail
		Overnight Delivery
		Hand Delivery
	✓	Facsimile
Mr. Karl J. Dreher Director Idaho Department of Water Resources 1301 N. Orchard P.O. Box 83720 Boise, ID 83720-0098 Fax 208-327-7866	✓	U.S. Mail
		Overnight Delivery
		Hand Delivery
		Facsimile

Douglas A. Werth

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BIETER WERTH & WALKER, PLLC
ATTORNEYS & COUNSELORS AT LAW

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WERTH@IDAHOATTYS.COM

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December 3, 2002

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Department of Water Resources
Southern Region

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Department of Water Resources

Mr. Karl J. Dreher
Director
Idaho Department of Water Resources
1301 N. Orchard
P.O. Box 83720
Boise, ID 83720-0098

RE: *In the Matter of Application for Permit No. 37-20742 (Robert G. Friedman)*

Dear Director Dreher:

I have enclosed for filing in the above-referenced case the following document:

PROTESTANT'S INITIAL POST-HEARING MEMORANDUM.

Sincerely yours,

Douglas A. Werth
BIETER WERTH & WALKER, PLLC

enclosure
cc/encl(s): Blaine County Board of Commissioners
IDWR Southern Regional Office (by fax & mail)
James P. Speck, Esq.

Post-it® Fax Note 7671	Date	# of pages ▶ 8
To Glen Saxton	From Allen-Merritt	
Co./Dept.	Co.	
Phone #	Phone #	
Fax #	Fax #	

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Idaho State Bar No. 3660

Attorneys for Protestant

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Department of Water Resources
Southern Region

BEFORE THE DEPARTMENT OF WATER RESOURCES

OF THE STATE OF IDAHO

IN THE MATTER OF APPLICATION FOR PERMIT NO. 37-20742,

ROBERT G. FRIEDMAN,

Applicant,

BLAINE COUNTY,

Protestant.

PROTESTANT'S INITIAL POST-HEARING MEMORANDUM

COMES NOW Protestant Blaine County and submits its initial post-hearing memorandum in the above-captioned proceeding.

Idaho Code § 42-203A(5) provides that:

> In all applications whether protested or not protested, where the proposed use is such (a) that it will reduce the quantity of water under existing water rights, or (b) that the water supply itself is insufficient for the purpose for which it is sought to be appropriated, or (c) where it appears to the satisfaction of the director that such application is not made in good faith, is made for delay or speculative purposes, or (d) that the applicant has not sufficient financial resources with which to complete the work involved

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> therein, or (e) that it will conflict with the local public interest, where the local public interest is defined as the affairs of the people in the area directly affected by the proposed use, or (f) that it is contrary to conservation of water resources within the state of Idaho; the director of the department of water resources may reject such application and refuse issuance of a permit therefor, or may partially approve and grant a permit for a smaller quantity of water than applied for, or may grant a permit upon conditions.
>
> Caselaw has fleshed out the local public interest standard:
>
> Under I.C. § 42-203A, any application to appropriate water in Idaho is subject to the local public interest standard. Likewise, any change to a water right under I.C. § 42-222 is also subject to a determination that the change is in the local public interest as stated in I.C. § 42-203A. To say that an amendment to a water permit under I.C. § 42-211 is not subject to a local public interest investigation would allow a prospective water user to circumvent this criterion. It is clear from the legislative scheme that this result was not intended.

Hardy v. Higginson, 123 Idaho 485, 849 P.2d 946 (1993). It is clear that the applicant here has the burden with respect to all of the issues described in Idaho Code § 42-203A(5):

> [I]t is not [the] protestant's burden of proof to establish that the project is not in the local public interest. The burden of proof is upon the applicant to show that the project is either in the local public interest or that there are factors that overweigh the local public interest in favor of the project.

Shokal v. Dunn, 109 Idaho 330, 339, 707 P.2d 441, 450 (1985) (describing non-exclusive list of factors bearing upon local public interest).

Idaho Code § 42-222 provides that all rights to use water shall be forfeited if not put to beneficial use for a five (5) year period:

> (2) All rights to the use of water acquired under this chapter or otherwise shall be lost and forfeited by a failure for the term of five (5) years to apply it to the beneficial use for which it was appropriated and when any right to the use of water shall be lost through nonuse or forfeiture such rights to such water shall revert to the state and be again subject to appropriation under this chapter; except that any right to the use of water shall not be lost through forfeiture by the failure to apply the water to beneficial use under certain circumstances as specified in section 42-223, Idaho Code.

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Protestant Blaine County

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Fax: 208-726-0752

✓ U.S. Mail
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Blaine County Board of Commissioners Old Blaine County Courthouse 206 1st Avenue South, Suite 300 Hailey, ID 83333 Fax: 208-788-5576	✓	U.S. Mail Overnight Delivery Hand Delivery Facsimile
Idaho Department of Water Resources Southern Regional Office 1341 Fillmore Street Suite 200 Twin Falls, ID 83301-3380 Fax: 208-736-3037	✓ ✓	U.S. Mail Overnight Delivery Hand Delivery Facsimile
Mr. Karl J. Dreher Director Idaho Department of Water Resources 1301 N. Orchard P.O. Box 83720 Boise, ID 83720-0098 Fax 208-327-7866	✓	U.S. Mail Overnight Delivery Hand Delivery Facsimile

Douglas A. Werth

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Department of Water Resources

December 4, 2002

VIA FACSIMILE - (208) 327-7866
ORIGINAL WILL FOLLOW
VIA REGULAR MAIL

Mr. L. Glen Saxton
Idaho Department of Water Resources
1301 North Orchard Street
Statehouse Mail
Boise ID 83720-9000

Re: ***In the Matter of Application for Permit No. 37-20742***
Robert G. Friedman, Applicant - Blaine County, Protestant

Dear Glen:

Enclosed is the Post Hearing Brief of Applicant, Robert G. Friedman. The original and one copy will follow by mail. Please receipt date stamp the copy and return the copy to me in the self-addressed, postage pre-paid envelope I will include for that purpose.

Sincerely yours,

SPECK & AANESTAD
A Professional Corporation

By: _____
James P. Speck

JPS:sgg
Enclosures
cc: Client (w/enclosures) via fax
Chuck Brockway (w/enclosures) via fax
Allen Merritt (w/enclosures) mail only
Dough Werth (w/enclosures) hand delivery

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Attorneys for Applicant Robert G. Friedman

BEFORE THE IDAHO DEPARTMENT OF WATER RESOURCES

IN THE MATTER OF APPLICATION FOR PERMIT NO. 37-20742:	)	
Robert G. Friedman, Applicant.	)	**POST HEARING BRIEF**
Blaine County,	)	
Protestant.	)	

Applicant, Robert G. Friedman ("Friedman"), respectfully submits his Post Hearing Brief in this matter.

I. FACTS

On July 11, 2002, Friedman filed his Application for Permit No. 37-20742 (the "Application"). The Application seeks a water right to divert groundwater from a well to be drilled on property owned by Friedman north of Ketchum, Idaho (the "Property") in the amount of 2.0 cfs for recreation, aesthetics and diversion to storage from January 1 through December 31. The Application also seeks permission to store 16 acre feet of water in three ponds with a total surface

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area of two acres to be constructed on the Property. The Property is within the service area of the Eagle Creek Irrigation Company (the "Company"), the owner of Water Right No. 37-863 to divert water from Eagle Creek for irrigation purposes. The mitigation proposed for the Application is for the Company to dry up two acres of irrigation under Water Right No. 37-863 pursuant to two of the 10 shares of stock in the Company owned by Friedman. A Protest to the Application was filed by Blaine County and the matter proceeded to hearing on November 13, 2002. The following are the important facts adduced at the hearing:

Friedman purchased the Property in December, 1999 intending to build a residence for his family and himself, and to ultimately use it as a full time retirement home. With the Property, Friedman acquired Stock Certificate No. 60 for 10 shares of the stock in the Company authorizing him to use ten inches of water diverted from Eagle Creek to irrigate 10 acres[1] of the Property (Exhibit X). Thereafter Friedman decided he would like to have certain water features for the Property which are schematically depicted in Exhibit 10. Friedman also proceeded with plans for a main house, guest house and barn on the Property, discussing those plans with a local architect, Mr. Jim Ruscitto. Friedman intends to use local contractors and architects for this project. If the Application is approved, Friedman will promptly proceed with the project next spring. Friedman intends to install a fire suppression system to draw water from the pond to protect the structures on the Property and is willing to grant the local fire department access to those ponds to fight fires on

---

[1] The Property has now been accurately measured at 9.71 acres. Friedman agrees he does not have the right to use his shares of stock to irrigate any additional land. However, when the 10 inches of the Eagle Creek water right represented by the stock in the Company owned by Friedman's predecessors was not used to irrigate the Property it may have been used by other shareholders in the Company to irrigate not more than 10 acres within the Company's service area according to the testimony of Mr. Everett Davis, current president of the Company.

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other properties. After Friedman acquired the Property he arranged to have it irrigated using water pursuant to his shares of stock in the Company during the summers of 2001 and 2002. Friedman has personally observed natural grasses growing on his Property as a result of the irrigation.

Mr. Jim Ruscitto ("Ruscitto") is a local architect with more than 30 years of experience in residential and commercial projects. Ruscitto worked with the landscape architect, Mr. Richard Emik, in preparing a site plan for the Property. The water features which are proposed through the Application are a key element of this plan. Ruscitto estimated the construction cost for the main house, guest house and barn to be approximately $2,500,000. The project would employ approximately four (4) architects and engineers for approximately one year and generate approximately $250,000 in fees for Ruscitto's architectural firm. Ruscitto estimated there would be approximately 70 construction workers employed during the course of the project and stated that the local contractors intended to be employed by Friedman would buy materials locally.

Mr. Brian Ros ("Ros"), a project manager for Webb Landscape, Inc., testified concerning the estimate he had prepared for Friedman for the landscaping work to be done for this project, including the water features (Exhibit 13). The first phase of the project, including the installation of the water features, would cost $401,481. The second phase would add another approximately $142,400. The well for the project would be drilled by a local contractor and cost approximately $30,000, including the pump. Once the project is completed, Ros estimated Friedman would pay annual maintenance of approximately $17,000 per year.

Mr. Everett Davis ("Davis"), president of the Company, described the service area for the Company's irrigation water system as being within the yellow outlines depicted on Exhibit 17. The ditch system for delivery of that water is depicted on Exhibit 18. The Company owns Water Right

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No. 37-863, but the users of that water right are the shareholders in the Company, numbering approximately 17, who own the properties within the Company's service area. Davis stated the Company is obligated to the best of its ability to deliver water represented by a shareholder's shares of stock, if so requested by that shareholder. Mr. Davis further stated that the Company does not have any control over whether or not a shareholder uses his or her share of the Company's water right and that when the water right was not used on the Friedman Property by its previous owners such non use was not under the control of the Company. The sole decision not to use water would be that of the shareholder. Mr. Davis further stated that if a shareholder does not use or call for his share of the Company's water right, the Company can and has delivered that water to another shareholder for use. Even though this past summer was one of the worst for flows in Eagle Creek, Davis testified the Company was still able to deliver Friedman's full share of the Company's water right represented by Friedman's 10 shares of stock.

Mr. Lee Peterson ("Peterson"), Watermaster for Water Districts 37 and 37M for the past 12 years, testified that Eagle Creek is classified as a dry stream so that priority cuts for the Big Wood River do not apply to the Company's water right from Eagle Creek. Mr. Peterson testified that the decree in *Winslow v. Chapman* (Exhibit T) has lawfully enjoined him and is predecessors as Watermaster from administering the waters of Eagle Creek since 1923 and that the users of Eagle Creek water have relied since then on that non-administration. He also testified that the use of water from Eagle Creek has not interfered with water in the Big Wood River during that same time period.

Mr. Tom Denker ("Denker"), the owner of Evergreen Landscaping, a local landscape company, and a resident of the Eagle Creek area for about 22 years, testified that his company irrigated the Property for Friedman in the summers of 2001 and 2002. His company used a portable,

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gasoline powered 5 horsepower high pressure pump and 12 lengths of 20 foot hand lines. Denker described the photographs in Exhibits 20-1 through 20-7 and 21-1 through 21-7 that depicted his company's irrigation of the Property. The hand lines were moved two or three times a day during the period of irrigation. Denker testified his company was able to do this irrigation even though the years 2001 and 2002 were some of the worst water years for Eagle Creek. He estimated the irrigation covered approximately one-third of the Property. Denker further testified he had not observed during the prior 10 years other occasions of sprinkler irrigation, which he described as surface irrigation, on the Property, but indicated there may have been flood irrigation. Denker testified that his employees spent approximately 50 hours moving the hand lines during each of the two summers. He could not recall how many days of irrigation actually took place. Denker testified the purpose of the irrigation was to raise native grasses and not any specific crop.

Ms. Mary Ann Mix ("Mix"), Chairperson of the Blaine County Commissioners, testified that ponds are contrary to the County's adopted Local Public Interest Water Policy (the "Policy"), and, therefore, the County amended its fire protection ordinance to disallow the construction of ponds on the basis of fire suppression purposes. The Policy (Exhibits I and J) states: "The Board [of County Commissioners] will appoint an advisory board of water use experts to advise the Board on application protests for transfers and diversion under § 4 and 5 of the Policy." Mix testified no such board was created or consulted before the County filed its protest to the Application.

Mr. Leonard Harlig ("Harlig"), a former County Commissioner, testified that he was involved as a Commissioner in the formulation of the Policy. He stated that leading up to the adoption of the Policy citizens had complained that water impounded in ponds for aesthetic purposes was taken out of the system and therefore not available to surface water irrigators. The following

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is the relevant provision from the Policy:

> Certain application requests to IDWR, for transfer or diversion of water rights, **have the potential to result in an actual increase of water use** that is contrary to the best interests of Blaine County's residents and visitors, and is contrary to State Legislative intent to preserve and conserve water in Idaho. Among these requests are:
>
> > 1) transfers or diversions of use to private recreational and aesthetic ponds, and fire protection ponds greater in size than needed for fire protection, **(all with an attendant impoundment of water that would normally be available for maintenance of instream flows, agricultural use, and the use of senior water right holders)** [see §§42-1503 (b), which requires that the application, "is in the public, as opposed to private, interest] (emphasis added);

Harlig testified his understanding of the purpose of the Policy opposing ponds for aesthetic purposes is that both the impoundment of water in and the evaporation of water from such ponds depletes the water supply for other water users. However, when asked if a project for aesthetic ponds which consumed less water than irrigation use of the same property would violate the Policy, Harlig candidly responded as follows:

> I think it would still violate the policy because it would be creating aesthetic and recreational type ponds and impounded water above ground that ought to be in the ground so I would say it is still in violation of the policy, **irrespective of whether it uses more water or less water than total irrigation of the property would do.** (Emphasis added).

Harlig then admitted he believes that any pond, other than one made available for use by the public, violates the Policy.

Dr. Charles E. Brockway ("Brockway") testified as an expert witness on the matters to be determined at the hearing. He generally described the Application, which he prepared, as a request for a non-consumptive water right to divert water from groundwater circulated through a series of

ponds and then returning the water back into the same aquifer at a point very near the well from which it was extracted. The ponds would be approximately two acres in surface area and store approximately 16 acre feet. The proposed well (Exhibit 6) will meet the requirements of the Idaho Department of Water Resources ("IDWR") for a non-potable groundwater source. A recirculating pump system will be included to minimize the time that water must be diverted from the well. Brockway testified that once the ponds have been filled, the well will only be pumped when necessary to keep the temperature of the water in the ponds at levels required to keep them fresh, free of algae and to maintain proper levels of dissolved oxygen. (*See, also*, Exhibit 4). There will be a minimum of three measuring devices: one on the well, one on the water entering the system from the Company's ditch and a third at the outflow from the system to determine how much water is actually being recharged into the ground. Brockway described the recharge area where water will be delivered after it leaves the last and biggest pond. The recharge area is 300 to 400 feet from the river and the groundwater gradient from that area down to the river is depicted on Exhibit 5 prepared by Brockway. Based on this information as well as the hydrologic conductivity of the gravels in that area, Brockway estimated it would take only 4 to 6 hours for water placed into the recharge area to reach the Big Wood River. Brockway testified it would reach the river no more than one quarter of a mile downstream from that point perpendicular to the recharge area. Brockway reviewed the well driller logs (Exhibit 12) to determine aquifer properties, and in his opinion, the aquifer is capable of supplying sufficient water for the water uses requested by the Application. Brockway explained that the consumptive use of ponds with a two acre surface area is essentially the same as the consumptive use for two acres of irrigated alfalfa. Therefore, the mitigation planned for the Application is to offset the consumptive use from the ponds by not irrigating two acres of the Property which would

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otherwise be irrigated by Friedman's shares of the Company water right.

Brockway described his calculations of the water requirements for the project and the consumptive use comparisons of irrigating the entire Property and the proposed project, all of which are set out in Exhibits 1, 2 and 3. Based upon the calculations made by Brockway he rendered the following opinions, none of which were refuted by any evidence offered by the Protestant, expert or otherwise:

a. Diversion of water under the proposed water right using the proposed mitigation plan will be non-consumptive.

b. Diversion of water under the proposed water right together with implementation of the mitigation plan will not reduce the flow or amount of water in the Big Wood River.

c. Diversion of water under the requested water right together with implementation of the proposed plan for mitigation will not reduce water available for diversion by any Big Wood River water right or in a tributary of the Big Wood River.

d. Diversion of water pursuant to the requested water right together with implementation of the proposed plan for mitigation will not cause the holder of any existing Big Wood River water right to incur an unreasonable effort or expense to divert that water.

e. Diversion of water under the requested water right together with the implementation of the proposed plan for mitigation will not injure any Big Wood River water right.

Brockway also prepared a well interference analysis using the Theis Formula and the assumption that the well is pumped continuously (Exhibit 7). Brockway testified that the actual operation of the project water right would result in draw downs much less than what is shown on Exhibit 7 since the well will only be pumped as needed to control the health of the ponds. The

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closest well to the proposed well is approximately 720 feet away. Brockway testified the exercise of the requested water right would have no impact on the operation of that well, would not reduce the water available for diversion in that well, or under any existing groundwater right. Brockway further testified that the diversion of groundwater pursuant to the requested water right will not reduce pumping levels in any well below historically reasonable pumping levels, will not cause the holder of any existing groundwater right to incur an unreasonable effort or expense to divert that groundwater right, and will not injure any groundwater right. Brockway gave his uncontested opinion that water in the local aquifer will be available for adequate time intervals and in quantities sufficient to make the requested water right work and water in Eagle Creek will be available for adequate time intervals and in quantifies sufficient to make the mitigation plan work.

Brockway stated the automatic control of the sprinkler system, lining of the ponds and water management through use of the water measuring devices are all consistent with contemporary standards for reasonably efficient use of water resources and not in any way contrary to the conservation of water resources in the State of Idaho. Brockway testified the exercise of the proposed water right will not in any way affect the temperature of water flowing in the Big Wood River. He testified it would not have any effect on the level of dissolved oxygen in the Big Wood River. He testified it would not increase the level of nitrates in the Big Wood River. In Brockway's opinion, the exercise of the water right will not raise the levels of dissolved oxygen or nitrates above those which are acceptable to the Idaho Department of Environmental Quality for the Big Wood River.

Brockway described the two points of diversion that deliver water from Eagle Creek to the Property, one located at the upper end of the Company's service area and the other on the west side

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of Highway 75 (Exhibit 17). Eagle Creek water is then delivered to the Property in two different ditches from those respective head gates (Exhibit 18). Brockway described measurements of the flow of water in the ditch running parallel to the north boundary of the Friedman Property which he made on 4 different occasions in the years 2000 and 2002 (Exhibit 16). Brockway testified that, as a result of the irrigation of the Property in 2001 and 2002, crested wheat grasses were growing and that irrigation to raise this type of grass is a beneficial use of the Company's water right. Brockway described a system of lateral ditches crossing the entirety of the Property that, in his opinion, indicated the Property had been historically irrigated even though he had not personally observed such irrigation since he, as a youth, assisted the original owner in irrigating the Property.

II. ARGUMENT

A. The Water Uses Proposed by the Application will Not Reduce the Quantity of Water under any Existing Water Rights.

I.C. § 42-203A(5) requires IDWR to determine whether or not the uses proposed by the Application will reduce the quantity of water under existing water rights. If it finds there will be such a reduction, IDWR may either deny the Application or approve it and grant a permit subject to appropriate conditions to prevent the reduction. The Application seeks to divert groundwater in the Big Wood River Groundwater Management Area ("BWRGWMA"). The management policy for BWRGWMA provides as follows:

> Under this policy, additional approvals of ground water for consumptive uses can be granted upon a showing by an applicant and a determination by the department that the water supply is adequate and other water rights will not be injured.[2]

[2] See Section II, B of this Brief for discussion of the issue of the adequacy of the water supply.

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Therefore, IDWR must also find there will be no injury to other water rights to grant the Application. As IDWR previously ruled in the Baker and Huf-N-Puf Trust Transfer Applications (Exhibit K), any real depletion of the flows of the Big Wood River, no matter how small or immeasurable, will cause actual injury to water rights in the Big Wood River. Therefore, the focus of these two tests - the reduction of the quantity of water under existing water rights and injury to existing water rights is essentially the same: will the proposed diversions under the Application reduce or deplete in any way the flows of the Big Wood River?

1. Implementation of the proposed mitigation plan will prevent injury to other water rights.

The mitigation plan is straight forward. Friedman is the owner of 10 shares of stock in the Company (Exhibit X). This entitles Friedman to the delivery of 10 inches of water diverted from Eagle Creek to his Property for the irrigation of approximately 10 acres. The Company has filed Application for Transfer No. 5748 (the "Transfer Application") which seeks to change the nature of use of two inches of its Water Right No. 37-863 from irrigation to recreation and aesthetics in the ponds proposed pursuant to the pending Application. Approval of that Transfer Application will mean that two acres of the Property which could otherwise be irrigated by the Company's water right will be "dried up" and never irrigated in the future. Therefore, approval of this Application must be subject to and conditioned upon approval of the Transfer Application.

Brockway presented expert testimony on the change in consumptive use of water applied to the Property if the Application is approved with the mitigation plan (Exhibits 1, 2 and 3). These calculations actually show the consumptive use will be less if the Application is approved and the ponds constructed and used than if the Property is fully irrigated with the Company's Eagle Creek water right. Other than to question and challenge the previous use of the Company's water right on

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the Property, the County did not produce any evidence to contradict or refute Brockway's findings. Nor was any evidence produced to challenge the following expert opinions expressed by Brockway:

a. Diversion of water under the proposed water right using the proposed mitigation plan will be non-consumptive.

b. Diversion of water under the proposed water right together with implementation of the mitigation plan will not reduce the flow or amount of water in the Big Wood River.

c. Diversion of water under the requested water right together with implementation of the proposed plan for mitigation will not reduce water available for diversion by any Big Wood River water right or in a tributary of the Big Wood River.

d. Diversion of water pursuant to the requested water right together with implementation of the proposed plan for mitigation will not cause the holder of any existing Big Wood River water right to incur an unreasonable effort or expense to divert that water.

e. Diversion of water under the requested water right together with the implementation of the proposed plan for mitigation will not injure any Big Wood River water right.

Brockway also performed a well interference analysis (Exhibit 7) and testified the exercise of the requested water right would have no impact on the operation of the closest well and would not reduce the water available for diversion in that well, or under any existing groundwater right. Brockway further testified that the diversion of groundwater pursuant to the requested water right will not reduce pumping levels in any well below historically reasonable pumping levels, will not cause the holder of any existing groundwater right to incur an unreasonable effort or expense to divert that groundwater right, and will not injure any groundwater right. Again, these expert opinions are unchallenged by the Protestant.

Therefore, the evidence overwhelmingly supports a finding and conclusion by IDWR that implementation of the mitigation plan will prevent injury to any other water right.

2. The portion of Water Right No. 37-863 represented by Friedman's shares of stock in the Company will provide the required mitigation for the Application.

In processing the Company's Transfer Application, IDWR must make a determination, subject to ultimate review in the SRBA, of the validity of that portion of Water Right No. 37-863 proposed for change. That issue is therefore not precisely before IDWR in the present proceeding. Any Permit issued pursuant to the Application must be subject to and conditioned on not only the approval of the Transfer Application, but also the ultimate determination of the validity of the Company's Eagle Creek water right in the SRBA.

Friedman also contends the evidence presented at the hearing supports the conclusion by IDWR that the portion of the Eagle Creek water right represented by his 10 shares of stock in the Company has not been lost and remains a valid water right which can be used to properly implement the proposed mitigation plan. Water Right No. 37-863 is based on the Decree in *Winslow v. Chapman* (Exhibit T). In relevant part, it orders that the Watermaster for the Big Wood River is,

> Hereby perpetually restrained and enjoined from and in any manner exercising supervision over the waters of Eagle Creek during the irrigation season, and particularly be restrained and enjoined from in any manner interfering with the Plaintiff's rights as hereinbefore set forth, to-wit, the right of Plaintiff to the perpetual use of the waters of Eagle Creek to the extent of 4.6 second feet or in any manner attempting to regulate or regulate in the use by Plaintiff upon the said land of the said 4.6 second feet of water.

The current Watermaster, Lee Peterson, testified that he and his predecessors had been bound by this Decree and have never administered this water right. In other words, this water right has never been

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cut off to provide water to fulfill any of the Big Wood River water rights and those rights are administered as if Eagle Creek was not tributary to the Big Wood River. Therefore, no holder of any water right on the Big Wood River has, since the entry of that Decree, relied in any way on whether or not the Company's water right was being diverted and used by its shareholders. Instead, assuming that the portion of the Company's water right not consumed by the diversion and irrigation use of its shareholders ultimately finds its way back to the Big Wood River, it is only this return flow which becomes a part of the flows of the Big Wood River available for downstream users. If this return flow is preserved, then there is no depletion in the flows of the Big Wood River and those water right holders are protected. That this will occur is established by Brockway's testimony and written calculations.

Brockway's calculations are based on the assumption that Friedman can use the water represented by his shares of stock in the Company to irrigate the entirety of his Property. In *Aberdeen-Springfield Canal Company v. Peiper*, 133 Idaho 82, 982 P.2d 917 (1999), the Idaho Supreme Court ruled that non-use of a portion of an irrigation company's water right by a shareholder does not result in forfeiture of that portion of the water right as long as the company did nothing to cause the non-use. The Court expressed its concern as follows:

> [A finding of partial forfeiture] would give stockholders, who are not appropriators, the power to determine the fate of ASCC's water rights. If a number of stockholders chose not to use their share of ASCC's water for the statutory period, ASCC's water right would gradually revert to the state through partial forfeiture. (Cites omitted). If the Piepers' argument were valid, ASCC could only watch helplessly while its water right was lost.

Id. At 87. This principle has recently been codified in I.C. § 42-223(7) as follows:

> No portion of a water right held by an irrigation district, a Carey Act operating company, or any other company, corporation, association,

> or entity which holds waters for distribution to its landowners, shareholders or members shall be lost or forfeited due to non use by such landowners, shareholders or members, unless the non use is subject to the control of such entity.

Mr. Everett Davis, President of the Company testified that the Company had no control over whether or not the portion of the Company's water rights represented by the shares of stock now owned by Friedman was used on the Property by Friedman or his predecessors in interest. Any non-use on that Property was due solely to the actions of the landowner and not the Company. Therefore, the Company has done nothing to cause the non-use of its water right on the Property and that portion of Water Right No. 37-863 represented by Friedman's shares of stock in the Company has not been forfeited.

Assuming, *arguendo*, the above-described case and statutory law does not apply to this matter, the recognized defense of resumption of use should be applied to protect the portion of the Company's water right which is part of the proposed mitigation plan. Unrefuted evidence concerning the recent irrigation of a portion of the Property was presented at the hearing through the testimony of Friedman, Denker and Brockway. This established that at least one-third of the Property was irrigated during portions of the 2001 and 2002 irrigation seasons. The "resumption of use" doctrine is a recognized defense to forfeiture of a water right in Idaho. *Zezi v. Lightfoot*, 57 Idaho 707, 68 P.2d 50 (1937); *Carrington v. Crandall*, 65 Idaho 525, 147 P.2d 1009 (1944); *Application of Boyer*, 73 Idaho 152, 248 P.2d 540 (1952). The rationale behind this doctrine is that since courts abhor forfeitures, water users should be allowed to avoid that harsh consequence if there are no other claims of right by third parties that could be injured by the resumption of use. In the present case, there are no other users on the Eagle Creek system. The Company's water right is administered separately from the Big Wood River so that the holders of water rights in the Big Wood

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River do not depend in any way on the use or non-use of this Eagle Creek water right. Therefore, the resumption of use by Friedman in 2001 and 2002 does not injure the rights of any third parties to the use of water from the Big Wood River. No one else has moved up the priority ladder, so to speak, to make use of any water left in Eagle Creek as a result of this non-use.

IDWR must conclude, based upon the evidence submitted at the hearing as well as relevant case and statutory law, that diversion of water pursuant to the Application together with implementation of the proposed mitigation plan will not reduce the quantity of water under any existing water rights and will not injure any other water right.

B. The Supply of Groundwater and Water in Eagle Creek Is Sufficient for the Purposes Requested in the Application.

The Application seeks a water right for the diversion of groundwater from the aquifer in reasonably close proximity to the Big Wood River several miles north of Ketchum, Idaho. The maximum diversion rate and other water requirements of the Application were described in detail by Brockway and his calculations set forth in Exhibits 1, 2 and 3. The mitigation plan which is an integral part of the Application depends, in part, on the supply of water available in Eagle Creek to fulfill the Company's Water Right No. 37-863. With respect to Eagle Creek, Brockway, Davis and Denker all testified that even in these recent record low water years there has been sufficient water in Eagle Creek for the Company to deliver at least the 10 inches of water represented by Friedman's shares of stock in the Company to the Property. Specific measurements of water flows were taken on four separate occasions during 2000 and 2002 by Brockway which confirm this (Exhibit 16). No evidence was presented by the Protestant to contradict this testimony.

As for the local aquifer into which the proposed well will be drilled, Brockway gave his opinion that it is capable of supplying the groundwater diversions which will be made pursuant to

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the Application. Again, no evidence was presented by the Protestant to refute this opinion. Therefore, IDWR must find and conclude the groundwater and surface water supplies are sufficient to provide the water diversions which will be required for the project proposed by the Application.

B. The Application is not Contrary to the Conservation of Water Resources in the State of Idaho.

Brockway testified that the management of the entire water system will be accurately controlled by measuring devices at all the significant points. The irrigation sprinkler systems will be automatically controlled and designed to be efficient. The ponds will be lined to prevent excessive seepage. According to Brockway, all of these measures are consistent with contemporary standards for reasonably efficient use of the water resources. Brockway also rendered his opinion that the project was not contrary in any way to the conservation of water resources in the state of Idaho. No testimony or other evidence was presented by the Protestant to refute these statements and opinions. Therefore, IDWR should find and conclude that the project proposed by the Application is not contrary to the conservation of water resources in the state of Idaho.

C. The Application is Made in Good Faith and Not for Delay or Speculative Purposes.

Friedman testified that he intends to build a home on the Property for his family and eventually use it as a full time retirement home. He also testified that if the Application is approved, he will start work right away in the spring of 2003. No evidence was presented by the Protestant to contradict this testimony. Therefore, IDWR should find and conclude that the Application is made in good faith and is not being pursued for delay or speculative purposes.

D. The Application will not Conflict with the Local Public Interest.

Under I.C. § 42-203A(5), if IDWR finds that the Application will "conflict with the local

public interest, where the local public interest is defined as the affairs of the people in the area directly affected by the proposed use," it may deny the Application or conditionally grant a permit on such conditions as it deems to be appropriate. This provision was first interpreted by the Idaho Supreme Court, in *Shokal v. Dunn*, 109 Idaho 330, 707 P.2d 441 (1985). Among the factors the Court held in that case to be elements of the local public interest are fish and wildlife habitat, aquatic life, recreation, transportation and navigation values, water quality, assuring minimum stream flows, discouraging waste and encouraging conservation. The determination of what elements of the public interest are impacted and what the public interest requires is committed to IDWR's sound discretion. *Id.* at 339. IDWR has promulgated rules identifying criteria to be considered in determining if new projects conflict with the local public interest. IDAPA 37.03.08.045.01(e). In addition to the above factors, the effect on the local economy as determined by employment opportunities and revenue gains, both long and short-term, and compliance with applicable air, water and hazardous substance standards and local planning and zoning ordinances, are identified.

The testimony of Friedman, Ruscitto and Ros establishes that the proposed project will generate a flow of over $3,000,000 in revenues for local construction, architectural and engineering services firms during the two year construction period. Furthermore, it will provide ongoing revenues to local landscaping contractors of approximately $17,000 per year for maintenance of the landscaping and the ponds. Although there may be some form of residential project on the Property someday if the Application is not approved, it is only mere speculation as to what revenue such a project might generate. On the other hand, the cost amounts presented for the project proposed by the Application are based on legitimate estimates presented by qualified professionals and not refuted in any way by the Protestant. Therefore, the evidence clearly supports a finding and

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conclusion by IDWR that there will be both long and short term benefits to the local economy as the result of approving the Application.

Brockway, testifying as an expert witness, stated that in his opinion the diversion of water pursuant to the Application will not have any impact on the temperature of water flowing in the Big Wood River, nor would it have any effect on the level of dissolved oxygen or the level of nitrates in the Big Wood River. Brockway further gave his opinion that the project will not raise the levels of dissolved oxygen or nitrates in the Big Wood River above those levels acceptable to the Idaho Department of Environmental Quality. Brockway also testified that the project will not affect in any way the quality of water in the local aquifer.

Friedman also testified he will use one or more of the ponds as a source of water for fire suppression systems for the structures he intends to build on the Property. He also testified he would provide access to the ponds for the local fire departments as a source of water to fight fires on other properties. On this point, the only evidence presented by the Protestant was Mix's testimony concerning a recent ordinance adopted by the County to simply make its fire protection provisions consistent with the anti-pond provisions of the Policy. The new ordinance merely states that a County resident may no longer justify the construction of a pond as a source of water which complies with the County fire protection ordinance requiring an on-site water supply for residences exceeding a certain size. There is nothing in the record before IDWR that indicates a pond will not work as a source of water to fight fires. Such an argument would, in fact, be contrary to plain common sense. The quick and effective suppression of fires which threaten homes and other structures located in the County is, without doubt, in the interest of the citizens of the County. As long as Friedman complies with the ordinance and provides whatever kind of water supply is required for the size of

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structures he builds on the Property, there is absolutely no reason why he cannot install additional fire suppression systems using the pond as another source of firefighting water to provide an extra level of protection for his Property. Again, anything enhancing the ability to suppress fires is in the local public interest.

Aside from the testimony of Mix on the new fire protection ordinance, the only other evidence presented by the Protestant on the issue of the local public interest was the testimony of Harlig and various exhibits admitted at the hearing. These exhibits include certain excerpts from the Blaine County Comprehensive Plan (Exhibit R) and Blaine County Resolution 98-1 adopting the Policy and a copy of how its provisions are set forth as a chapter of the Blaine County Code (Exhibits I and J)[3]. The only relevant provision of the Policy is as follows:

> Certain application requests to IDWR, for transfer or diversion of water rights, **have the potential to result in an actual increase of water use** that is contrary to the best interests of Blaine County's residents and visitors, and is contrary to State Legislative intent to preserve and conserve water in Idaho. Among these requests are:
>
> > 1) transfers or diversions of use to private recreational and aesthetic ponds, and fire protection ponds greater in size than needed for fire protection, **(all with an attendant impoundment of water that would normally be available for maintenance of instream flows, agricultural use, and the use of senior water right holders)** [see §§42-1503 (b), which requires that the application, "is in the public, as opposed to private, interest] (emphasis added);

This provision, as embellished by Harlig's testimony, is based solely on a concern that these impoundments of water for private beneficial uses will deplete the water resources which should

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[3] The Policy is NOT an ordinance or law. It is merely a policy statement by the County Commissioners.

otherwise be available for maintaining minimum stream flows and fulfilling valid senior downstream water rights for agricultural uses. The logical conclusion is that a pond which does not deplete any of these water resources through the implementation of a proper mitigation plan such as that proposed by the Application simply does not violate the basis for or the Policy itself.

However, it is readily apparent that the Protestant's true position is that all new ponds *per se*, except possibly a pond constructed for use by the public, violate the Policy and, therefore, are not in the local public interest. The mere "potential" that a private pond will deplete the available water resources is, in the view of the Protestant, all that is required to conflict with the local public interest. This is not sufficient. There must be hard, scientific facts to support such a claim. The Protestant has not presented any evidence to establish the Application will deplete the flows of the Big Wood River, will result in "an actual increase in water use" or will impound "water that would normally be available for maintenance of instream flows, agricultural use, and the use of senior water right holders." The reason for such failure is clear - the Application simply will not lead to these results. The mere filing of the protest claiming the Application will violate the Policy - a protest filed without the required consultation with an advisory board of water right experts - does not in any way establish the Policy will be violated. The Protestant has not met its burden of presenting sufficient evidence that the Application will conflict with those elements of the local public interest of which it has particular knowledge, i.e how it will violate those provisions of the Policy which are legitimate expressions of the local public interest. On the other hand, Friedman has met his burden and presented sufficient evidence for IDWR to find and conclude the Application will not conflict with the local public interest.

III. CONCLUSION

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Friedman has met his burden by presenting evidence to meet all of the requirements of I.C. §42-203A(5) and the BWRGMA Management Plan. The evidence establishes that diversion and use of water pursuant to the permit together with the implementation of the mitigation plan will not reduce the quantity of water under any existing water rights and will not injure any water right. Mere claims by the Protestant that any private pond will violate the Policy without specific scientific evidence that the pond will reduce available water resources for legitimate local public interest concerns such as maintaining minimum stream flows is not evidence the Application will conflict with the local public interest. Evidence presented by Friedman establishes approval of the Application will result in significant long and short term benefits to the local economy, will not result in any adverse temperature or other water quality impacts on the Big Wood River or the local aquifer and will provide an additional water supply for fire suppression. Therefore, the Application will not conflict with the local public interest. The Application should be approved and a permit issued subject to and conditioned upon both the approval of the Company's Transfer Application and the ultimate determination of the validity of the Company's water right in the SRBA.

Dated this 4th day of December, 2002.

SPECK & AANESTAD
A Professional Corporation
Attorneys for Applicant

By _____
James P. Speck

JUL 15 2003

CERTIFICATE OF SERVICE

I hereby certify that on the 4th day of December, 2002, I served a true and correct copy of the within and foregoing document upon the persons named below in the manner noted:

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JAMES P. SPECK

McCa... Ltd.
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December 4, 2002

VIA FACSIMILE - (208) 327-7866
ORIGINAL WILL FOLLOW
VIA REGULAR MAIL

Mr. L. Glen Saxton
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Statehouse Mail
Boise ID 83720-9000

Re: In the Matter of Application for Permit No. 37-20742
Robert G. Friedman, Applicant - Blaine County, Protestant

Dear Glen:

Enclosed is the Post Hearing Brief of Applicant, Robert G. Friedman. The original and one copy will follow by mail. Please receipt date stamp the copy and return the copy to me in the self-addressed, postage pre-paid envelope I will include for that purpose.

Sincerely yours,

SPECK & AANESTAD
A Professional Corporation

By: _____
James P. Speck

JPS:sgg
Enclosures
cc: Client (w/enclosures) via fax
Chuck Brockway (w/enclosures) via fax
Allen Merritt (w/enclosures) mail only
Dough Werth (w/enclosures) hand delivery

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Attorneys for Applicant Robert G. Friedman

BEFORE THE IDAHO DEPARTMENT OF WATER RESOURCES

IN THE MATTER OF APPLICATION FOR PERMIT NO. 37-20742:	)	
Robert G. Friedman, Applicant.	)	**POST HEARING BRIEF**
Blaine County,	)	
Protestant.	)	

Applicant, Robert G. Friedman ("Friedman"), respectfully submits his Post Hearing Brief in this matter.

I. FACTS

On July 11, 2002, Friedman filed his Application for Permit No. 37-20742 (the "Application"). The Application seeks a water right to divert groundwater from a well to be drilled on property owned by Friedman north of Ketchum, Idaho (the "Property") in the amount of 2.0 cfs for recreation, aesthetics and diversion to storage from January 1 through December 31. The Application also seeks permission to store 16 acre feet of water in three ponds with a total surface

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area of two acres to be constructed on the Property. The Property is within the service area of the Eagle Creek Irrigation Company (the "Company"), the owner of Water Right No. 37-863 to divert water from Eagle Creek for irrigation purposes. The mitigation proposed for the Application is for the Company to dry up two acres of irrigation under Water Right No. 37-863 pursuant to two of the 10 shares of stock in the Company owned by Friedman. A Protest to the Application was filed by Blaine County and the matter proceeded to hearing on November 13, 2002. The following are the important facts adduced at the hearing:

Friedman purchased the Property in December, 1999 intending to build a residence for his family and himself, and to ultimately use it as a full time retirement home. With the Property, Friedman acquired Stock Certificate No. 60 for 10 shares of the stock in the Company authorizing him to use ten inches of water diverted from Eagle Creek to irrigate 10 acres[1] of the Property (Exhibit X). Thereafter Friedman decided he would like to have certain water features for the Property which are schematically depicted in Exhibit 10. Friedman also proceeded with plans for a main house, guest house and barn on the Property, discussing those plans with a local architect, Mr. Jim Ruscitto. Friedman intends to use local contractors and architects for this project. If the Application is approved, Friedman will promptly proceed with the project next spring. Friedman intends to install a fire suppression system to draw water from the pond to protect the structures on the Property and is willing to grant the local fire department access to those ponds to fight fires on

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[1] The Property has now been accurately measured at 9.71 acres. Friedman agrees he does not have the right to use his shares of stock to irrigate any additional land. However, when the 10 inches of the Eagle Creek water right represented by the stock in the Company owned by Friedman's predecessors was not used to irrigate the Property it may have been used by other shareholders in the Company to irrigate not more than 10 acres within the Company's service area according to the testimony of Mr. Everett Davis, current president of the Company.

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other properties. After Friedman acquired the Property he arranged to have it irrigated using water pursuant to his shares of stock in the Company during the summers of 2001 and 2002. Friedman has personally observed natural grasses growing on his Property as a result of the irrigation.

Mr. Jim Ruscitto ("Ruscitto") is a local architect with more than 30 years of experience in residential and commercial projects. Ruscitto worked with the landscape architect, Mr. Richard Emik, in preparing a site plan for the Property. The water features which are proposed through the Application are a key element of this plan. Ruscitto estimated the construction cost for the main house, guest house and barn to be approximately $2,500,000. The project would employ approximately four (4) architects and engineers for approximately one year and generate approximately $250,000 in fees for Ruscitto's architectural firm. Ruscitto estimated there would be approximately 70 construction workers employed during the course of the project and stated that the local contractors intended to be employed by Friedman would buy materials locally.

Mr. Brian Ros ("Ros"), a project manager for Webb Landscape, Inc., testified concerning the estimate he had prepared for Friedman for the landscaping work to be done for this project, including the water features (Exhibit 13). The first phase of the project, including the installation of the water features, would cost $401,481. The second phase would add another approximately $142,400. The well for the project would be drilled by a local contractor and cost approximately $30,000, including the pump. Once the project is completed, Ros estimated Friedman would pay annual maintenance of approximately $17,000 per year.

Mr. Everett Davis ("Davis"), president of the Company, described the service area for the Company's irrigation water system as being within the yellow outlines depicted on Exhibit 17. The ditch system for delivery of that water is depicted on Exhibit 18. The Company owns Water Right

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No. 37-863, but the users of that water right are the shareholders in the Company, numbering approximately 17, who own the properties within the Company's service area. Davis stated the Company is obligated to the best of its ability to deliver water represented by a shareholder's shares of stock, if so requested by that shareholder. Mr. Davis further stated that the Company does not have any control over whether or not a shareholder uses his or her share of the Company's water right and that when the water right was not used on the Friedman Property by its previous owners such non use was not under the control of the Company. The sole decision not to use water would be that of the shareholder. Mr. Davis further stated that if a shareholder does not use or call for his share of the Company's water right, the Company can and has delivered that water to another shareholder for use. Even though this past summer was one of the worst for flows in Eagle Creek, Davis testified the Company was still able to deliver Friedman's full share of the Company's water right represented by Friedman's 10 shares of stock.

Mr. Lee Peterson ("Peterson"), Watermaster for Water Districts 37 and 37M for the past 12 years, testified that Eagle Creek is classified as a dry stream so that priority cuts for the Big Wood River do not apply to the Company's water right from Eagle Creek. Mr. Peterson testified that the decree in *Winslow v. Chapman* (Exhibit T) has lawfully enjoined him and is predecessors as Watermaster from administering the waters of Eagle Creek since 1923 and that the users of Eagle Creek water have relied since then on that non-administration. He also testified that the use of water from Eagle Creek has not interfered with water in the Big Wood River during that same time period.

Mr. Tom Denker ("Denker"), the owner of Evergreen Landscaping, a local landscape company, and a resident of the Eagle Creek area for about 22 years, testified that his company irrigated the Property for Friedman in the summers of 2001 and 2002. His company used a portable,

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gasoline powered 5 horsepower high pressure pump and 12 lengths of 20 foot hand lines. Denker described the photographs in Exhibits 20-1 through 20-7 and 21-1 through 21-7 that depicted his company's irrigation of the Property. The hand lines were moved two or three times a day during the period of irrigation. Denker testified his company was able to do this irrigation even though the years 2001 and 2002 were some of the worst water years for Eagle Creek. He estimated the irrigation covered approximately one-third of the Property. Denker further testified he had not observed during the prior 10 years other occasions of sprinkler irrigation, which he described as surface irrigation, on the Property, but indicated there may have been flood irrigation. Denker testified that his employees spent approximately 50 hours moving the hand lines during each of the two summers. He could not recall how many days of irrigation actually took place. Denker testified the purpose of the irrigation was to raise native grasses and not any specific crop.

Ms. Mary Ann Mix ("Mix"), Chairperson of the Blaine County Commissioners, testified that ponds are contrary to the County's adopted Local Public Interest Water Policy (the "Policy"), and, therefore, the County amended its fire protection ordinance to disallow the construction of ponds on the basis of fire suppression purposes. The Policy (Exhibits I and J) states: "The Board [of County Commissioners] will appoint an advisory board of water use experts to advise the Board on application protests for transfers and diversion under § 4 and 5 of the Policy." Mix testified no such board was created or consulted before the County filed its protest to the Application.

Mr. Leonard Harlig ("Harlig"), a former County Commissioner, testified that he was involved as a Commissioner in the formulation of the Policy. He stated that leading up to the adoption of the Policy citizens had complained that water impounded in ponds for aesthetic purposes was taken out of the system and therefore not available to surface water irrigators. The following

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is the relevant provision from the Policy:

> Certain application requests to IDWR, for transfer or diversion of water rights, **have the potential to result in an actual increase of water use** that is contrary to the best interests of Blaine County's residents and visitors, and is contrary to State Legislative intent to preserve and conserve water in Idaho. Among these requests are:
>
> > 1) transfers or diversions of use to private recreational and aesthetic ponds, and fire protection ponds greater in size than needed for fire protection, **(all with an attendant impoundment of water that would normally be available for maintenance of instream flows, agricultural use, and the use of senior water right holders)** [see §§42-1503 (b), which requires that the application, "is in the public, as opposed to private, interest] (emphasis added);

Harlig testified his understanding of the purpose of the Policy opposing ponds for aesthetic purposes is that both the impoundment of water in and the evaporation of water from such ponds depletes the water supply for other water users. However, when asked if a project for aesthetic ponds which consumed less water than irrigation use of the same property would violate the Policy, Harlig candidly responded as follows:

> I think it would still violate the policy because it would be creating aesthetic and recreational type ponds and impounded water above ground that ought to be in the ground so I would say it is still in violation of the policy, **irrespective of whether it uses more water or less water than total irrigation of the property would do.** (Emphasis added).

Harlig then admitted he believes that any pond, other than one made available for use by the public, violates the Policy.

Dr. Charles E. Brockway ("Brockway") testified as an expert witness on the matters to be determined at the hearing. He generally described the Application, which he prepared, as a request for a non-consumptive water right to divert water from groundwater circulated through a series of

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ponds and then returning the water back into the same aquifer at a point very near the well from which it was extracted. The ponds would be approximately two acres in surface area and store approximately 16 acre feet. The proposed well (Exhibit 6) will meet the requirements of the Idaho Department of Water Resources ("IDWR") for a non-potable groundwater source. A recirculating pump system will be included to minimize the time that water must be diverted from the well. Brockway testified that once the ponds have been filled, the well will only be pumped when necessary to keep the temperature of the water in the ponds at levels required to keep them fresh, free of algae and to maintain proper levels of dissolved oxygen. (*See, also*, Exhibit 4). There will be a minimum of three measuring devices: one on the well, one on the water entering the system from the Company's ditch and a third at the outflow from the system to determine how much water is actually being recharged into the ground. Brockway described the recharge area where water will be delivered after it leaves the last and biggest pond. The recharge area is 300 to 400 feet from the river and the groundwater gradient from that area down to the river is depicted on Exhibit 5 prepared by Brockway. Based on this information as well as the hydrologic conductivity of the gravels in that area, Brockway estimated it would take only 4 to 6 hours for water placed into the recharge area to reach the Big Wood River. Brockway testified it would reach the river no more than one quarter of a mile downstream from that point perpendicular to the recharge area. Brockway reviewed the well driller logs (Exhibit 12) to determine aquifer properties, and in his opinion, the aquifer is capable of supplying sufficient water for the water uses requested by the Application. Brockway explained that the consumptive use of ponds with a two acre surface area is essentially the same as the consumptive use for two acres of irrigated alfalfa. Therefore, the mitigation planned for the Application is to offset the consumptive use from the ponds by not irrigating two acres of the Property which would

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otherwise be irrigated by Friedman's shares of the Company water right.

Brockway described his calculations of the water requirements for the project and the consumptive use comparisons of irrigating the entire Property and the proposed project, all of which are set out in Exhibits 1, 2 and 3. Based upon the calculations made by Brockway he rendered the following opinions, none of which were refuted by any evidence offered by the Protestant, expert or otherwise:

a. Diversion of water under the proposed water right using the proposed mitigation plan will be non-consumptive.

b. Diversion of water under the proposed water right together with implementation of the mitigation plan will not reduce the flow or amount of water in the Big Wood River.

c. Diversion of water under the requested water right together with implementation of the proposed plan for mitigation will not reduce water available for diversion by any Big Wood River water right or in a tributary of the Big Wood River.

d. Diversion of water pursuant to the requested water right together with implementation of the proposed plan for mitigation will not cause the holder of any existing Big Wood River water right to incur an unreasonable effort or expense to divert that water.

e. Diversion of water under the requested water right together with the implementation of the proposed plan for mitigation will not injure any Big Wood River water right.

Brockway also prepared a well interference analysis using the Theis Formula and the assumption that the well is pumped continuously (Exhibit 7). Brockway testified that the actual operation of the project water right would result in draw downs much less than what is shown on Exhibit 7 since the well will only be pumped as needed to control the health of the ponds. The

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closest well to the proposed well is approximately 720 feet away. Brockway testified the exercise of the requested water right would have no impact on the operation of that well, would not reduce the water available for diversion in that well, or under any existing groundwater right. Brockway further testified that the diversion of groundwater pursuant to the requested water right will not reduce pumping levels in any well below historically reasonable pumping levels, will not cause the holder of any existing groundwater right to incur an unreasonable effort or expense to divert that groundwater right, and will not injure any groundwater right. Brockway gave his uncontested opinion that water in the local aquifer will be available for adequate time intervals and in quantities sufficient to make the requested water right work and water in Eagle Creek will be available for adequate time intervals and in quantifies sufficient to make the mitigation plan work.

Brockway stated the automatic control of the sprinkler system, lining of the ponds and water management through use of the water measuring devices are all consistent with contemporary standards for reasonably efficient use of water resources and not in any way contrary to the conservation of water resources in the State of Idaho. Brockway testified the exercise of the proposed water right will not in any way affect the temperature of water flowing in the Big Wood River. He testified it would not have any effect on the level of dissolved oxygen in the Big Wood River. He testified it would not increase the level of nitrates in the Big Wood River. In Brockway's opinion, the exercise of the water right will not raise the levels of dissolved oxygen or nitrates above those which are acceptable to the Idaho Department of Environmental Quality for the Big Wood River.

Brockway described the two points of diversion that deliver water from Eagle Creek to the Property, one located at the upper end of the Company's service area and the other on the west side

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of Highway 75 (Exhibit 17). Eagle Creek water is then delivered to the Property in two different ditches from those respective head gates (Exhibit 18). Brockway described measurements of the flow of water in the ditch running parallel to the north boundary of the Friedman Property which he made on 4 different occasions in the years 2000 and 2002 (Exhibit 16). Brockway testified that, as a result of the irrigation of the Property in 2001 and 2002, crested wheat grasses were growing and that irrigation to raise this type of grass is a beneficial use of the Company's water right. Brockway described a system of lateral ditches crossing the entirety of the Property that, in his opinion, indicated the Property had been historically irrigated even though he had not personally observed such irrigation since he, as a youth, assisted the original owner in irrigating the Property.

II. ARGUMENT

A. The Water Uses Proposed by the Application will Not Reduce the Quantity of Water under any Existing Water Rights.

I.C. § 42-203A(5) requires IDWR to determine whether or not the uses proposed by the Application will reduce the quantity of water under existing water rights. If it finds there will be such a reduction, IDWR may either deny the Application or approve it and grant a permit subject to appropriate conditions to prevent the reduction. The Application seeks to divert groundwater in the Big Wood River Groundwater Management Area ("BWRGWMA"). The management policy for BWRGWMA provides as follows:

> Under this policy, additional approvals of ground water for consumptive uses can be granted upon a showing by an applicant and a determination by the department that the water supply is adequate and other water rights will not be injured.[2]

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[2] See Section II, B of this Brief for discussion of the issue of the adequacy of the water supply.

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Therefore, IDWR must also find there will be no injury to other water rights to grant the Application. As IDWR previously ruled in the Baker and Huf-N-Puf Trust Transfer Applications (Exhibit K), any real depletion of the flows of the Big Wood River, no matter how small or immeasurable, will cause actual injury to water rights in the Big Wood River. Therefore, the focus of these two tests - the reduction of the quantity of water under existing water rights and injury to existing water rights is essentially the same: will the proposed diversions under the Application reduce or deplete in any way the flows of the Big Wood River?

1. **Implementation of the proposed mitigation plan will prevent injury to other water rights.**

The mitigation plan is straight forward. Friedman is the owner of 10 shares of stock in the Company (Exhibit X). This entitles Friedman to the delivery of 10 inches of water diverted from Eagle Creek to his Property for the irrigation of approximately 10 acres. The Company has filed Application for Transfer No. 5748 (the "Transfer Application") which seeks to change the nature of use of two inches of its Water Right No. 37-863 from irrigation to recreation and aesthetics in the ponds proposed pursuant to the pending Application. Approval of that Transfer Application will mean that two acres of the Property which could otherwise be irrigated by the Company's water right will be "dried up" and never irrigated in the future. Therefore, approval of this Application must be subject to and conditioned upon approval of the Transfer Application.

Brockway presented expert testimony on the change in consumptive use of water applied to the Property if the Application is approved with the mitigation plan (Exhibits 1, 2 and 3). These calculations actually show the consumptive use will be less if the Application is approved and the ponds constructed and used than if the Property is fully irrigated with the Company's Eagle Creek water right. Other than to question and challenge the previous use of the Company's water right on

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the Property, the County did not produce any evidence to contradict or refute Brockway's findings. Nor was any evidence produced to challenge the following expert opinions expressed by Brockway:

a. Diversion of water under the proposed water right using the proposed mitigation plan will be non-consumptive.

b. Diversion of water under the proposed water right together with implementation of the mitigation plan will not reduce the flow or amount of water in the Big Wood River.

c. Diversion of water under the requested water right together with implementation of the proposed plan for mitigation will not reduce water available for diversion by any Big Wood River water right or in a tributary of the Big Wood River.

d. Diversion of water pursuant to the requested water right together with implementation of the proposed plan for mitigation will not cause the holder of any existing Big Wood River water right to incur an unreasonable effort or expense to divert that water.

e. Diversion of water under the requested water right together with the implementation of the proposed plan for mitigation will not injure any Big Wood River water right.

Brockway also performed a well interference analysis (Exhibit 7) and testified the exercise of the requested water right would have no impact on the operation of the closest well and would not reduce the water available for diversion in that well, or under any existing groundwater right. Brockway further testified that the diversion of groundwater pursuant to the requested water right will not reduce pumping levels in any well below historically reasonable pumping levels, will not cause the holder of any existing groundwater right to incur an unreasonable effort or expense to divert that groundwater right, and will not injure any groundwater right. Again, these expert opinions are unchallenged by the Protestant.

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Therefore, the evidence overwhelmingly supports a finding and conclusion by IDWR that implementation of the mitigation plan will prevent injury to any other water right.

2. The portion of Water Right No. 37-863 represented by Friedman's shares of stock in the Company will provide the required mitigation for the Application.

In processing the Company's Transfer Application, IDWR must make a determination, subject to ultimate review in the SRBA, of the validity of that portion of Water Right No. 37-863 proposed for change. That issue is therefore not precisely before IDWR in the present proceeding. Any Permit issued pursuant to the Application must be subject to and conditioned on not only the approval of the Transfer Application, but also the ultimate determination of the validity of the Company's Eagle Creek water right in the SRBA.

Friedman also contends the evidence presented at the hearing supports the conclusion by IDWR that the portion of the Eagle Creek water right represented by his 10 shares of stock in the Company has not been lost and remains a valid water right which can be used to properly implement the proposed mitigation plan. Water Right No. 37-863 is based on the Decree in *Winslow v. Chapman* (Exhibit T). In relevant part, it orders that the Watermaster for the Big Wood River is,

> Hereby perpetually restrained and enjoined from and in any manner exercising supervision over the waters of Eagle Creek during the irrigation season, and particularly be restrained and enjoined from in any manner interfering with the Plaintiff's rights as hereinbefore set forth, to-wit, the right of Plaintiff to the perpetual use of the waters of Eagle Creek to the extent of 4.6 second feet or in any manner attempting to regulate or regulate in the use by Plaintiff upon the said land of the said 4.6 second feet of water.

The current Watermaster, Lee Peterson, testified that he and his predecessors had been bound by this Decree and have never administered this water right. In other words, this water right has never been

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cut off to provide water to fulfill any of the Big Wood River water rights and those rights are administered as if Eagle Creek was not tributary to the Big Wood River. Therefore, no holder of any water right on the Big Wood River has, since the entry of that Decree, relied in any way on whether or not the Company's water right was being diverted and used by its shareholders. Instead, assuming that the portion of the Company's water right not consumed by the diversion and irrigation use of its shareholders ultimately finds its way back to the Big Wood River, it is only this return flow which becomes a part of the flows of the Big Wood River available for downstream users. If this return flow is preserved, then there is no depletion in the flows of the Big Wood River and those water right holders are protected. That this will occur is established by Brockway's testimony and written calculations.

Brockway's calculations are based on the assumption that Friedman can use the water represented by his shares of stock in the Company to irrigate the entirety of his Property. In *Aberdeen-Springfield Canal Company v. Peiper*, 133 Idaho 82, 982 P.2d 917 (1999), the Idaho Supreme Court ruled that non-use of a portion of an irrigation company's water right by a shareholder does not result in forfeiture of that portion of the water right as long as the company did nothing to cause the non-use. The Court expressed its concern as follows:

> [A finding of partial forfeiture] would give stockholders, who are not appropriators, the power to determine the fate of ASCC's water rights. If a number of stockholders chose not to use their share of ASCC's water for the statutory period, ASCC's water right would gradually revert to the state through partial forfeiture. (Cites omitted). If the Piepers' argument were valid, ASCC could only watch helplessly while its water right was lost.

Id. At 87. This principle has recently been codified in I.C. § 42-223(7) as follows:

> No portion of a water right held by an irrigation district, a Carey Act operating company, or any other company, corporation, association,

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> or entity which holds waters for distribution to its landowners, shareholders or members shall be lost or forfeited due to non use by such landowners, shareholders or members, unless the non use is subject to the control of such entity.

Mr. Everett Davis, President of the Company testified that the Company had no control over whether or not the portion of the Company's water rights represented by the shares of stock now owned by Friedman was used on the Property by Friedman or his predecessors in interest. Any non-use on that Property was due solely to the actions of the landowner and not the Company. Therefore, the Company has done nothing to cause the non-use of its water right on the Property and that portion of Water Right No. 37-863 represented by Friedman's shares of stock in the Company has not been forfeited.

Assuming, *arguendo*, the above-described case and statutory law does not apply to this matter, the recognized defense of resumption of use should be applied to protect the portion of the Company's water right which is part of the proposed mitigation plan. Unrefuted evidence concerning the recent irrigation of a portion of the Property was presented at the hearing through the testimony of Friedman, Denker and Brockway. This established that at least one-third of the Property was irrigated during portions of the 2001 and 2002 irrigation seasons. The "resumption of use" doctrine is a recognized defense to forfeiture of a water right in Idaho. *Zezi v. Lightfoot*, 57 Idaho 707, 68 P.2d 50 (1937); *Carrington v. Crandall*, 65 Idaho 525, 147 P.2d 1009 (1944); *Application of Boyer*, 73 Idaho 152, 248 P.2d 540 (1952). The rationale behind this doctrine is that since courts abhor forfeitures, water users should be allowed to avoid that harsh consequence if there are no other claims of right by third parties that could be injured by the resumption of use. In the present case, there are no other users on the Eagle Creek system. The Company's water right is administered separately from the Big Wood River so that the holders of water rights in the Big Wood

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River do not depend in any way on the use or non-use of this Eagle Creek water right. Therefore, the resumption of use by Friedman in 2001 and 2002 does not injure the rights of any third parties to the use of water from the Big Wood River. No one else has moved up the priority ladder, so to speak, to make use of any water left in Eagle Creek as a result of this non-use.

IDWR must conclude, based upon the evidence submitted at the hearing as well as relevant case and statutory law, that diversion of water pursuant to the Application together with implementation of the proposed mitigation plan will not reduce the quantity of water under any existing water rights and will not injure any other water right.

B. The Supply of Groundwater and Water in Eagle Creek Is Sufficient for the Purposes Requested in the Application.

The Application seeks a water right for the diversion of groundwater from the aquifer in reasonably close proximity to the Big Wood River several miles north of Ketchum, Idaho. The maximum diversion rate and other water requirements of the Application were described in detail by Brockway and his calculations set forth in Exhibits 1, 2 and 3. The mitigation plan which is an integral part of the Application depends, in part, on the supply of water available in Eagle Creek to fulfill the Company's Water Right No. 37-863. With respect to Eagle Creek, Brockway, Davis and Denker all testified that even in these recent record low water years there has been sufficient water in Eagle Creek for the Company to deliver at least the 10 inches of water represented by Friedman's shares of stock in the Company to the Property. Specific measurements of water flows were taken on four separate occasions during 2000 and 2002 by Brockway which confirm this (Exhibit 16). No evidence was presented by the Protestant to contradict this testimony.

As for the local aquifer into which the proposed well will be drilled, Brockway gave his opinion that it is capable of supplying the groundwater diversions which will be made pursuant to

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the Application. Again, no evidence was presented by the Protestant to refute this opinion. Therefore, IDWR must find and conclude the groundwater and surface water supplies are sufficient to provide the water diversions which will be required for the project proposed by the Application.

B. The Application is not Contrary to the Conservation of Water Resources in the State of Idaho.

Brockway testified that the management of the entire water system will be accurately controlled by measuring devices at all the significant points. The irrigation sprinkler systems will be automatically controlled and designed to be efficient. The ponds will be lined to prevent excessive seepage. According to Brockway, all of these measures are consistent with contemporary standards for reasonably efficient use of the water resources. Brockway also rendered his opinion that the project was not contrary in any way to the conservation of water resources in the state of Idaho. No testimony or other evidence was presented by the Protestant to refute these statements and opinions. Therefore, IDWR should find and conclude that the project proposed by the Application is not contrary to the conservation of water resources in the state of Idaho.

C. The Application is Made in Good Faith and Not for Delay or Speculative Purposes.

Friedman testified that he intends to build a home on the Property for his family and eventually use it as a full time retirement home. He also testified that if the Application is approved, he will start work right away in the spring of 2003. No evidence was presented by the Protestant to contradict this testimony. Therefore, IDWR should find and conclude that the Application is made in good faith and is not being pursued for delay or speculative purposes.

D. The Application will not Conflict with the Local Public Interest.

Under I.C. § 42-203A(5), if IDWR finds that the Application will "conflict with the local

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public interest, where the local public interest is defined as the affairs of the people in the area directly affected by the proposed use," it may deny the Application or conditionally grant a permit on such conditions as it deems to be appropriate. This provision was first interpreted by the Idaho Supreme Court, in *Shokal v. Dunn*, 109 Idaho 330, 707 P.2d 441 (1985). Among the factors the Court held in that case to be elements of the local public interest are fish and wildlife habitat, aquatic life, recreation, transportation and navigation values, water quality, assuring minimum stream flows, discouraging waste and encouraging conservation. The determination of what elements of the public interest are impacted and what the public interest requires is committed to IDWR's sound discretion. *Id.* at 339. IDWR has promulgated rules identifying criteria to be considered in determining if new projects conflict with the local public interest. IDAPA 37.03.08.045.01(e). In addition to the above factors, the effect on the local economy as determined by employment opportunities and revenue gains, both long and short-term, and compliance with applicable air, water and hazardous substance standards and local planning and zoning ordinances, are identified.

The testimony of Friedman, Ruscitto and Ros establishes that the proposed project will generate a flow of over $3,000,000 in revenues for local construction, architectural and engineering services firms during the two year construction period. Furthermore, it will provide ongoing revenues to local landscaping contractors of approximately $17,000 per year for maintenance of the landscaping and the ponds. Although there may be some form of residential project on the Property someday if the Application is not approved, it is only mere speculation as to what revenue such a project might generate. On the other hand, the cost amounts presented for the project proposed by the Application are based on legitimate estimates presented by qualified professionals and not refuted in any way by the Protestant. Therefore, the evidence clearly supports a finding and

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conclusion by IDWR that there will be both long and short term benefits to the local economy as the result of approving the Application.

Brockway, testifying as an expert witness, stated that in his opinion the diversion of water pursuant to the Application will not have any impact on the temperature of water flowing in the Big Wood River, nor would it have any effect on the level of dissolved oxygen or the level of nitrates in the Big Wood River. Brockway further gave his opinion that the project will not raise the levels of dissolved oxygen or nitrates in the Big Wood River above those levels acceptable to the Idaho Department of Environmental Quality. Brockway also testified that the project will not affect in any way the quality of water in the local aquifer.

Friedman also testified he will use one or more of the ponds as a source of water for fire suppression systems for the structures he intends to build on the Property. He also testified he would provide access to the ponds for the local fire departments as a source of water to fight fires on other properties. On this point, the only evidence presented by the Protestant was Mix's testimony concerning a recent ordinance adopted by the County to simply make its fire protection provisions consistent with the anti-pond provisions of the Policy. The new ordinance merely states that a County resident may no longer justify the construction of a pond as a source of water which complies with the County fire protection ordinance requiring an on-site water supply for residences exceeding a certain size. There is nothing in the record before IDWR that indicates a pond will not work as a source of water to fight fires. Such an argument would, in fact, be contrary to plain common sense. The quick and effective suppression of fires which threaten homes and other structures located in the County is, without doubt, in the interest of the citizens of the County. As long as Friedman complies with the ordinance and provides whatever kind of water supply is required for the size of

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structures he builds on the Property, there is absolutely no reason why he cannot install additional fire suppression systems using the pond as another source of firefighting water to provide an extra level of protection for his Property. Again, anything enhancing the ability to suppress fires is in the local public interest.

Aside from the testimony of Mix on the new fire protection ordinance, the only other evidence presented by the Protestant on the issue of the local public interest was the testimony of Harlig and various exhibits admitted at the hearing. These exhibits include certain excerpts from the Blaine County Comprehensive Plan (Exhibit R) and Blaine County Resolution 98-1 adopting the Policy and a copy of how its provisions are set forth as a chapter of the Blaine County Code (Exhibits I and J)[3]. The only relevant provision of the Policy is as follows:

> Certain application requests to IDWR, for transfer or diversion of water rights, **have the potential to result in an actual increase of water use** that is contrary to the best interests of Blaine County's residents and visitors, and is contrary to State Legislative intent to preserve and conserve water in Idaho. Among these requests are:
>
> > 1) transfers or diversions of use to private recreational and aesthetic ponds, and fire protection ponds greater in size than needed for fire protection, **(all with an attendant impoundment of water that would normally be available for maintenance of instream flows, agricultural use, and the use of senior water right holders)** [see §§42-1503 (b), which requires that the application, "is in the public, as opposed to private, interest] (emphasis added);

This provision, as embellished by Harlig's testimony, is based solely on a concern that these impoundments of water for private beneficial uses will deplete the water resources which should

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[3] The Policy is NOT an ordinance or law. It is merely a policy statement by the County Commissioners.

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otherwise be available for maintaining minimum stream flows and fulfilling valid senior downstream water rights for agricultural uses. The logical conclusion is that a pond which does not deplete any of these water resources through the implementation of a proper mitigation plan such as that proposed by the Application simply does not violate the basis for or the Policy itself.

However, it is readily apparent that the Protestant's true position is that all new ponds *per se*, except possibly a pond constructed for use by the public, violate the Policy and, therefore, are not in the local public interest. The mere "potential" that a private pond will deplete the available water resources is, in the view of the Protestant, all that is required to conflict with the local public interest. This is not sufficient. There must be hard, scientific facts to support such a claim. The Protestant has not presented any evidence to establish the Application will deplete the flows of the Big Wood River, will result in "an actual increase in water use" or will impound "water that would normally be available for maintenance of instream flows, agricultural use, and the use of senior water right holders." The reason for such failure is clear - the Application simply will not lead to these results. The mere filing of the protest claiming the Application will violate the Policy - a protest filed without the required consultation with an advisory board of water right experts - does not in any way establish the Policy will be violated. The Protestant has not met its burden of presenting sufficient evidence that the Application will conflict with those elements of the local public interest of which it has particular knowledge, i.e how it will violate those provisions of the Policy which are legitimate expressions of the local public interest. On the other hand, Friedman has met his burden and presented sufficient evidence for IDWR to find and conclude the Application will not conflict with the local public interest.

III. CONCLUSION

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Friedman has met his burden by presenting evidence to meet all of the requirements of I.C. §42-203A(5) and the BWRGMA Management Plan. The evidence establishes that diversion and use of water pursuant to the permit together with the implementation of the mitigation plan will not reduce the quantity of water under any existing water rights and will not injure any water right. Mere claims by the Protestant that any private pond will violate the Policy without specific scientific evidence that the pond will reduce available water resources for legitimate local public interest concerns such as maintaining minimum stream flows is not evidence the Application will conflict with the local public interest. Evidence presented by Friedman establishes approval of the Application will result in significant long and short term benefits to the local economy, will not result in any adverse temperature or other water quality impacts on the Big Wood River or the local aquifer and will provide an additional water supply for fire suppression. Therefore, the Application will not conflict with the local public interest. The Application should be approved and a permit issued subject to and conditioned upon both the approval of the Company's Transfer Application and the ultimate determination of the validity of the Company's water right in the SRBA.

Dated this 4th day of December, 2002.

SPECK & AANESTAD
A Professional Corporation
Attorneys for Applicant

By _____
James P. Speck

JUL 1 5 2004

CERTIFICATE OF SERVICE

I hereby certify that on the 4th day of December, 2002, I served a true and correct copy of the within and foregoing document upon the persons named below in the manner noted:

Douglas A. Werth, Esq. Post Office Box 2360 Ketchum, ID 83340 FAX (208) 727-6853	☐ ☒ ☐	United States Mail, Postage Prepaid Hand Delivery Facsimile, with copy by United States Mail, Postage Prepaid
Mr. L. Glen Saxton Idaho Department of Water Resources 1301 North Orchard Street Statehouse Mail Boise, Idaho 83720-9000 FAX (208) 327-7866	☐ ☐ ☒	United States Mail, Postage Prepaid Hand Delivery Facsimile, with copy by United States Mail, Postage Prepaid
Mr. Allen Merritt Idaho Department of Water Resources 1341 Fillmore, Suite 200 Twin Falls, ID 83301 FAX (208) 736-3037	☒ ☐ ☐	United States Mail, Postage Prepaid Hand Delivery Facsimile, with copy by United States Mail, Postage Prepaid

JAMES P. SPECK

MICRO
JUL 1 5 2004

Idaho Department of Water Resources Receipt

Receipt ID C066023

Payment Amount $123.75 **Date Received** 11/27/2002 10:37:46 A **Region** State **Status**

Payment Type Check **Check Number** 32006

Payer SPECK & AANESTAD

Comment PAYMENT FOR COPIES OF HEARING TAPES REGARDING FRIEDMAN APPL WATER RIGHT 37-70742

Fee Detail

Amount	Description	Fund	FD	PCA	SO
$123.75	MISCELLANEOUS REVENUE PAYMENTS	0001		55000	5410

Signature Line (Dept. Representative)

2004

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
1301 NORTH ORCHARD
BOISE, ID 83706-2237
(208) 327-7900

Date Nov. 18, 2002

Name James P. Speck, Speck & Aanestad

Address P.O. Box 987

Ketchum, ID 83340

No. of Copies	Materials	Cost
1 set	Hearing tapes regarding	$ 123.75
	Friedman Appl. 37-20742	
	See attached copy of Invoice	
	from Custom Recording & Sound.	
Credited to:	Fund 0001 PCA 55000 SO 5410	
	TOTAL	$ 123.75

Please find enclosed the form(s) and/or information you requested. The charge, if any, is indicated above.

If we may be of further assistance, please contact us.

Sincerely,

Deborah J. Gibson

Please credit PCA acct. #55000.

MICROFILMED
2004

Y2K STARS Transaction Inquiry FY2003

55000	0001	EXP0332	01	08052002	CUSTOM RECORDING & S	5410		230	5310
				4200	1020100	TAPE COPY			
	22-52421				37.02				
53000	0001	EXP0420	01	08132002	CUSTOM RECORDING & S	5410		230	5220
				4200	1020100	VHS 120 MINUTES			
	22-52382				16.20				
55000	0001	EXP1016	01	10102002	CUSTOM RECORDING & S	5410		230	5310
				4200	1020100	STEREO DUPLICATION			
	22-53196				14.15				
55000	0001	EXP1341	01	11192002	CUSTOM RECORDING & S	5410		230	5310
				4200	1020100	COPY SLOW TO STANDARD			
	22-53689				123.75				
51000	0001	EXP1398	05	11252002	CUSTOM RECORDING & S	5410		230	5110
				4200	1020100	SONY VHS			
	22-53714				4.21				

No more matching transactions. Total = $ 195.33 Tap enter

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JUL 15 2004

Custom Recording & Sound, Inc.
3907 Custer Drive
Boise, ID 83705-2910
Phone # (208) 344-3535
Fax # (208) 323-0373

Invoice

Date	Invoice #
11/18/2002	22-53689

Bill To	Ship To
Idaho Water Resources Janet Garrett 1301 N Orchard Boise, ID 83706	

P.O. Number	Terms	Due Date	Rep	Ship	Via	F.O.B.
Debbie Gibson	Net 30	12/18/2002		11/18/2002		Boise Dock

Quant...	Item Code	Description	Price Each	Amount
6	Cass-Std Speed	Copy Slow Speed Tape to Standard Speed	20.00	120.00
3	C120HFL	Sony C120HFC Audio Cassette	1.25	3.75

COPY

Copy of invoice to customer w/taped 10/19/02 dg

Subtotal	$123.75
Sales Tax (5.0%)	$0.00
Total	$123.75

Returns subject to management approval. 15% Restocking fee on all returned items.
No return on special orders or after 30 days.

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JUL 15 2004

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
1301 NORTH ORCHARD
BOISE, ID 83706-2237
(208) 327-7900

Date Nov. 18, 2002

Name James P. Speck, Speck & Aanestad

Address P.O. Box 987

Ketchum, ID 83340

No. of Copies	Materials	Cost
1 set	Hearing tapes regarding	$ 123.75
	Friedman Appl. 37-20742	
	See attached copy of Invoice	
	from Custom Recording & Sound	
	TOTAL	$ 123.75

COPY

Please find enclosed the form(s) and/or information you requested. The charge, if any, is indicated above.

If we may be of further assistance, please contact us.

Sincerely,

Deborah S. Gibson

MICRO
JUL 15 200

SPECK & AANESTAD
A PROFESSIONAL CORPORATION
ATTORNEYS
120 EAST AVENUE
POST OFFICE BOX 987
KETCHUM, IDAHO 83340

JAMES P. SPECK
jimspeck@cox-internet.com
DOUGLAS J. AANESTAD
aanestad@cox-internet.com

TELEPHONE
(208) 726-4421
FACSIMILE
(208) 726-0752

November 14, 2002

RECEIVED
NOV 18 2002
Department of Water Resources

Mr. L. Glen Saxton
Idaho Department of Water Resources
1301 North Orchard Street
Statehouse Mail
Boise ID 83720-9000

Re: ***In the Matter of Application for Permit No. 37-20742***
Robert G. Friedman, Applicant - Blaine County, Protestant

Dear Glen:

Enclosed you will find copies of the three documents not available at the time of the hearing but which were admitted by stipulation as Protestant's Exhibits Z, AA and AB. I understand you will mark these and make them a part of the record for the proceedings held yesterday.

Thank you.

Sincerely yours,

SPECK & AANESTAD
A Professional Corporation

By: _____
James P. Speck

JPS:sgg
Enclosures

MICROFILMED
JUL 15 2004

BIETER WERTH & WALKER, PLLC
ATTORNEYS & COUNSELORS AT LAW

208 SPRUCE AVENUE NORTH
SECOND FLOOR
POST OFFICE BOX 2360
KETCHUM, IDAHO 83340

DOUGLAS A. WERTH
WERTH@IDAHOATTYS.COM

BOISE OFFICE
TELEPHONE 208.383.0008
FACSIMILE 208.383.0311

KETCHUM OFFICE
TELEPHONE 208.726.0847
FACSIMILE 208.727.6853

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NOV 18 2002
Department of Water Resources

November 14, 2002

Mr. Karl J. Dreher
Director
Idaho Department of Water Resources
1301 N. Orchard
P.O. Box 83720
Boise, ID 83720-0098

RE: *In the Matter of Application for Permit No. 37-20742 (Robert G. Friedman)*

Dear Director Dreher:

Enclosed please find the following document that was filed in the above matter.

PROTESTANT'S WITNESS AND EXHIBIT LISTS.

Sincerely yours,

Douglas A. Werth
BIETER WERTH & WALKER, PLLC

Enclosure
Cc: Southern Regional Office (w/encl.)

MICROFILMED
JUL 15 2004

State of Idaho
Department of Water Resources

ROSTER OF ATTENDANCE

IN THE MATTER OF APPLICATION FOR PERMIT NO. 37-20742 IN THE NAME OF ROBERT G. FRIEDMAN

Date:	November 13, 2002
Time:	10:00 a.m.
Location:	Blaine County Courthouse Third Floor Meeting Room Hailey, ID
Hearing Officer:	L. Glen Saxton

* * *Please Print* * *

NAME	ADDRESS	REPRESENTING (Applicant, Protestant)
Douglas Werth	Box 2360 Ketchum 83340	Protestant
James P. Speck	Box 917 Ketchum ID 83340	Applicant
Charles E. Brockway	2016 Washington N. Twin Falls	Applicant
Everett Davis	#30 Eagle Cove	Ket.
Jim Ruscitto	Box 419 S.V.	Architect
Robert Friedman	9455 Hoyden Dr. Los Angeles Ca	Applicant
MaryAnn Mix	206 First Ave So	Hailey Protestant
Brian R. Ros	PO Box 3303	Ketchum Landscape
Tom Denker	PO Box 1157	Ketchum ID.
Len Harlig	P.O. Box 2010	SV ID

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Southern Region

State of Idaho
Department of Water Resources
AMMENDED APPLICATION FOR PERMIT

RECOMMENDATION OF WATERMASTER

Application No: 37-20742 Water Right No(s): 37-20742
Applicant's Name: Robert Friedman

Watermaster's Recommendation:

a) ___X___ I do not oppose approval of this application.

b) _____ I do not oppose approval of this application if it is conditioned as follows.

c) _____ I oppose approval of this application for the following reasons:

d) _____ Additional Comment:

Dated this 12th day of November, 2002.

Water District No. 37

Watermaster's Signature

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NOV 15 2004

Rec'd 11/18/02

ORIGINAL

Douglas A. Werth
BIETER WERTH & WALKER, PLLC
208 Spruce Avenue, 2nd Floor
P.O. Box 2360
Ketchum, ID 83340
Telephone: 208.726.0847
Facsimile: 208.727.6853
Idaho State Bar No. 3660

Attorneys for Protestant

BEFORE THE DEPARTMENT OF WATER RESOURCES

OF THE STATE OF IDAHO

IN THE MATTER OF APPLICATION FOR PERMIT NO. 37-20742,

ROBERT G. FRIEDMAN,

Applicant,

BLAINE COUNTY,

Protestant.

PROTESTANT'S WITNESS AND EXHIBIT LISTS

Attached hereto are Protestant Blaine County's Exhibit and Witness Lists previously faxed to the Honorable L. Glen Saxton, Hearing Officer, on November 4, 2002.

DATED this 13th day of November, 2002.

Douglas A. Werth, Attorney for
Protestant Blaine County

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2004

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that on this 13th day of November, 2002, I caused a true and correct copy of the within and foregoing document to be served by the method(s) indicated below, and addressed to each of the following:

James P. Speck SPECK & AANESTAD P.O. Box 987 Ketchum, ID 83340 Fax: 208-726-0752	____ ____ ✓ ____	U.S. Mail Overnight Delivery Hand Delivery Facsimile
Blaine County Board of Commissioners Old Blaine County Courthouse 206 1st Avenue South, Suite 300 Hailey, ID 83333 Fax: 208-788-5576	____ ____ ✓ ____	U.S. Mail Overnight Delivery Hand Delivery Facsimile
Idaho Department of Water Resources Southern Regional Office 1341 Fillmore Street Suite 200 Twin Falls, ID 83301-3380 Fax: 208-736-3037	✓ ____ ____ ____	U.S. Mail Overnight Delivery Hand Delivery Facsimile
Mr. Karl J. Dreher Director Idaho Department of Water Resources 1301 N. Orchard P.O. Box 83720 Boise, ID 83720-0098 Fax 208-327-7866	✓ ____ ____ ____	U.S. Mail Overnight Delivery Hand Delivery Facsimile

Douglas A. Werth

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JUL 15 2004

PROTESTANT BLAINE COUNTY'S WITNESS LIST

	WITNESSES
1	**Leonard Harlig, Former Blaine County Commissioner** Testimony concerning formulation of Blaine County Local Interest Water Policy; personal knowledge of water issues and availability in Eagle Creek vicinity; foundation for photographs
2	**Mary Ann Mix, Chairman of Blaine County Board of Commissioners** Testimony concerning formulation of Blaine County Local Interest Water Policy
3	**Dennis Wright, Blaine County Board of Commissioners** Testimony concerning formulation of Blaine County Local Interest Water Policy
4	**Lee Peterson, Watermaster** Testimony concerning management of Eagle Creek decreed water rights; priority cut-offs for the prior ten years (not confirmed)
5	**Everett Davis (or other corporate designee), Eagle Creek Irrigation Company** Testimony concerning Eagle Creek decreed water rights, duties, if any, with respect to Eagle Creek, knowledge concerning the flows of Eagle Creek, the shares of the Eagle Creek Irrigation Co., uses of water relating to the Eagle Creek Irrigation Co. (not confirmed)
6	**Records Custodian, Eagle Creek Irrigation Company** As necessary
7	**Records Custodian, Blaine County Clerk-Recorder** As necessary

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JUN 15 2004

PROTESTANT BLAINE COUNTY'S LIST OF EXHIBITS

EX.	DESCRIPTION OF EXHIBITS
A	Order of the Department dated June 28, 1991 designating the Big Wood River Ground Water Management Area
B	"Management Policy for the Big Wood River Ground Water Management Area" dated June 28, 1991
C	Idaho Department of Water Resources memorandum dated January 22, 1980 from C. Stephen Allred to Staff re: "Big Wood River Appropriations"
D	Idaho Department of Water Resources memorandum dated February 1, 1980 from Dave Tuthill to Bob Fleenor re: "Director's Memos on the Boise River and Big Wood River Drainages"
E	Letter dated July 13, 2000 from Nick Purdy to Mary Ann Mix, Chairman of Blaine County Board of Commissioners re: "Drought Disaster Declaration"
F	Letter dated July 17, 2000 from Blaine County Board of Commissioners to the Honorable Dirk Kempthorne, Governor of the State of Idaho, re: "Drought Disaster Declaration for Blaine County"
G	Order Declaring Drought Emergency dated July 18, 2000 of Karl J. Dreher, Director of Idaho Department of Water Resources and the Honorable Dirk Kempthorne, Governor of the State of Idaho
H	Idaho Department of Water Resources letter dated August 26, 1996 from Allen Merritt, Southern Regional Manager, to Blaine County Board of Commissioners re: "Use of Water in Blaine County for Aesthetic Purposes"
I	Blaine County Resolution 98-1 dated January 26, 1998 adopting a Blaine County Local Public Interest Water Policy
J	Title 8, Chapter 3, Blaine County Code codifying the Blaine County Local Public Interest Water Policy

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K	Final Order dated November 25, 1998 In the Matter of Applications for Transfer No. 5174 in the name of Dennis M. Baker and No. 5175 in the name of Huf-N-Puf Trust
L	Order Declaring Drought Emergency dated April 19, 2001 of Karl J. Dreher, Director of Idaho Department of Water Resources, and the Honorable Dirk Kempthorne, Governor of the State of Idaho
M	Order Declaring Drought Emergency dated May 13, 2002 of Karl J. Dreher, Director of Idaho Department of Water Resources, and the Honorable Dirk Kempthorne, Governor of the State of Idaho
N	Photographs
O	Topographic Map – USGS (Amber Lakes, Idaho)
P	Aerial Vicinity Photograph
Q	Tax Lot Vicinity Map
R	Blaine County Comprehensive Plan
S	Minutes of Blaine County Board of Commissioners' meeting held January 26, 1998, adopting Resolution 98-1
T	Winslow v. Chapman Decree
U	Eagle Creek Irrigation Company, Certificate of Incorporation
V	Articles of Incorporation of Eagle Creek Irrigation Company
W	By-Laws of Eagle Creek Irrigation Company
X	Shares of Eagle Creek Irrigation Company (Friedman)
Y	Compilation of Priority Cuts on the Big Wood River above Magic Reservoir for years 1992 through 2002 (from official records of IDWR)

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Z	Letter dated December 22, 1997, to Board of County Commissioners from Norman C. Young – County will request Judicial Notice of Protestant's Exhibit "L" in Baker – Huf-N-Puf Applications
AA	U.S. Geological Survey Report 89-4018 titled "Water Resources of the Upper Big Wood River Basin, Idaho" – County will request Judicial Notice of Protestant's Exhibit "AA" in Baker – Huf-N-Puf Applications
AB	Phase 1, Final Report titled "Hydrologic Evaluation of the Big Wood River and Silver Creek Watershed" dated November 1994 County will request Judicial Notice of Protestant's Exhibit "AB" in Baker – Huf-N-Puf Applications

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NOV 15 2002
Department of Water Resources

Douglas A. Werth
BIETER WERTH & WALKER, PLLC
208 Spruce Avenue, 2nd Floor
P.O. Box 2360
Ketchum, ID 83340
Telephone: 208.726.0847
Facsimile: 208.727.6853
Idaho State Bar No. 3660

Attorneys for Protestant

BEFORE THE DEPARTMENT OF WATER RESOURCES

OF THE STATE OF IDAHO

IN THE MATTER OF APPLICATION FOR PERMIT NO. 37-20742, ROBERT G. FRIEDMAN, Applicant, BLAINE COUNTY, Protestant.	PROTESTANT'S NOTICE OF SERVICE OF SECOND RESPONSE TO REQUESTS FOR DISCOVERY

Protestant Blaine County (hereinafter "County"), by and through its undersigned counsel of record, pursuant to the Rules of Procedure of the Idaho Department of Water Resources, IDAPA 37.01.01.000 *et seq.*, provides notice to the Department that on October 17, 2002, it served its "PROTESTANT'S SECOND RESPONSE TO INTERROGATORIES AND REQUESTS FOR PRODUCTION" by hand-delivering the original and one copy of each such response at the law offices of Applicant's attorney of record as indicated in the certificate of service below.

MICROFILMED
JUL 15 2004

DATED this 12 day of November, 2002.

Douglas A. Werth, Attorney for
Protestant Blaine County

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that on this 12 day of November, 2002, I caused a true and correct copy of the within and foregoing document to be served by the method(s) indicated below, and addressed to each of the following:

James P. Speck SPECK & AANESTAD P.O. Box 987 Ketchum, ID 83340 Fax: 208-726-0752	____ ____ ✓ ____	U.S. Mail Overnight Delivery Hand Delivery Facsimile
Blaine County Board of Commissioners Old Blaine County Courthouse 206 1st Avenue South, Suite 300 Hailey, ID 83333 Fax: 208-788-5576	____ ____ ✓ ____	U.S. Mail Overnight Delivery Hand Delivery Facsimile
Idaho Department of Water Resources Southern Regional Office 1341 Fillmore Street Suite 200 Twin Falls, ID 83301-3380 Fax: 208-736-3037	✓ ____ ____ ✓	U.S. Mail Overnight Delivery Hand Delivery Facsimile
Mr. Karl J. Dreher Director Idaho Department of Water Resources 1301 N. Orchard P.O. Box 83720 Boise, ID 83720-0098 Fax 208-327-7866	✓ ____ ____ ✓	U.S. Mail Overnight Delivery Hand Delivery Facsimile

Douglas A. Werth

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JUL 15 2004

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Department of Water Resources

SPECK & AANESTAD
A PROFESSIONAL CORPORATION
ATTORNEYS

120 EAST AVENUE
P. O. BOX 987
KETCHUM, IDAHO 83340

TELEPHONE
(208) 726-4421
FAX (208) 726-0752

JAMES P. SPECK
jimspeck@cox-internet.com

DOUGLAS J. AANESTAD
aanestad@cox-internet.com

November 6, 2002

VIA FACSIMILE - 1-208-327-7866
ORIGINAL WILL FOLLOW BY MAIL
Mr. L. Glen Saxton
Idaho Department of Water Resources
1301 North Orchard Street
Statehouse Mail
Boise ID 83720-9000

Re: In the Matter of Application for Permit No. 37-20742

Dear Glen:

Enclosed for filing in this matter are the original and copy of Applicant's Motion In Limine And To Strike Protestant's First Response to Applicant's Requests for Admissions. Please file the original and have your secretary receipt date stamp the copy, returning it to me in the postage prepaid self-addressed envelope included for that purpose.

I will be out of the office for the remainder of this week, but will be available for an oral argument on this motion anytime on the afternoon of Monday, November 11, 2002 or anytime the following day, November 12, 2002.

Thank you.

Sincerely yours,

SPECK & AANESTAD
A Professional Corporation

By: _____
James P. Speck

JPS:jal
Enclosures
cc: Client (w/encls.)
Allen Merritt (w/encls.)
Doug Werth (w/encls.)

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JUL 15 2004

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NOV 13 2002
DEPARTMENT OF WATER RESOURCES

James P. Speck, Esq., ISB #2067
SPECK & AANESTAD,
A Professional Corporation
Post Office Box 987
Ketchum, Idaho 83340
Telephone (208) 726-4421
Facsimile (208)726-0752
Attorneys for Applicant Robert G. Friedman

BEFORE THE IDAHO DEPARTMENT OF WATER RESOURCES

IN THE MATTER OF APPLICATION FOR PERMIT NO. 37-20742: **Robert G. Friedman, Applicant.** **Blaine County,** **Protestant.**	**APPLICANT'S MOTION IN LIMINE AND TO STRIKE PROTESTANT'S FIRST RESPONSE TO APPLICANT'S REQUESTS FOR ADMISSIONS**

The Applicant, ROBERT G. FRIEDMAN ("Applicant"), by and through his counsel of record, James P. Speck of the law firm of Speck & Aanestad, A Professional Corporation, moves the Department for its Order as follows: (1) Striking Protestant's First Response to Applicant's Requests For Admissions as untimely; (2) precluding the Protestant from introducing any evidence at Hearing regarding those matters deemed admitted; and (3) precluding the Protestant from introducing any evidence at Hearing regarding the validity of Eagle Creek Irrigation Company's Water Right 37-863, a portion of which is the subject of Application for Transfer No. 5748. In support thereof, Applicant respectfully states as follows:

ADMISSIONS

On September 12, 2002, Applicant served counsel for the Protestant with Applicant's First Interrogatories, Request For Documents and Requests for Admissions, set forth below in relevant part as follows:

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JUL 15 2004

REQUESTS FOR ADMISSIONS

Pursuant to the Department's Rule of Procedure 524 (IDAPA 37.01.01.524) and Rule 36 of the Idaho Rules of Civil Procedure, Applicant hereby requests that you answer all of the following requests for admissions within fifteen (15) days from the date of service of this First Request for Admissions upon you.

REQUEST FOR ADMISSION NO. 1. Eagle Creek Irrigation Company is a corporation formed under the law of the State of Idaho.

REQUEST FOR ADMISSION NO. 2. Attached hereto as Exhibit A is a true and correct copy of the Articles of Incorporation of Eagle Creek Irrigation Company.

REQUEST FOR ADMISSION NO. 3. Eagle Creek Irrigation Company is the owner of Water Right No. 37-00863D.

REQUEST FOR ADMISSION NO. 4. Attached hereto as Exhibit B is a true and correct copy of the stock certificate of Eagle Creek Irrigation Company owned by the Applicant.

REQUEST FOR ADMISSION NO. 5. Each share of stock of Eagle Creek Irrigation Company entitled the stockholder to receive 0.02 cfs of water diverted from Eagle Creek to irrigate one acre of land.

REQUEST FOR ADMISSION NO. 6. Providing a standpipe or dry hydrant connected to a pond on Applicant's property, accessible at all times to the Ketchum Rural Fire Protection District, constructed in accordance with the District's specifications and approved by the District, for the purpose of fighting fires, is in the local public interest.

REQUEST FOR ADMISSION NO. 7. The Department has the authority to assign to the Watermaster of Water District 37 the regulation of ground water rights in Basin 37.

REQUEST FOR ADMISSION NO. 8. The Department has the sole and exclusive authority in the State of Idaho for granting permits to divert the waters of the State of Idaho.

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JUL 15 2004

REQUEST FOR ADMISSION NO. 9. The amount of evaporation from an open water surface is the same as the amount of evaportranspiration from an equal area of growing alfalfa

IRCP 36(a) (applicable to these proceedings through IDAPA 37.01.01.525) provides in pertinent part: "A party may serve upon any other party a written request for the admission, for purposes of the pending action only, of the truth of any matters....[E]ach matter of which an admission is requested shall be separately set forth. The matter is ***deemed admitted unless, 15 days after service of the request***, or within such shorter or longer terms as the court may allow, the party to whom the request is directed serves upon the party requesting the admission a written answer or objection addressed to the matter, signed under oath by the party or the party's attorney..."(*Emphasis added).* Thus, pursuant to IRCP 36(a), Protestant's First Response to Applicant's Requests For Admissions was due within fifteen(15) days of service thereof, or on or before September 30, 2002 or those matters were deemed admitted pursuant to the express provisions of that Rule. *I.R.C.P.* 36(a). Protestant's First Response to Applicant's Requests For Admissions were not filed within fifteen (15) days of service thereof or on or before September 30, 2002. Instead, Protestant's First Response to Applicant's Requests For Admissions was untimely filed, nearly three weeks after it was due, on October 17, 2002. Protestant did not obtain leave from the Department or counsel for the Applicant prior to filing this untimely Response.

Pursuant to the express provisions of IRCP 36(a) and Idaho case law, a request is deemed admitted if the party from whom an admission is requested does not timely respond within fifteen (15) days after service thereof. *Deloge v. Cortez*, 131 Idaho 201,205, 953 P.2d 641,644 (Idaho Ct. App., 1998)(Defendants requests for admissions deemed admitted where plaintiff failed to timely respond to requests to admit); *Tomich v. City of Pocatello*, 127 Idaho 394, 400, 901 P.2d 501, 507 (Idaho, 1995)(Where defendant failed to respond to requests to admit within fifteen day statutorily prescribed period, admissions could have been deemed admitted by the court had plaintiff elected

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that remedy); *Wagner v. Carex Investigations Security Inc.*, 93 Nev. 627, 572 P.2d 921 (Nevada, 1977)(The sanction for the late filing of responses to requests to admit is that all matters stated therein are deemed admitted). Moreover, the conclusiveness of matters admitted pursuant to requests to admit applies equally to admissions made affirmatively and those made by default. *Id. See also, Quiring v. Quiring*, 130 Idaho 560,564, 944 P.2d 695, 699 (Idaho, 1997). Finally, Protestant's counsel knew that failure to properly respond within fifteen (15) days would be deemed an admission of the matters set forth in Applicant's Requests for Admissions. As part of Applicant's September 12, 2002 Requests for Admissions, Applicant's counsel included the customary language that a response to the admissions was due within fifteen (15) days, as set forth above.

Therefore, Applicant moves to strike Protestant's First Response to Applicant's Requests for Admissions as untimely and further moves for an Order precluding Protestant from presenting any evidence at Hearing to disprove any of the matters deemed admitted pursuant to the express provisions of Idaho Rule Of Civil Procedure 36(a) and well established case law thereunder.

WATER RIGHT NO. 37-863

The Application for Permit which is the subject of this contested proceeding before the Department seeks a permit to divert groundwater within the Big Wood River Groundwater Management Area. Applicant has included a proposed plan to mitigate the impact on the Big Wood River of groundwater withdrawals pursuant to the requested permit. That plan, as more fully described in the Application, involves the change in nature of use of a portion of Water Right No. 37-863 owned by Eagle Creek Irrigation Company (the "Company"). Applicant is the owner and holder of ten (10) shares of stock in that corporation entitling him to divert water for the irrigation of ten (10) acres. The Company has filed Application for Transfer No. 5748 (the "Transfer Application") to change the nature of the use of a portion of Water Right No. 37-863 from irrigation to recreation and aesthetics to provide mitigation water for the pond and related aspects of the project represented by the pending Application for Permit. Blaine County, the Protestant herein, did not file a protest to that Transfer Application. The Transfer Application is currently being processed through

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JUL 15 2004

the Department's southern regional office.

Notwithstanding the fact that there are no protests to the Transfer Application, the Department in processing that Application must examine the validity of Water Right No. 37-863, including a determination of whether or not all or any portion of that right has been lost due to forfeiture. The permit sought in the present matter will and *must* be conditioned upon the approval of that Transfer Application. The validity of Water Right No. 37-863, and thus the approval of the Transfer Application, are not at issue in this contested matter. The Company is not a party to this contested matter. Water Right No. 37-863 is owned by the Company, not by the Applicant. It is a valuable property right. Furthermore, any contested case before the Department by which Blaine County, the Protestant herein, seeks to deprive the Company of all or any portion of this property right MUST involve the Company as a party to avoid any taking of a valuable property right without due process of law.

The Protestant herein cannot simply turn the Transfer Application (an uncontested administrative proceeding in which the applicant is the Company and is directly involved in any questions raised by the Department as to the validity of its water right) into a contested case solely between the Applicant (Robert G. Friedman) and the Protestant (Blaine County), by challenging the validity of all or any portion of the Company's Water Right No. 37-863 in these proceedings. Therefore, the Applicant is entitled to an order herein precluding Protestant from presenting any evidence at the hearing regarding th validity of Water Right No.37-863.

Oral argument on this Motion is requested at the earliest convenience of the Hearing Officer.

DATED this 6 day of November, 2002.

SPECK & AANESTAD
A Professional Corporation
Attorneys for Plaintiff

By _____
James P. Speck

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JUL 15 2004

CERTIFICATE OF SERVICE

I hereby certify that on the 6 day of November, 2002, I served a true and correct copy of the within and foregoing document upon the persons named below in the manner noted:

Douglas A. Werth, Esq. Post Office Box 2360 Ketchum, ID 83340 FAX (208) 727-6853	☐ United States Mail, Postage Prepaid ☐ Hand Delivery ☑ Facsimile, with copy by United States Mail, Postage Prepaid
Mr. L. Glen Saxton Idaho Department of Water Resources 1301 North Orchard Street Statehouse Mail Boise, Idaho 83720-9000 FAX (208) 327-7866	☐ United States Mail, Postage Prepaid ☐ Hand Delivery ☑ Facsimile, with copy by United States Mail, Postage Prepaid
Mr. Allen Merritt Idaho Department of Water Resources 1341 Fillmore, Suite 200 Twin Falls, ID 83301 FAX (208) 736-3037	☐ United States Mail, Postage Prepaid ☐ Hand Delivery ☑ Facsimile, with copy by United States Mail, Postage Prepaid

J. P. Speck

JAMES P. SPECK

MICROFILMED

JUL 15 2004

SPECK & AANESTAD
A PROFESSIONAL CORPORATION
ATTORNEYS
P. O. Box 987
Ketchum, ID 83340
1-208-726-4421
Fax: 1-208-726-0752

FAX COVER SHEET/MEMO

To:	Mr. Robert G. Friedman L. Glen Saxton Allen Merritt Doug Werth	**Fax Copies:**	
Fax #:	1-323-862-2220 1-208-327-7866 1-208-736-3037 727-6853	**Fax #'s:**	
From:	Jean Latham for James P. Speck	**Pages:**	8, including this cover page
Date:	November 6, 2002		
Subject:	Robert Friedman/Fox Creek Property	**Our File No.**	91/000144

COMMENTS:

THE INFORMATION CONTAINED IN THIS FAX TRANSMISSION IS CONFIDENTIAL INFORMATION INTENDED ONLY FOR THE USE OF THE ABOVE-NAMED RECIPIENT AND MAY BE THE SUBJECT OF ATTORNEY/CLIENT PRIVILEGE. IF THE READER OF THIS MESSAGE IS NOT THE ABOVE-NAMED RECIPIENT, YOU ARE HEREBY NOTIFIED THAT ANY DISTRIBUTION, DISSEMINATION, COPYING OR OTHER USE OF THIS COMMUNICATION IS STRICTLY PROHIBITED AND NO PRIVILEGE IS WAIVED. IF YOU HAVE RECEIVED THIS COMMUNICATION IN ERROR, PLEASE NOTIFY US IMMEDIATELY BY TELEPHONE. THANK YOU.

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JUL 15 2004

SPECK & AANESTAD
A PROFESSIONAL CORPORATION
ATTORNEYS

JAMES P. SPECK
jimspeck@micron.net

DOUGLAS J. AANESTAD
aanestad@micron.net

120 EAST AVENUE
P. O. BOX 987
KETCHUM, IDAHO 83340

TELEPHONE
(208) 726-4421
FAX (208) 726-0752

November 6, 2002

VIA FACSIMILE - 1-208-327-7866
ORIGINAL WILL FOLLOW BY MAIL
Mr. L. Glen Saxton
Idaho Department of Water Resources
1301 North Orchard Street
Statehouse Mail
Boise ID 83720-9000

Re: In the Matter of Application for Permit No. 37-20742

Dear Glen:

Enclosed for filing in this matter are the original and copy of Applicant's Motion In Limine And To Strike Protestant's First Response to Applicant's Requests for Admissions. Please file the original and have your secretary receipt date stamp the copy, returning it to me in the postage prepaid self-addressed envelope included for that purpose.

I will be out of the office for the remainder of this week, but will be available for an oral argument on this motion anytime on the afternoon of Monday, November 11, 2002 or anytime the following day, November 12, 2002.

Thank you.

Sincerely yours,

SPECK & AANESTAD
A Professional Corporation

By: _____
James P. Speck

JPS:jal
Enclosures
cc: Client (w/encls.)
Allen Merritt (w/encls.)
Doug Werth (w/encls.)

[illegible] 5 2004

James P. Speck, Esq., ISB #2067
SPECK & AANESTAD,
A Professional Corporation
Post Office Box 987
Ketchum, Idaho 83340
Telephone (208) 726-4421
Facsimile (208)726-0752
Attorneys for Applicant Robert G. Friedman

BEFORE THE IDAHO DEPARTMENT OF WATER RESOURCES

IN THE MATTER OF APPLICATION FOR PERMIT NO. 37-20742: **Robert G. Friedman, Applicant.** **Blaine County,** **Protestant.**	**APPLICANT'S MOTION IN LIMINE AND TO STRIKE PROTESTANT'S FIRST RESPONSE TO APPLICANT'S REQUESTS FOR ADMISSIONS**

The Applicant, ROBERT G. FRIEDMAN ("Applicant"), by and through his counsel of record, James P. Speck of the law firm of Speck & Aanestad, A Professional Corporation, moves the Department for its Order as follows: (1) Striking Protestant's First Response to Applicant's Requests For Admissions as untimely; (2) precluding the Protestant from introducing any evidence at Hearing regarding those matters deemed admitted; and (3) precluding the Protestant from introducing any evidence at Hearing regarding the validity of Eagle Creek Irrigation Company's Water Right 37-863, a portion of which is the subject of Application for Transfer No. 5748. In support thereof, Applicant respectfully states as follows:

ADMISSIONS

On September 12, 2002, Applicant served counsel for the Protestant with Applicant's First Interrogatories, Request For Documents and Requests for Admissions, set forth below in relevant part as follows:

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REQUESTS FOR ADMISSIONS

Pursuant to the Department's Rule of Procedure 524 (IDAPA 37.01.01.524) and Rule 36 of the Idaho Rules of Civil Procedure, Applicant hereby requests that you answer all of the following requests for admissions within fifteen (15) days from the date of service of this First Request for Admissions upon you.

REQUEST FOR ADMISSION NO. 1. Eagle Creek Irrigation Company is a corporation formed under the law of the State of Idaho.

REQUEST FOR ADMISSION NO. 2. Attached hereto as Exhibit A is a true and correct copy of the Articles of Incorporation of Eagle Creek Irrigation Company.

REQUEST FOR ADMISSION NO. 3. Eagle Creek Irrigation Company is the owner of Water Right No. 37-00863D. — 10

REQUEST FOR ADMISSION NO. 4. Attached hereto as Exhibit B is a true and correct copy of the stock certificate of Eagle Creek Irrigation Company owned by the Applicant.

REQUEST FOR ADMISSION NO. 5. Each share of stock of Eagle Creek Irrigation Company entitled the stockholder to receive 0.02 cfs of water diverted from Eagle Creek to irrigate one acre of land.

REQUEST FOR ADMISSION NO. 6. Providing a standpipe or dry hydrant connected to a pond on Applicant's property, accessible at all times to the Ketchum Rural Fire Protection District, constructed in accordance with the District's specifications and approved by the District, for the purpose of fighting fires, is in the local public interest.

REQUEST FOR ADMISSION NO. 7. The Department has the authority to assign to the Watermaster of Water District 37 the regulation of ground water rights in Basin 37.

REQUEST FOR ADMISSION NO. 8. The Department has the sole and exclusive authority in the State of Idaho for granting permits to divert the waters of the State of Idaho.

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REQUEST FOR ADMISSION NO. 9. The amount of evaporation from an open water surface is the same as the amount of evaportranspiration from an equal area of growing alfalfa

IRCP 36(a) (applicable to these proceedings through IDAPA 37.01.01.525) provides in pertinent part: "A party may serve upon any other party a written request for the admission, for purposes of the pending action only, of the truth of any matters....[E]ach matter of which an admission is requested shall be separately set forth. The matter is ***deemed admitted unless, 15 days after service of the request***, or within such shorter or longer terms as the court may allow, the party to whom the request is directed serves upon the party requesting the admission a written answer or objection addressed to the matter, signed under oath by the party or the party's attorney..."(*Emphasis added).* Thus, pursuant to IRCP 36(a), Protestant's First Response to Applicant's Requests For Admissions was due within fifteen(15) days of service thereof, or on or before September 30, 2002 or those matters were deemed admitted pursuant to the express provisions of that Rule. *I.R.C.P.* 36(a). Protestant's First Response to Applicant's Requests For Admissions were not filed within fifteen (15) days of service thereof or on or before September 30, 2002. Instead, Protestant's First Response to Applicant's Requests For Admissions was untimely filed, nearly three weeks after it was due, on October 17, 2002. Protestant did not obtain leave from the Department or counsel for the Applicant prior to filing this untimely Response.

Pursuant to the express provisions of IRCP 36(a) and Idaho case law, a request is deemed admitted if the party from whom an admission is requested does not timely respond within fifteen (15) days after service thereof. *Delage v. Cortez,* 131 Idaho 201,205, 953 P.2d 641,644 (Idaho Ct. App., 1998)(Defendants requests for admissions deemed admitted where plaintiff failed to timely respond to requests to admit); *Tomich v. City of Pocatello,* 127 Idaho 394, 400, 901 P.2d 501, 507 (Idaho, 1995)(Where defendant failed to respond to requests to admit within fifteen day statutorily prescribed period, admissions could have been deemed admitted by the court had plaintiff elected

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that remedy); *Wagner v. Carex Investigations Security Inc.*, 93 Nev. 627, 572 P.2d 921 (Nevada, 1977)(The sanction for the late filing of responses to requests to admit is that all matters stated therein are deemed admitted). Moreover, the conclusiveness of matters admitted pursuant to requests to admit applies equally to admissions made affirmatively and those made by default. *Id. See also, Quiring v. Quiring*, 130 Idaho 560,564, 944 P.2d 695, 699 (Idaho, 1997). Finally, Protestant's counsel knew that failure to properly respond within fifteen (15) days would be deemed an admission of the matters set forth in Applicant's Requests for Admissions. As part of Applicant's September 12, 2002 Requests for Admissions, Applicant's counsel included the customary language that a response to the admissions was due within fifteen (15) days, as set forth above.

Therefore, Applicant moves to strike Protestant's First Response to Applicant's Requests for Admissions as untimely and further moves for an Order precluding Protestant from presenting any evidence at Hearing to disprove any of the matters deemed admitted pursuant to the express provisions of Idaho Rule Of Civil Procedure 36(a) and well established case law thereunder.

WATER RIGHT NO. 37-863

The Application for Permit which is the subject of this contested proceeding before the Department seeks a permit to divert groundwater within the Big Wood River Groundwater Management Area. Applicant has included a proposed plan to mitigate the impact on the Big Wood River of groundwater withdrawals pursuant to the requested permit. That plan, as more fully described in the Application, involves the change in nature of use of a portion of Water Right No. 37-863 owned by Eagle Creek Irrigation Company (the "Company"). Applicant is the owner and holder of ten (10) shares of stock in that corporation entitling him to divert water for the irrigation of ten (10) acres. The Company has filed Application for Transfer No. 5748 (the "Transfer Application") to change the nature of the use of a portion of Water Right No. 37-863 from irrigation to recreation and aesthetics to provide mitigation water for the pond and related aspects of the project represented by the pending Application for Permit. Blaine County, the Protestant herein, did not file a protest to that Transfer Application. The Transfer Application is currently being processed through

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the Department's southern regional office.

Notwithstanding the fact that there are no protests to the Transfer Application, the Department in processing that Application must examine the validity of Water Right No. 37-863, including a determination of whether or not all or any portion of that right has been lost due to forfeiture. The permit sought in the present matter will and *must* be conditioned upon the approval of that Transfer Application. The validity of Water Right No. 37-863, and thus the approval of the Transfer Application, are not at issue in this contested matter. The Company is not a party to this contested matter. Water Right No. 37-863 is owned by the Company, not by the Applicant. It is a valuable property right. Furthermore, any contested case before the Department by which Blaine County, the Protestant herein, seeks to deprive the Company of all or any portion of this property right MUST involve the Company as a party to avoid any taking of a valuable property right without due process of law.

The Protestant herein cannot simply turn the Transfer Application (an uncontested administrative proceeding in which the applicant is the Company and is directly involved in any questions raised by the Department as to the validity of its water right) into a contested case solely between the Applicant (Robert G. Friedman) and the Protestant (Blaine County), by challenging the validity of all or any portion of the Company's Water Right No. 37-863 in these proceedings. Therefore, the Applicant is entitled to an order herein precluding Protestant from presenting any evidence at the hearing regarding th validity of Water Right No.37-863.

Oral argument on this Motion is requested at the earliest convenience of the Hearing Officer.

DATED this 6 day of November, 2002.

SPECK & AANESTAD
A Professional Corporation
Attorneys for Plaintiff

By _____
James P. Speck

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JUN 15 2004

CERTIFICATE OF SERVICE

I hereby certify that on the 6 day of November, 2002, I served a true and correct copy of the within and foregoing document upon the persons named below in the manner noted:

Douglas A. Werth, Esq.
Post Office Box 2360
Ketchum, ID 83340
FAX (208) 727-6853

- ☐ United States Mail, Postage Prepaid
- ☐ Hand Delivery
- ☑ Facsimile, with copy by United States Mail, Postage Prepaid

Mr. L. Glen Saxton
Idaho Department of Water Resources
1301 North Orchard Street
Statehouse Mail
Boise, Idaho 83720-9000
FAX (208) 327-7866

- ☐ United States Mail, Postage Prepaid
- ☐ Hand Delivery
- ☑ Facsimile, with copy by United States Mail, Postage Prepaid

Mr. Allen Merritt
Idaho Department of Water Resources
1341 Fillmore, Suite 200
Twin Falls, ID 83301
FAX (208) 736-3037

- ☐ United States Mail, Postage Prepaid
- ☐ Hand Delivery
- ☑ Facsimile, with copy by United States Mail, Postage Prepaid

JAMES P. SPECK

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JUL 15 2004

State of Idaho
DEPARTMENT OF WATER RESOURCES
1301 North Orchard Street, Boise, ID 83706 - P.O. Box 83720, Boise, ID 83720-0098
Phone: (208) 327-7900 Fax: (208) 327-7866 Web Site: www.idwr.state.id.us

DIRK KEMPTHORNE
Governor

KARL J. DREHER
Director

November 8, 2002

DOUGLAS A WERTH
BIETER WERTH & WALKER PLLC
PO BOX 2360
KETCHUM ID 83340

Re: In the matter of Application for Permit No. 37-20742 in the name of Robert G. Friedman

Dear Mr. Werth:

Enclosed are the two Subpoenas you requested the department issue for service on Lee Peterson and Everett Davis.

Sincerely,

Deborah J. Gibson

Deborah J. Gibson
Administrative Assistant
Water Allocation Bureau

Encls.
C: James Speck
Blaine County Board of Commissioners
Allen Merritt, IDWR Southern Region

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JUL 15 2004

BEFORE THE DIRECTOR OF THE DEPARTMENT OF WATER RESOURCES

OF THE STATE OF IDAHO

IN THE MATTER OF APPLICATION FOR PERMIT NO. 37-20742 IN THE NAME OF ROBERT G. FRIEDMAN	))))	**SUBPOENA**

THE STATE OF IDAHO TO: EVERETT DAVIS

YOU ARE HEREBY COMMANDED to appear before the Director of the Department of Water Resources at the 3rd Floor Meeting Room of the Old Blaine County Courthouse, 206 1st Avenue South, Hailey, Idaho, on November 13, 2002 at 1:00 p.m. as a witness in the above captioned matter.

DATED this 8th day of November, 2002.

By order of the Director.

KARL J. DREHER, Director

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JUL 15 2004

BEFORE THE DIRECTOR OF THE DEPARTMENT OF WATER RESOURCES

OF THE STATE OF IDAHO

IN THE MATTER OF APPLICATION FOR PERMIT NO. 37-20742 IN THE NAME OF ROBERT G. FRIEDMAN	))))	**SUBPOENA**

THE STATE OF IDAHO TO: LEE R. PETERSON

YOU ARE HEREBY COMMANDED to appear before the Director of the Department of Water Resources at the 3rd Floor Meeting Room of the Old Blaine County Courthouse, 206 1st Avenue South, Hailey, Idaho, on November 13, 2002 at 1:00 p.m. as a witness in the above captioned matter.

DATED this 8th day of November, 2002.

By order of the Director.

KARL J. DREHER, Director

MICROFILMED
JUL 15 2004

IDAHO DEPARTMENT OF
WATER RESOURCES

Fax

To:	Douglas Werth	**From:**	Deborah J. Gibson
Fax:	(208)727-6853	**Date:**	November 8, 2002
Phone:	(208)726-0847	**Pages:**	3
Re:	Permit No. 37-20742 (Friedman)	**CC:**	

☑ **Urgent** ☐ **For Review** ☐ **Please Comment** ☐ **Please Reply** ☐ **Please Recycle**

•**Comments:** Attached are the signed Subpoenas for Lee Peterson and Everett Davis. I am mailing out the originals to you today, however, because of the holiday and weekend you may not get them until the day of the hearing. I hope this fax will suffice for now.

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JUL 15 2004

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Department of Water Resources

Douglas A. Werth
BIETER WERTH & WALKER, PLLC
208 Spruce Avenue, 2nd Floor
P.O. Box 2360
Ketchum, ID 83340
Telephone: 208.726.0847
Facsimile: 208.727.6853
Idaho State Bar No. 3660

Attorneys for Protestant

BEFORE THE DEPARTMENT OF WATER RESOURCES

OF THE STATE OF IDAHO

IN THE MATTER OF APPLICATION FOR PERMIT NO. 37-20742, ROBERT G. FRIEDMAN, Applicant, BLAINE COUNTY, Protestant.	EX PARTE MOTION FOR ISSUANCE OF SUBPOENAS

Protestant Blaine County (hereinafter "County"), by and through its undersigned counsel of record, pursuant to the Rules of Procedure of the Idaho Department of Water Resources, IDAPA 37.01.01.520 and -.525, moves the hearing officer for issuance of subpoenas compelling the appearance of the following witnesses at the hearing to be held in this matter on November 13, 2002, at 1:00 p.m. at the 3rd Floor Meeting Room of the Old Blaine County Courthouse, 206 1st Avenue South, Hailey, Idaho:

2004

Lee R. Peterson Watermaster, Big Wood River P.O. Box T Shoshone, Idaho 83352	Everett Davis Secretary, Eagle Creek Irrig. Co. 30 Eagle Creek Rd. Blaine County, Idaho

The grounds for the motion are that the above witnesses are necessary for protestant Blaine County to provide to the hearing officer all of the pertinent information necessary to evaluate the above-captioned application.

Oral argument is not requested.

DATED this 1st day of November, 2002.

Douglas A. Werth, Attorney for
Protestant Blaine County

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that on this 1st day of November, 2002, I caused a true and correct copy of the within and foregoing document to be served by the method(s) indicated below, and addressed to each of the following:

James P. Speck SPECK & AANESTAD P.O. Box 987 Ketchum, ID 83340 Fax: 208-726-0752	✓	U.S. Mail Overnight Delivery Hand Delivery Facsimile
Blaine County Board of Commissioners Old Blaine County Courthouse 206 1st Avenue South, Suite 300 Hailey, ID 83333 Fax: 208-788-5576	✓	U.S. Mail Overnight Delivery Hand Delivery Facsimile

NOV 15 2002

Idaho Department of Water Resources
Southern Regional Office
1341 Fillmore Street
Suite 200
Twin Falls, ID 83301-3380
Fax: 208-736-3037

✓ U.S. Mail
___ Overnight Delivery
___ Hand Delivery
✓ Facsimile

Mr. Karl J. Dreher
Director
Idaho Department of Water Resources
1301 N. Orchard
P.O. Box 83720
Boise, ID 83720-0098
Fax 208-327-7866

✓ U.S. Mail
___ Overnight Delivery
___ Hand Delivery
✓ Facsimile

Douglas A. Werth

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JUL 25 2006

Douglas A. Werth
BIETER WERTH & WALKER, PLLC
208 Spruce Avenue, 2nd Floor
P.O. Box 2360
Ketchum, ID 83340
Telephone: 208.726.0847
Facsimile: 208.727.6853
Idaho State Bar No. 3660

Attorneys for Protestant

BEFORE THE DEPARTMENT OF WATER RESOURCES
OF THE STATE OF IDAHO

IN THE MATTER OF APPLICATION FOR PERMIT NO. 37-20742 IN THE NAME OF ROBERT G. FRIEDMAN.

SUBPOENA

TO: Lee R. Peterson
Watermaster, Big Wood River
P.O. Box T
Shoshone, Idaho 83352

YOU ARE COMMANDED to appear before the hearing officer of the Idaho Department of Water Resources on **November 13, 2000, at 1:00 p.m.** in the **3rd Floor Meeting Room of the Old Blaine County Courthouse, 206 1st Avenue South, Hailey, Idaho**, to testify as a witness in the agency hearing in the above-captioned action held in accordance with provisions of chapters 2 and 17, Title 42 and Chapter 52, Title 67, Idaho Code, the adopted Rules of Procedure of the department and Water Appropriation Rules 40 and 45.

Be advised that a failure to comply with this subpoena could result in a finding of contempt and/or other legal action.

Given under my hand this _____ day of November, 2002.

IDAHO DEPARTMENT OF WATER RESOURCES

by_____
L. Glen Saxton
Presiding Hearing Officer

MICROFILMED
NOV 15 2002

BIETER WERTH & WALKER PLLC

ATTORNEYS & COUNSELORS AT LAW

WWW.IDAHOATTYS.COM

208 SPRUCE AVENUE NORTH, 2ND FLOOR
POST OFFICE BOX 2360
KETCHUM, IDAHO 83340
TELEPHONE 208.726.0847
FACSIMILE 208. 727.6853

RECEIVED
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Department of Water Resources

November 1, 2002

TO: Honorable L. Glen Saxton
Fax No. 208-327-7866

FROM: Douglas A. Werth

SUBJECT: Application for Permit No. 37-20742 (Robert G. Friedman)

ENCLOSED: Ex Parte Motion For Issuance Of Subpoenas
Subpoena to Lee R. Peterson
Subpoena to Everett Davis

PAGES: 6

COMMENTS:

CONFIDENTIALITY NOTICE: The contents of this fax transmission are confidential, intended only for the use of the above-named recipient, and also may be the subject of attorney-client privilege. Any distribution, dissemination, copying or other use of this communication by anyone other than the above-named recipient is strictly prohibited and no privilege is waived. If you received this fax transmission in error, please notify us at 208-726-0847. Thank you.

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JUL 15 2004

Douglas A. Werth
BIETER WERTH & WALKER, PLLC
208 Spruce Avenue, 2nd Floor
P.O. Box 2360
Ketchum, ID 83340
Telephone: 208.726.0847
Facsimile: 208.727.6853
Idaho State Bar No. 3660

Attorneys for Protestant

BEFORE THE DEPARTMENT OF WATER RESOURCES

OF THE STATE OF IDAHO

IN THE MATTER OF APPLICATION FOR PERMIT NO. 37-20742, ROBERT G. FRIEDMAN, Applicant, BLAINE COUNTY, Protestant.	EX PARTE MOTION FOR ISSUANCE OF SUBPOENAS

Protestant Blaine County (hereinafter "County"), by and through its undersigned counsel of record, pursuant to the Rules of Procedure of the Idaho Department of Water Resources, IDAPA 37.01.01.520 and -.525, moves the hearing officer for issuance of subpoenas compelling the appearance of the following witnesses at the hearing to be held in this matter on November 13, 2002, at 1:00 p.m. at the 3rd Floor Meeting Room of the Old Blaine County Courthouse, 206 1st Avenue South, Hailey, Idaho:

JUL 1 5 2004

Lee R. Peterson
Watermaster, Big Wood River
P.O. Box T
Shoshone, Idaho 83352

Everett Davis
Secretary, Eagle Creek Irrig. Co.
30 Eagle Creek Rd.
Blaine County, Idaho

The grounds for the motion are that the above witnesses are necessary for protestant Blaine County to provide to the hearing officer all of the pertinent information necessary to evaluate the above-captioned application.

Oral argument is not requested.

DATED this 1st day of November, 2002.

Douglas A. Werth, Attorney for
Protestant Blaine County

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that on this 1st day of November, 2002, I caused a true and correct copy of the within and foregoing document to be served by the method(s) indicated below, and addressed to each of the following:

James P. Speck
SPECK & AANESTAD
P.O. Box 987
Ketchum, ID 83340
Fax: 208-726-0752

✓ U.S. Mail
____ Overnight Delivery
____ Hand Delivery
____ Facsimile

Blaine County Board of Commissioners
Old Blaine County Courthouse
206 1st Avenue South, Suite 300
Hailey, ID 83333
Fax: 208-788-5576

✓ U.S. Mail
____ Overnight Delivery
____ Hand Delivery
____ Facsimile

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JUL 15 2004

Idaho Department of Water Resources
Southern Regional Office
1341 Fillmore Street
Suite 200
Twin Falls, ID 83301-3380
Fax: 208-736-3037

✓ U.S. Mail
___ Overnight Delivery
___ Hand Delivery
✓ Facsimile

Mr. Karl J. Dreher
Director
Idaho Department of Water Resources
1301 N. Orchard
P.O. Box 83720
Boise, ID 83720-0098
Fax 208-327-7866

✓ U.S. Mail
___ Overnight Delivery
___ Hand Delivery
✓ Facsimile

Douglas A. Werth

JUL 15 2004

Douglas A. Werth
BIETER WERTH & WALKER, PLLC
208 Spruce Avenue, 2nd Floor
P.O. Box 2360
Ketchum, ID 83340
Telephone: 208.726.0847
Facsimile: 208.727.6853
Idaho State Bar No. 3660

Attorneys for Protestant

BEFORE THE DEPARTMENT OF WATER RESOURCES
OF THE STATE OF IDAHO

IN THE MATTER OF APPLICATION FOR PERMIT NO. 37-20742 IN THE NAME OF ROBERT G. FRIEDMAN.	**SUBPOENA**

TO: Lee R. Peterson
Watermaster, Big Wood River
P.O. Box T
Shoshone, Idaho 83352

YOU ARE COMMANDED to appear before the hearing officer of the Idaho Department of Water Resources on **November 13, 2000, at 1:00 p.m.** in the **3rd Floor Meeting Room of the Old Blaine County Courthouse, 206 1st Avenue South, Hailey, Idaho**, to testify as a witness in the agency hearing in the above-captioned action held in accordance with provisions of chapters 2 and 17, Title 42 and Chapter 52, Title 67, Idaho Code, the adopted Rules of Procedure of the department and Water Appropriation Rules 40 and 45.

Be advised that a failure to comply with this subpoena could result in a finding of contempt and/or other legal action.

Given under my hand this _____ day of November, 2002.

IDAHO DEPARTMENT OF WATER RESOURCES

by_____
L. Glen Saxton
Presiding Hearing Officer

JUL 15 2004

Douglas A. Werth
BIETER WERTH & WALKER, PLLC
208 Spruce Avenue, 2nd Floor
P.O. Box 2360
Ketchum, ID 83340
Telephone: 208.726.0847
Facsimile: 208.727.6853
Idaho State Bar No. 3660

Attorneys for Protestant

BEFORE THE DEPARTMENT OF WATER RESOURCES
OF THE STATE OF IDAHO

IN THE MATTER OF APPLICATION FOR PERMIT NO. 37-20742 IN THE NAME OF ROBERT G. FRIEDMAN.	**SUBPOENA**

TO: Everett Davis
Secretary, Eagle Creek Irrigation Co.
30 Eagle Creek Rd.
Blaine County, Idaho

YOU ARE COMMANDED to appear before the hearing officer of the Idaho Department of Water Resources on **November 13, 2000, at 1:00 p.m.** in the **3rd Floor Meeting Room of the Old Blaine County Courthouse, 206 1st Avenue South, Hailey, Idaho,** to testify as a witness called by Protestant Blaine County in the agency hearing in the above-captioned action held in accordance with provisions of chapters 2 and 17, Title 42 and Chapter 52, Title 67, Idaho Code, the adopted Rules of Procedure of the department and Water Appropriation Rules 40 and 45.

Be advised that a failure to comply with this subpoena could result in a finding of contempt and/or other legal action.

Given under my hand this _____ day of November, 2002.

IDAHO DEPARTMENT OF WATER RESOURCES

by_____
L. Glen Saxton
Presiding Hearing Officer

JUL 15 2004

SPECK & AANESTAD
A PROFESSIONAL CORPORATION
ATTORNEYS
120 EAST AVENUE
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jimspeck@cox-internet.com
DOUGLAS J. AANESTAD
aanestad@cox-internet.com

TELEPHONE
(208) 726-4421
FACSIMILE
(208) 726-0752

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NOV - 6 2002
Department of Water Resources

November 4, 2002

Mr. L. Glen Saxton
Idaho Department of Water Resources
1301 North Orchard Street
Statehouse Mail
Boise ID 83720-9000

Re: In the Matter of Application for Permit No. 37-20742

Dear Glen:

Enclosed are the originals and one copy each of the Applicant's Witness List and Exhibit List for this matter. For the sake of saving paper, I have not included copies of the Exhibits with the copy of the Exhibit List. Please have your office receipt date stamp the copies of the Witness List and Exhibit List and return them to me in the postage prepaid, self-addressed envelope I have included for that purpose.

– done 11/6/02 dg

Thank you.

Sincerely yours,

SPECK & AANESTAD
A Professional Corporation

By: _____
James P. Speck

JPS:jal
Enclosures
cc: Client (w/encls.)
Chuck Brockway (w/encls.)
Doug Werth (w/encls.)

NOV 15 2002

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Department of Water Resources

James P. Speck, Esq., ISB #2067
SPECK & AANESTAD,
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Post Office Box 987
Ketchum, Idaho 83340
Telephone (208) 726-4421
Facsimile (208)726-0752

Attorneys for Applicant Robert G. Friedman

BEFORE THE IDAHO DEPARTMENT OF WATER RESOURCES

IN THE MATTER OF APPLICATION FOR PERMIT NO. 37-20742:	
Robert G. Friedman, Applicant.	**WITNESS LIST**
Blaine County,	
Protestant.	

Applicant, Robert G. Friedman, submits the following list of witnesses he may call at the hearing:

1. Robert G. Friedman, if called to testify at the hearing, will describe the residential project he intends to build on his property north of Ketchum, Idaho, if the Application for Permit is approved in this manner.

2. James Ruscitto, if called to testify at the hearing, will describe his experience as an architect in Blaine County, Idaho and provide estimates of the costs of construction of the improvements to be made on the Applicant's property and the economic benefit thereof to the local community.

3. Brian Ros, if called to testify at the hearing, will describe his experience as a landscape contractor in Blaine County, Idaho and provide estimates of the cost of construction of the ponds, streams and related landscaping for the Applicant's property if the Application for Permit is

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JUL 15 2004

approved.

4. Dr. Charles E. Brockway, if called to testify at the hearing, will testify as an expert witness giving his opinions that the use of water proposed by the Application for Permit will not reduce the quantity of water under any existing water rights, that the water supply is itself sufficient for the use of water proposed by the Application for Permit, that the use of water proposed by the Application for Permit will not adversely affect the water quality of any surface water or groundwater, that the use of water proposed by the Application for Permit will not change the temperature of any groundwater or surface water and that the use of water proposed by the Application for Permit is not contrary to the conservation of water resources within the state of Idaho.

5. Lee Peterson, Watermaster for Water Districts 37 and 37M, if called to testify at the hearing, will state his recommendation for this Application for Permit and the grounds therefor.

6. Any witness identified as a witness by the Protestant.

Dated this 4 day of November, 2002.

SPECK & AANESTAD
A Professional Corporation
Attorneys for Applicant

By _____
James P. Speck

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JUL 15 2004

CERTIFICATE OF SERVICE

I hereby certify that on the 4 day of November, 2002, I served a true and correct copy of the within and foregoing document upon the persons named below in the manner noted:

Douglas A. Werth, Esq. Post Office Box 2360 Ketchum, ID 83340 FAX (208) 727-6853	☑	United States Mail, Postage Prepaid
	☐	Hand Delivery
	☐	Facsimile, with copy by United States Mail, Postage Prepaid
Mr. L. Glen Saxton Idaho Department of Water Resources 1301 North Orchard Street Statehouse Mail Boise, Idaho 83720-9000 FAX (208) 327-7866	☑	United States Mail, Postage Prepaid
	☐	Hand Delivery
	☐	Facsimile, with copy by United States Mail, Postage Prepaid
Mr. Allen Merritt Idaho Department of Water Resources 1341 Fillmore, Suite 200 Twin Falls, ID 83301 FAX (208) 736-3037	☑	United States Mail, Postage Prepaid
	☐	Hand Delivery
	☐	Facsimile, with copy by United States Mail, Postage Prepaid

JAMES P. SPECK

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Telephone (208) 726-4421
Facsimile (208)726-0752

Attorneys for Applicant Robert G. Friedman

BEFORE THE IDAHO DEPARTMENT OF WATER RESOURCES

IN THE MATTER OF APPLICATION FOR PERMIT NO. 37-20742:	)	
Robert G. Friedman, Applicant.	)	**EXHIBIT LIST**
Blaine County,	)	
Protestant.	)	

Applicant, Robert G. Friedman, submits the following list of exhibits which he may offer at the hearing:

1. Those documents attached hereto as Exhibits 1 through 15.
2. Any exhibit submitted by the Protestant.
3. Any document contained in the IDWR file for this Application for Permit.

Dated this 4 day of November, 2002.

SPECK & AANESTAD
A Professional Corporation
Attorneys for Applicant

By _____
James P. Speck

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JUL 15 2004

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Twin Falls, ID 83301
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JAMES P. SPECK

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JUL 15 2004

BIETER WERTH & WALKER PLLC

ATTORNEYS & COUNSELORS AT LAW

WWW.IDAHOATTYS.COM

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KETCHUM, IDAHO 83340
TELEPHONE 208.726.0847
FACSIMILE 208. 727.6853

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Department of Water Resources

November 4, 2002

TO: Honorable L. Glen Saxton
Fax No. 208-327-7866

FROM: Douglas A. Werth

SUBJECT: Application for Permit No. 37-20742 (Robert G. Friedman)

ENCLOSED: Protestant Blaine County's Witness List
Protestant Blaine County's Exhibit List

PAGES: 5

COMMENTS:

Witness and Exhibit Lists with enclosed documents to follow by mail.

cc/encls: James Speck
Blaine County Board of Commissioners

CONFIDENTIALITY NOTICE: The contents of this fax transmission are confidential, intended only for the use of the above-named recipient, and also may be the subject of attorney-client privilege. Any distribution, dissemination, copying or other use of this communication by anyone other than the above-named recipient is strictly prohibited and no privilege is waived. If you received this fax transmission in error, please notify us at 208-726-0847. Thank you.

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JUL 15 2004

PROTESTANT BLAINE COUNTY'S WITNESS LIST

	WITNESSES
1	**Leonard Harlig, Former Blaine County Commissioner** Testimony concerning formulation of Blaine County Local Interest Water Policy; personal knowledge of water issues and availability in Eagle Creek vicinity; foundation for photographs
2	**Mary Ann Mix, Chairman of Blaine County Board of Commissioners** Testimony concerning formulation of Blaine County Local Interest Water Policy
3	**Dennis Wright, Blaine County Board of Commissioners** Testimony concerning formulation of Blaine County Local Interest Water Policy
4	**Lee Peterson, Watermaster** Testimony concerning management of Eagle Creek decreed water rights; priority cut-offs for the prior ten years (not confirmed)
5	**Everett Davis (or other corporate designee), Eagle Creek Irrigation Company** Testimony concerning Eagle Creek decreed water rights, duties, if any, with respect to Eagle Creek, knowledge concerning the flows of Eagle Creek, the shares of the Eagle Creek Irrigation Co., uses of water relating to the Eagle Creek Irrigation Co. (not confirmed)
6	**Records Custodian, Eagle Creek Irrigation Company** As necessary
7	**Records Custodian, Blaine County Clerk-Recorder** As necessary

NOV 05 2004

PROTESTANT BLAINE COUNTY'S LIST OF EXHIBITS

Ex.	Description of Exhibits
A	Order of the Department dated June 28, 1991 designating the Big Wood River Ground Water Management Area
B	"Management Policy for the Big Wood River Ground Water Management Area" dated June 28, 1991
C	Idaho Department of Water Resources memorandum dated January 22, 1980 from C. Stephen Allred to Staff re: "Big Wood River Appropriations"
D	Idaho Department of Water Resources memorandum dated February 1, 1980 from Dave Tuthill to Bob Fleenor re: "Director's Memos on the Boise River and Big Wood River Drainages"
E	Letter dated July 13, 2000 from Nick Purdy to Mary Ann Mix, Chairman of Blaine County Board of Commissioners re: "Drought Disaster Declaration"
F	Letter dated July 17, 2000 from Blaine County Board of Commissioners to the Honorable Dirk Kempthorne, Governor of the State of Idaho, re: "Drought Disaster Declaration for Blaine County"
G	Order Declaring Drought Emergency dated July 18, 2000 of Karl J. Dreher, Director of Idaho Department of Water Resources and the Honorable Dirk Kempthorne, Governor of the State of Idaho
H	Idaho Department of Water Resources letter dated August 26, 1996 from Allen Merritt, Southern Regional Manager, to Blaine County Board of Commissioners re: "Use of Water in Blaine County for Aesthetic Purposes"
I	Blaine County Resolution 98-1 dated January 26, 1998 adopting a Blaine County Local Public Interest Water Policy
J	Title 8, Chapter 3, Blaine County Code codifying the Blaine County Local Public Interest Water Policy

JUL 15 2004

K	Final Order dated November 25, 1998 In the Matter of Applications for Transfer No. 5174 in the name of Dennis M. Baker and No. 5175 in the name of Huf-N-Puf Trust
L	Order Declaring Drought Emergency dated April 19, 2001 of Karl J. Dreher, Director of Idaho Department of Water Resources, and the Honorable Dirk Kempthorne, Governor of the State of Idaho
M	Order Declaring Drought Emergency dated May 13, 2002 of Karl J. Dreher, Director of Idaho Department of Water Resources, and the Honorable Dirk Kempthorne, Governor of the State of Idaho
N	Photographs
O	Topographic Map – USGS (Amber Lakes, Idaho)
P	Aerial Vicinity Photograph
Q	Tax Lot Vicinity Map
R	Blaine County Comprehensive Plan
S	Minutes of Blaine County Board of Commissioners' meeting held January 26, 1998, adopting Resolution 98-1
T	Winslow v. Chapman Decree
U	Eagle Creek Irrigation Company, Certificate of Incorporation
V	Articles of Incorporation of Eagle Creek Irrigation Company
W	By-Laws of Eagle Creek Irrigation Company
X	Shares of Eagle Creek Irrigation Company (Friedman)
Y	Compilation of Priority Cuts on the Big Wood River above Magic Reservoir for years 1992 through 2002 (from official records of IDWR)

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Z	Letter dated December 22, 1997, to Board of County Commissioners from Norman C. Young – County will request Judicial Notice of Protestant's Exhibit "L" in Baker – Huf-N-Puf Applications
AA	U.S. Geological Survey Report 89-4018 titled "Water Resources of the Upper Big Wood River Basin, Idaho" – County will request Judicial Notice of Protestant's Exhibit "AA" in Baker – Huf-N-Puf Applications
AB	Phase 1, Final Report titled "Hydrologic Evaluation of the Big Wood River and Silver Creek Watershed" dated November 1994 County will request Judicial Notice of Protestant's Exhibit "AB" in Baker – Huf-N-Puf Applications

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Southern Region

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Facsimile (208)726-0752

Attorneys for Applicant Robert G. Friedman

BEFORE THE IDAHO DEPARTMENT OF WATER RESOURCES

IN THE MATTER OF APPLICATION FOR PERMIT NO. 37-20742: **Robert G. Friedman, Applicant.** **Blaine County,** **Protestant.**	**SECOND EXHIBIT LIST**

Applicant, Robert G. Friedman, submits the following list of exhibits which he may offer at the hearing:

1. Those documents attached hereto as Exhibits 16 through 18.

Dated this 12 day of November, 2002.

SPECK & AANESTAD
A Professional Corporation
Attorneys for Applicant

By _____
James P. Speck

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JUL 15 2004

CERTIFICATE OF SERVICE

I hereby certify that on the 12 day of November, 2002, I served a true and correct copy of the within and foregoing document upon the persons named below in the manner noted:

Douglas A. Werth, Esq.
Post Office Box 2360
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FAX (208) 727-6853

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Mr. L. Glen Saxton
Idaho Department of Water Resources
1301 North Orchard Street
Statehouse Mail
Boise, Idaho 83720-9000
FAX (208) 327-7866

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Mr. Allen Merritt
Idaho Department of Water Resources
1341 Fillmore, Suite 200
Twin Falls, ID 83301
FAX (208) 736-3037

- ☐ United States Mail, Postage Prepaid
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JAMES P. SPECK

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Friedman Property

Flow Measurements-Eagle Creek Irrig. Dist. Ditch to Property

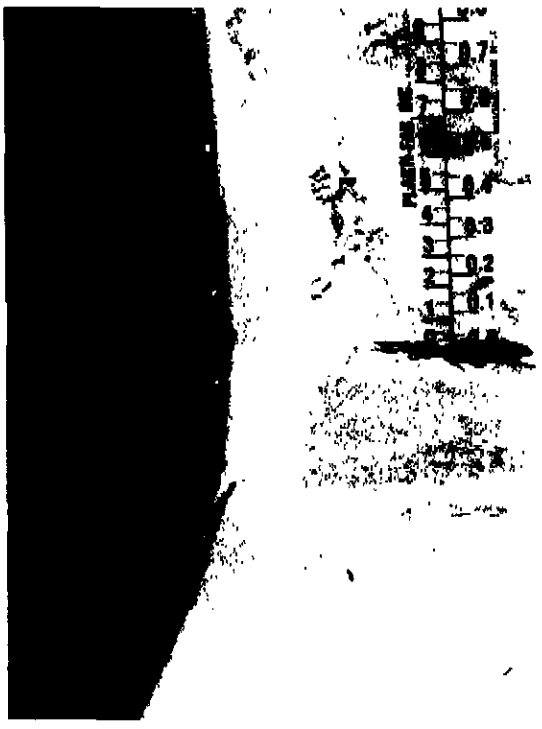
Flow measurements made with a calibrated trapazoidal weir
by Brockway Engineering

Date	Time	Head	Discharge		Photo
		ft	cfs	miners inches	
8/2/00	5:00pm	0.52	0.33	16.5	x
7/19/00		0.43	0.22	11.0	x
7/26/02	3:30pm	0.39	0.18	9.0	
9/26/02		0.39	0.18	9.0	x

EXHIBIT-16-1
JUL 15 2004

Friedman Ditch Water Measurement
September 26, 2002





Flow = 0.18 cfs

Brockway Engineering, PLLC
November 2002

MICRO
JUL 15 2003
EXHIBIT - 16-2

Friedman Ditch Water Measurement
July 19, 2000



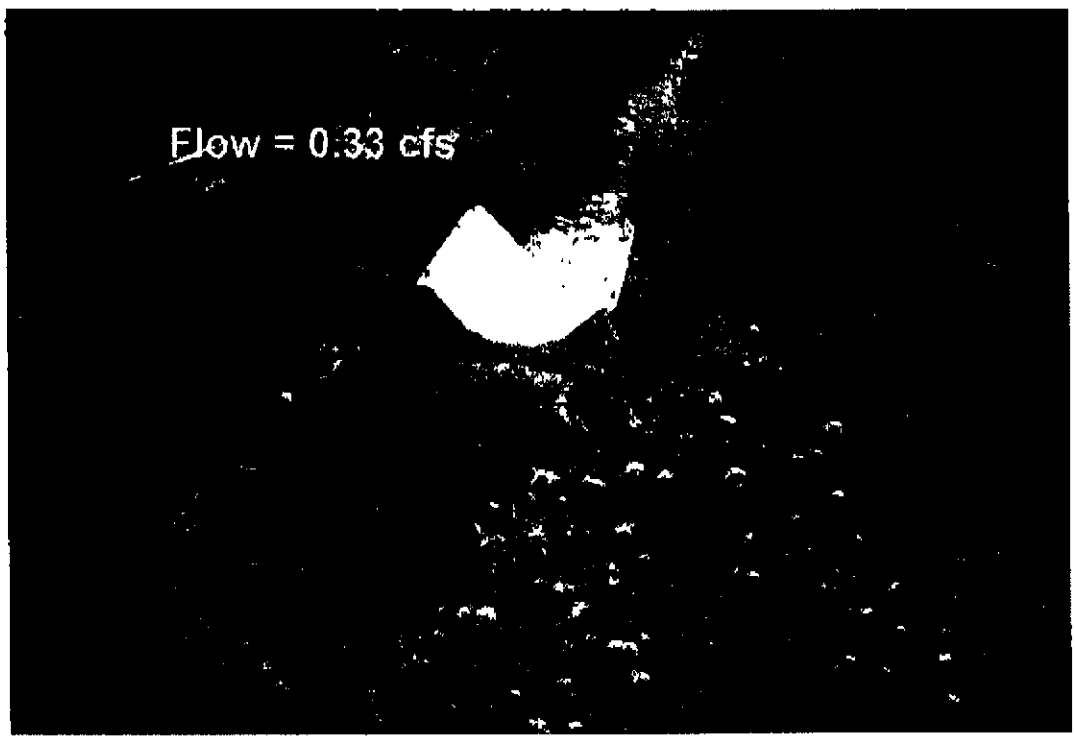
Brockway Engineering, PLLC
November 2002

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EXHIBIT - 16-3

Friedman Ditch Water Measurement
August 2, 2000





Brockway Engineering, PLLC
November 2002

MICRO... JUL 15 2004 EXHIBIT - 16-4

Eagle Cre[redacted]rigation Company - Section 14 and 2[redacted]N, R17E
Amended Irrigation Claim - Place of Use, Acreage and Points of Diversions
Figure One



SCALE 1:11,000
One inch = 900 feet

900 0 900 1800 2700 3600 Feet

N

NOTE: Points of diversion noted along Eagle Creek (EC)

Rectified FSA Aerial Photos, 1999
Brockway Engineering, PLLC
Revised May, 2002

[redacted] 2004

EXHIBIT-17

Eagle Creek Irrigation Company - Section 14 and 23, T5N, R17E
Present Ditch Diversion System
Figure Two



SCALE 1:10,800
One inch = 900 feet

N

1000 0 1000 Feet

Ponds

Pickrell Ditch
Main Ditch
West Ditch
Present Property Lines
Diversions by ECIC Members

Rectified FSA Aerial Photos, 1999
Brockway Engineering, PLLC
Revised May, 2002

JUL 15 2002

EXHIBIT - 18

BIETER WERTH & WALKER PLLC

ATTORNEYS & COUNSELORS AT LAW

WWW.IDAHOATTYS.COM

208 SPRUCE AVENUE NORTH, 2ND FLOOR
POST OFFICE BOX 2360
KETCHUM, IDAHO 83340
TELEPHONE 208.726.0847
FACSIMILE 208. 727.6853

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Department of Water Resources
Southern Region

November 12, 2002

TO: Idaho Department of Water Resorces
Fax No. 208-736-3037

FROM: Douglas A. Werth

SUBJECT: Application of Friedman (37-20742)

ENCLOSED: Protestant's Notice Of Service Of Second Response To Requests For Discovery

PAGES: 3

COMMENTS:

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JUL 15 2004

Douglas A. Werth
BIETER WERTH & WALKER, PLLC
208 Spruce Avenue, 2nd Floor
P.O. Box 2360
Ketchum, ID 83340
Telephone: 208.726.0847
Facsimile: 208.727.6853
Idaho State Bar No. 3660

Attorneys for Protestant

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Department of Water Resources
Southern Region

BEFORE THE DEPARTMENT OF WATER RESOURCES

OF THE STATE OF IDAHO

IN THE MATTER OF APPLICATION FOR PERMIT NO. 37-20742, ROBERT G. FRIEDMAN, Applicant, BLAINE COUNTY, Protestant.	PROTESTANT'S NOTICE OF SERVICE OF SECOND RESPONSE TO REQUESTS FOR DISCOVERY

Protestant Blaine County (hereinafter "County"), by and through its undersigned counsel of record, pursuant to the Rules of Procedure of the Idaho Department of Water Resources, IDAPA 37.01.01.000 *et seq.*, provides notice to the Department that on October 17, 2002, it served its "PROTESTANT'S SECOND RESPONSE TO INTERROGATORIES AND REQUESTS FOR PRODUCTION" by hand-delivering the original and one copy of each such response at the law offices of Applicant's attorney of record as indicated in the certificate of service below.

JUL 15 2004

DATED this 12 day of November, 2002.

Douglas A. Werth, Attorney for
Protestant Blaine County

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that on this 12 day of November, 2002, I caused a true and correct copy of the within and foregoing document to be served by the method(s) indicated below, and addressed to each of the following:

James P. Speck SPECK & AANESTAD P.O. Box 987 Ketchum, ID 83340 Fax: 208-726-0752	____ ____ ✓ ____	U.S. Mail Overnight Delivery Hand Delivery Facsimile
Blaine County Board of Commissioners Old Blaine County Courthouse 206 1st Avenue South, Suite 300 Hailey, ID 83333 Fax: 208-788-5576	____ ____ ✓ ____	U.S. Mail Overnight Delivery Hand Delivery Facsimile
Idaho Department of Water Resources Southern Regional Office 1341 Fillmore Street Suite 200 Twin Falls, ID 83301-3380 Fax: 208-736-3037	✓ ____ ____ ✓	U.S. Mail Overnight Delivery Hand Delivery Facsimile
Mr. Karl J. Dreher Director Idaho Department of Water Resources 1301 N. Orchard P.O. Box 83720 Boise, ID 83720-0098 Fax 208-327-7866	____ ____ ____ ✓	U.S. Mail Overnight Delivery Hand Delivery Facsimile

Douglas A. Werth

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Department of Water Resources

James P. Speck, Esq., ISB #2067
SPECK & AANESTAD,
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Ketchum, Idaho 83340
Telephone (208) 726-4421
Facsimile (208)726-0752

Attorneys for Applicant Robert G. Friedman

BEFORE THE IDAHO DEPARTMENT OF WATER RESOURCES

IN THE MATTER OF APPLICATION FOR PERMIT NO. 37-20742:	
Robert G. Friedman, Applicant.	**SECOND EXHIBIT LIST**
Blaine County,	
Protestant.	

Applicant, Robert G. Friedman, submits the following list of exhibits which he may offer at the hearing:

1. Those documents attached hereto as Exhibits 16 through 18.

Dated this 12 day of November, 2002.

SPECK & AANESTAD
A Professional Corporation
Attorneys for Applicant

By _____
James P. Speck

JUL 15 2004

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Mr. L. Glen Saxton
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- ☑ Facsimile, with copy by United States Mail, Postage Prepaid

JAMES P. SPECK

JUL 15 2004

Friedman Property

Flow Measurements-Eagle Creek Irrig. Dist. Ditch to Property

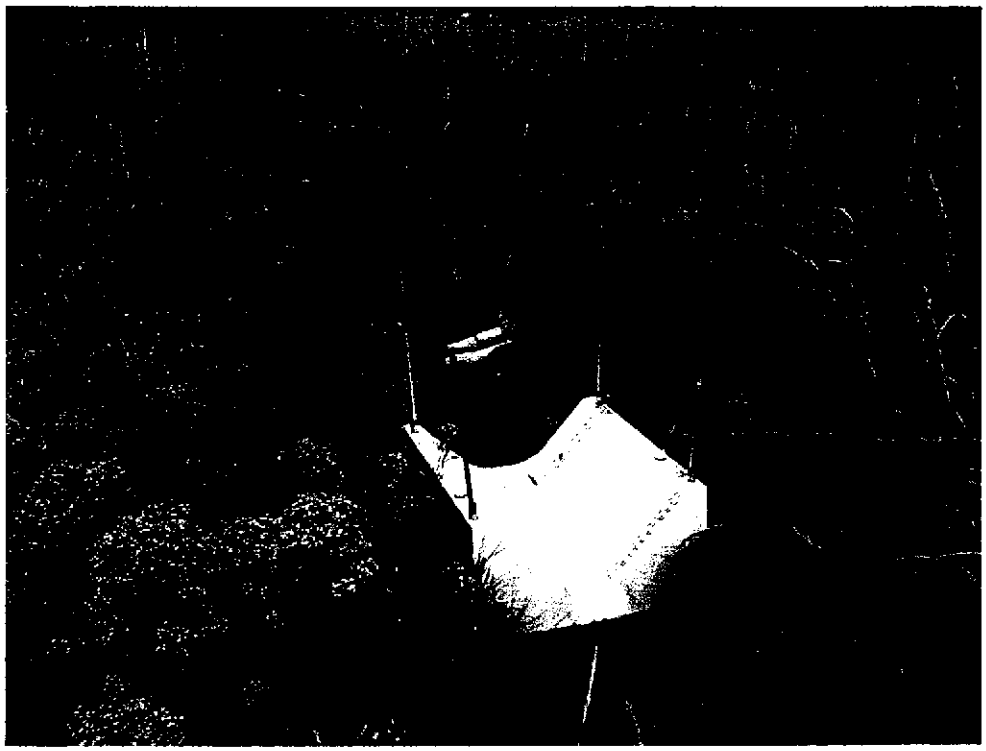
Flow measurements made with a calibrated trapazoidal weir
by Brockway Engineering

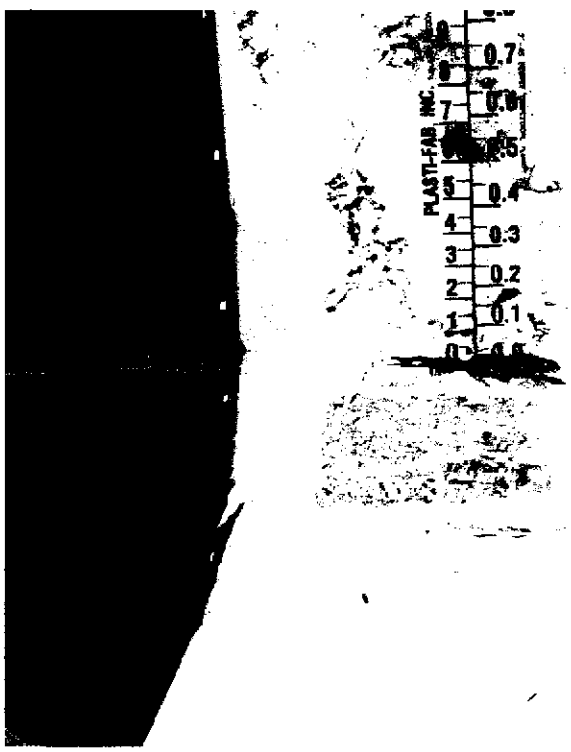
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9/26/02		0.39	0.18	9.0	x

JUL 15 2003

EXHIBIT-16-1

Friedman Ditch Water Measurement
September 26, 2002





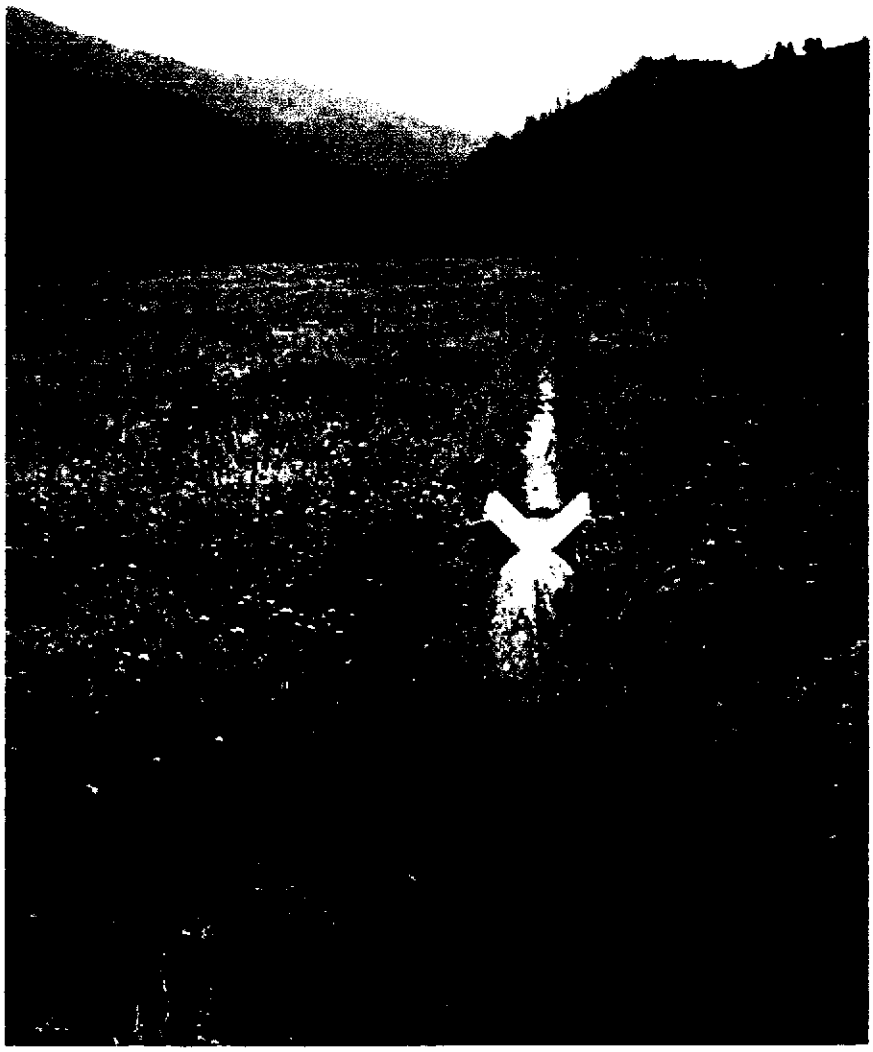
Flow = 0.18 cfs

Brockway Engineering, PLLC
November 2002

JUL 15 2004

EXHIBIT - 16-2

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July 19, 2000

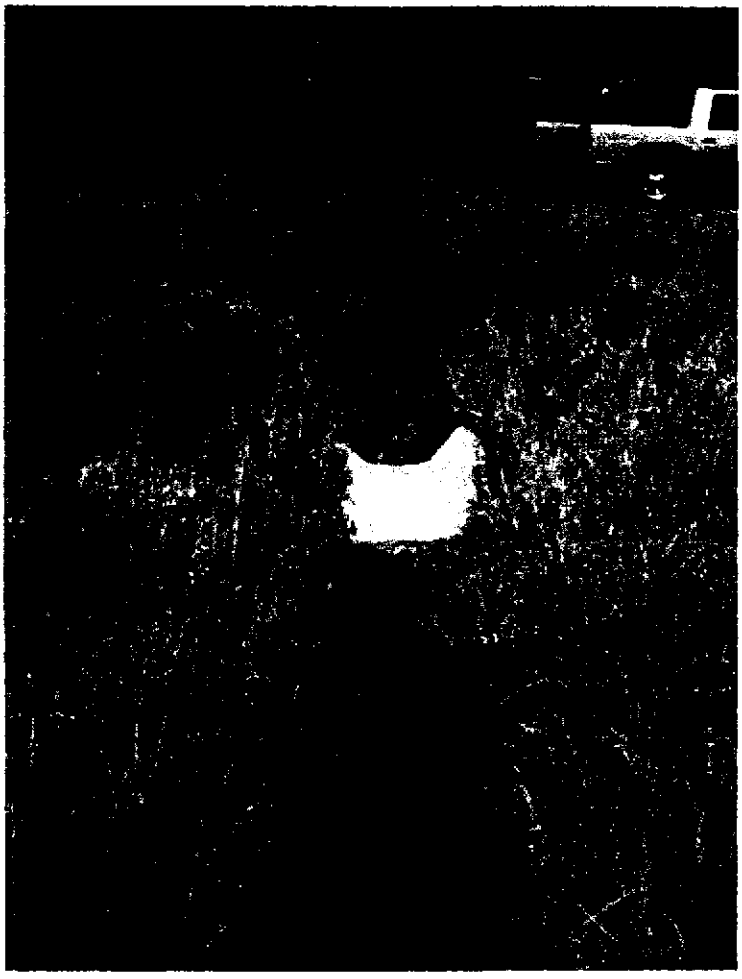


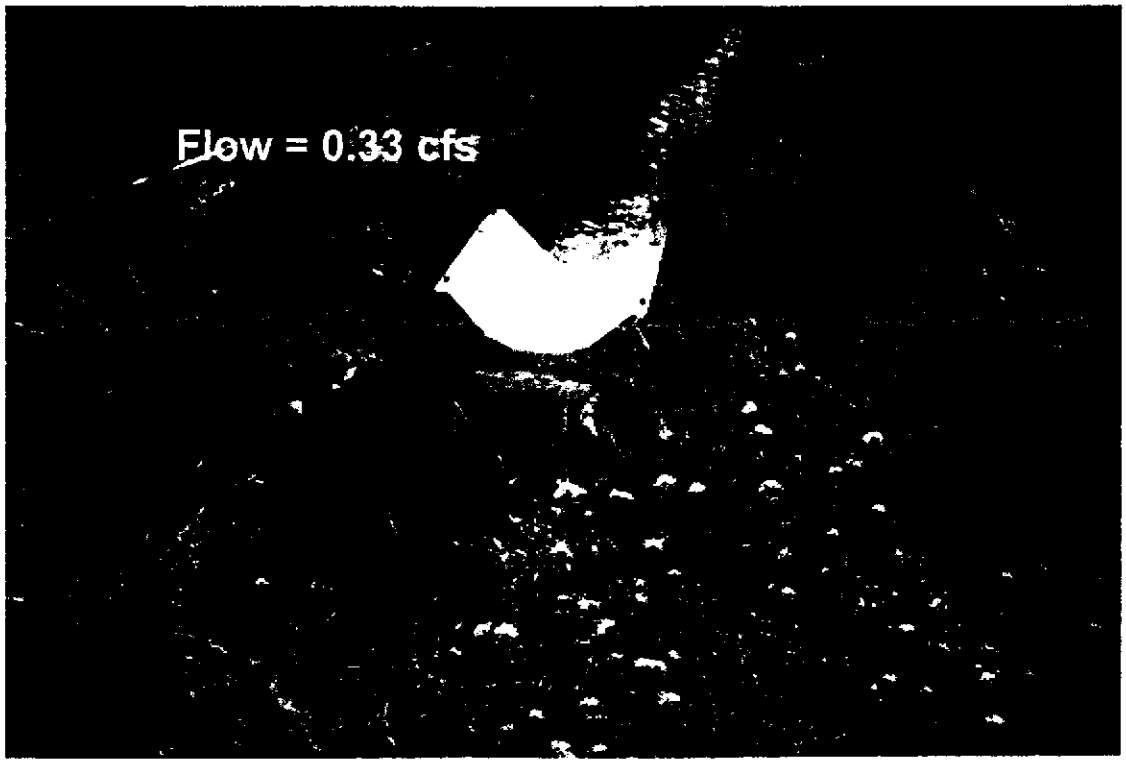
Brockway Engineering, PLLC
November 2002

JUL 1 5 2004

EXHIBIT - 16-3

Friedman Ditch Water Measurement
August 2, 2000



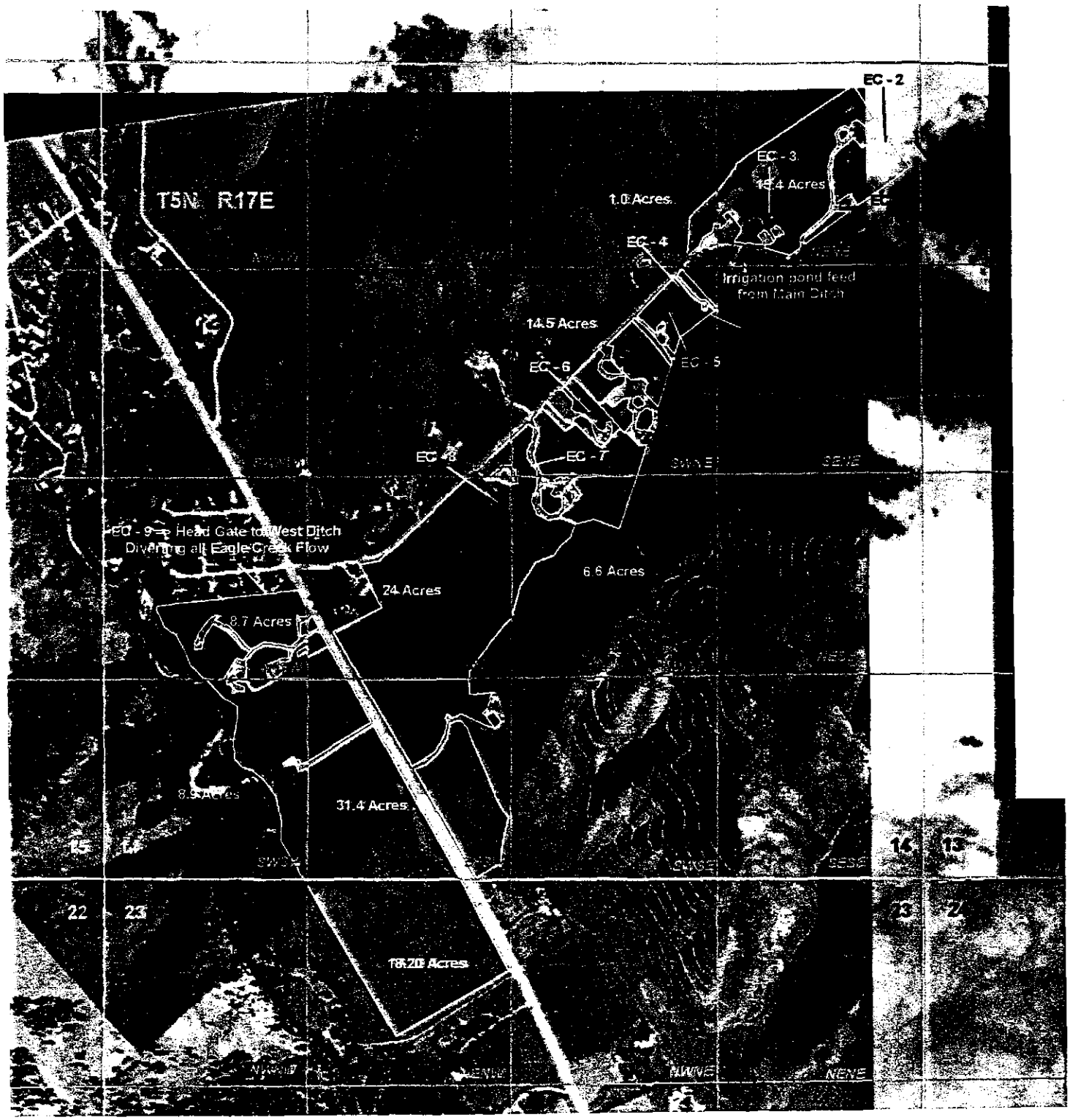


Brockway Engineering, PLLC
November 2002

JUL 1 5 2004

EXHIBIT - 16-4

Eagle Creek Irrigation Company - Section 14 and 15 T5N, R17E
Amended Irrigation Claim - Place of Use, Acreage and Points of Diversions
Figure One



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One inch = 900 feet

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NOTE: Points of diversion noted along Eagle Creek (EC)

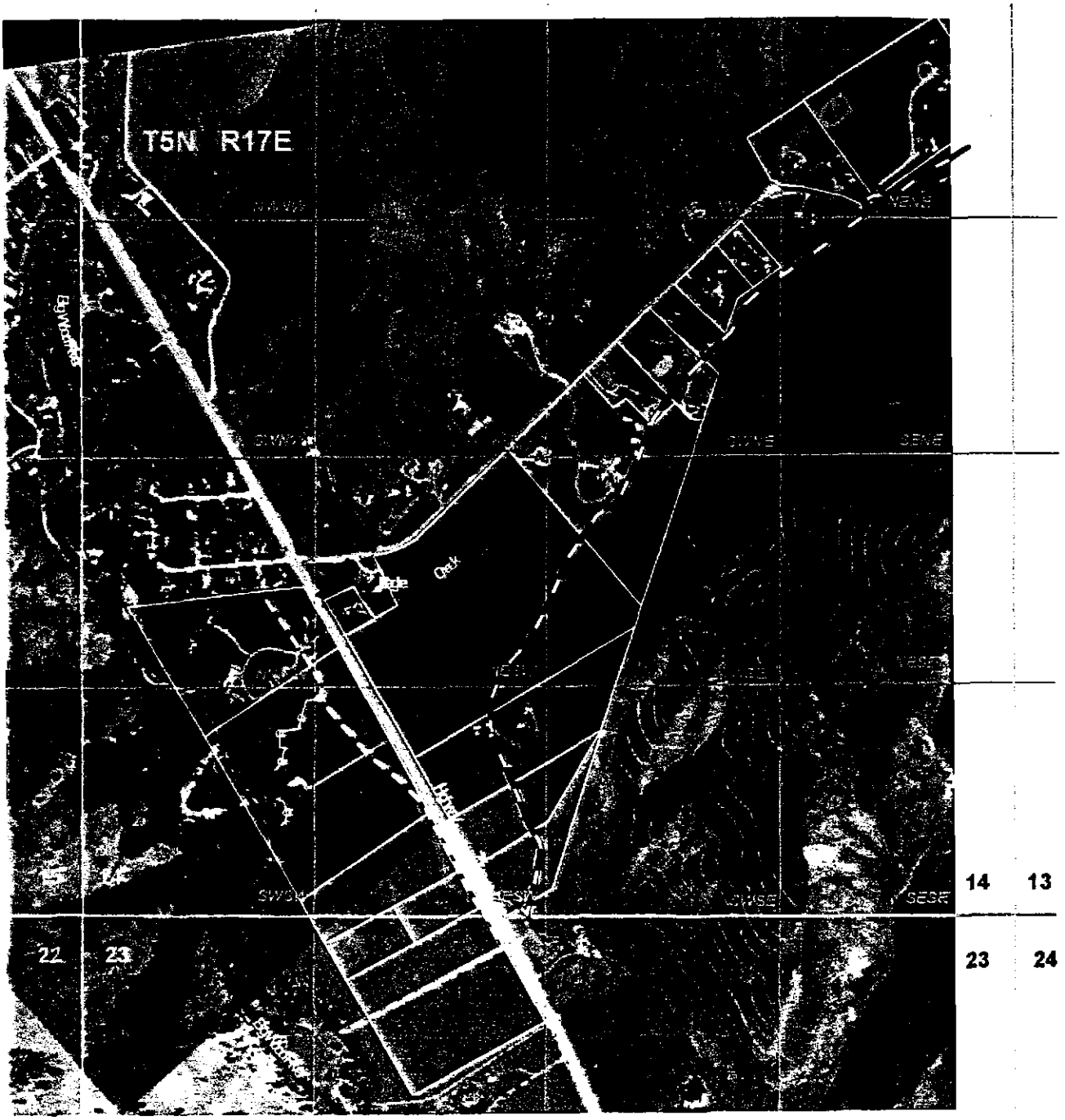
Rectified FSA Aerial Photos, 1999
Brockway Engineering, PLLC
Revised May, 2002

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EXHIBIT-17

Eagle Creek Irrigation Company - Section 14 and 23, T5N, R17E
Present Ditch Diversion System
Figure Two



SCALE 1:10,800
One Inch = 900 feet

N

1000 0 1000 Feet

Ponds

Pickrell Ditch
Main Ditch
West Ditch
Present Property Lines
Diversions by ECIC Members

Rectified FSA Aerial Photos, 1999
Brockway Engineering, PLLC
Revised May, 2002

EXHIBIT - 18

State of Idaho
DEPARTMENT OF WATER RESOURCES
1301 North Orchard Street, Boise, ID 83706 - P.O. Box 83720, Boise, ID 83720-0098
Phone: (208) 327-7900 Fax: (208) 327-7866 Web Site: www.idwr.state.id.us

DIRK KEMPTHORNE
Governor

KARL J. DREHER
Director

MEMORANDUM

To: L. Glen Saxton

From: Karl J. Dreher

RE: APPOINTMENT AS HEARING OFFICER - PROCEDURE RULE 410

Date: October 28, 2002

You are hereby appointed as hearing officer and are authorized to represent the department as provided by IDAPA Rule 37.01.01410 (Procedure Rule 410) in the following matter:

IN THE MATTER OF APPLICATION FOR PERMIT NO. 37-20742 IN THE NAME OF ROBERT G. FRIEDMAN

Date: November 13, 2002

Time: 10:00 a.m.

Location: Blaine County Courthouse
Third Floor Meeting Room
Hailey, ID

MICROFILMED
NOV 13 2002

Ident. No. 37-20742

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

APPLICATION FOR PERMIT

To appropriate the public water of the State of Idaho

1. Name: ROBERT G FRIEDMAN
718 N CRESCENT DR
BEVERLY HILLS CA 90210
(323)956-5060

2. Source: GROUND WATER

3. Location of Point of Diversion:
#1 GROUND WATER NE1/4NW1/4 Sec. 23, Twp 05N, Rge 17E, B.M.
BLAINE County

4. Water will be used for the following purposes:

Purpose	From To	RATE OF DIVERSION	ANNUAL VOLUME
DIVERSION TO STORAGE	01/01 to 12/31	2.00 CFS	
AESTHETIC STORAGE	01/01 to 12/31		16.0 AF
RECREATION STORAGE	01/01 to 12/31		16.0 AF
AESTHETIC	01/01 to 12/31	2.00 CFS	
RECREATION	01/01 to 12/31	2.00 CFS	

5. Total quantity to be appropriated is: 2.00 CFS 16.0 AF

6. Proposed diverting works:

POINT OF DIVERSION #1
a. Type and size of devices used to divert water from the source: PROPOESED WELL
b. Height of storage dam _____ feet;
Active reservoir capacity _____ acre-feet;
Total reservoir capacity _____ acre-feet;.
c. Proposed well diameter is 12 inches;
Proposed depth of well is 100 feet.
d. Is ground water with a temperature of greater than 85F being sought? N
e. If well is already drilled, when? _____;
Drilling Firm _____;
Drilling Permit No. _____.

7. Time required for the completion of the works and application of the water to the proposed beneficial use is 2 year(s).

8.

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Ident. No. 37-20742

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

APPLICATION FOR PERMIT

To appropriate the public water of the State of Idaho

PLACE OF USE: DIVERSION TO STORAGE

Twp Rge Sec	NE				NW				SW				SE				Totals
	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
05N 17E 23					X												

PLACE OF USE: AESTHETIC STORAGE

Twp Rge Sec	NE				NW				SW				SE				Totals
	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
05N 17E 23					X												

PLACE OF USE: RECREATION STORAGE

Twp Rge Sec	NE				NW				SW				SE				Totals
	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
05N 17E 23					X												

PLACE OF USE: AESTHETIC

Twp Rge Sec	NE				NW				SW				SE				Totals
	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
05N 17E 23					X												

PLACE OF USE: RECREATION

Twp Rge Sec	NE				NW				SW				SE				Totals
	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
05N 17E 23					X												

9a. Who owns the property at the point of diversion? If other than applicant, describe the arrangement enabling the applicant to make this filing.

APPLICANT

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Ident. No. 37-20742

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

APPLICATION FOR PERMIT

To appropriate the public water of the State of Idaho

9b. Who owns the land to be irrigated or place of use? If other than applicant, describe the arrangement enabling the applicant to make this filing.

APPLICANT

10. Remarks:

Groundwater pumped under this permit will be utilized as flow through water for ponds. Water from 10 shares of Eagle Creek Irrigation co. (37-00863) will flow into the ponds and irrigation of 8 acres on the project will be pumped from the ponds. Applicant owns 10 of the 230 shares of the Company.

11. Map of proposed point of diversion and place of use attached? [ ]

BE IT KNOWN that the undersigned hereby makes application for permit to appropriate the public waters of the State of Idaho as herein set forth.

_____
Applicant

Received by _____ Date _____ Time _____ Preliminary check by _____
Publication prepared by _____ Date _____ Published in _____
Publication approved _____ Date _____

Receipt No. S025060
Date: _____

Receipted by: _____

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JUL 15 2004

Form 202
10/92

Ident No. 37-20742

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
APPLICATION FOR PERMIT

To appropriate the public waters of the State of Idaho

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Department of Water Resources
Southern Region

1. Name of applicant Robert G. Friedman Phone 323-956-5060

   Post Office address 718 North Crescent Drive, Beverly Hills, CA 90210

2. Source of water supply Ground Water which is a tributary of _____

3. Location of point of diversion is _____ 1/4 of NE 1/4 of NW 1/4, Govt. Lot _____

   Sec. 23 Township 5N Range 17E B.M. Blaine County; additional

   points of diversion, if any: _____

4. Water will be used for the following purposes:

   Amount 2.0 cfs (cfs or acre-feet per annum) for Rec./Aes. purposes from 1/1 to 12/31 (both dates inclusive)

   Amount 16 af (cfs or acre-feet per annum) for storage for Rec./Aes. purposes from 1/1 to 12/31 (both dates inclusive)

   Amount 2.0 cfs (cfs or acre-feet per annum) for Div. to Stor. purposes from 1/1 to 12/31 (both dates inclusive)

   Amount _____ (cfs or acre-feet per annum) for _____ purposes from _____ to _____ (both dates inclusive)

5. Total quantity being appropriated is (a) 2.0cfs (cubic feet per second) and/or (b) 16storage (acre-feet per annum)

6. Proposed diverting works:

   a. Description of ditches, flumes, pumps, headgates, etc. Well and pipeline to ponds

   b. Height of storage dam _____ feet; active reservoir capacity _____ acre-feet; total reservoir capacity _____ acre-feet; period of year when water will be diverted to storage: _____ to _____ inclusive.

   c. Proposed well diameter is 12 inches; proposed depth of well is 100 feet

   d. Is groundwater with a temperature of greater than 85 degrees being sought? No

   e. If well is already drilled, when? _____; Drilling firm _____;

   Well was drilled for *(well owner)* _____

7. Time required for the completion of the works and application of the water to the proposed beneficial use is 2 years *(minimum 1 year)*.

JUL 15 2002

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37- 20742

8. Description of proposed uses (if irrigation only, go to item 9):
   a. Hydropower; show total feet of head and proposed capacity in KW. _____
   b. Stockwatering; list number and kind of livestock. _____
   c. Municipal; show name of municipality. _____
   d. Domestic; show number of households _____;
   e. Other; describe fully. Recreation and asthetic ponds

9. Description of place of use:
   a. If water is for irrigation, indicate acreage in each subdivision in the tabulation below.
   b. If water is used for other purposes, place a symbol of the use (example: D for Domestic) in the corresponding place of use below. See instructions for standard symbols.

			NE 1/4				NW 1/4				SW 1/4				SE 1/4				
TWP	RANGE	SEC.	NE 1/4	NW 1/4	SW 1/4	SE 1/4	NE 1/4	NW 1/4	SW 1/4	SE 1/4	NE 1/4	NW 1/4	SW 1/4	SE 1/4	NE 1/4	NW 1/4	SW 1/4	SE 1/4	TOTALS
5N	17E	23					R/A	~~R/A~~											

Total number of acres to be irrigated _____

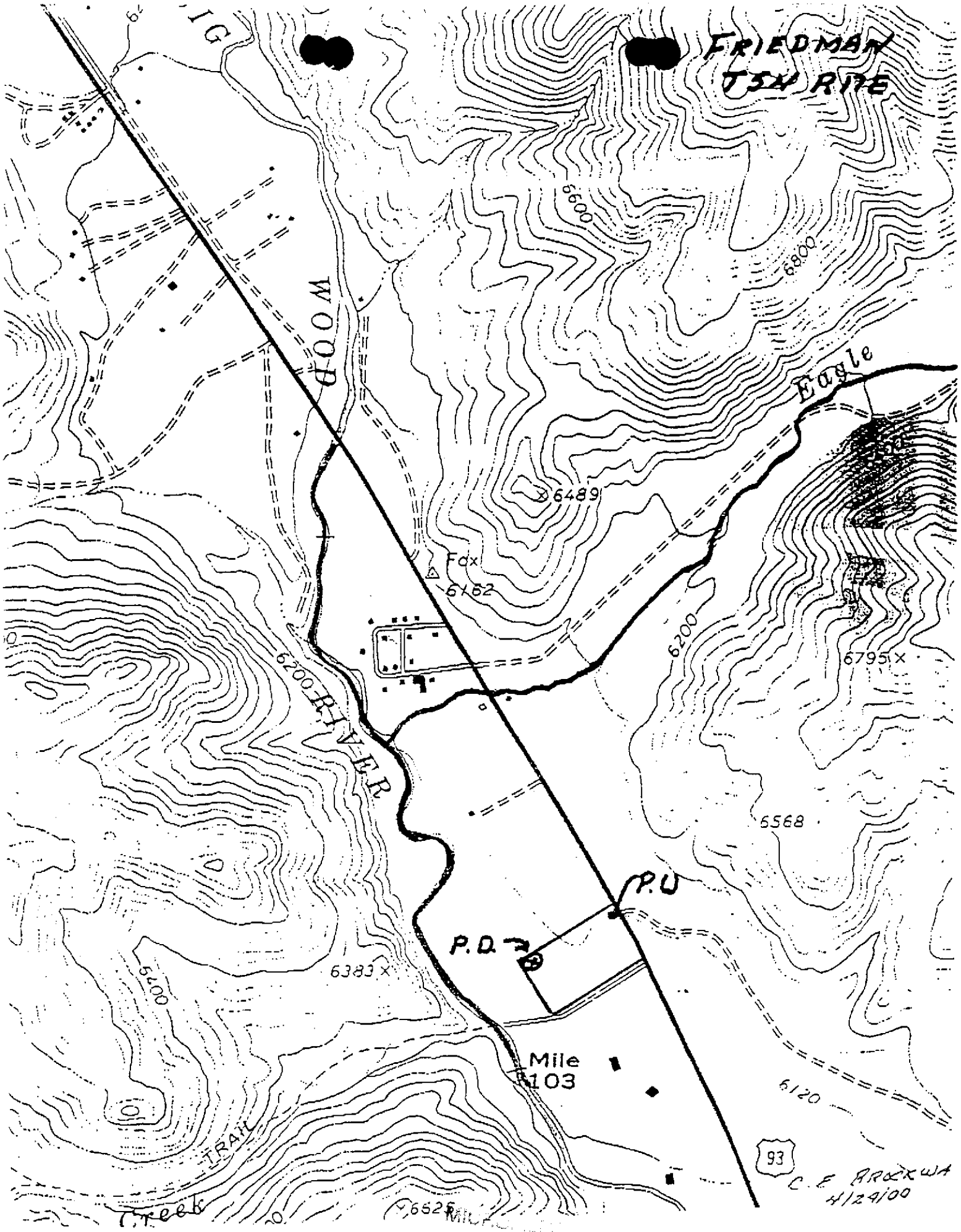
10. Describe any other water rights used for the same purposes as described above. 37-00863 Two(2) acres of irrigation under this right will be dried up to mitigate for two(2) acres of pond

11. a. Who owns the property at the point of diversion? Applicant
    b. Who owns the land to be irrigated or place of use? Applicant
    c. If the property is owned by a person other than the applicant, describe the arrangement enabling the applicant to make this filing. _____

12.. Remarks: Groundwater pumped under this permit will be utilized as flow through water for ponds. Water from 10 shares of Eagle Creek Irrigation Co. (37-00863) will flow into the ponds and irrigation of 8 acres on the project will be pumped from the ponds. Applicant owns 10 of the 230 shares of the Company.

Mu[illegible]

[illegible] 2002


FRIEDMAN
T34 R17E
6600
6800
Eagle
6489
Fox
6162
6200
6795
6200
RIVER
6568
P.U
P.D
6383
6400
Mile
103
6120
93
TRAIL
Creek
6625
C.E. ARCKWA
4/24/00

37-20742

13. Map of proposed project: show clearly the proposed point of diversion, place of use, section number, township and range number.

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JUL 18 2002
Department of Water Resources
Southern Region

Scale: 2 inches equal 1 mile.

BE IT KNOWN that the undersigned hereby makes application for permit to appropriate the public waters of the State of Idaho as herein set forth.

MICHAEL [illegible]
(applicant)

JUL 18 2002

37-20742

Received by L. SKINNER Date 7/11/2002 Time ≈ 9:00 Preliminary check by L. SKINNER

Fee $ 290.00 Receipted by L. SKINNER # 5025060 Date 7/11/2002

Publication prepared by MB Date 7/11/02 Published in Wood River Journal

Publication approved _____ Date _____

ACTION OF THE DIRECTOR, DEPARTMENT OF WATER RESOURCES

This is to certify that I have examined Application for Permit to appropriate the public waters of the State of Idaho No. _____ and said application is hereby _____.

1. Approval of said application is subject to the following limitations and conditions:

   a. SUBJECT TO ALL PRIOR WATER RIGHTS

   b. Proof of construction works and application of water to beneficial use shall be submitted on or before

   _____, 19 _____.

c. The rate of diversion, if water is to be used for irrigation under this permit, when combined with all other water rights for the same land shall not exceed 0.02 cubic feet per second for each acre of land.

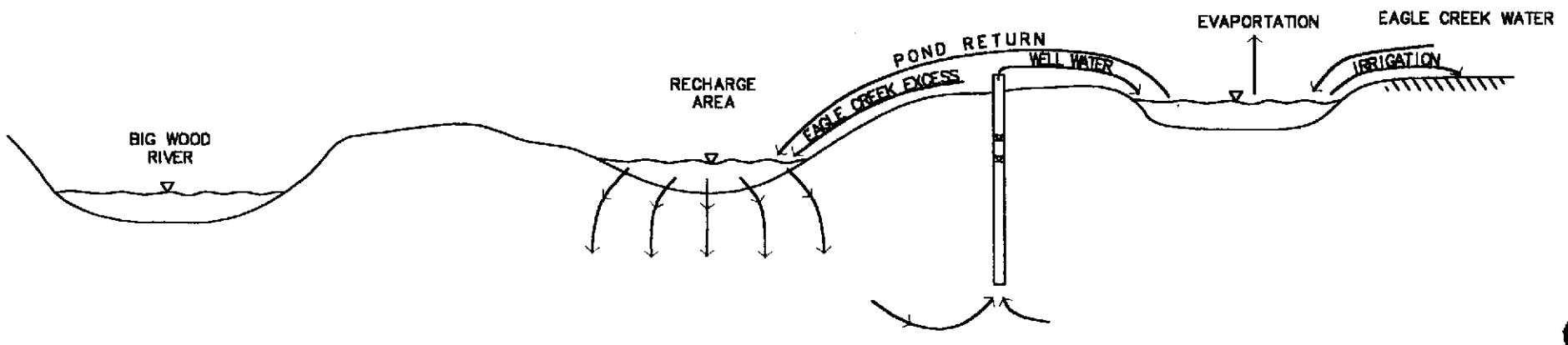
d. The water right acquired under this permit if for hydropower purposes shall be junior and subordinate to all rights to the use of water, other than hydropower, within the State of Idaho that are initiated later in time than the priority of this permit and shall not give rise to any right or claim against any future rights to the use of water, other than hydropower, within the State of Idaho initiated later in time than the priority of this permit.

e. Other:

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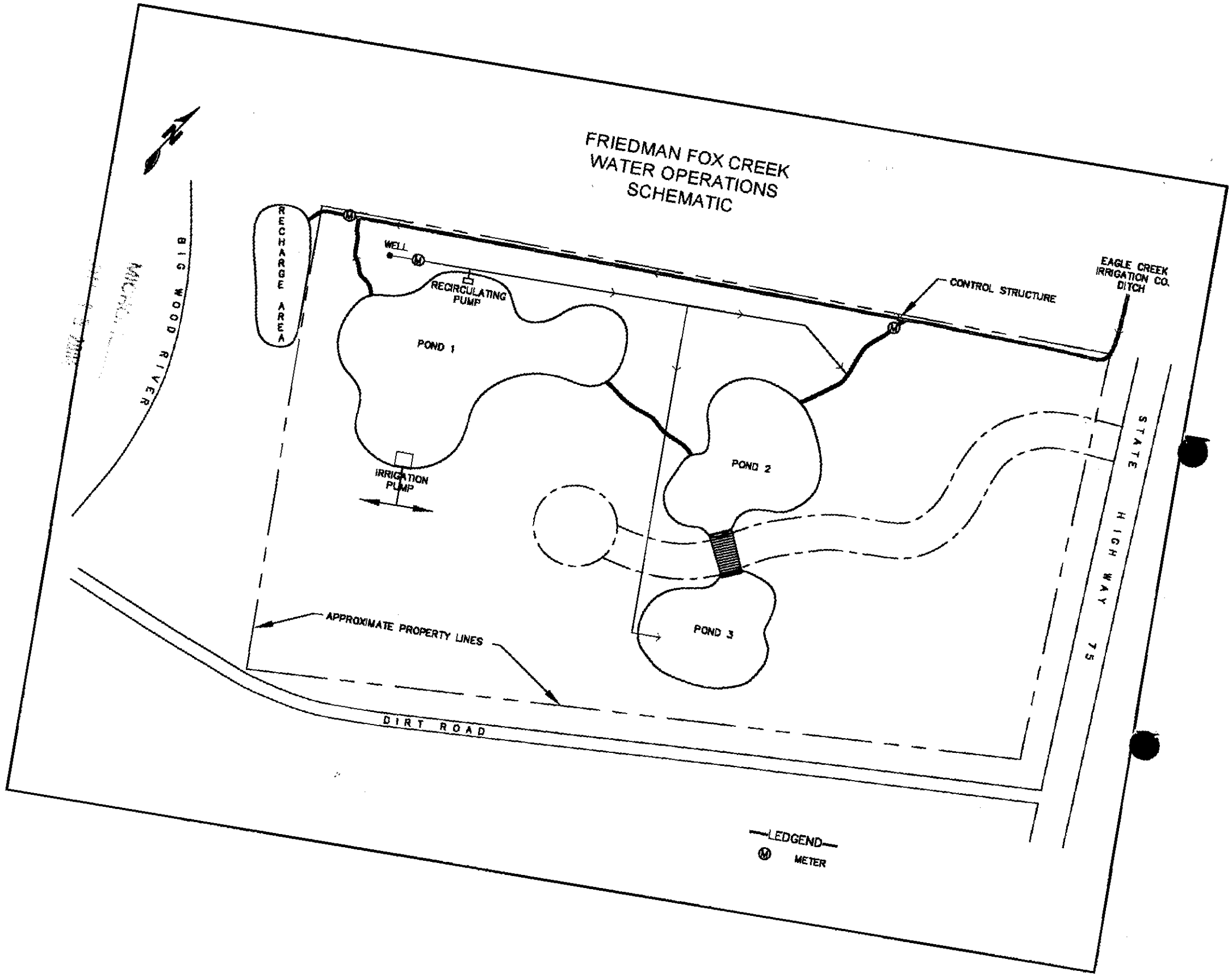
37-20742

FRIEDMAN FOX CREEK
WATER OPERATIONS
CROSS SECTION



37-20742

FRIEDMAN FOX CREEK WATER OPERATIONS SCHEMATIC



37-20742

SEE FILE #2

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JUL 15 2004

COPY

Douglas A. Werth
BIETER WERTH & WALKER, PLLC
208 Spruce Avenue, 2nd Floor
P.O. Box 2360
Ketchum, ID 83340
Telephone: 208.726.0847
Facsimile: 208.727.6853
Idaho State Bar No. 3660

Attorneys for Protestant

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NOV 04 2002
Department of Water Resources
Southern Region

BEFORE THE DEPARTMENT OF WATER RESOURCES

OF THE STATE OF IDAHO

IN THE MATTER OF APPLICATION FOR PERMIT NO. 37-20742,

ROBERT G. FRIEDMAN,

Applicant,

BLAINE COUNTY,

Protestant.

EX PARTE MOTION FOR ISSUANCE OF SUBPOENAS

37-20742

Protestant Blaine County (hereinafter "County"), by and through its undersigned counsel of record, pursuant to the Rules of Procedure of the Idaho Department of Water Resources, IDAPA 37.01.01.520 and -.525, moves the hearing officer for issuance of subpoenas compelling the appearance of the following witnesses at the hearing to be held in this matter on November 13, 2002, at 1:00 p.m. at the 3rd Floor Meeting Room of the Old Blaine County Courthouse, 206 1st Avenue South, Hailey, Idaho:

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Lee R. Peterson Watermaster, Big Wood River P.O. Box T Shoshone, Idaho 83352	Everett Davis Secretary, Eagle Creek Irrig. Co. 30 Eagle Creek Rd. Blaine County, Idaho

The grounds for the motion are that the above witnesses are necessary for protestant Blaine County to provide to the hearing officer all of the pertinent information necessary to evaluate the above-captioned application.

Oral argument is not requested.

DATED this 15th day of November, 2002.

Douglas A. Werth, Attorney for
Protestant Blaine County

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that on this 15th day of November, 2002, I caused a true and correct copy of the within and foregoing document to be served by the method(s) indicated below, and addressed to each of the following:

James P. Speck SPECK & AANESTAD P.O. Box 987 Ketchum, ID 83340 Fax: 208-726-0752	✓	U.S. Mail Overnight Delivery Hand Delivery Facsimile
Blaine County Board of Commissioners Old Blaine County Courthouse 206 1st Avenue South, Suite 300 Hailey, ID 83333 Fax: 208-788-5576	✓	U.S. Mail Overnight Delivery Hand Delivery Facsimile

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JUL 15 2004

Idaho Department of Water Resources
Southern Regional Office
1341 Fillmore Street
Suite 200
Twin Falls, ID 83301-3380
Fax: 208-736-3037

✓ U.S. Mail
___ Overnight Delivery
___ Hand Delivery
✓ Facsimile

Mr. Karl J. Dreher
Director
Idaho Department of Water Resources
1301 N. Orchard
P.O. Box 83720
Boise, ID 83720-0098
Fax 208-327-7866

✓ U.S. Mail
___ Overnight Delivery
___ Hand Delivery
✓ Facsimile

Douglas A. Werth

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JUL 15 2014

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Department of Water Resources

Douglas A. Werth
BIETER WERTH & WALKER, PLLC
208 Spruce Avenue, 2nd Floor
P.O. Box 2360
Ketchum, ID 83340
Telephone: 208.726.0847
Facsimile: 208.727.6853
Idaho State Bar No. 3660

Attorneys for Protestant

BEFORE THE DEPARTMENT OF WATER RESOURCES

OF THE STATE OF IDAHO

IN THE MATTER OF APPLICATION FOR PERMIT NO. 37-20742, ROBERT G. FRIEDMAN, Applicant, BLAINE COUNTY, Protestant.	PROTESTANT'S NOTICE OF SERVICE OF FIRST RESPONSE TO REQUESTS FOR DISCOVERY

Protestant Blaine County (hereinafter "County"), by and through its undersigned counsel of record, pursuant to the Rules of Procedure of the Idaho Department of Water Resources, IDAPA 37.01.01.000 *et seq.*, provides notice to the Department that on October 17, 2002, it served its "PROTESTANT'S FIRST RESPONSE TO INTERROGATORIES AND REQUESTS FOR PRODUCTION" and "PROTESTANT'S FIRST RESPONSE TO REQUESTS FOR ADMISSIONS" by hand-delivering the original and one copy of each such response at the law offices of Applicant's attorney of

JUL 1 6 2004

record as indicated in the certificate of service below.

DATED this 17 day of October, 2002.

Douglas A. Werth, Attorney for
Protestant Blaine County

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NOV 15 2002

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that on this 17 day of October, 2002, I caused a true and correct copy of the within and foregoing document to be served by the method(s) indicated below, and addressed to each of the following:

James P. Speck SPECK & AANESTAD P.O. Box 987 Ketchum, ID 83340 Fax: 208-726-0752	____ ____ ✓ ____	U.S. Mail Overnight Delivery Hand Delivery Facsimile
Blaine County Board of Commissioners Old Blaine County Courthouse 206 1st Avenue South, Suite 300 Hailey, ID 83333 Fax: 208-788-5576	✓ ____ ____ ____	U.S. Mail Overnight Delivery Hand Delivery Facsimile
Idaho Department of Water Resources Southern Regional Office 1341 Fillmore Street Suite 200 Twin Falls, ID 83301-3380 Fax: 208-736-3037	✓ ____ ____ ____	U.S. Mail Overnight Delivery Hand Delivery Facsimile
Mr. Karl J. Dreher Director Idaho Department of Water Resources 1301 N. Orchard P.O. Box 83720 Boise, ID 83720-0098 Fax 208-327-7866	✓ ____ ____ ____	U.S. Mail Overnight Delivery Hand Delivery Facsimile

Douglas A. Werth

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JUL 15 2004

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OCT 18 2002
Department of Water Resources

COPY

Douglas A. Werth
BIETER WERTH & WALKER, PLLC
208 Spruce Avenue, 2nd Floor
P.O. Box 2360
Ketchum, ID 83340
Telephone: 208.726.0847
Facsimile: 208.727.6853
Idaho State Bar No. 3660

Attorneys for Protestant

BEFORE THE DEPARTMENT OF WATER RESOURCES

OF THE STATE OF IDAHO

IN THE MATTER OF APPLICATION FOR PERMIT NO. 37-20742,

ROBERT G. FRIEDMAN,

Applicant,

BLAINE COUNTY,

Protestant.

PROTESTANT'S FIRST RESPONSE TO REQUESTS FOR ADMISSIONS

Protestant Blaine County (hereinafter "County"), by and through its undersigned counsel of record, responds to Applicant's First Requests for Admissions, pursuant to the Rules of Procedure of the Idaho Department of Water Resources, IDAPA 37.01.01.000 *et seq.*, as follows:

RESPONSE TO REQUESTS FOR ADMISSIONS

REQUEST FOR ADMISSION NO. 1: Please admit that Eagle Creek Irrigation Company is a corporation formed under the law of the State of Idaho.

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JUL 15 2004

ANSWER TO REQUEST FOR ADMISSION NO.1: At this time, County has no reason to doubt the veracity of this assertion based upon the information provided by Applicant in discovery; however, County does not have personal knowledge of the assertion and therefore denies the same. If County receives any additional information relating to the veracity of this assertion, it will supplement its answer to this request for admission.

REQUEST FOR ADMISSION NO. 2: Please admit that attached hereto as Exhibit A is a true and correct copy of the Articles of Incorporation of Eagle Creek Irrigation Company.

ANSWER TO REQUEST FOR ADMISSION NO. 2: At this time, County has no reason to doubt the veracity or authenticity of Exhibit A based upon the information provided by Applicant in discovery; however, County does not have personal knowledge of the assertion and therefore denies the same. If County receives any additional information relating to the veracity or authenticity of Exhibit A, it will supplement its answer to this request for admission.

REQUEST FOR ADMISSION NO. 3: Please admit that Eagle Creek Irrigation Company is the owner of Water Right No. 37-00863D.

ANSWER TO REQUEST FOR ADMISSION NO. 3: At this time, County has no reason to doubt the veracity of this assertion based upon the information provided by Applicant in discovery; however, County does not have personal knowledge of the assertion and therefore denies the same. If County receives any additional information relating to the veracity of this assertion, it will supplement its answer to this request for admission.

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REQUEST FOR ADMISSION NO. 4: Please admit that attached hereto as Exhibit B is a true and correct copy of the stock certificate of Eagle Creek Irrigation Company owned by the Applicant.

ANSWER TO REQUEST FOR ADMISSION NO. 4: At this time, County has no reason to doubt the veracity or authenticity of Exhibit B based upon the information provided by Applicant in discovery; however, County does not have personal knowledge of the assertion and therefore denies the same. If County receives any additional information relating to the veracity or authenticity of Exhibit B, it will supplement its answer to this request for admission.

REQUEST FOR ADMISSION NO. 5: Please admit that each share of stock of Eagle Creek Irrigation Company entitles the stockholder to receive 0.02 cfs of water diverted from Eagle Creek to irrigate one acre of land.

ANSWER TO REQUEST FOR ADMISSION NO. 5: At this time, County has no reason to doubt the veracity of this assertion based upon the information provided by Applicant in discovery; however, County does not have personal knowledge of the assertion and therefore denies the same. If County receives any additional information relating to the veracity of this assertion, it will supplement its answer to this request for admission.

REQUEST FOR ADMISSION NO. 6: Please admit that providing a standpipe or dry hydrant connected to a pond on Applicant's property, accessible at all times to the Ketchum Rural Fire Protection District, constructed in accordance with the District's specifications and approved by the District, for the purpose of fighting fires, is in the local public interest.

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JUL 15 2004

ANSWER TO REQUEST FOR ADMISSION NO. 6: When the Application for Permit is considered in light of all the facts and circumstances, it is County's contention that the proposal is not in the local public interest. Further, there is no showing that impoundment for water is necessary for fire protection purposes in this case or that the current fire protection resources available are inadequate. Accordingly, County denies this request for admission.

REQUEST FOR ADMISSION NO. 7: Please admit that the Department has the authority to assign to the Watermaster of Water District 37 the regulation of ground water rights in Basin 37.

ANSWER TO REQUEST FOR ADMISSION NO. 7: County has insufficient information with which to admit or deny this request for admission and therefore denies the same.

REQUEST FOR ADMISSION NO. 8: Please admit that the Department has the sole and exclusive authority in the State of Idaho for granting permits to divert the waters of the State of Idaho.

ANSWER TO REQUEST FOR ADMISSION NO. 8: County admits that any permit to divert water pursuant to Title 42, Chapter 2, Idaho Code, must be approved by the Idaho Department of Water Resources, but has insufficient information with which to admit or deny whether this authority is exclusive of any federal or other authority and therefore denies that portion of the request for admission.

REQUEST FOR ADMISSION NO. 9: Please admit that the amount of evaporation from an open water surface is the same as the amount of evepotranspiration from an equal area of growing alfalfa.

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JAN 05 2004

ANSWER TO REQUEST FOR ADMISSION NO. 6: When the Application for Permit is considered in light of all the facts and circumstances, it is County's contention that the proposal is not in the local public interest. Further, there is no showing that impoundment for water is necessary for fire protection purposes in this case or that the current fire protection resources available are inadequate. Accordingly, County denies this request for admission.

REQUEST FOR ADMISSION NO. 7: Please admit that the Department has the authority to assign to the Watermaster of Water District 37 the regulation of ground water rights in Basin 37.

ANSWER TO REQUEST FOR ADMISSION NO. 7: County has insufficient information with which to admit or deny this request for admission and therefore denies the same.

REQUEST FOR ADMISSION NO. 8: Please admit that the Department has the sole and exclusive authority in the State of Idaho for granting permits to divert the waters of the State of Idaho.

ANSWER TO REQUEST FOR ADMISSION NO. 8: County admits that any permit to divert water pursuant to Title 42, Chapter 2, Idaho Code, must be approved by the Idaho Department of Water Resources, but has insufficient information with which to admit or deny whether this authority is exclusive of any federal or other authority and therefore denies that portion of the request for admission.

REQUEST FOR ADMISSION NO. 9: Please admit that the amount of evaporation from an open water surface is the same as the amount of evepotranspiration from an equal area of growing alfalfa.

MAY ACKNOWLEDGED
5 2004

ANSWER TO REQUEST FOR ADMISSION NO. 9: County has insufficient information with which to admit or deny this request for admission and therefore denies the same.

DATED this 17 day of October, 2002.

Douglas A. Werth, Attorney for
Protestant Blaine County

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that on this 17 day of October, 2002, I caused a true and correct copy of the within and foregoing document to be served by the method(s) indicated below, and addressed to each of the following:

James P. Speck SPECK & AANESTAD P.O. Box 987 Ketchum, ID 83340 Fax: 208-726-0752	____ ____ ✓ ____	U.S. Mail Overnight Delivery Hand Delivery Facsimile
Blaine County Board of Commissioners Old Blaine County Courthouse 206 1st Avenue South, Suite 300 Hailey, ID 83333 Fax: 208-788-5576	✓ ____ ____ ____	U.S. Mail Overnight Delivery Hand Delivery Facsimile
Idaho Department of Water Resources Southern Regional Office 1341 Fillmore Street Suite 200 Twin Falls, ID 83301-3380 Fax: 208-736-3037	✓ ____ ____ ____	U.S. Mail Overnight Delivery Hand Delivery Facsimile

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15 2002

Mr. Karl J. Dreher
Director
Idaho Department of Water Resources
1301 N. Orchard
P.O. Box 83720
Boise, ID 83720-0098
Fax 208-327-7866

✓ U.S. Mail
____ Overnight Delivery
____ Hand Delivery
____ Facsimile

Douglas A. Werth

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JUL 15 2004

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SEP 16 2002
Department of Water Resources

James P. Speck, Esq., ISB #2067
SPECK & AANESTAD,
A Professional Corporation
Post Office Box 987
Ketchum, Idaho 83340
Telephone (208) 726-4421
Facsimile (208)726-0752
Attorneys for Applicant Robert G. Friedman

BEFORE THE IDAHO DEPARTMENT OF WATER RESOURCES

IN THE MATTER OF APPLICATION FOR PERMIT NO. 37-20742: Robert G. Friedman, Applicant. Blaine County, Protestant.	NOTICE IN COMPLIANCE

Notice is hereby given that on the 12 day of September, 2002, I caused to be served Applicant's First Set of Interrogatories, Requests for Production of Documents and Requests for Admissions by mailing copies of the same to Douglas A. Werth at 201 2nd Avenue South, Suite 100, Hailey, Idaho 83333.

DATED this 12 day of September, 2002.

SPECK & AANESTAD
A Professional Corporation
Attorneys for Plaintiff

By J. P. Speck
James P. Speck

MICROFILMED
JUL 13 2006

CERTIFICATE OF SERVICE

I hereby certify that on the 12 day of September, 2002, I served a true and correct copy of the within and foregoing document upon the persons named below in the manner noted:

Douglas A. Werth, Esq.
Post Office Box 2360
Ketchum, ID 83340
FAX (208) 727-6853

- ☑ United States Mail, Postage Prepaid
- ☐ Hand Delivery
- ☐ Facsimile, with copy by United States Mail, Postage Prepaid

Mr. L. Glen Saxton
Idaho Department of Water Resources
1301 North Orchard Street
Statehouse Mail
Boise, Idaho 83720-9000
FAX (208) 327-7866

- ☑ United States Mail, Postage Prepaid
- ☐ Hand Delivery
- ☐ Facsimile, with copy by United States Mail, Postage Prepaid

Blaine County Board of Commissioners
206 1st Ave. So. Suite 300
Hailey, ID 83333
FAX (208) 788-5576

- ☑ United States Mail, Postage Prepaid
- ☐ Hand Delivery
- ☐ Facsimile, with copy by United States Mail, Postage Prepaid

Mr. Allen Merritt
Idaho Department of Water Resources
1341 Fillmore, Suite 200
Twin Falls, ID 83301
FAX (208) 736-3037

- ☑ United States Mail, Postage Prepaid
- ☐ Hand Delivery
- ☐ Facsimile, with copy by United States Mail, Postage Prepaid

Mr. Karl J. Dreher
Idaho Department of Water Resources
1301 North Orchard Street
Statehouse Mail
Boise, Idaho 83720-9000
FAX (208) 327-7866

- ☑ United States Mail, Postage Prepaid
- ☐ Hand Delivery
- ☐ Facsimile, with copy by United States Mail, Postage Prepaid

JAMES P. SPECK

MICROFILMED
JUL 15 2004

BIETER WERTH & WALKER, PLLC
ATTORNEYS & COUNSELORS AT LAW

DOUGLAS A. WERTH
WERTH@IDAHOATTYS.COM

208 SPRUCE AVENUE NORTH
SECOND FLOOR
POST OFFICE BOX 2360
KETCHUM, IDAHO 83340

BOISE OFFICE
TELEPHONE 208.383.0008
FACSIMILE 208.383.0311

KETCHUM OFFICE
TELEPHONE 208.726.0847
FACSIMILE 208.727.6853

September 3, 2002

RECEIVED
SEP - 6 2002
Department of Water Resources

Mr. Karl J. Dreher
Director
Idaho Department of Water Resources
1301 N. Orchard
P.O. Box 83720
Boise, ID 83720-0098

RECEIVED
SEP 10 2002
Department of Water Resources
Southern Region

RE: *In the Matter of Application for Permit No. 37-20742 (Robert G. Friedman)*

Dear Director Dreher:

I have enclosed for filing in the above-referenced case the following document(s):

NOTICE OF REPRESENTATION AND AVAILABLE DATES FOR HEARING.

Sincerely yours,

Douglas A. Werth
BIETER WERTH & WALKER, PLLC

encl(s)
cc/encl(s):Blaine County Board of Commissioners
IDWR Southern Regional Office (by fax & mail)
James P. Speck, Esq.

MICROFILMED
SEP 15 2004

ORIGINAL

RECEIVED
SEP 10 2002
Department of Water Resources
Southern Region

Douglas A. Werth
BIETER WERTH & WALKER, PLLC
208 Spruce Avenue, 2nd Floor
P.O. Box 2360
Ketchum, ID 83340
Telephone: 208.726.0847
Facsimile: 208.727.6853
Idaho State Bar No. 3660

Attorneys for Protestant

BEFORE THE DEPARTMENT OF WATER RESOURCES

OF THE STATE OF IDAHO

IN THE MATTER OF APPLICATION FOR PERMIT NO. 37-20742, ROBERT G. FRIEDMAN, Applicant, BLAINE COUNTY, Protestant.	NOTICE OF REPRESENTATION AND AVAILABLE DATES FOR HEARING

The Idaho Department of Water Resources is hereby notified pursuant to IDWR Rules of Procedure 200-205 (IDAPA 37.01.01.200 through IDAPA 37.01.01.205), that Protestant Blaine County will be represented in the above-captioned matter by Douglas A. Werth, of the law office of Douglas A. Werth PLLC.

All documents should be served upon both Douglas A. Werth and the Blaine County Board of Commissioners at the following addresses:

MICROFILMED
SEP 15 2004

Douglas A. Werth
BIETER WERTH & WALKER, PLLC
P.O. Box 2360
Ketchum, ID 83340

Blaine County Board of Commissioners
Old Blaine County Courthouse
206 1st Avenue South, Suite 300
Hailey, ID 83333

Protestant's available dates for hearing during October, November and December, 2002, are November 13, 19, and 21.

DATED this 3rd day of September, 2002.

Douglas A. Werth, Attorney for
Protestant Blaine County

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that on this 3rd day of September, 2002, I caused a true and correct copy of the within and foregoing document to be served by the method(s) indicated below, and addressed to each of the following:

James P. Speck SPECK & AANESTAD P.O. Box 987 Ketchum, ID 83340 Fax: 208-726-0752	✓	U.S. Mail
		Overnight Delivery
		Hand Delivery
		Facsimile
Blaine County Board of Commissioners Old Blaine County Courthouse 206 1st Avenue South, Suite 300 Hailey, ID 83333 Fax: 208-788-5576	✓	U.S. Mail
		Overnight Delivery
		Hand Delivery
		Facsimile

SEP 15 2002

Idaho Department of Water Resources
Southern Regional Office
1341 Fillmore Street
Suite 200
Twin Falls, ID 83301-3380
Fax: 208-736-3037

✓ U.S. Mail
____ Overnight Delivery
____ Hand Delivery
✓ Facsimile

Mr. Karl J. Dreher
Director
Idaho Department of Water Resources
1301 N. Orchard
P.O. Box 83720
Boise, ID 83720-0098
Fax 208-327-7866

✓ U.S. Mail
____ Overnight Delivery
____ Hand Delivery
____ Facsimile

Douglas A. Werth

COPY

BIETER WERTH & WALKER, PLLC
ATTORNEYS & COUNSELORS AT LAW

DOUGLAS A. WERTH
WERTH@IDAHOATTYS.COM

208 SPRUCE AVENUE NORTH
SECOND FLOOR
POST OFFICE BOX 2360
KETCHUM, IDAHO 83340

BOISE OFFICE
TELEPHONE 208.383.0008
FACSIMILE 208.383.0311

KETCHUM OFFICE
TELEPHONE 208.726.0847
FACSIMILE 208.727.6853

September 3, 2002

RECEIVED
SEP 05 2002
Department of Water Resources
Southern Region

Mr. Karl J. Dreher
Director
Idaho Department of Water Resources
1301 N. Orchard
P.O. Box 83720
Boise, ID 83720-0098

RE: *In the Matter of Application for Permit No. 37-20742 (Robert G. Friedman)*

Dear Director Dreher:

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NOTICE OF REPRESENTATION AND AVAILABLE DATES FOR HEARING.

Sincerely yours,

Douglas A. Werth
BIETER WERTH & WALKER, PLLC

encl(s)
cc/encl(s):Blaine County Board of Commissioners
IDWR Southern Regional Office (by fax & mail)
James P. Speck, Esq.

37-20742

MICROFILMED
JUL 15 2004

COPY

Douglas A. Werth
BIETER WERTH & WALKER, PLLC
208 Spruce Avenue, 2nd Floor
P.O. Box 2360
Ketchum, ID 83340
Telephone: 208.726.0847
Facsimile: 208.727.6853
Idaho State Bar No. 3660

Attorneys for Protestant

RECEIVED
SEP 0 5 2002
Department of Water Resources
Southern Region

BEFORE THE DEPARTMENT OF WATER RESOURCES

OF THE STATE OF IDAHO

IN THE MATTER OF APPLICATION FOR PERMIT NO. 37-20742, ROBERT G. FRIEDMAN, Applicant, BLAINE COUNTY, Protestant.	NOTICE OF REPRESENTATION AND AVAILABLE DATES FOR HEARING

The Idaho Department of Water Resources is hereby notified pursuant to IDWR Rules of Procedure 200-205 (IDAPA 37.01.01.200 through IDAPA 37.01.01.205), that Protestant Blaine County will be represented in the above-captioned matter by Douglas A. Werth, of the law office of Douglas A. Werth PLLC.

All documents should be served upon both Douglas A. Werth and the Blaine County Board of Commissioners at the following addresses:

MICROFILMED
SEP 1 5 2004

Douglas A. Werth
BIETER WERTH & WALKER, PLLC
P.O. Box 2360
Ketchum, ID 83340

Blaine County Board of Commissioners
Old Blaine County Courthouse
206 1st Avenue South, Suite 300
Hailey, ID 83333

Protestant's available dates for hearing during October, November and December, 2002, are November 13, 19, and 21.

DATED this 3rd day of September, 2002.

Douglas A. Werth, Attorney for
Protestant Blaine County

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that on this 3rd day of September, 2002, I caused a true and correct copy of the within and foregoing document to be served by the method(s) indicated below, and addressed to each of the following:

James P. Speck SPECK & AANESTAD P.O. Box 987 Ketchum, ID 83340 Fax: 208-726-0752	✓ 	U.S. Mail Overnight Delivery Hand Delivery Facsimile
Blaine County Board of Commissioners Old Blaine County Courthouse 206 1st Avenue South, Suite 300 Hailey, ID 83333 Fax: 208-788-5576	✓ 	U.S. Mail Overnight Delivery Hand Delivery Facsimile

MICROFILMED
JUL 15 2004

Idaho Department of Water Resources
Southern Regional Office
1341 Fillmore Street
Suite 200
Twin Falls, ID 83301-3380
Fax: 208-736-3037

✓ U.S. Mail
___ Overnight Delivery
___ Hand Delivery
✓ Facsimile

Mr. Karl J. Dreher
Director
Idaho Department of Water Resources
1301 N. Orchard
P.O. Box 83720
Boise, ID 83720-0098
Fax 208-327-7866

✓ U.S. Mail
___ Overnight Delivery
___ Hand Delivery
___ Facsimile

Douglas A. Werth

MICROFILMED
JUL 15 2004

BEFORE THE DEPARTMENT OF WATER RESOURCES
OF THE
STATE OF IDAHO

IN THE MATTER OF APPLICATION FOR PERMIT NO. 37-20742

Robert G. Friedman,
Applicant

Blaine County Board of Commissioners,
Protestants

NOTICE OF HEARING and
PRE-HEARING ORDER

SOURCE: Ground water

COUNTY: Blaine

On July 11, 2002 Robert G. Friedman, (applicant), filed with the Department of Water Resources (department) Application for Permit No. 37-20742. The application was protested by the Blaine County Board of Commissioners. Negotiations between the parties regarding the protest have been un-successful, the applicant has waived a Pre-Hearing Conference, and has requested a formal hearing to be held by the department on the matter.

The Department has scheduled the matter for hearing on Wednesday - November 13, 2002 in the Third Floor Meeting Room, Blaine County Courthouse in Hailey, ID commencing at 10:00 a.m.

The hearing will be held in accordance with provisions of chapters 2 and 17, Title 42 and Chapter 52, Title 67, Idaho Code, the adopted Rules of Procedure of the Department and Water Appropriation Rules 40 and 45. A copy of the rules may be obtained from the department upon request. The presiding officer at the hearing will be **L. Glen Saxton.**

The hearing will be conducted in a facility which meets the accessibility requirements of the Americans with Disabilities Act. If you require special accommodations in order to attend, participate in or understand the conference, please advise the department within (10) days prior to the conference.

IT IS HEREBY ORDERED, pursuant to Rule of Procedure 37.01.01510 (Rule of Procedure 510) that each party will mail to L. Glen Saxton, the hearing officer, at Idaho Department of Water Resources, PO Box 83720; Boise ID 83706 and to the other parties of record the following information as prescribed below:

On or before November 4, 2002 a list of witnesses, including expert witnesses the party will call or rely on; copies of documents and proposed exhibits the party may offer at hearing; and a brief statement of the substance of testimony from each witness shall be provided to the hearing officer.

On or before November 8, 2002 the parties shall determine which exhibits will be admitted without objection and shall so advise the hearing officer in writing by this date.

In addition, the applicant shall pre-mark all proposed documents or exhibits with sequential numbers beginning with "01". The protestant shall pre-mark all proposed documents or exhibits with sequential letters beginning with "A". For contested cases with multiple protestants, each protestant shall precede the letter with their initial. (For example: John Doe's first exhibit or document shall be pre-marked "JD-A").

HRG

Failure to comply with this Pre-Hearing Order is cause for the hearing officer to issue a Notice of Proposed Default to dismiss a party's pleading as provided in IDAPA 37.01.01700 (Rule of Procedure 700).

All parties to the matter will have the opportunity to respond and present information and argument on all issues involved. **Only witnesses or exhibits properly disclosed will be considered at the hearing.**

Dated this 5th day of September, 2002.

Allen D. Merritt
Southern Region Manager

CERTIFICATE OF MAILING

I hereby certify that on the 5th day of September, 2002 a true and correct copy of the above and foregoing document was forwarded with all required charges prepared, by the method indicated below, to the parties listed:

Secretary

JAMES P. SPECK SPECK & AANESTAD PO BOX 987 KETCHUM ID 83340	Hand delivered U.S. Mail-Regular U.S. Mail-Certified Fax	_____ _____ ___X_ _____
ATTN MARY ANN MIX BLAINE COUNTY COMMISSIONERS 206 FIRST AVENUE SOUTH, STE# 300 HAILEY ID 83333	Hand delivered U.S. Mail-Regular U.S. Mail-Certified Fax	_____ _____ ___X_ ____
DOUGLAS A. WERTH BIETER WERTH & WALKER PO BOX 2360 KETCHUM ID 83340	Hand delivered U.S. Mail-Regular U.S. Mail-Certified Fax	_____ _____ ___X_ _____
C. E. BROCKWAY P E BROCKWAY ENGINEERING 2016 NORTH WASHINGTON ST-STE 4 TWIN FALLS ID 83301	Hand delivered U.S. Mail-Regular U.S. Mail-Certified Fax	_____ ____X_ _____ _____

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2004

CONFERENCE AND HEARING PROCEDURE

APPLICATION FOR PERMIT ISSUES

Section 42-203A, Idaho Code, requires the department to consider the following issues in connection with an application for permit:

1. Will the proposed appropriation injure other water rights?

2. Is the water supply sufficient for the purpose for which it is sought to be appropriated?

3. Was the application made in good faith or for delay or speculative purposes?

4. Does the applicant have sufficient financial resources with which to complete the proposed project?

5. Is the proposed appropriation in the local public interest, which is defined as the affairs of the people in the area directly affected by the proposed use?

6. Is the proposed use contrary to conservation of water resources within the state of Idaho?

BURDEN OF PROOF

The applicant has the initial burden of proof for issues 1, 2, 3, 4, and 6 above and must provide evidence for the department to evaluate these criteria. The initial burden of proof on issue 5 above lies with both the applicant and protestant as to factors of which they are most knowledgeable and cognizant. The applicant has the ultimate burden of persuasion, however, for this issue.

PROCEDURE

The department generally conducts an informal conference with the parties to determine the issues and to try to settle a protested matter before a hearing is scheduled. If a hearing is held the department will issue a written decision based on the hearing record.

CONFERENCE

The purpose of a pre-hearing conference is to provide the opportunity for the parties and the department to familiarize themselves with a contested matter and to attempt to resolve the matter. At the conference, the department may also formulate and simplify the issues, identify documents to avoid unnecessary proof, exchange proposed exhibits or prepared testimony, limit witnesses, discuss settlement or make settlement offers, schedule hearings, establish procedure at hearing and address other matters that may expedite orderly conduct and disposition of the proceeding or its settlement. The department may issue a "pre-conference statement order" which requires response to the inquiries.

HEARING

The department will tape record the hearing. Copies of a hearing tape are available upon request and the payment of the cost of reproducing the tape. The hearing likely will be conducted by a hearing officer appointed by the Director rather than by the Director himself. If so, the hearing officer will prepare a recommended order for the Director's consideration. Parties can file exceptions to a recommended order, briefs in support of the exceptions or may request oral argument. Parties may seek judicial review of any final order issued by the Director. Parties may by written stipulation waive the right to a recommended order, particularly when a shortened decision process is desirable or necessary. Such a waiver does not eliminate any rights of the parties in connection with the final order of the Director and judicial review of the order.

EXHIBITS

A party who plans to offer an exhibit as part of the hearing record must provide a copy of the proposed exhibit to the parties and to the hearing officer. As part of the conference a date may be set by which exchange of exhibits and witness lists must occur.

EFFECT OF FAILURE TO APPEAR AT A CONFERENCE OR HEARING

Failure to appear at the time and place set for a conference or hearing by the applicant or protestant(s) may allow the department to dismiss without prejudice the protest(s) or the application. Any and all cost incurred by reason of such non-appearance may be assessed against such non-appearing party.

AMERICANS WITH DISABILITIES ACT

Any hearing scheduled will be conducted in a facility which meets the accessibility requirements of the Americans with Disabilities Act. If you require special accommodations in order to attend, participate in or understand the hearing, please advise the department within (l0) days prior to the hearing.

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JUL 15 2004

7002 0510 0001 0739 2809

U.S. Postal Service

CERTIFIED MAIL RECEIPT

nestic Mail Only; No Insurance Coverage

OFFICIAL USE

Postage	$
Certified Fee	
Return Receipt Fee (Endorsement Required)	
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	$

Postmark Here

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OCT 15 2004

DOUGLAS A. WERTH
BIETER WERTH & WALKER
PO BOX 2360
KETCHUM ID 83340

Certified Mail Provides:

- A mailing receipt
- A unique identifier for your mailpiece
- A signature upon delivery
- A record of delivery kept by the Postal Service for two years

Important Reminders:

- Certified Mail may ONLY be combined with First-Class Mail or Priority Mail.
- Certified Mail is *not* available for any class of international mail.
- NO INSURANCE COVERAGE IS PROVIDED with Certified Mail. For valuables, please consider Insured or Registered Mail.
- For an additional fee, a *Return Receipt* may be requested to provide proof of delivery. To obtain Return Receipt service, please complete and attach a Return Receipt (PS Form 3811) to the article and add applicable postage to cover the fee. Endorse mailpiece "Return Receipt Requested". To receive a fee waiver for a duplicate return receipt, a USPS postmark on your Certified Mail receipt is required.
- For an additional fee, delivery may be restricted to the addressee or addressee's authorized agent. Advise the clerk or mark the mailpiece with the endorsement *"Restricted Delivery"*.
- If a postmark on the Certified Mail receipt is desired, please present the article at the post office for postmarking. If a postmark on the Certified Mail receipt is not needed, detach and affix label with postage and mail.

IMPORTANT: Save this receipt and present it when making an inquiry.

7003 2260 0001 0239 2293

U.S. Postal Service
CERTIFIED MAIL RECEIPT
mestic Mail Only; No Insurance Coverage P

OFFICIAL USE

Postage	$
Certified Fee	
Return Receipt Fee (Endorsement Required)	
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	$

Postmark Here

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JUL 13 2006

ATTN MARY ANN MIX
BLAINE COUNTY COMMISSIONERS
206 1ST AVENUE SOUTH, STE# 300
HAILEY ID 83333

Certified Mail Provides:

- A mailing receipt
- A unique identifier for your mailpiece
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Important Reminders:

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IMPORTANT: Save this receipt and present it when making an inquiry.

U.S. Postal Service
CERTIFIED MAIL RECEIPT

mestic Mail Only; No Insurance Coverage P

OFFICIAL USE

Postage	$
Certified Fee	
Return Receipt Fee (Endorsement Required)	
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	$

Postmark Here

1

MICROFILMED

JUL 15 2004

JAMES P. SPECK
SPECK & AANESTAD
PO BOX 987
KETCHUM ID 83340

7002 0510 0001 0239 2746

Certified Mail Provides:

- A m[redacted]g receipt
- A [redacted] identifier for your mailpiece
- A signature upon delivery
- A record of delivery kept by the Postal Service for two years

Important Reminders:

- Certified Mail may ONLY be combined with First-Class Mail or Priority Mail.
- Certified Mail is *not* available for any class of international mail.
- NO INSURANCE COVERAGE IS PROVIDED with Certified Mail. For valuables, please consider Insured or Registered Mail.
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- For an additional fee, delivery may be restricted to the addressee or addressee's authorized agent. Advise the clerk or mark the mailpiece with the endorsement *"Restricted Delivery"*.
- If a postmark or the Certified Mail receipt is desired, please present the article at the post office for postmarking. If a postmark on the Certified Mail receipt is not needed, detach and affix label with postage and mail.

IMPORTANT: Save this receipt and present it when making an inquiry.

PS Form 3800, January 2001 *(Reverse)* 102595-02-M-0452

SENDER: *COMPLETE THIS SECTION*

- Complete items 1 [illegible]nd 3. Also complete item 4 if Restricted [illegible]elivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to: AM/37 - 20742
9-5-02

DOUGLAS A. WERTH
BIETER WERTH & WALKER
PO BOX 2360
KETCHUM ID 83340

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X [signature] ☐ Agent ☐ Addressee

B. Received by (Printed Name) Douglas Werth C. Date of Delivery

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

JUL 15 2004

3. Service Type
☒ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? *(Extra Fee)* ☐ Yes

2. Article Number
(Transfer from service label) 7002 0510 0001 0739 2809

PS Form 3811, August 2001 Domestic Return Receipt 102595-02-M-0835

UNITED STATES POSTAL SERVICE



First-Class Mail
Postage & Fees Paid
USPS
Permit No. G-10

• Sender: Please print your name, address, and ZIP+4 in this box •

83340

RECEIVED
SEP 11 2002
Department of Water Resources
Southern Region

STATE OF IDAHO
DEPT OF WATER RESOURCES
1341 FILLMORE ST - SUITE #200
TWIN FALLS ID 83301-3380

MICROFILMED
2004

SENDER: *COMPLETE THIS SECTION*

- Complete items 1, [redacted]d 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to: AM/37 - 20742
9-5-02

ATTN MARY ANN MIX
BLAINE COUNTY COMMISSIONERS
206 1ST AVENUE SOUTH, STE# 300
HAILEY ID 83333

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X [redacted] ☐ Agent ☐ Addressee

B. Received by *(Printed Name)* [redacted] C. Date of Delivery 09-06

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

MICRO FILMED

3. Service Type
☒ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? *(Extra Fee)* ☐ Yes

2. Article Number
(Transfer from service label) 7002 0510 0001 0739 2793

PS Form 3811, August 2001 Domestic Return Receipt 102595-02-M-0835

UNITED STATES POSTAL SERVICE

First-Class Mail
Postage & Fees Paid
USPS
Permit No. G-10

• Sender: Please print your name, address, and ZIP+4 in this box •

STATE OF IDAHO
DEPT OF WATER RESOURCES
1341 FILLMORE ST - SUITE #200
TWIN FALLS ID 83301-3380

MICROFILMED
2004

RECEIVED
SEP 09 2002
Department of Water Resources
Southern Region

SENDER: *COMPLETE THIS SECTION*

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to: AM/37-20742
9-5-02

JAMES P. SPECK
SPECK & AANESTAD
PO BOX 987
KETCHUM ID 83340

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X Opal Davis ☐ Agent ☐ Addressee

B. Received by (*Printed Name*) Opal Davis C. Date of Delivery

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
☒ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (*Extra Fee*) ☐ Yes

2. Article Number
(*Transfer from service label*) 7002 0510 0001 0739 2786

PS Form 3811, August 2001 Domestic Return Receipt 102595-02-M-0835

UNITED STATES POSTAL SERVICE

First-Class Mail
Postage & Fees Paid
USPS
Permit No. G-10

• Sender: Please print your name, address, and ZIP+4 in this box •

STATE OF IDAHO
DEPT OF WATER RESOURCES
1341 FILLMORE ST - SUITE #200
TWIN FALLS ID 83301-3380

KETCH
SEP - 9
83340

RECEIVED
SEP 10 2002
Department of Water Resources
Southern Region

MICROFILMED
JUN 15 2004

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to: AM/37 - 20742
9-5-02

ATTN MARY ANN MIX
BLAINE COUNTY COMMISSIONERS
206 1ST AVENUE SOUTH, STE# 300
HAILEY ID 83333

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X ☐ Agent ☐ Addressee

B. Received by (Printed Name) C. Date of Delivery

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
☒ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee) ☐ Yes

2. Article Number (Transfer from service label) 7002 0510 0001 0739 2793

PS Form 3811, August 2001 Domestic Return Receipt 102595-02-M-0835

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to: AM/37 - 20742
9-5-02

JAMES P. SPECK
SPECK & AANESTAD
PO BOX 987
KETCHUM ID 83340

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X ☐ Agent ☐ Addressee

B. Received by (Printed Name) C. Date of Delivery

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
☒ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee) ☐ Yes

2. Article Number (Transfer from service label) 7002 0510 0001 0739 2786

PS Form 3811, August 2001 Domestic Return Receipt 102595-02-M-0835

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to: AM/37 - 20742
9-5-02

DOUGLAS A. WERTH
BIETER WERTH & WALKER
PO BOX 2360
KETCHUM ID 83340

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X ☐ Agent ☐ Addressee

B. Received by (Printed Name) C. Date of Delivery

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
☒ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee) ☐ Yes

2. Article Number (Transfer from service label) 7002 0510 0001 0739 2809

PS Form 3811, August 2001 Domestic Return Receipt 102595-02-M-0835

MICROFILMED
JUL 15 2004

State of Idaho
DEPARTMENT OF WATER RESOURCES
1341 Fillmore Street, Suite 200, Twin Falls ID 83301-3380
Phone: (208) 736-3033 FAX: (208) 736-3037

SOUTHERN REGION

DIRK KEMPTHORNE
Governor

KARL J. DREHER
Director

September 4, 2002

ATTN: SHER BRODOSKI
THIRD FLOOR MEETING ROOM
BLAINE COUNTY COURTHOUSE
206 FIRST AVE SOUTH-STE# 300
HAILEY ID 83333-8429

Dear Ms. Brodoski:

The purpose of this letter is to confirm our reservation of the Third Floor Meeting Room for a meeting to be held by this office on **Wednesday - November 13, 2002 from 9:00 a.m. to 5:00 p.m.**

If you have any questions please feel free to contact me or Allen Merritt, Southern Regional Office Manager.

Thank you very much for your assistance in this matter.

Very truly yours,

Mary Baldwin

Mary Baldwin
Administrative Assistant

MICROFILMED
JUL 15 2004

BIETER WERTH & WALKER PLLC

ATTORNEYS & COUNSELORS AT LAW

WWW.IDAHOATTYS.COM

208 SPRUCE AVENUE NORTH, 2ND FLOOR
POST OFFICE BOX 2360
KETCHUM, IDAHO 83340
TELEPHONE 208.726.0847
FACSIMILE 208. 727.6853

RECEIVED
SEP 03 2002
Department of Water Resources
Southern Region

September 3, 2002

TO: VIA FACSIMILE & U.S. Mail
Fax No. Fax: 208-736-3037

Mr. Allen Merritt, IDWR Southern Regional Office

FROM: Douglas A. Werth

SUBJECT: Friedman Protest

ENCLOSED: Cover letter; Notice of Representation

PAGES: 5

COMMENTS:

CONFIDENTIALITY NOTICE: The contents of this fax transmission are confidential, intended only for the use of the above-named recipient, and also may be the subject of attorney-client privilege. Any distribution, dissemination, copying or other use of this communication by anyone other than the above-named recipient is strictly prohibited and no privilege is waived. If you received this fax transmission in error, please notify us at 208-726-0847. Thank you.

RECEIVED
5 2002

BIETER WERTH & WALKER, PLLC
ATTORNEYS & COUNSELORS AT LAW

208 SPRUCE AVENUE NORTH
SECOND FLOOR
POST OFFICE BOX 2360
KETCHUM, IDAHO 83340

BOISE OFFICE
TELEPHONE 208.383.0008
FACSIMILE 208.383.0311

KETCHUM OFFICE
TELEPHONE 208.726.0847
FACSIMILE 208.727.6853

DOUGLAS A. WERTH
WERTH@IDAHOATTYS.COM

September 3, 2002

Mr. Karl J. Dreher
Director
Idaho Department of Water Resources
1301 N. Orchard
P.O. Box 83720
Boise, ID 83720-0098

RE: *In the Matter of Application for Permit No. 37-20742 (Robert G. Friedman)*

Dear Director Dreher:

I have enclosed for filing in the above-referenced case the following document(s):

NOTICE OF REPRESENTATION AND AVAILABLE DATES FOR HEARING.

Sincerely yours,

Douglas A. Werth
BIETER WERTH & WALKER, PLLC

encl(s)
cc/encl(s): Blaine County Board of Commissioners
IDWR Southern Regional Office (by fax & mail)
James P. Speck, Esq.

MICROFILMED
JUL 15 2004

Douglas A. Werth
BIETER WERTH & WALKER, PLLC
208 Spruce Avenue, 2nd Floor
P.O. Box 2360
Ketchum, ID 83340
Telephone: 208.726.0847
Facsimile: 208.727.6853
Idaho State Bar No. 3660

Attorneys for Protestant

BEFORE THE DEPARTMENT OF WATER RESOURCES

OF THE STATE OF IDAHO

IN THE MATTER OF APPLICATION FOR PERMIT NO. 37-20742, ROBERT G. FRIEDMAN, Applicant, BLAINE COUNTY, Protestant.	NOTICE OF REPRESENTATION AND AVAILABLE DATES FOR HEARING

The Idaho Department of Water Resources is hereby notified pursuant to IDWR Rules of Procedure 200-205 (IDAPA 37.01.01.200 through IDAPA 37.01.01.205), that Protestant Blaine County will be represented in the above-captioned matter by Douglas A. Werth, of the law office of Douglas A. Werth PLLC.

All documents should be served upon both Douglas A. Werth and the Blaine County Board of Commissioners at the following addresses:

Douglas A. Werth
BIETER WERTH & WALKER, PLLC
P.O. Box 2360
Ketchum, ID 83340

Blaine County Board of Commissioners
Old Blaine County Courthouse
206 1st Avenue South, Suite 300
Hailey, ID 83333

Protestant's available dates for hearing during October, November and December, 2002, are November 13, 19 and 21.

DATED this 3rd day of September, 2002.

Douglas A. Werth, Attorney for
Protestant Blaine County

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that on this 3rd day of September, 2002, I caused a true and correct copy of the within and foregoing document to be served by the method(s) indicated below, and addressed to each of the following:

James P. Speck SPECK & AANESTAD P.O. Box 987 Ketchum, ID 83340 Fax: 208-726-0752	✓	U.S. Mail Overnight Delivery Hand Delivery Facsimile
Blaine County Board of Commissioners Old Blaine County Courthouse 206 1st Avenue South, Suite 300 Hailey, ID 83333 Fax: 208-788-5576	✓	U.S. Mail Overnight Delivery Hand Delivery Facsimile

MICROFILMED
JUL 15 2004

Idaho Department of Water Resources Southern Regional Office 1341 Fillmore Street Suite 200 Twin Falls, ID 83301-3380 Fax: 208-736-3037	✓	U.S. Mail
		Overnight Delivery
		Hand Delivery
	✓	Facsimile
Mr. Karl J. Dreher Director Idaho Department of Water Resources 1301 N. Orchard P.O. Box 83720 Boise, ID 83720-0098 Fax 208-327-7866	✓	U.S. Mail
		Overnight Delivery
		Hand Delivery
		Facsimile

Douglas A. Werth

MICROFILMED
SEP 09 2002

SPECK & AANESTAD
A PROFESSIONAL CORPORATION
ATTORNEYS
120 EAST AVENUE
POST OFFICE BOX 987
KETCHUM, IDAHO 83340

JAMES P. SPECK
jimspeck@cox-internet.com
DOUGLAS J. AANESTAD
aanestad@cox-internet.com

TELEPHONE
(208) 726-4421
FACSIMILE
(208) 726-0752

RECEIVED
AUG 27 2002
Department of Water Resources
Southern Region

August 23, 2002

Mr. Allen Merritt
Idaho Department of Water Resources
1341 Fillmore, Suite 200
Twin Falls ID 83301

Re: In the Matter of the Application for Permit No. 37-20742
Robert G. Friedman, Applicant

Dear Allen:

Pursuant to the Pre-Hearing Order and Order Authorizing Discovery, enclosed is a copy of my calendar for the months of October, November and December listing my unavailable dates for hearing as well as the unavailable dates for Chuck Brockway, Mr. Friedman's expert witness.

Please let me know if you need anything further. Thank you.

Sincerely yours,

SPECK & AANESTAD
A Professional Corporation

By: _____
James P. Speck

JPS:sgg
enclosure
cc: Client
Chuck Brockway

MICROFILMED
JUL 15 2004

JAMES P. SPECK - AVAILABILITY

October 2002

October 2002

S	M	T	W	T	F	S
		1	2	3	4	5
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RECEIVED
AUG 27 2002
Department of Water Resources
Southern Region

JAMES P. SPECK - AVAILABILITY

November 2002

November 2002

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RECEIVED
AUG 27 2002
Department of Water Resources
Southern Region

JAMES P. SPECK - AVAILABILITY

December 2002

December 2002

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NOT AVAILABLE					

RECEIVED
AUG 27 2002
Department of Water Resources
Southern Region

BEFORE THE DEPARTMENT OF WATER RESOURCES

OF THE

STATE OF IDAHO

IN THE MATTER OF APPLICATION FOR PERMIT NO. 37-20742 Robert G. Friedman, Applicant Blaine County Board of Commissioners, Protestants	**PRE-HEARING ORDER** **and** **ORDER AUTHORIZING DISCOVERY**

On July 11, 2002 Robert G. Friedman, (applicant), filed with the Department of Water Resources an Application for Permit to appropriate the public waters of the State of Idaho. The Department has received a protest against the approval of said application from the above captioned protestant(s).

On August 15, 2002 legal counsel for the applicant submitted to the Department a Motion for Order Compelling Discovery.

IT IS THEREFORE, HEREBY ORDERED as follows:

The parties are authorized to engage in discovery commencing with the date of this order. The parties shall complete discovery fourteen days (14) days prior to the date of a future hearing. Discovery shall be conducted pursuant to IDAPA Rules 37.01.01520-532 (Rules of Procedure 520 through 532). The parties are directed to answer or otherwise respond to discovery in accordance with the department's Rules of Procedure and the Idaho rules of Civil Procedure, as appropriate. In accordance with Rule 520, the scope of discovery shall be governed by Rule 26(b) of the Idaho Rules of Civil Procedure, unless otherwise provided by statute, rule or order of the Director.

IT IS FURTHER HEREBY ORDERED as follows:

On or before September 3, 2002 the parties shall submit to the Department a list of dates in October, November and December, 2002 available for a formal Hearing before the Department regarding this protested matter.

Dated this 19th day of August, 2002.

Allen Merritt
Pre-Hearing Officer
Southern Regional Manager

MICROFILMED

JUL 15 2004

CERTIFICATE OF MAILING

I hereby certify that on the 19th day of August, 2002 a true and correct copy of the above and foregoing document was forwarded with all required charges prepared, by Regular U.S. Mail to the parties listed:

Mary Baldwin

Secretary

JAMES P. SPECK
SPECK & AANESTAD
PO BOX 987
KETCHUM ID 83340

ATTN MARY ANN MIX
BLAINE COUNTY COMMISSIONERS
206 FIRST AVENUE SOUTH, STE# 300
HAILEY ID 83333

MICROFILMED

JUL 15 2004

SPECK & AANESTAD
A PROFESSIONAL CORPORATION
ATTORNEYS
120 EAST AVENUE
POST OFFICE BOX 987
KETCHUM, IDAHO 83340

JAMES P. SPECK
jimspeck@cox-internet.com
DOUGLAS J. AANESTAD
aanestad@cox-internet.com

TELEPHONE
(208) 726-4421
FACSIMILE
(208) 726-0752

August 14, 2002

RECEIVED
AUG 15 2002
Department of Water Resources
Southern Region

Mr. Allen Merritt
Idaho Department of Water Resources
1341 Fillmore, Suite 200
Twin Falls ID 83301

Re: Application for Permit No. 37-20742

Dear Allen:

Enclosed you will find the original and one copy each of a Notice of Appearance and Motion for Order Compelling Discovery in the above-referenced matter. Please receipt date stamp the copies and return them to me in the postage prepaid, self-addressed envelope I have included for that purpose.

As you may know, the pending Application is very similar to Application for Permit No. 37-8910, previously filed by Mr. Friedman, protested by Blaine County and subsequently withdrawn by Mr. Friedman. It appears the issues will be pretty much the same as in the earlier contested case and, therefore, we see no need whatsoever for a Pre-hearing Conference. Instead, we request that you now schedule the hearing allowing adequate time for discovery to be completed so that this matter may proceed in a timely fashion.

Finally, please make arrangements to have an appropriate order issued authorizing discovery to proceed. Thank you.

Sincerely yours,

SPECK & AANESTAD
A Professional Corporation

By: _____
James P. Speck

JPS:sgg
cc: Client (w/enclosures
Chuck Brockway (w/enclosures)
Board of Blaine County Commissioners (w/enclosures)
Jim J. Thomas, Esq. (w/enclosures)
IDWR (w/enclosures)
Karl J. Dreher (w/enclosures)

James P. Speck, Esq., ISB # 2067
SPECK & AANESTAD
A Professional Corporation
120 East Avenue
Post Office Box 987
Ketchum, Idaho 83340
Telephone (208) 726-4421
Facsimile (208) 726-0752
Attorneys for Applicant Robert G. Friedman

RECEIVED
AUG 15 2002
Department of Water Resources
Southern Region

BEFORE THE IDAHO DEPARTMENT OF WATER RESOURCES

IN THE MATTER OF APPLICATION FOR PERMIT NO. 37-20742:	)	
Robert G. Friedman, Applicant.	)	**MOTION FOR ORDER COMPELLING DISCOVERY**
Blaine County,	)	
Protestant.	)	

Applicant, Robert G. Friedman, pursuant to the provisions of IDAPA 37.01.01.521 moves the Department for its Order directing that discovery may be conducted in this contested case and providing in such order a schedule for completion of the discovery.

Dated this 14th day of August, 2002.

SPECK & AANESTAD
A Professional Corporation
Attorneys for Applicant Robert G. Friedman

By: _____
James P. Speck

MICROFILMED
JUL 15 2003

I. **CERTIFICATE OF SERVICE**

I hereby certify that on the 14th day of August 2002, I served a true and correct copy of the within and foregoing document upon the persons named below in the manner noted:

Board of Blaine County Commissioners 206 First Avenue South Suite 300 Hailey, ID 83333 Fax: 1-208-788-5576	☑ ❑ ❑	United States Mail, Postage Prepaid Hand Delivery Facsimile, with copy by United States Mail, Postage Prepaid
Mr. Jim J. Thomas Blaine County Prosecuting Attorney 201 Second Avenue South Suite 100 Hailey, ID 83333 Fax: 1-208-788-5554	☑ ❑ ❑	United States Mail, Postage Prepaid Hand Delivery Facsimile, with copy by United States Mail, Postage Prepaid
IDAHO DEPARTMENT OF WATER RESOURCES Southern Regional Office 1341 Fillmore Street Suite 200 Twin Falls ID 83301-3380 Fax: 1-208-736-3037	☑ ❑ ❑	United States Mail, Postage Prepaid Hand Delivery Facsimile, with copy by United States Mail, Postage Prepaid
Mr. Karl J. Dreher Director IDAHO DEPARTMENT OF WATER RESOURCES 1301 N. Orchard P.O. Box 83720 Boise, ID 83720-0098 Fax: 1-208-327-7866	☑ ❑ ❑	United States Mail, Postage Prepaid Hand Delivery Facsimile, with copy by United States Mail, Postage Prepaid

JAMES P. SPECK

Motion Filed

James P. Speck, Esq., ISB # 2067
SPECK & AANESTAD
A Professional Corporation
120 East Avenue
Post Office Box 987
Ketchum, Idaho 83340
Telephone (208) 726-4421
Facsimile (208) 726-0752
Attorneys for Applicant Robert G. Friedman

RECEIVED
AUG 15 2002
Department of Water Resources
Southern Region

BEFORE THE IDAHO DEPARTMENT OF WATER RESOURCES

IN THE MATTER OF APPLICATION FOR PERMIT NO. 37-20742:	)	
Robert G. Friedman, Applicant.	)	**NOTICE OF APPEARANCE**
Blaine County,	)	
Protestant.	)	

James P. Speck, of Speck & Aanestad, A Professional Corporation, hereby files its Notice of Appearance on behalf of Applicant Robert G. Friedman.

Dated this 14th day of August, 2002.

SPECK & AANESTAD
A Professional Corporation
Attorneys for Applicant Robert G. Friedman

By: _____
James P. Speck

MICROFILMED
AUG 15 2002

I. **CERTIFICATE OF SERVICE**

I hereby certify that on the 14th day of August 2002, I served a true and correct copy of the within and foregoing document upon the persons named below in the manner noted:

Board of Blaine County Commissioners 206 First Avenue South Suite 300 Hailey, ID 83333 Fax: 1-208-788-5576	☑ ☐ ☐	United States Mail, Postage Prepaid Hand Delivery Facsimile, with copy by United States Mail, Postage Prepaid
Mr. Jim J. Thomas Blaine County Prosecuting Attorney 201 Second Avenue South Suite 100 Hailey, ID 83333 Fax: 1-208-788-5554	☑ ☐ ☐	United States Mail, Postage Prepaid Hand Delivery Facsimile, with copy by United States Mail, Postage Prepaid
IDAHO DEPARTMENT OF WATER RESOURCES Southern Regional Office 1341 Fillmore Street Suite 200 Twin Falls ID 83301-3380 Fax: 1-208-736-3037	☑ ☐ ☐	United States Mail, Postage Prepaid Hand Delivery Facsimile, with copy by United States Mail, Postage Prepaid
Mr. Karl J. Dreher Director IDAHO DEPARTMENT OF WATER RESOURCES 1301 N. Orchard P.O. Box 83720 Boise, ID 83720-0098 Fax: 1-208-327-7866	☑ ☐ ☐	United States Mail, Postage Prepaid Hand Delivery Facsimile, with copy by United States Mail, Postage Prepaid

JAMES P. SPECK

AUG 15 2002

State of Idaho
DEPARTMENT OF WATER RESOURCES
1341 Fillmore Street, Suite 200, Twin Falls ID 83301-3380
Phone: (208) 736-3033 FAX: (208) 736-3037

SOUTHERN REGION

DIRK KEMPTHORNE
Governor

KARL J. DREHER
Director

August 12, 2002

ROBERT G. FRIEDMAN
718 NORTH CRESCENT DRIVE
BEVERLY HILLS CA 90210

RE: APPLICATION FOR PERMIT NO. 37-20742

Dear Applicant:

Enclosed is a copy of a protest filed against approval of the above referenced application. The Department suggests that you contact the protestant(s) directly to determine the nature of the protest and, if possible, to resolve the matter without action by the Department.

In our experience, informal discussion between the parties prior to initiation of formal proceedings often leads to resolution of the protest. If the protest cannot be resolved informally, the matter will be scheduled for conference and/or hearing.

The following are criteria the Department must consider in either approving or denying the application (Section 42-203A, Idaho Code).

1. Will the proposed use reduce the quantity of water under existing water rights?

2. Is the proposed water supply insufficient for the purpose intended?

3. Is the application made in good faith or for delay or speculative purposes?

4. Has the applicant sufficient financial resources with which to complete the project?

5. Will the proposed use conflict with the local public interest?

6. Will the proposed use be contrary to the conservation of water resources within the State of Idaho?

Please contact this office if you have any questions regarding this procedure or if you wish to schedule a conference and/or hearing.

Sincerely,

Allen D. Merritt, P.E.
Regional Manager

Enclosures
cc: C E BROCKWAY P E
BROCKWAY ENGINEERING
2016 NORTH WASHINGTON ST-STE 4
TWIN FALLS ID 83301

MICROFILMED

AUG 15 2002

State of Idaho
DEPARTMENT OF WATER RESOURCES
1341 Fillmore Street, Suite 200, Twin Falls ID 83301-3380
Phone: (208) 736-3033 FAX: (208) 736-3037

SOUTHERN REGION

DIRK KEMPTHORNE
Governor

KARL J. DREHER
Director

August 12, 2002

ATTN MARY ANN MIX
BLAINE COUNTY COMMISSIONERS
206 FIRST AVENUE SOUTH, STE# 300
HAILEY ID 83333

RE: APPLICATION FOR PERMIT NO. 37-20742 (Friedman)

Dear Protestants:

Your protest against the approval of the above referenced application has been received and a copy has been sent to the applicant with the suggestion that he contact you directly to determine the exact nature of the protest and, if possible, to resolve the matter without action by the Department.

Please note that the application is considered a contested case and subject to the Rules of Procedure adopted by the Department.

If you need a copy of these rules, please contact this office. The Rules of Procedure are also available on the Internet by using the IDWR Homepage at the following electronic address:

http://www.idwr.state.id.us/apa/idapa37/0101.htm

The attachment to this letter describes the issues which the Department must consider in taking action on an application. It also gives a brief description of the conference and hearing procedure followed by the Department in resolving protested applications.

If you have any questions or if this office can be of further assistance, please feel free to contact us.

Very truly yours,

Allen D. Merritt, P.E.
Southern Region Manager

AM:MB
Enclosure(s)

MICROFILMED
JUL 15 2004

THE BOARD OF BLAINE COUNTY COMMISSIONERS

206 FIRST AVENUE SOUTH, SUITE 300
HAILEY, IDAHO 83333
PHONE: (208) 788-5500 * FAX: (208) 788-5576
www.co.blaine.id.us

Mary Ann Mix, Chairman * Dennis Wright, Commissioner * Sarah Michael, Commissioner

RECEIVED

AUG 0 5 2002

Department of Water Resources
Southern Region

August 2, 2002

Mr. Allen Merritt
Department of Water Resources, Southern Region
1341 Fillmore St. Suite 200
Twin Falls, ID 83301

RE: Blaine County Protest of Application #37-20742

Dear Mr. Merritt:

We are protesting the above referenced application by Robert G. Friedman. A check for $25.00 and a "Notice of Protest" is included with this letter.

Under the Department's "policy memorandum" of 1980 and the Big Wood River Ground Water Management Area (BWRGWMA) June 28, 1991), water in the Blaine County area has been declared over-allocated.

The applicant carries the burden of providing evidence that the proposed use will not injure other water rights holders, will not constitute an enlargement of use, and will be consistent with principles of conservation of the water of the State of Idaho. None of these requirements are found in this application.

There is also no showing by the applicant that this application "is in the public, as opposed to private, interest" {1.C. § 42-1503 (b).

The practice of creating ponds for aesthetic purposes is more likely in Blaine County than in most Idaho counties because of the extraordinary land values in Blaine County. The potential for abuse of the Department's stated goal of water conservation and preservation is more likely here than in most Idaho Counties. One of the reasons the Board of Commissioners established a "Local Public Interest Water Policy (Policy)" [*Shokal v. Dunn* and *Hardy v. Higginson* and I. C. 42-203 A (5)] was because of the unique nature of this community and the measurable impact of increased, expanded use of a scarce water resource, always to the detriment of other water rights holders.

MICROFILMED
AUG 15 2002

8/5/02
S025141
MB

No mater how "minimum" the amount of impounded water in each new pond is said to be, by an applicant, the cumulative impact of a succession of huge ponds in our community will in fact have a very measurable affect on the availability of water for other water rights holders, minimum stream flows, and all the other water interests noted in the 1998 Blaine County "Local Public Interest Policy".

There are many hundreds of lots in Blaine County large enough to hold ponds. It wouldn't take much imagination to compute how much water even as few as fifty such ponds would take out of the system and how this cumulative impact would shift the use of water in our community, from agricultural and public purposes, to private marketing and aesthetic interests. Neither the interests of the State of Idaho nor the welfare of residents of Blaine County will be served if aesthetic ponds are use to divert water from other water rights holders and from the aquifer system.

We ask that you deny this application for the above stated reasons. Further, we ask again that future applications for aesthetic ponds in our County be evaluated under a re-defined terminology that recognizes that such ponds aren't "really" non-consumptive", but are actually "consumptive', **and that the cumulative impacts of multiple ponds must be considered before approving such applications for enlargements of water use.** With less than normal snow pack for 2002, we seriously question the wisdom of allowing any new water impoundments.

Sincerely,

Mary Ann Mix
Chair

Dennis Wright
Vice Chairman

cc: Robert G. Friedman
Jim Thomas, BCPA

MICROFILMED
JUL 15 2004

3/96

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
NOTICE OF PROTEST

RECEIVED
AUG 0 5 2002
Department of Water Resources
Southern Region

This form may be used to file a protest with the department under sections 42-108B, 42-203A, 42-203C, 42-211, 42-222 and 42-224, Idaho Code. The department will also accept a timely protest not completed on this form if it contains the same information.

1. Matter being protested Robert G Friedman Water Right Application 37-20742

2. Name of protestant Blaine County Commissioners

3. Protestant's representative for service (If different than protestant)

4. Service mailing address 206 1st Ave S., Suite 300, Hailey, ID 83333

5. Service telephone no. 208-788-5500

6. Basis of protest (including statement of facts and law upon which the protest is based)
Reference enclosed letter.

(additional pages may be attached to describe the nature of the protest)

7. What would resolve your protest?

I hereby, acknowledge that if I, or my designated representative, fails to appear at any regularly scheduled conference or hearing in the matter of which I have been notified at the address above, the department may issue a notice of proposed default against me in this matter for failure to appear. I also verify that I have served a copy of this protest upon the applicant.

Signed this 2nd day of August, ~~19~~ 2002.

Blaine County
PROTESTANT

Glenda Wright
PROTESTANT'S REPRESENTATIVE

MICROFILMED
AUG 15 2002

8/5/02
SO 25141
MB

FORM NO.202A
REVISED 7/31/98

APPLICATION NO. 37-20742

STATE OF IDAHO
IDWR SOUTHERN REGION
APPLICATION FOR PERMIT ANALYSIS SHEET

INITIAL REVIEW BY L. SKINNER DATE 7/11/2002

REQUIRED INFORMATION (Ck if OK)

X Name (If applicant is a corporation or partnership, names must be provided for the director, officers, & other partners.
X Address
X Source (see USGS quad for names of water sources)
X Point of diversion (10 Acres for spring, lot & block descriptions for subdivisions, local name, flow &/or volume.
X County
X Quantity (flow &/or volume)
X Period of use
X Nature of proposed use (include description of use)
X Description of diverting works.
X Time required for beneficial use of water.
X Place of use or acres irrigated.
X Map
___ Signature (If applicant is corp., partnership, or muninicipality, title of signator is required) (NEED ORIGINAL SIGNATURE PAGE)
X Fee
X Yes ___ No* In form to receipt?

++++PROPOSED PRIORITY DATE 7/11 19, 2002

ADDITIONAL INFORMATION

X Overlapping place of use(Describe source & relationship to present application on the back. PART OF RIGHT 37-863 WILL BE UTILIZED IN PONDS. ALSO SEE TRANSFER #66115
X Overlapping point of diversion. NONE
___ Yes X No Is Source Surface Water?
If Yes Send Copy to F&G.
If Yes Field check/memo required.
Field check/memo by_____
___ Yes X No Field report attached?
___ Yes X No Critical Ground water area?
X Yes ___ No Groundwater management area? BIG WOOD
___ Yes X No Measurement District or Groundwater District?
What District? _____
___ Yes X No Send Dam safety information?
___ Yes X No Send power requirement letter?
___ Yes X No Send fish farm requirement letter?
___ Yes X No Power residency affidavit attached?
___ Yes X No Power efficiency form?
X Yes ___ No Within trustwater boundary?(If yes, attach trustwater supplementary analysis sheet.
___ Yes X No Diversion greater than 5 cfs or 500 acre ft? (If yes,attach large diversion supplementary analysis sheet.
___ Yes X No Is Application made to record Pre Nov 1987 Development?
If Yes then request clear evidence of when use started.

* REQUEST THE FOLLOWING ADDITIONAL INFORMATION FROM THE APPLICANT:

_____

_____

_____

_____ Date Requested _____

	Date Sent	Comments Received
SEND COPIES TO:		
___ Idaho Dept of Health & Welfare	_____	_____
___ USDI BLM	_____	_____
___ Idaho Dept of Fish & Game	_____	_____
___ USFS	_____	_____
___ Idaho Dept of Lands	_____	_____
___ Water Dist. No. _____	_____	_____
___ Adjudication Bureau Unit	_____	_____
___ _____	_____	_____
___ _____	_____	_____

PROCESSING X Yes ___ No In form for Advertising?
___ Yes X No Statewide Advertising?
X Yes ___ No Fee amount, receipt date & No. recorded?

___ Yes ___ No Has all requested additional information been received?
If not, describe action taken: _____
_____

FINAL REGIONAL PROCESSING REVIEW
___Yes ___No Affidavit of publication received?
___Yes ___No Application published correctly? If not, record action taken.
_____
_____
___Yes ___No Publication dates and paper recorded?
Final date for protest: _____
___Yes ___No Protests received?
___Yes ___No Protested?
Describe Resolution: _____
_____
___Yes ___No Measuring device required?
___Yes ___No Access port required?
___Yes ___No Will water be delivered by watermaster? If yes, what dist? ____
___Yes ___No Special conditions codes:
_____

___Yes ___No Is Evaluation Memo Attached?
If yes; date of Memo _____

Date of priority recommended: _____

COMMENTS:

_____
_____
_____
_____

RECOMMEND _____Approval _____Denial

By _____ Date _____

RECEIVED

AUG 0 2 2002

Department of Water Resources
Southern Region

AFFIDAVIT of PUBLICATION

State of Idaho, } SS.
County of Blaine }

On this 24 day of July, in the year 2002 before me a Notary Public of said State, personally appeared , known or identified to me to be the person whose name is subscribed to be the within instrument, and being by me first duly sworn, declared that the statements therein are true, and acknowledged to me that he executed the same. As the publisher of the Wood River Journal, he/she attests that said newspaper has been continuously and and uninterruptedly published for a period of seventy-eight consecutive weeks prior to the first publication of the annexed notice, and is a newspaper qualified to publish legal notices as provided by act of the 1919 session of the legislature of the State of Idaho, known as House Bill 145; that the annexed advertisement was published once each week for 2 consecutive issues in said newspaper proper and not in a supplement; that the date of the first publication of said advertisement was on the 17 day of July 2002 and the date of the last publication was on the 24 day of July 2002

Subscribed and Sworn to Before me this 24 day of July 2002

CHRISTINA A GARCEAU NOTARY PUBLIC STATE OF IDAHO

NOTARY PUBLIC

#13083

WOOD RIVER JOURNAL
Hailey, Idaho

OK MB 8/6/02

COST OF PUBLICATION

Number of Picas per Line	11.5	
Number of Lines in Notice	56	
Number of Insertions	2	
— Lines tabular at	—	7¢ / Pica
56 Lines straight at	1.43	6¢ / Pica
— Subsequent lines at	—	5¢ / Pica
TOTAL COST	55.08	

AUG 15 2002

COPY OF NOTICE
(Paste Here)

Application for WATER

TITLE OF NOTICE

Right

PLAINTIFF ATTORNEY

DEFENDANT

#24620

PLAINTIFF

Id. Dept. of Water Resources

BILL TO

Application for water right

The following application has been filed to appropriate the public waters of the State of Idaho:

37-20742
ROBERT G. FRIEDMAN
718 N CRESCENT DR
BEVERLY HILLS CA 90210
Point(s) of Diversion: NENW S23 T05N R17E; BLAINE County
Source: GROUND WATER
Use: 01/01 To 12/31
RECREATION 2 CFS
RECREATION STORAGE 16 AFA
AESTHETIC 2 CFS
AESTHETIC STORAGE 16 AFA
DIVERSION TO STORAGE 2 CFS
Total Diversion: 2 CFS 16 AFA
Date Filed: 07/11/2002
Place of Use: NENW S23 T05N R17E

Remark: Application proposes developing a new well to provide water for a new pond project located approximately 5.5 miles north and 1.75 miles west of Ketchum, along the west side of Highway 75.

Consumptive uses associated with the pond use will be mitigated by no longer irrigating two acres of land with Eagle Creek Irrigation Company water shares as outlined in pending transfer #66115. Permits will be subject to all prior water rights. Protests may be submitted based on the criteria of Sec 42-203A, Idaho Code. Any protest against the approval of this application must be filed with the Director, Dept. of Water Resource, Southern Region, 1341 Fillmore St, Suite 200, Twin Falls ID 83301 together with a protest fee of $25.00 for each application on or before 08/05/2002. The protestant must also send a copy of the protest to the applicant.

KARL J DREHER, Director

Publish: Wood River Journal–July 17 & 24, 2002.

13083

BROCKWAY ENGINEERING PLLC

Memo

RECEIVED
JUL 18 2002
Department of Water Resources
Southern Region

To: Allen Merritt

From: CEB

Cc:

Date: July 17, 2002

Re: Permit Application 37-20742

Please find the enclosed signature page for Rob Friedman. If you have any questions, please give me a call.

Chuck

MICROFILMED
JUL 15 2004

IDAHO DEPARTMENT OF WATER RESOURCES
1341 FILLMORE STREET-STE# 200
TWIN FALLS ID 83301
Phone: 736-3033 Fax# : 736-3037

July 11, 2002

ATTN: Scott Kraus-LEGALS
WOOD RIVER JOURNAL
PO BOX 988
HAILEY ID 83333

Dear Scott:

Enclosed you will find a legal notice which we wish to have published in your newspaper on the dates indicated (once a week for two consecutive weekly issues).

If you cannot publish the notice on the proposed dates, please contact us immediately at 736-3033. An affidavit of publication must be submitted to the Department along with the publication bill. Your cooperation is appreciated.

Sincerely

Mary Baldwin

Mary A. Baldwin
Administrative Assistant

MICROFILMED
JUL 15 2002

State of Idaho
DEPARTMENT OF WATER RESOURCES
1341 Fillmore Street, Suite 200, Twin Falls ID 83301-3380
Phone: (208) 736-3033 FAX: (208) 736-3037

SOUTHERN REGION

DIRK KEMPTHORNE
Governor

KARL J. DREHER
Director

July 11, 2002

ROBERT G. FRIEDMAN
718 N CRESCENT DR
BEVERLY HILLS CA 90210

RE: Application for Permit No 37-20742

Dear Applicant:

The Department of Water Resources acknowledges receipt of your water right application. Please refer to the above referenced number in all future correspondence regarding this application.

A legal notice of the application has been prepared and is scheduled for publication in the **Wood River Journal on 7/17 & 7/24/02.** Submittal of protests to this application will be allowed for a period ending ten days after the second publication. **(August 5, 2002)**

If the application is protested you will be sent a copy of the protest(s). All protests must be resolved before the application can be considered for approval. If the protest(s) cannot be resolved voluntarily, the Department will conduct a conference and/or hearing on the matter.

If the application is not protested, it will be forwarded to our State Office in Boise for final processing. The State Office will notify you of any action taken on the application and will send you a copy of the permit if approved. A typical processing time for an unprotested application is about eight weeks.

Please feel free to contact this office if you have any questions.

Sincerely,

Mary Baldwin

Mary A. Baldwin
Administrative Assistant I

cc:
C E BROCKWAY P E
BROCKWAY ENGINEERING
2016 NORTH WASHINGTON ST-STE 4
TWIN FALLS ID 83301

MICROFILMED
JUL 2 3 2004

State of Idaho
DEPARTMENT OF WATER RESOURCES
1341 Fillmore Street, Suite 200, Twin Falls ID 83301-3380
Phone: (208) 736-3033 FAX: (208) 736-3037

SOUTHERN REGION

DIRK KEMPTHORNE
Governor

KARL J. DREHER
Director

July 11, 2002

LEE PETERSON WATERMASTER
WATER DISTRICT #37
PO BOX T
SHOSHONE ID 83352

Re: Application for Permit No. 37-20742 - Robert G. Friedman

Dear Mr. Peterson:

Enclosed is a copy of an Application for Permit within your District.

We also have enclosed a Watermaster's Recommendation Form for your comment and/or recommendation.

Regional review of an un-protested application can be completed as soon as the final protest period is past; therefore, your prompt response to this request is appreciated.

If you have any questions about an application, please contact this office or the applicant.

Very truly yours,

Mary Baldwin

Mary A. Baldwin
Administrative Assistant

Enclosure(s)

MICROFILMED
JUL 15 2002

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

WATER DISTRICT NO. 37 & 37 M
P.O. Box T
Shoshone, Idaho 83352
(208) 886-2451

LEE R. PETERSON
Watermaster

RECEIVED
JUL 25 2002
Department of Water Resources
Southern Region

FACSIMILE TRANSMISSION

TO:	IDWR Twin Falls
FAX NUMBER:	736-3037
FOR THE ATTENTION OF	Cory Skinner
FROM	Water District 37 & 37M
FAX NO.	Same as phone 886-2451
NUMBER OF PAGES (INCLUDING THIS ONE)	2
DATE	7/25/02
MESSAGE	

If you do not receive the above number of pages, or if there is any other problem, please call (208) 886-2451 at Shoshone, Idaho.

The information contained in this fax is confidential and subject to attorney-client privilege. If the reader is not the intended receipient or the agent therof, you are hereby notified that any disseminatin, distribution or copying of the fax is prohibited. If you have received this fax in error, please notify us immediately and return the original by mail at our expense. Thank you.

MICROFILMED
JUL 25 2002

State of Idaho
Department of Water Resources
Application For Permit
RECOMMENDATION OF WATERMASTER

RECEIVED
JUL 25 2002
Department of Water Resources
Southern Region

Application No: 37-20742 Water Right No(s): 37-20742
Applicant's Name: Robert G. Friedman

Watermaster's Recommendation:

a) _____ I do not oppose approval of this application.

b) _____ I do not oppose approval of this application if it is conditioned as follows.

c) __X__ I oppose approval of this application for the following reasons:
The well will be pumping from Big Wood River, sub or aquifer. Pipe 10 shares from Eagle Creek – it is cold enough. 2 CFS appears to be too much for ponding. It appears that the well will be main source of water. Big Wood River is already over taxed. By my observation 3 ponds will require way more water than 2 acres of irrigation.

d) _____ Additional Comment:

Dated this 25th day of July, 2002.

Water District No. 37

Watermaster's Signature

MICRO... JUL 25 2002

The following application has been filed to appropriate the public waters of the State of Idaho:
37-20742
ROBERT G. FRIEDMAN
718 N CRESCENT DR
BEVERLY HILLS CA 90210
Point(s) of Diversion: NENW S23 T05N R17E; BLAINE County
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Use: 01/01 To 12/31
RECREATION 2 CFS
RECREATION STORAGE 16 AFA
AESTHETIC 2 CFS
AESTHETIC STORAGE 16 AFA
DIVERSION TO STORAGE 2 CFS
Total Diversion: 2 CFS 16 AFA
Date Filed: 07/11/2002
Place of Use: NENW S23 T05N R17E
Remark: Application proposes developing a new well to provide water for a new pond project located approximately 5.5 miles north and 1.75 miles west of Ketchum, along the west side of Highway 75. Consumptive uses associated with the pond use will be mitigated by no longer irrigating two acres of land with Eagle Creek Irrigation Company water shares as outlined in pending transfer #66115. Permits will be subject to all prior water rights. Protests may be submitted based on the criteria of Sec 42-203A, Idaho Code. Any protest against the approval of this application must be filed with the Director, Dept. of Water Resource, Southern Region, 1341 Fillmore St, Suite 200, Twin Falls ID 83301 together with a protest fee of $25.00 for each application on or before 08/05/2002. The protestant must also send a copy of the protest to the applicant.

KARL J DREHER, Director

Published in the Wood River Journal on 7/17 & 7/24/02

MILLENNIUM

JUL 25 2002

BROCKWAY
ENGINEERING
P.L.L.C.

Hydraulics
Hydrology
Water Resources

CHARLES E. BROCKWAY, PH.D., P.E.

CHARLES G. BROCKWAY, PH.D., P.E.

2016 NORTH WASHINGTON STREET • SUITE 4

TWIN FALLS, IDAHO 83301

208•736•8543

FAX: 736•8506

RECEIVED
JUL 11
Department of Water Resources
Southern Region

July 10, 2002

Mr. Allen Merritt, Regional Manager
Idaho Department of Water Resources
1341 Fillmore, Suite 200
Twin Falls, ID 83301

Subject: Application for Permit-Robert G. and Sandra S. Friedman

Dear Allen:

Thank you for meeting with me on July 10, 2002 to review the application for permit prior to advertising. I have made the suggested changes in the application and narrative to reflect your suggestions.
The revised application is enclosed. This application for non-consumptive ground water exchange is submitted to allow for utilization of Eagle Creek Irrigation Company surface water shares as mitigation for evaporation from irrigation storage and aesthetic ponds within the place of use of the irrigation company. Processing of the application for transfer on the Eagle Creek Irrigation Company water right should proceed as authorized by the letter from Everett Davis, President of the Company.

The application for permit for ground water proposes to utilize ground water for non-consumptive use in the ponds to maintain water quality and to recharge the outflow from the pond system into the local aquifer. It also proposes storage for recreation and aesthetics. Utilization of the pond system for irrigation storage and fire suppression is contemplated.

Also enclosed is Brockway Engineering Check # 3830 for $290 for the application fee.

I believe the application is complete with the exception of the final original signature page of the applicant. The original should be delivered to you within two days. Mr. Friedman is anxious to begin construction on the project and I hope that the advertisement schedule to begin the week of July 15 can be met. Thanks for all your help.

Sincerely,

Charles E. Brockway P.E. PhD.

En closures: Application for Permit

cc: R. Friedman
J. Speck
E. Davis

MICROFILMED
JUL 15 2002

37-20742

37-20742

State of Idaho

Department of State.

I, PETE T. CENARRUSA, Secretary of State of the State of Idaho and custodian of the Seal of said State, do hereby certify that the annexed is a full, true and complete transcipt of articles of incorporation of EAGLE CREEK IRRIGATION COMPANY, an Idaho corporation, received and filed in this office on the 7th day of March, 1973, as appears of record in this office as of this date.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the Great Seal of the State of Idaho.

Done at Boise, Idaho, this 7th *day of* March *A.D., 19* 73

Pete T. Cenarrusa

Secretary of State

Margaret Lamont

Corporation Clerk

EXHIBIT A

37-20742

EXHIBIT B

MICROFILMED
JUL 15 2004

EXHIBIT A

WATER REQUIRMENTS AND USE DATA Revised 7/10/2002 CEB

R. FRIEDMAN PROPERTY-EAGLE CREEK

ESTIMATED POND EVAPORATION AND SEEPAGE

C.E. BROCKWAY P.E

THREE PONDS WITH INFLOW FROM EAGLE CREEK SHARES AND WELL

POND EVAPORATION DATA FROM J.L. WRIGHT AND MARVIN E. JENSEN 1975

1975 EVAPOTRANSPIRATION AND CLIMATIC DATA FOR THE SILVER CREEK-

CREEK TRIANGLE BLAINE COUNTY, IDAHO FEBRUARY 1976

LAKE OR POND EVAPORATION CALCULATED USING THE KOHLER-NORDENSON-FOX PROCEDURE

NUMBER OF LOTS= 1

MAX. IRRIG. DIV PER ACRE= 8 GPM USING SPRINKLERS IRRIG. EFFICIENCY= 90 PERCENT

INFLOW FROM SHARES 10 INCHES

RECIRCULATION 135 INCHES

OTHER DIVERSION 0 INCHES

TOTAL DIVERSION TO POND INFLOW= 145 INCHES OR 2.90 CFS

ALL DITCHES & PONDS HAVE 3 TO 1 SIDE SLOPES TOTAL POND AREA = 1.98 ACRES

ALL DITCHES AND PONDS LINED W/ MEMBRANE LINER OR CLAY LINER <<<

SEEPAGE RATES ESTIMATED FROM LOSS MEASUREMENTS AND SOILTYPES FOR EACH LAKE OR LINER TYPE

NUMBER OF PONDS = 3

MO	AVG EVAP AVG DAY MM	AVG EVAP AVG DAY IN	TOTAL MON. EVAP IN.	PRECIP HAILEY IN.	PROJECT | AVG EVAP CFS	PROJECT AVG EVAP GPM	PROJECT AVG EVAP MIN.IN	|EVAP- |PRECIP IN/ DAY	PROJECT |EVAP- |PRECIP CFS	PROJECT EVAP- PRECIP GPM	PROJECT EVAP- PRECIP MIN. IN.
JAN	0.56	0.022	0.68	2.67	0.002	0.83	0.09	0.00	0.000	0.00	0.00
FEB	0.91	0.036	1.00	1.83	0.003	1.35	0.15	0.00	0.000	0.00	0.00
MAR	1.43	0.056	1.75	1.22	0.005	2.13	0.24	0.02	0.001	0.64	0.07
APR	2.29	0.090	2.70	1.07	0.008	3.41	0.38	0.05	0.005	2.06	0.23
MAY	4.32	0.170	5.27	1.47	0.014	6.43	0.72	0.12	0.010	4.64	0.52
JUN	5.19	0.204	6.13	1.39	0.017	7.72	0.86	0.16	0.013	5.97	0.67
JUL	5.19	0.204	6.33	0.47	0.017	7.72	0.86	0.19	0.016	7.15	0.80
AUG	4.55	0.179	5.55	0.69	0.015	6.77	0.75	0.16	0.013	5.93	0.66
SEP	3.96	0.156	4.68	0.71	0.013	5.89	0.66	0.13	0.011	5.00	0.56
OCT	2.07	0.081	2.53	0.76	0.007	3.08	0.34	0.06	0.005	2.15	0.24
NOV	1.01	0.040	1.19	1.44	0.003	1.50	0.17	0.00	0.000	0.00	0.00
DEC	0.63	0.025	0.77	2.48	0.002	0.94	0.10	0.00	0.000	0.00	0.00
	MAX MON.		6.33	2.67	0.017	7.72	0.86	0.19	0.016	7.15	0.80
	ANNUAL TOT.		38.59	16.20							
	APR-SEP TOT.		30.67	5.80							

37-2774

EXHIBIT B

POND AND IRRIGATION SYSTEM INFLOW AND OUTFLOW LOSS ESTIMATES(SUMMERTIME)

DITCH WIDTH= 2 FT

DITCH DEPTH= 0.75 FT

	L	WIDTH	AVG DEPTH	SURF. AREA	AREA	WET AREA	WET AREA	SEEP. RATE	VOL	IN-FLOW	SEEP-AGE	EVAP (MAX)	ACRES IRRIG.	IRRIG. DIV.	OUT-FLOW	TURN-OVER
	FT	FT	FT	FT^2	AC.	FT^2	AC.	FT/D	FT^3	CFS	CFS	CFS		CFS	CFS	HRS
DITCH INLET1-2	200	2	0.75	400	0.009	449	0.010	0.01	300	1.550	0.00005	0.00008	0.0	0.00	1.550	0.1
POND 2	180	113	6.00	20340	0.467	20691	0.475	0.01	122040	2.895	0.00239	0.00401	0.0	0.00	2.889	11.7
DITCH INLET2-3	60	2	0.75	120	0.003	135	0.003	0.01	90	1.350	0.00002	0.00002	0.0	0.00	1.350	0.0
POND 3	130	120	6.00	15600	0.358	15853	0.364	0.01	93600	1.350	0.00183	0.00307	0.0	0.00	1.345	19.3
DITCH 2-1	140	2	0.75	280	0.006	314	0.007	0.01	210	2.889	0.00004	0.00006	0.0	0.00	2.888	0.0
POND 1	260	194	6.00	50440	1.158	50946	1.170	0.01	302640	2.888	0.00590	0.00994	8.0	0.14	2.730	29.1
TOT. DITCH	340			680.0102	0.02	763	0.53		510		0.000	0.00013				
TOT. PONDS				86380	1.98	87490	2.01		518280		0.010	0.01702				
TOTAL				87180	2.00	88387	2.03		518880		0.010	0.01718	8.0	0.14		60.2

SYSTEM SEEPAGE LOSS=	0.010	CFS=	0.51	MINERS IN.=	5 GPM
SYSTEM DESIGN EVAP LOSS=	0.017	CFS=	0.86	MINERS IN.=	8 GPM
SYSTEM IRRIG. REQ'T=	0.143	CFS=	7.1	MINERS IN.=	64 GPM
SYSTEM WATER REQ'T=	0.170	CFS=	8.5	MINERS IN.=	76 GPM
SYSTEM IRRIG. WATER RIGHT(SHARES)	0.200	CFS=	10.0	MINERS IN.=	90 GPM
SYSTEM RECIRCULATION	2.700	CFS=	135.0	MINERS IN.=	1212 GPM
SYSTEM DIVERSION AVAILABLE=	2.900	CFS=	145.0	MINERS IN.=	1302 GPM
SYSTEM RETURN FLOW	2.730	CFS=	136.5	MINERS IN.=	1225 GPM

MAX POND TURNOVER TIME- ALL PONDS= 60.2 HOURS TOTAL WATER REPLACEMENT

MAX TURNOVER TIME WITHOUT IRRIGATION= 49.9 HOURS ASSUMES PUMPING FOR IRRIGATION OUT OF POND 1

SYSTEM IRRIGATION SEASON POND WATER USE ESTIMATE

IRRIGATION SEASON LENGTH	180	DAYS
AVERAGE PROJECT SEEPAGE	0.010	CFS
IRRIG SEASON PROJECT SEEPAGE	3.6	ACRE FEET
IRRIG. SEASON EVAP. (CONSUMPTIVE USE)	5.1	ACRE FEET

SYSTEM NON-IRRIGATION SEASON POND WATER USE ESTIMATE

NON-IRRIGATION SEASON LENGTH	185	DAYS
AVERAGE PROJECT SEEPAGE	0.010	CFS
NON-IRRIG SEASON PROJECT SEEPAGE	3.8	ACRE FEET
NON-IRRIG. SEASON EVAP. (CONSUMPTIVE USE)	1.3	ACRE FEET

SYSTEM IRRIGATION SEASON DISCHARGE REQ'T

POND SEEPAGE LOSS FOR	2.00 ACRES=	4.6	GPM
MAX. EVAPORATION LOSS		7.7	GPM
IRRIGATION OF	8 ACRES FROM PONDS	64.0	GPM
TOTAL IRRIGATION SEASON DISCHARGE REQ'T		76.3	GPM

SYSTEM NON-IRRIGATION SEASON DISCHARGE REQ'T(PONDS FULL)

SEEPAGE LOSS	4.6	GPM
MAX. EVAPORATION LOSS(OCTOBER)	3.2	GPM
TOTAL NON IRRIGATION SEASON DISCHARGE REQ'T	7.8	GPM

EXHIBIT C

CONSUMPTIVE USE COMPARISON

ESTIMATED MAXIMUM NET GROUNDWATER USE FOR RESIDENCES

IRRIGATION					**DOMESTIC C.U.**			
NUMBER OF LOTS	1	IRRIG EFF=	60	%	USE/HOUSHOLD	75	% OCCUPANCY	
ACRES IRR/LOT=	0.5	ACRES			FOR 1 LOTS	75	GPD	MAXIMUM
TOTAL ACRES IRRIG.	0.50	ACRES			SEASONAL DOMESTIC USE	20531.25	GAL	
MAXIMUM DAILY ET=	0.25	INCHES			OR	0.06	ACRE FEET/YEAR	
MAX DAILY PR-ET	0.005	CFS=	2.4	GPM				
MAX DAILY DIV. REQT	0.009	CFS=	3.9	GPM				
SEASONAL ET	1.20	ACRE FT/YEAR						

MAX REF ET =	0.3633	INCHES/DAY=	9.228	MM/DAY(ALLEN & BROCKWAY,1983) Avg Hailey July ET x 1.2
SEAS. REF ET=	49.84	INCHES/YEAR=	1266	MM/YR(ALLEN & BROCKWAY,1983)

PROJECT IRRIGATION NON-DOMESTIC

SYSTEM IRRIGATED ACREAGE AND ESTIMATED MAXIMUM ET

VEGETATION EST	ACRES	CROP COEFF.	ET IN/DAY	MAX USE AF/DAY	MAX USE GPD
TURF	4.90	0.74	0.27	0.11	35769
SHRUBS	2.24	0.70	0.25	0.05	15468
TOTAL	7.14			0.16	51237
WEIGHTED MAX DAY CROP COEFF.		0.73			
SEASONAL AVG CROP COEFF		0.58	(ALLEN & BROCKWAY, 1983)		
SEASONAL REFERENCE ET		49.84	INCHES		
SEASONAL WEIGHTED ET=		28.91	INCHES		
TOTAL SEASON ET		17.2	ACRE FEET		

CURRENT CROPPING

TOTAL IRRIGATED ACREAGE	9.71 ACRES
CROP	ALFALFA
SEASONAL ALFALFA CROP COEFF	0.6
SEASONAL ALFALFA ET	29.91 INCHES
TOTAL SEASON ET(ALFALFA)	24.20 ACRE FEET

PRE PROJECT V PROJECT IRRIGATION C.U. WATER BUDGET	PROJECT	PRE PROJECT
CROP CONSUMPTIVE USE		24.2
POND CONSUMPTIVE USE	5.1	
LANDSCAPING CONSUMPTIVE USE	17.2	
RESIDENTIAL CONSUMPTIVE USE	1.3	
TOTAL	**23.6**	**24.2 AF**

NOTE: First year filling of ponds requires 16 af which will be mitigated by not irrigataing the first season during construction.

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37-20743

EXHIBIT C

Summary Operations Plan

Friedman Project Eagle Creek

July 10, 2002

C. E. Brockway P.E.
Brockway Engineering P.L.L.C.

This project will utilize water available from the Eagle Creek Irrigation Company to the historically irrigated 10 acre parcel to mitigate or make up for water evaporated from approximately 2.0 acres of new ponds. The historically irrigated area will be reduced by 2.0 acres or more and all irrigated areas will be served from the Irrigation Company source and not the domestic well (domestic exemption waived).

Up to 2.0 cfs of water will be re-circulated from the lower pond to the inlets of the upper ponds to provide flow through the system.

The ponds will be lined and the initial filling from the Irrigation Company flow will occur during the first season. No irrigation will occur the first season so the water stored will be offset by the forgone irrigation application resulting in no net depletion of the resource. If the ponds are subsequently emptied for emergency reasons or maintenance, the same procedure will be utilized to mitigate the effect of storage.

A well in the gravel aquifer will pump up to 2.0 cfs of cooler ground water for re-circulation within the pond system when air temperatures are high. The pumped groundwater flowing out of the lower pond will be recharged into the shallow aquifer at the northwest corner of the property. This ground water will be utilized during the irrigation season only when there is sufficient Irrigation Company water to mitigate for pond evaporation and only when water temperature becomes elevated or dissolved oxygen levels are low in the ponds. During the wintertime, any decreases in ponds levels, if excessive, will be made up from the well. Since the ponds will be lined, this could only occur if a leak occurs or wintertime evaporation exceeds precipitation, which is not likely.

Water use will be measured at three sites as anticipated requirements of the Department of Water Resources: inlet water from the Irrigation Company, pond outflow to the recharge area, and well pumping. The rate of flow and cumulative volume will be monitored for these three sites on a monthly basis and reported to the Department of Water Resources. This will allow determination of compliance with the conditions of the water right.

The water balance for the project shows that all pond evaporation will be mitigated and any Irrigation Company inflow in excess of evaporation and irrigation requirements will be recharged into the aquifer. This will enhance the aquifer storage and benefit downstream users and the river.

The groundwater for the project will be pumped from a well approximately 80 feet deep located some distance from the Big Wood River. Recharge of this pumped water will occur immediately after the water flows from the lower pond into a recharge area near the river. This will facilitate the river/aquifer exchange and benefit downstream users. No long term storage is required in the aquifer.

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37-20742

Narrative in Support of Application for Permit

Robert G. and Sandra S. Friedman
Brockway Engineering P.L.L.C. July 8, 2002

Robert G. and Sandra S. Friedman are owners of two tax lots near the confluence of the Big Wood River and Eagle Creek in Blaine County. Tax Lots 6079 and 6080 are located within HES 129 and in the NE1/4 NW1/4, NW1/4 NW1/4, SW1/4 NW1/4, and the SE1/4 NW1/4 Section 23, Township 5N Range 17E as interpolated. This 10 acre parcel is included in the place of use of the Eagle Creek Irrigation Company and is irrigated under water right 37-00863. Irrigation has historically been surface irrigation from open ditches.

The 10 shares of the original 230 shares of the Eagle Creek Irrigation Company's 4.6 cfs diversion amount to 0.02 cfs per share or 10 miners inches applicable to the 10 acre parcel.

Mr. and Mrs. Friedman propose to build a residence on the two lots and include in the landscaping plan three ponds which will serve as irrigation storage ponds and for recreation and aesthetics. The excavated ponds will be 2.0 acres in area and average 8 feet deep for a total volume of 16 acre feet. All ponds and interconnecting channels will be lined to reduce seepage losses. Pumping from the ponds will be utilized to irrigate the approximately 8 acres remaining on the parcel.

It is estimated that the seasonal consumptive use from the proposed 2.0 acres of ponds will be approximately 5.1 acre feet or approximately 2.5 af/acre.

Exhibits A, B, and C attached show the consumptive use estimates for open water in the area, estimated pond seepage and evaporation and seasonal and annual water requirements for the project.

Surface water from the Eagle Creek Irrigation Company enters the property on the northeast corner and will be introduced into pond number 2 through a small channel (see attached site plan). Water will flow through pond #2 and into pond #1. Outflow from pond #1 will exit the property on the northwest corner and infiltrate into the aquifer on U.S. Forest Service Land adjacent to the property. All runoff and excess irrigation water has exited the property at this location historically and has recharge the aquifer at that point.

This application is being submitted for a well to be constructed adjacent to pond #1 to provide non-consumptive water from the aquifer for re-circulation in the pond system and for fire protection. An application for permit for 2.0 cfs of non-consumptive water from the well and storage of 16.0 af is being submitted in conjunction with the application for transfer.

The water from the well will be pumped to the head of ponds #2 and #3 and will flow through all ponds to the recharge area.

Based on aquifer properties determined from well driller's logs of adjacent wells, the proposed well will be 12 inches in diameter and approximately 80 feet deep.

Water measurement devices will be installed on the inlet from the Eagle Creek Irrigation Company system, on the well, and on the outlet from pond #1. This will allow

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37-20742

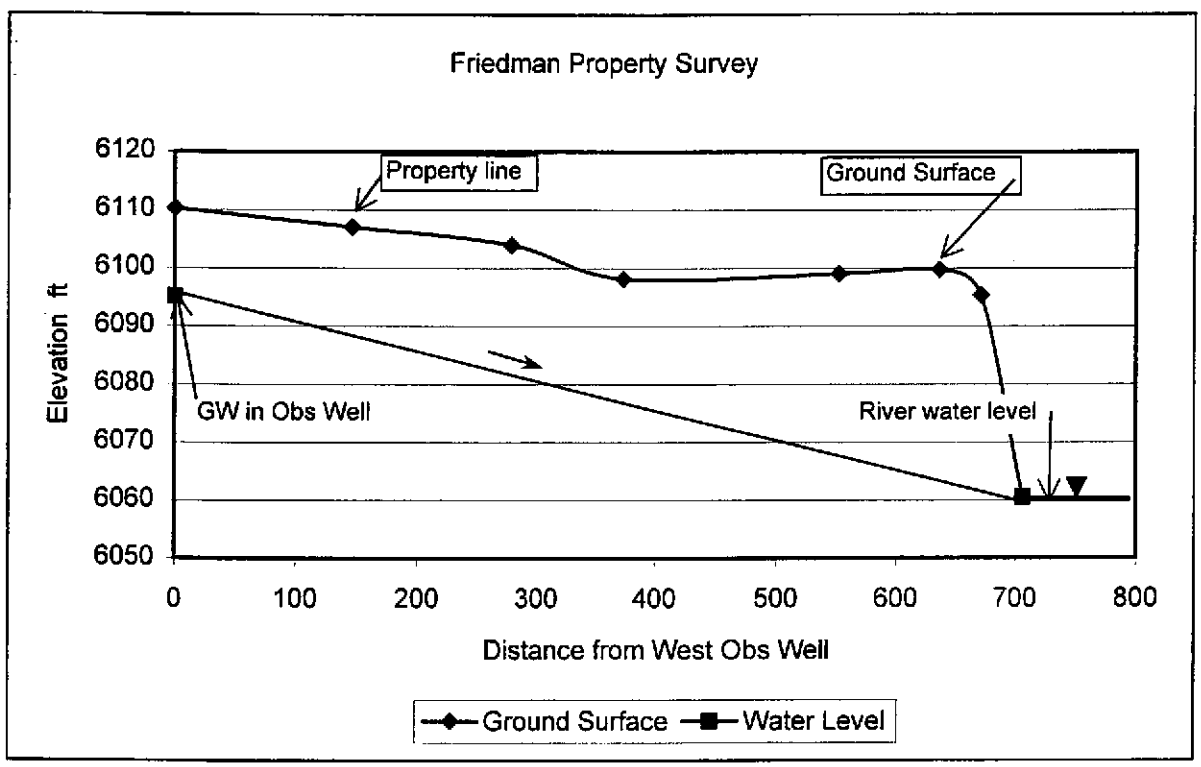
determination of the water balance on the system to ensure that no expansion of the water right occurs and that all provisions of the proposed permit are met.

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MAY 13 2014

37-20742

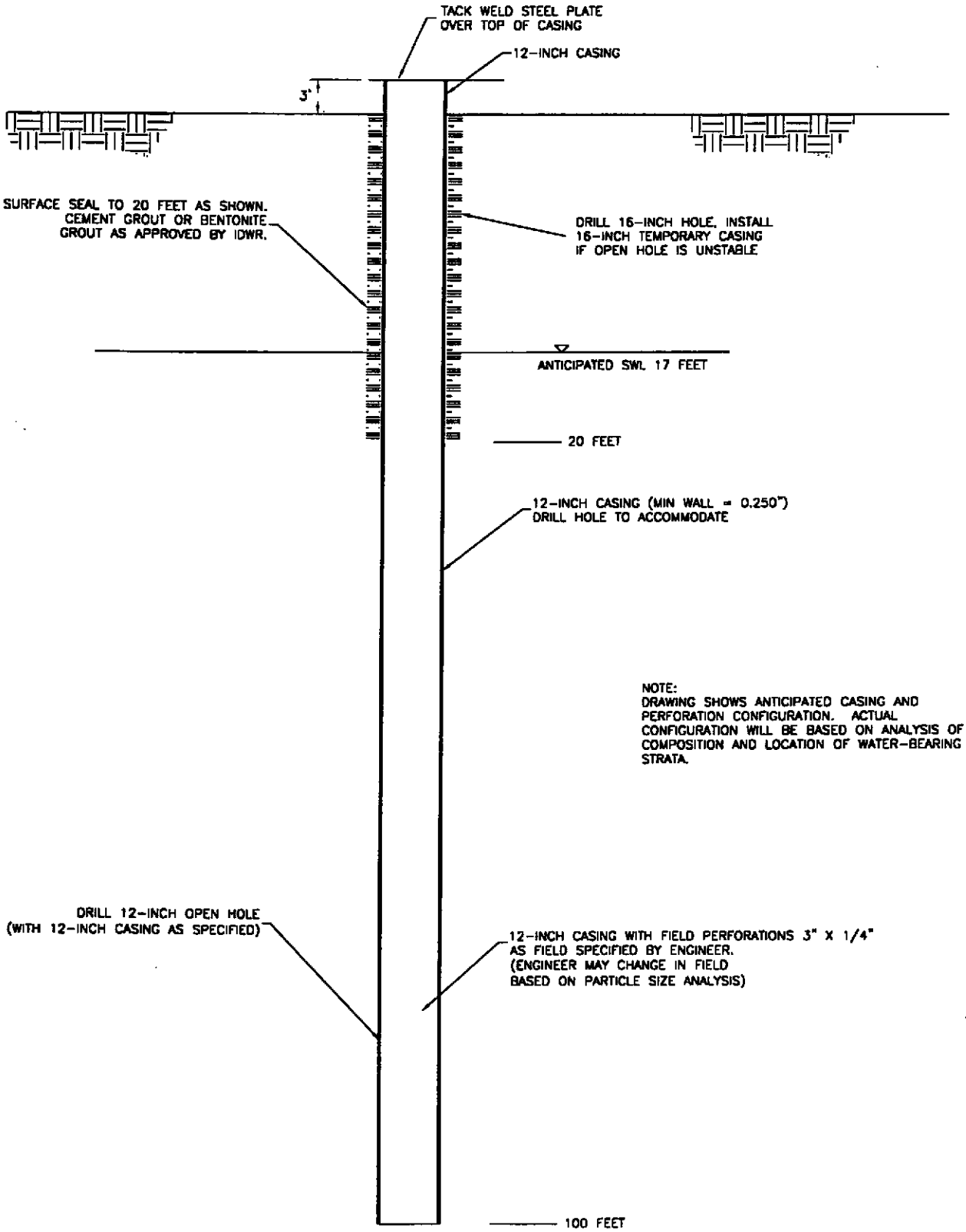
Friedman Property-Fox Creek Ranch
Survey from west observation well to Big Wood River Benchmark 10/2/2000
Map Scale 1in= 220.7 ft

Station	Dist inches	Elevation gs	Elevation ws	Description
0	0	6110.2	6095.1	Water Level in Obs well &gs
145.7	0.66	6107		Property line est gs
278.1	1.26	6104		Top Bank gs
373.0	1.69	6098.2		gs
551.8	2.5	6099.1		gs
635.6	2.88	6099.8		gs
670.9	3.04	6095.4		Top Bank gs
706.2	3.2	6060.6	6060.6	Edge of River



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JAN 15 2003

37-20742



NOTE:
DRAWING SHOWS ANTICIPATED CASING AND PERFORATION CONFIGURATION. ACTUAL CONFIGURATION WILL BE BASED ON ANALYSIS OF SOIL COMPOSITION AND LOCATION OF WATER-BEARING STRATA.

JUL 18 2001

BROCKWAY ENGINEERING P.L.L.C. — Hydraulics ◆ Hydrology ◆ Water Resources	FRIEDMAN – FOX CREEK	SHEET 1 OF 1	DRAWN JSR
	WELL SECTION & CONFIGURATION PROPOSED NEW WELL	DATE 10/02/00	REVISIONS A
		SCALE NONE	

37-20742

Well Interference Analysis Friedman Project Well

Estimated Well Drawdown

Wellint.xls

C.E. BROCKWAY October 3, 2000 Brockway Engineering P.L.L.C.

AQUIFER PROPERTIES BASED ON USBR GROUNDWATER MANUAL-SAND AND GRAVEL ALLUVIAL AQUIFER AND PUMPING TESTS OF WELLS ON DIP CREEK SUBDIVISION

EST. HOLE DIA. 12 INCHES

USING THEIS FORMULA S=114.6*Q/T*W(U)
S= DRAWDOWN IN FT
Q= PUMPING RATE GPM
T= COEFFICIENT OF TRANSMISSIBILITY GPD/FT
W(U)= WELL FUNCTION OF 'U'

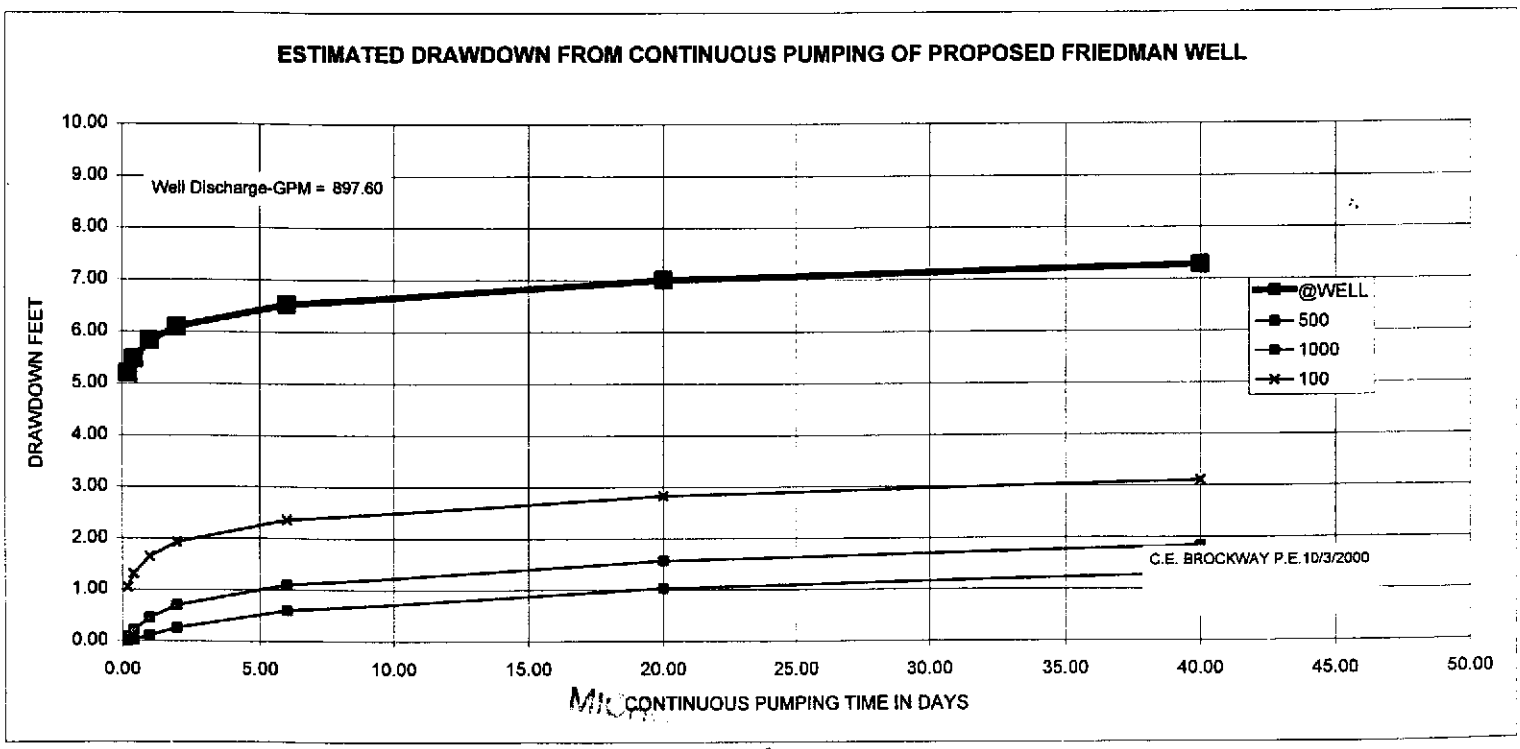
W(U)=-.5772-LOGeU +U-U^2/(2*2!)+U^3/(3*3!)-U^4/(4*4!) .....
U=1.87*r^2*S/(T*t)
r=DISTANCE IN FT. FROM CENTER OF PUMPED WELL TO DRAWDOWN POINT
S=COEFFICIENT OF STORAGE
T=COEFFICIENT OF TRANSMISSIBILITY, GPD/FT
t= TIME SINCE PUMPING STARTED, DAYS

INPUT

r1=	0.500	FT	K=	350.00	FT/DAY
r2=	100	FT	K=	0.00405093	CFS/FT^2
r3=	500	FT	K=	2.61E+03	GPD/FT^2
r4=	1000	FT	SAT. DEPTH EST.=	100	FT
r5=	5280	FT	TRANSMISSIVITY=	261100	GPD/FT
S=	0.12		TRANSMISSIVITY=	4.04E-01	FT^2/SEC
T=	261100	GPD/FT	TRANSMISSIVITY=	34906.4	FT^2/DAY
Q/WELL	897.60	GPM =	2.000	CFS	

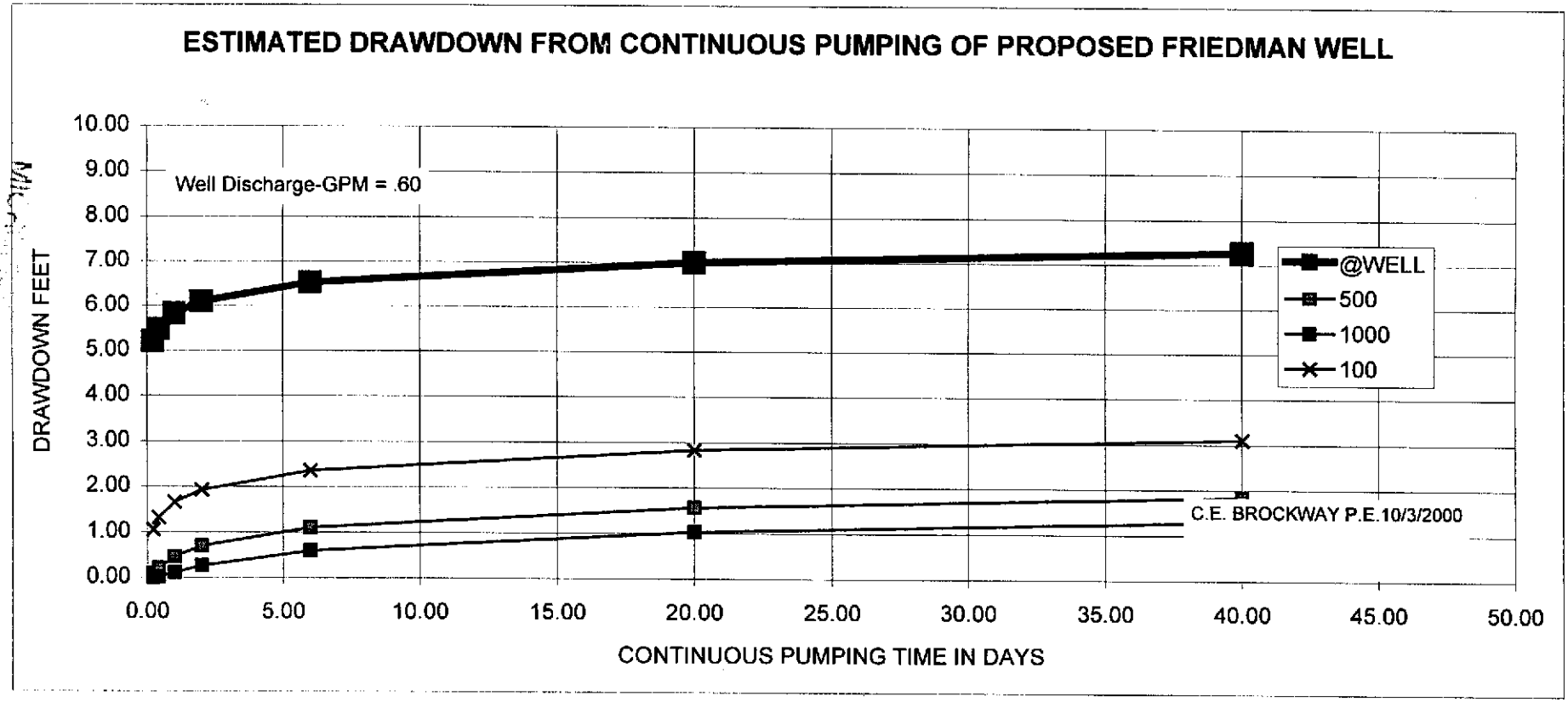
TIME HOURS	TIME t DAYS	U w/r1 0.5	WELL FUNCT. W(U)1	DRAW DOWN @WELL	SPEC. CAP GPM/FT	U W/r2 100	WELL FUNCT. W(U)2	DRAW DOWN @ 100	U W/r3 500	WELL FUNCT. W(U)3	DRAW DOWN 500	U W/r4 1000	WELL FUNCT. W(U)4	DRAW DOWN @ 1000
5	0.21	1.031E-06	13.2075	5.20	173	4.125E-02	2.6517	1.04	1.031E+00	0.2082	0.08	4.125E+00	0.0000	0.00
10	0.42	5.157E-07	13.9006	5.48	164	2.063E-02	3.3245	1.31	5.157E-01	0.5412	0.21	2.063E+00	0.0449	0.02
24	1.00	2.149E-07	14.7761	5.82	154	8.594E-03	4.1880	1.65	2.149E-01	1.1644	0.46	8.594E-01	0.2793	0.11
48	2.00	1.074E-07	15.4692	6.09	147	4.297E-03	4.8769	1.92	1.074E-01	1.7583	0.69	4.297E-01	0.6551	0.26
144	6.00	3.581E-08	16.5678	6.53	138	1.432E-03	5.9726	2.35	3.581E-02	2.7878	1.10	1.432E-01	1.5043	0.59
480	20.00	1.074E-08	17.7718	7.00	128	4.297E-04	7.1756	2.83	1.074E-02	3.9670	1.56	4.297E-02	2.6125	1.03
960	40.00	5.372E-09	18.4650	7.27	123	2.149E-04	7.8685	3.10	5.372E-03	4.6548	1.83	2.149E-02	3.2845	1.29

HOURS	DAYS	@WELL	100	500	1000	DISTANCE FEET
0	0.00	0	0	0	0	
5	0.21	-5.20	-1.04	-0.08	0.00	
10	0.42	-5.48	-1.31	-0.21	-0.02	
24	1.00	-5.82	-1.65	-0.46	-0.11	
48	2.00	-6.09	-1.92	-0.69	-0.26	
144	6.00	-6.53	-2.35	-1.10	-0.59	
480	20.00	-7.00	-2.83	-1.56	-1.03	
960	40.00	-7.27	-3.10	-1.83	-1.29	



JUL 15 2004

37-20742


ESTIMATED DRAWDOWN FROM CONTINUOUS PUMPING OF PROPOSED FRIEDMAN WELL
Well Discharge-GPM = .60
DRAWDOWN FEET
10.00
9.00
8.00
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
0.00
5.00
10.00
15.00
20.00
25.00
30.00
35.00
40.00
45.00
50.00
CONTINUOUS PUMPING TIME IN DAYS
@WELL
500
1000
100
C.E. BROCKWAY P.E.10/3/2000

37-20743

Machine

The following application(s) have been filed to appropriate the public waters of the State of Idaho:
37-20742
ROBERT G FRIEDMAN
718 N CRESCENT DR
BEVERLY HILLS CA 90210
Point(s) of Diversion: NENW S23 T05N R17E BLAINE County Source GROUND WATER

Use: RECREATION 01/01 To 12/31 2 CFS
Use: RECREATION STORAGE 01/01 To 12/31 16 AFA
Use: AESTHETIC 01/01 To 12/31 2 CFS
Use: AESTHETIC STORAGE 01/01 To 12/31 16 AFA
Use: DIVERSION TO STORAGE 01/01 To 12/31 2 CFS
Total Diversion: 2 CFS 16 AFA
Date Filed: 07/11/2002
Place of Use: DIVERSION TO STORAGE
T05N R17E S23 NENW

Place of Use: AESTHETIC STORAGE
T05N R17E S23 NENW

Place of Use: RECREATION STORAGE
T05N R17E S23 NENW

Place of Use: AESTHETIC
T05N R17E S23 NENW

Place of Use: RECREATION
T05N R17E S23 NENW

Remark: Application proposes developing a new well to provide water for a new pond project located approximately 5.5 miles north and 1.75 miles west of Ketchum, along the west side of Highway 75. Consumptive uses associated with the pond use will be mitigated by no longer irrigating two acres of land with Eagle Creek Irrigation Company water shares as outlined in pending transfer #66115.

Permits will be subject to all prior water rights. Protests may be submitted based on the criteria of Sec 42-203A, Idaho Code. Any protest against the approval of this application must be filed with the Director, Dept. of Water Resource, Southern Region, 1341 Fillmore St, Suite 200, Twin Falls ID 83301 together with a protest fee of $25.00 for each application on or before 08/05/2002. The protestant must also send a copy of the protest to the applicant.

KARL J DREHER, Director Published on _____ and _____

Mic
JUL 2003

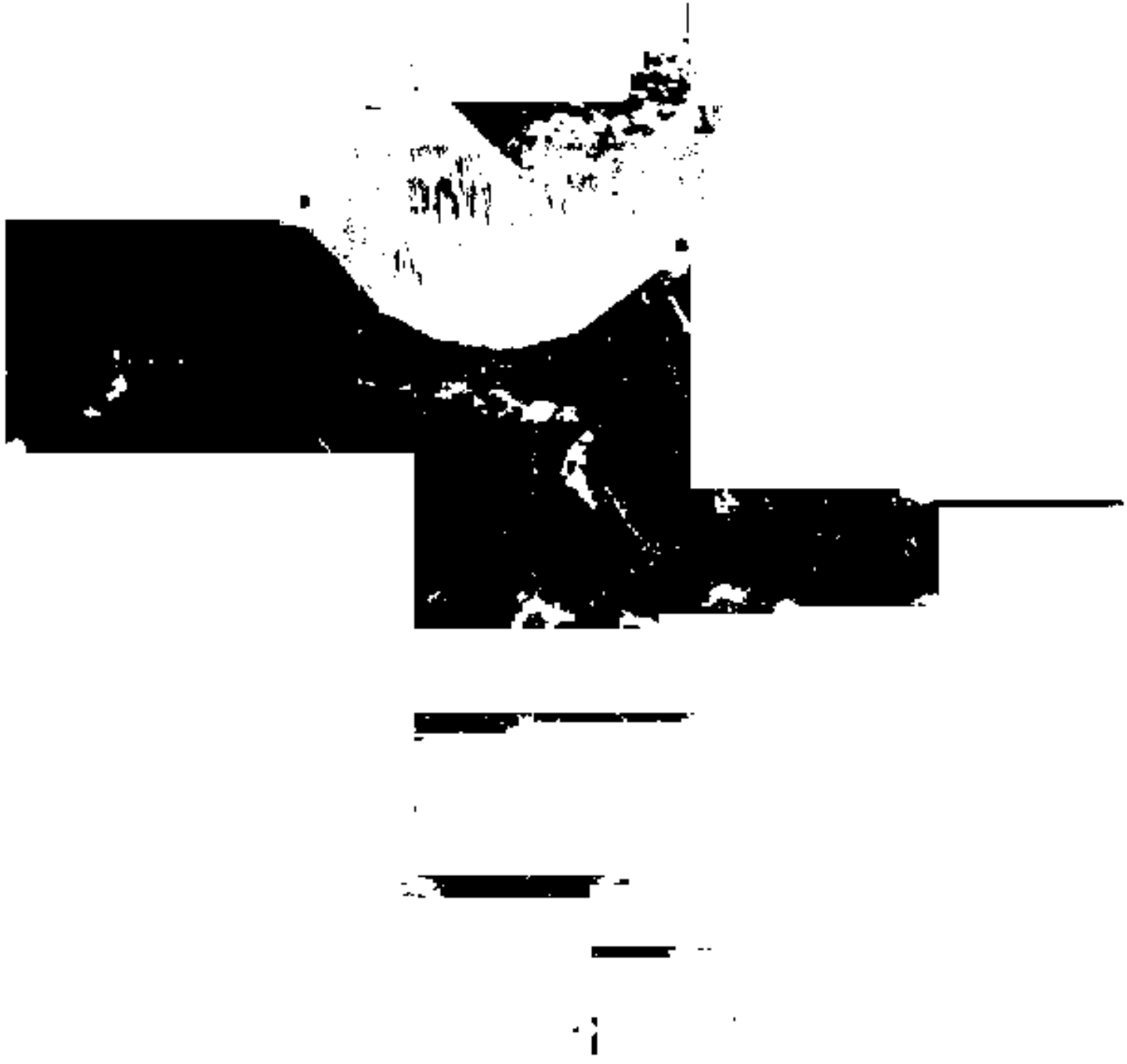


applicant's
Exhibit
19



Flume in ditch - Eagle Creek

Department of Water Res...
APPLICANT'S
Exhibit 19-1
Date Admitted 11/13/02



Flume in ditch - Eagle Creek Irrig Co return on Friedman property

Department of Water Resources
APPLICANT'S
Exhibit 19-2
Date Admitted 4/13/02



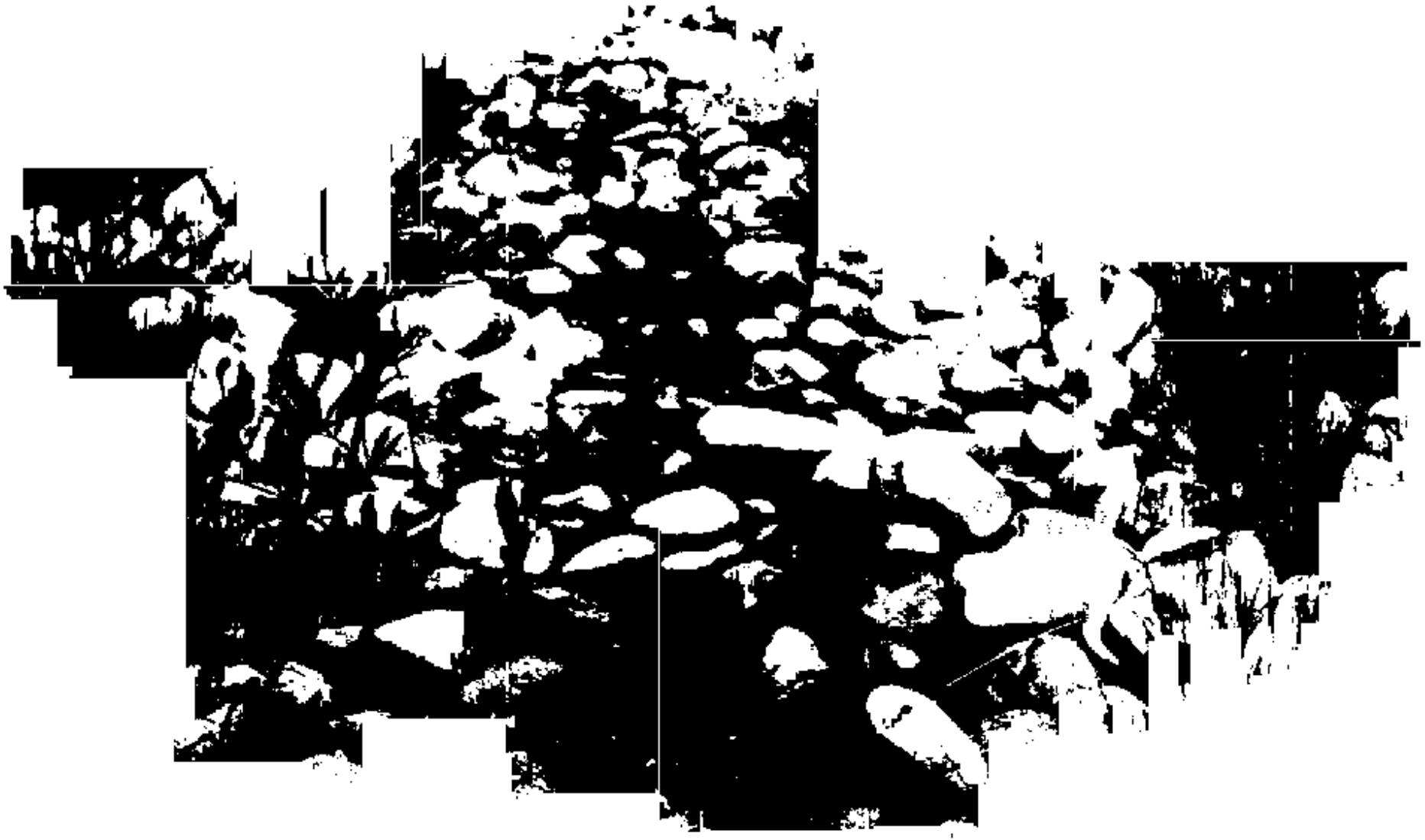
Ditch along North Side of Freedom Prop
Eagle Creek Irrig. Co

Department of Water Resources
APPLICANT'S
Exhibit 19-3
Date Admitted 11/13/02



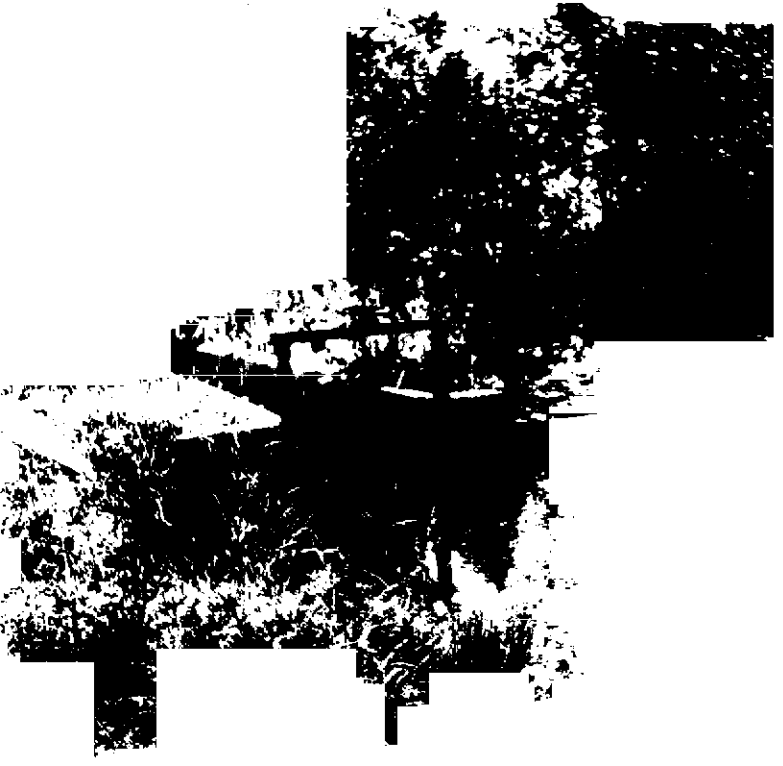
Eagle Creek Irrig. & Return on Freedman prop.

Department of Water Resources
APPLICANT'S
Exhibit 19-4
Date Admitted 11/13/02

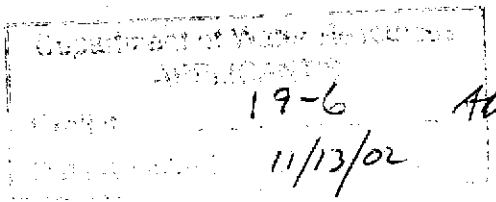


Fogg Circle Irving Ca - Retain Lakes from Friedman Property on USFS property

Department of Water Resources
APPROVED
Form 19-5
By [illegible] 11/13/02

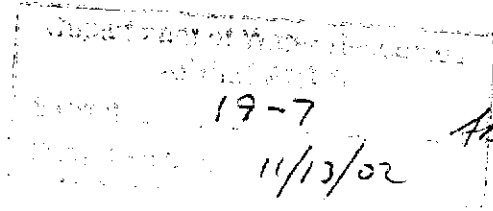


Eagle Creek Irrig Co Inc CEB





Eagle Ck. Well @ Eagle Creek Irrig Co Dist.
Well nearest Eagle Creek





Eagle Creek - Eagle Crk Irrig Co Div.

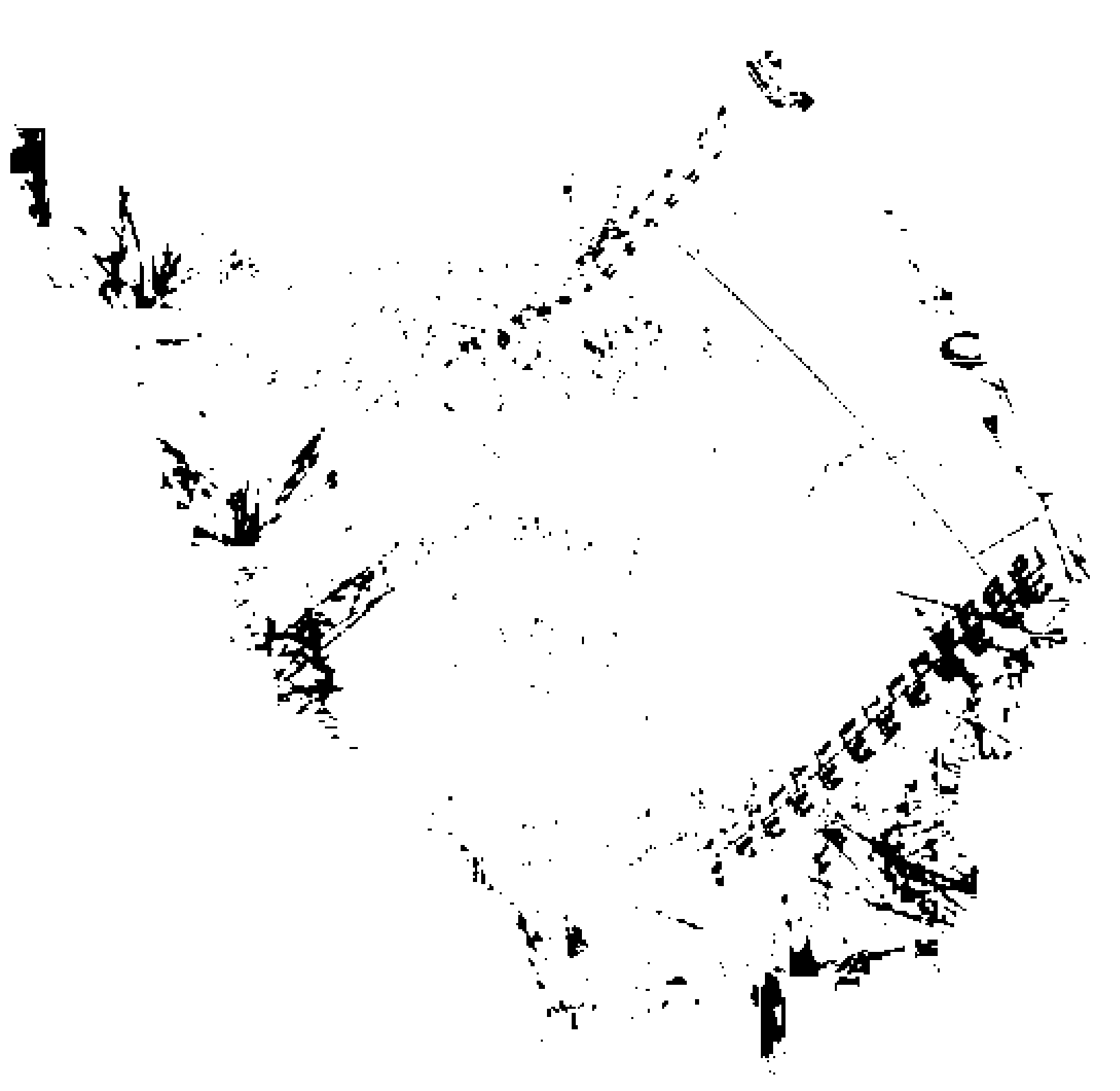
19-8
11/13/02



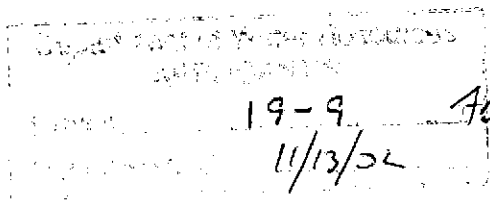
Flume in Eagle Creek Irrig Co Volume Ditch



11/13/02



Flowers Ditch - Eagle Rock Irrig. Co return



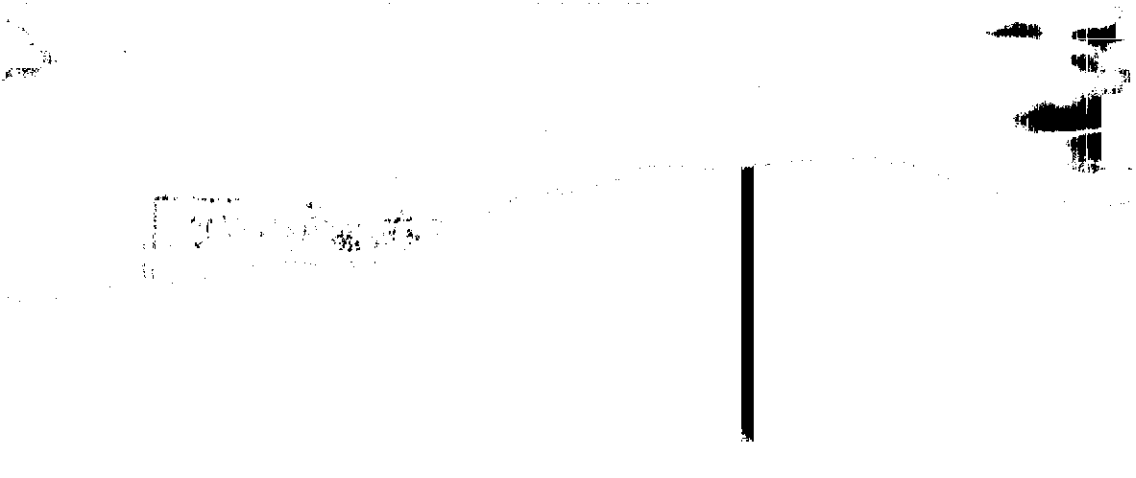
applicant's
Exhibit
21



10/6/01

Freidman Property
Eagle Creek 10/6/01
Photo by: Tom Dinker

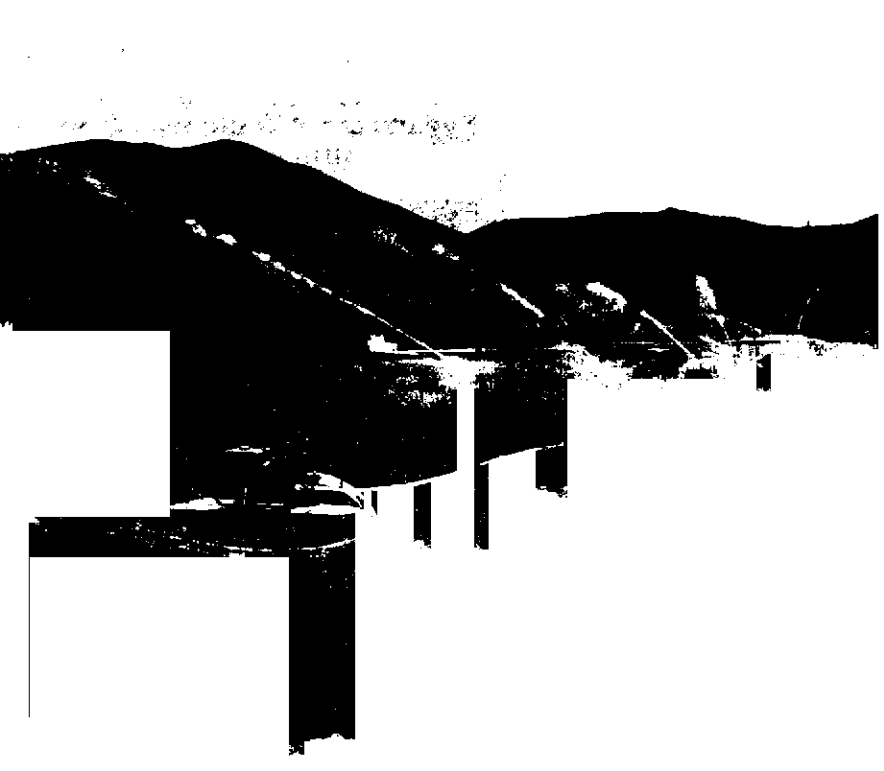
Department of Water Resources
APPLICANT'S
Exhibit 21-1
Date Admitted 11/12/02



10/6/01

Freidman Property
Eagle Creek 10/6/01
Photo by: Tom Dinker

Department of Water Resources
APPLICANT'S
Exhibit 21-2
Date Admitted 11/13/02



10/6/01

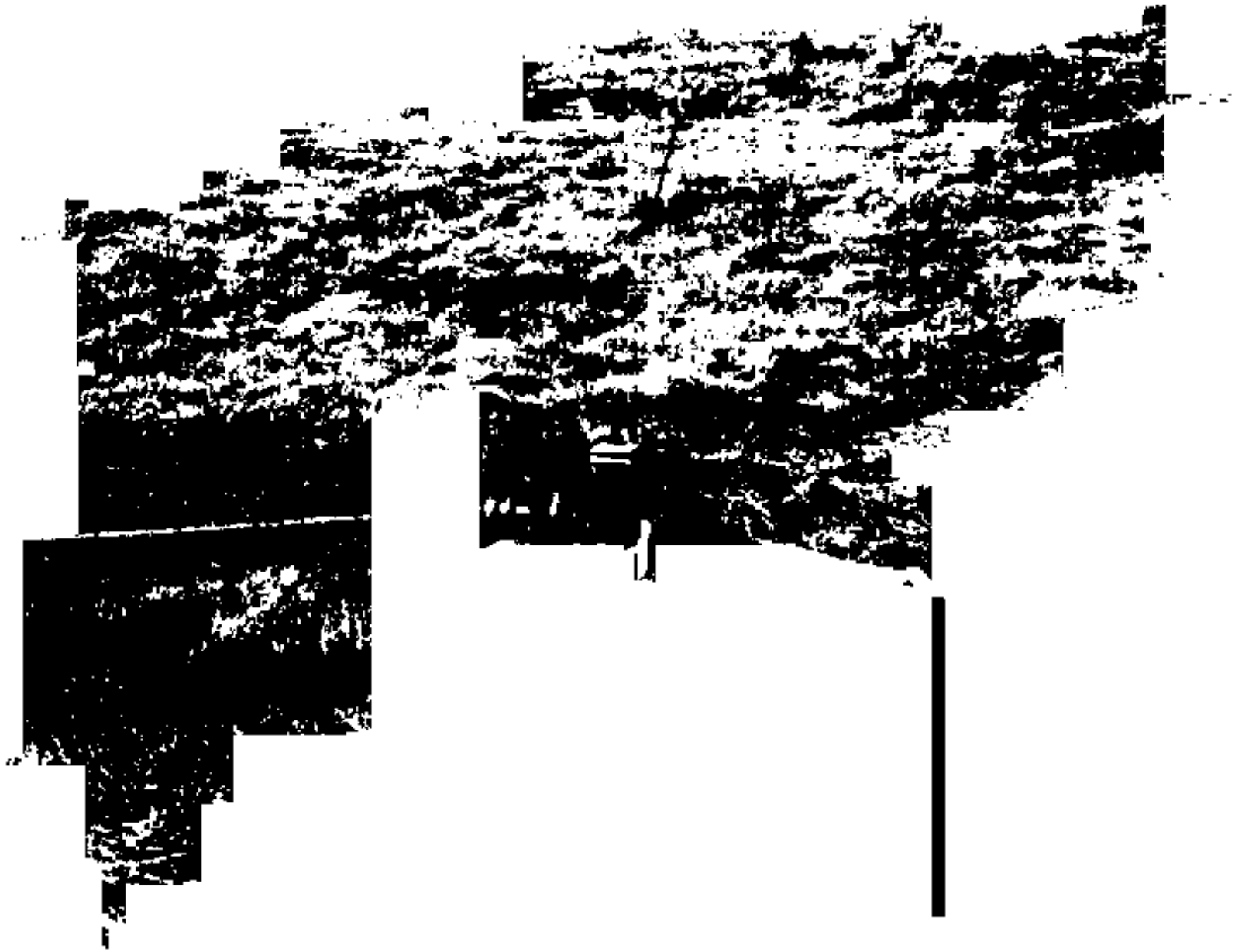
Freidman Property
Eagle Creek 10/6/01
Photo by: Tom Dinker

Department of Water Resources
APPLICANT'S
Exhibit 21-3
Date Admitted 11/12/02

10/6/01

Freidman Property
Eagle Creek 10/6/01
Photo by: Tom Dinker

Exhibit # of Water Resources
APPLICANTS
Exhibit 21-4 AP-
Date Admitted: 11/13/02



10/6/01

Freidman Property
Eagle Creek 10/6/01
Photo by: Tom Dinker

Exhibit 21-5
Date Received 11/13/02



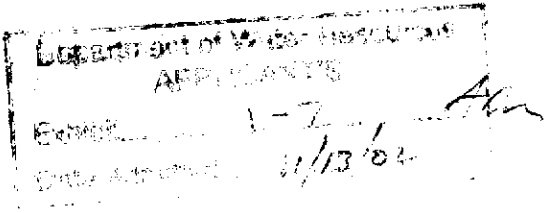
10/6/01

Freidman Property
Eagle Creek 10/6/01
Photo by: Tom Dinker

Department of Water Resources
APPLICANTS
Exhibit 21-6
Date Admitted 11/12/02



Freidman Property
Eagle Creek 10/6/01
Photo by: Tom Dinker



410-01-00
Freidman 9-28-01



applicant's
Exhibit
20

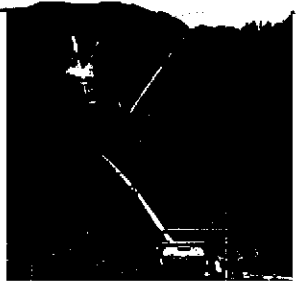
410-01-00
Freidman 9-28-01



Department of Water Resources
APPLICANT'S
Exhibit 20-1
Date Admitted 11/13/02

Department of Water Resources
APPLICANT'S
Exhibit 20-2
Date Admitted 11/12/02

Nov 12 01 02:17p 22-68 BANK OF U.S.





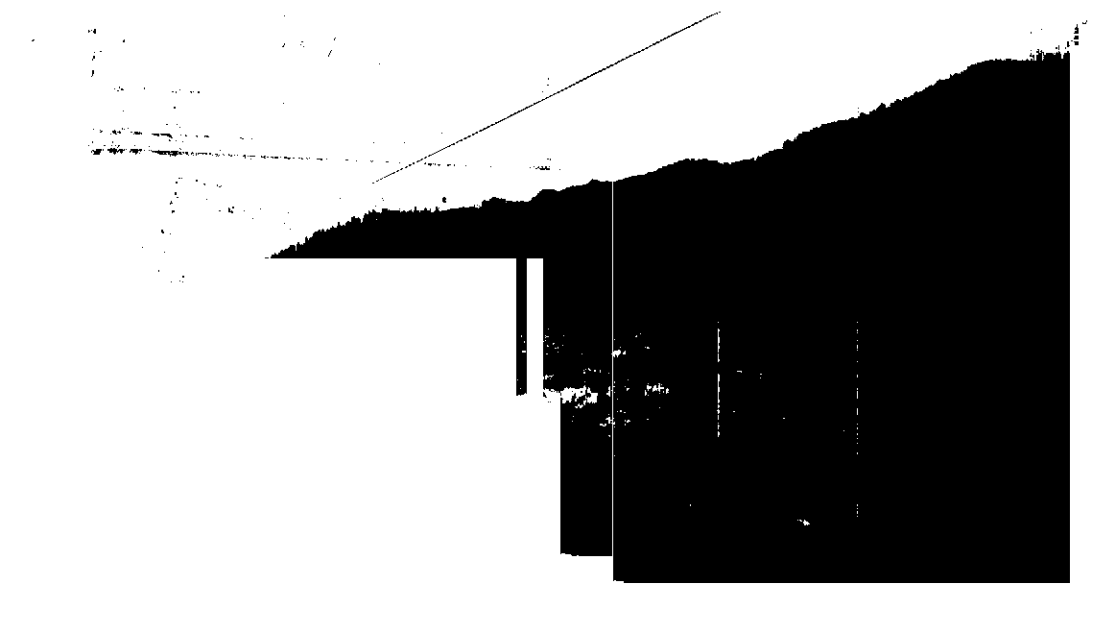
Department of Water Resources
APPLICANTS
Exhibit 20-3
Date Admitted 11/12/02

Oct. 11 2012 22:38 [illegible] 95%



Department of Water Resources
APPLICANTS
Permit 20-4
Date Approved 11/12/02

CAD, 100811 7/1/88 (NNN-61RL 6-15



APPLICANTS
Exhibit 20-5
11/12/02

Ser. No. 09/810,229 (Docket 11001.0516)



APPLICANTS
Paper No. 20-6
Date 11/13/02

Ser. No. 09/687,224 ORIGINAL GRAY 07/1

[redacted]

EXHIBIT
APPLICANT'S
29-7
11/12/02

Copyright 2002 Matthew Bender & Co., Inc.

EXHIBIT A

WATER REQUIRMENTS AND USE DATA Revised 7/10/2002 CEB

R. FRIEDMAN PROPERTY-EAGLE CREEK

ESTIMATED POND EVAPORATION AND SEEPAGE

C.E. BROCKWAY P.E

THREE PONDS WITH INFLOW FROM EAGLE CREEK SHARES AND WELL

POND EVAPORATION DATA FROM J.L. WRIGHT AND MARVIN E. JENSEN 1975

1975 EVAPOTRANSPIRATION AND CLIMATIC DATA FOR THE SILVER CREEK-

CREEK TRIANGLE BLAINE COUNTY, IDAHO FEBRUARY 1976

LAKE OR POND EVAPORATION CALCULATED USING THE KOHLER-NORDENSON-FOX PROCEDURE

NUMBER OF LOTS= 1

MAX. IRRIG. DIV PER ACRE= 8 GPM USING SPRINKLERS IRRIG. EFFICIENCY= 90 PERCENT

INFLOW FROM SHARES 10 INCHES

RECIRCULATION 135 INCHES

OTHER DIVERSION 0 INCHES

TOTAL DIVERSION TO POND INFLOW= 145 INCHES OR 2.90 CFS

ALL DITCHES & PONDS HAVE 3 TO 1 SIDE SLOPES TOTAL POND AREA = 1.98 ACRES

ALL DITCHES AND PONDS LINED W/ MEMBRANE LINER OR CLAY LINER <<<

SEEPAGE RATES ESTIMATED FROM LOSS MEASUREMENTS AND SOILTYPES FOR EACH LAKE OR LINER TYPE

NUMBER OF PONDS = 3

	AVG EVAP AVG DAY	AVG EVAP AVG DAY	TOTAL MON. EVAP	PRECIP	PROJECT | AVG EVAP	PROJECT AVG EVAP	PROJECT AVG EVAP	|EVAP- |PRECIP	PROJECT |EVAP-	PROJECT EVAP-	PROJECT EVAP-
MO.	MM	IN	IN.	IN.	CFS	GPM	MIN.IN	IN/ DAY	CFS	GPM	MIN. IN.
JAN	0.56	0.022	0.68	2.67	0.002	0.83	0.09	0.00	0.000	0.00	0.00
FEB	0.91	0.036	1.00	1.83	0.003	1.35	0.15	0.00	0.000	0.00	0.00
MAR	1.43	0.056	1.75	1.22	0.005	2.13	0.24	0.02	0.001	0.64	0.07
APR	2.29	0.090	2.70	1.07	0.008	3.41	0.38	0.05	0.005	2.06	0.23
MAY	4.32	0.170	5.27	1.47	0.014	6.43	0.72	0.12	0.010	4.64	0.52
JUN	5.19	0.204	6.13	1.39	0.017	7.72	0.86	0.16	0.013	5.97	0.67
JUL	5.19	0.204	6.33	0.47	0.017	7.72	0.86	0.19	0.016	7.15	0.80
AUG	4.55	0.179	5.55	0.69	0.015	6.77	0.75	0.16	0.013	5.93	0.66
SEP	3.96	0.156	4.68	0.71	0.013	5.89	0.66	0.13	0.011	5.00	0.56
OCT	2.07	0.081	2.53	0.76	0.007	3.08	0.34	0.06	0.005	2.15	0.24
NOV	1.01	0.040	1.19	1.44	0.003	1.50	0.17	0.00	0.000	0.00	0.00
DEC	0.63	0.025	0.77	2.48	0.002	0.94	0.10	0.00	0.000	0.00	0.00
	MAX MON.		6.33	2.67	0.017	7.72	0.86	0.19	0.016	7.15	0.80
	ANNUAL TOT.		38.59	16.20 ✓							
	APR-SEP TOT.		30.67	5.80							

Department of Water Resources
APPLICANT'S
Exhibit
Date Admitted 11/13/02

Applicants Exhibit

EXHIBIT - 1 -

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37-20742

EXHIBIT B

POND AND IRRIGATION SYSTEM INFLOW AND OUTFLOW LOSS ESTIMATES(SUMMERTIME)

DITCH WIDTH= 2 FT

DITCH DEPTH= 0.75 FT

	L FT	WIDTH FT	AVG DEPTH FT	SURF. AREA FT^2	AREA AC.	WET AREA FT^2	WET AREA AC.	SEEP. RATE FT/D	VOL FT^3	IN-FLOW CFS	SEEP-AGE CFS	EVAP (MAX) CFS	ACRES IRRIG.	IRRIG. DIV. CFS	OUT-FLOW CFS	TURN-OVER HRS
DITCH INLET1-2	200	2	0.75	400	0.009	449	0.010	0.01	300	1.550	0.00005	0.00008	0.0	0.00	1.550	0.1
POND 2	180	113	6.00	20340	0.467	20691	0.475	0.01	122040	2.895	0.00239	0.00401	0.0	0.00	2.889	11.7
DITCH INLET2-3	60	2	0.75	120	0.003	135	0.003	0.01	90	1.350	0.00002	0.00002	0.0	0.00	1.350	0.0
POND 3	130	120	6.00	15600	0.358	15853	0.364	0.01	93600	1.350	0.00183	0.00307	0.0	0.00	1.345	19.3
DITCH 2-1	140	2	0.75	280	0.006	314	0.007	0.01	210	2.889	0.00004	0.00006	0.0	0.00	2.888	0.0
POND 1	260	194	6.00	50440	1.158	50946	1.170	0.01	302640	2.888	0.00590	0.00994	8.0	0.14	2.730	29.1
TOT. DITCH	340			680.0102	0.02	763	0.53		510		0.000	0.00013				
TOT. PONDS				86380	1.98	87490	2.01		518280		0.010	0.01702				
TOTAL				87180	2.00	88387	2.03		518880		0.010	0.01718	8.0	0.14		60.2

SYSTEM SEEPAGE LOSS=	0.010	CFS=	0.51 MINERS IN.=	5 GPM
SYSTEM DESIGN EVAP LOSS=	0.017	CFS=	0.86 MINERS IN.=	8 GPM
SYSTEM IRRIG. REQ'T=	0.143	CFS=	7.1 MINERS IN.=	64 GPM
SYSTEM WATER REQ'T=	0.170	CFS=	8.5 MINERS IN.=	76 GPM
SYSTEM IRRIG. WATER RIGHT(SHARES)	0.200	CFS=	10.0 MINERS IN.=	90 GPM
SYSTEM RECIRCULATION	2.700	CFS=	135.0 MINERS IN.=	1212 GPM
SYSTEM DIVERSION AVAILABLE=	2.900	CFS=	145.0 MINERS IN.=	1302 GPM
SYSTEM RETURN FLOW	2.730	CFS=	136.5 MINERS IN.=	1225 GPM

Department of Water Resources
APPLICANT'S
Exhibit 2
Date Admitted 11/13/02

MAX POND TURNOVER TIME- ALL PONDS= 60.2 HOURS TOTAL WATER REPLACEMENT

MAX TURNOVER TIME WITHOUT IRRIGATION= 49.9 HOURS ASSUMES PUMPING FOR IRRIGATION OUT OF POND 1

SYSTEM IRRIGATION SEASON POND WATER USE ESTIMATE

IRRIGATION SEASON LENGTH	180 DAYS
AVERAGE PROJECT SEEPAGE	0.010 CFS
IRRIG SEASON PROJECT SEEPAGE	3.6 ACRE FEET
IRRIG. SEASON EVAP. (CONSUMPTIVE USE)	5.1 ACRE FEET

SYSTEM IRRIGATION SEASON DISCHARGE REQ'T

POND SEEPAGE LOSS FOR	2.00 ACRES=	4.6 GPM
MAX. EVAPORATION LOSS		7.7 GPM
IRRIGATION OF	8 ACRES FROM PONDS	64.0 GPM
TOTAL IRRIGATION SEASON DISCHARGE REQ'T		76.3 GPM

SYSTEM NON-IRRIGATION SEASON POND WATER USE ESTIMATE

NON-IRRIGATION SEASON LENGTH	185 DAYS
AVERAGE PROJECT SEEPAGE	0.010 CFS
NON-IRRIG SEASON PROJECT SEEPAGE	3.8 ACRE FEET
NON-IRRIG. SEASON EVAP. (CONSUMPTIVE USE)	1.3 ACRE FEET

SYSTEM NON-IRRIGATION SEASON DISCHARGE REQ'T(PONDS FULL)

SEEPAGE LOSS	4.6 GPM
MAX. EVAPORATION LOSS(OCTOBER)	3.2 GPM
TOTAL NON IRRIGATION SEASON DISCHARGE REQ'T	7.8 GPM

EXHIBIT 2

A00008

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~~EXHIBIT C~~

CONSUMPTIVE USE COMPARISON

ESTIMATED MAXIMUM NET GROUNDWATER USE FOR RESIDENCES

IRRIGATION

NUMBER OF LOTS	1	IRRIG EFF=	60	%
ACRES IRR/LOT=	0.5	ACRES		
TOTAL ACRES IRRIG.	0.50	ACRES		
MAXIMUM DAILY ET=	0.25	INCHES		
MAX DAILY PR-ET	0.005	CFS=	2.4	GPM
MAX DAILY DIV. REQT	0.009	CFS=	3.9	GPM
SEASONAL ET	1.20	ACRE FT/YEAR		

DOMESTIC C.U.

		75	% OCCUPANCY
USE/HOUSHOLD		75	GPD
FOR	1 LOTS	75	GPD MAXIMUM
SEASONAL DOMESTIC USE		20531.25	GAL
	OR	0.06	ACRE FEET/YEAR

MAX REF ET =	0.3633 INCHES/DAY=	9.228	MM/DAY(ALLEN & BROCKWAY,1983) Avg Hailey July ET x 1.2
SEAS. REF ET=	49.84 INCHES/YEAR=	1266	MM/YR(ALLEN & BROCKWAY,1983)

PROJECT IRRIGATION NON-DOMESTIC

SYSTEM IRRIGATED ACREAGE AND ESTIMATED MAXIMUM ET

VEGETATION EST	ACRES	CROP COEFF.	ET IN/DAY	MAX USE AF/DAY	MAX USE GPD
TURF	4.90	0.74	0.27	0.11	35769
SHRUBS	2.24	0.70	0.25	0.05	15468
TOTAL	7.14			0.16	51237
WEIGHTED MAX DAY CROP COEFF.		0.73			
SEASONAL AVG CROP COEFF		0.58	(ALLEN & BROCKWAY, 1983)		
SEASONAL REFERENCE ET		49.84	INCHES		
SEASONAL WEIGHTED ET=		28.91	INCHES		
TOTAL SEASON ET		17.2	ACRE FEET		

CURRENT CROPPING

TOTAL IRRIGATED ACREAGE	9.71 ACRES
CROP	ALFALFA
SEASONAL ALFALFA CROP COEFF	0.6
SEASONAL ALFALFA ET	29.91 INCHES
TOTAL SEASON ET(ALFALFA)	24.20 ACRE FEET

PRE PROJECT V PROJECT

IRRIGATION C.U. WATER BUDGET	PROJECT	PRE PROJECT
CROP CONSUMPTIVE USE		24.2
POND CONSUMPTIVE USE	5.1	
LANDSCAPING CONSUMPTIVE USE	17.2	
RESIDENTIAL CONSUMPTIVE USE	1.3	
TOTAL	**23.6**	**24.2 AF**

NOTE: First year filling of ponds requires 16 af which will be mitigated by not irrigataing the first season during construction.

+1.3

24.9

Department of Water Resources
APPLICANT'S
Exhibit 3
Date Admitted 11/13/02

EXHIBIT 1-3

A00009
37-2074

Department of Water Resources
APPLICANT'S
Exhibit 4
Date Admitted 11/13/02

EXHIBIT C

Summary Operations Plan

Friedman Project Eagle Creek

July 10, 2002

C. E. Brockway P.E.
Brockway Engineering P.L.L.C.

This project will utilize water available from the Eagle Creek Irrigation Company to the historically irrigated 10 acre parcel to mitigate or make up for water evaporated from approximately 2.0 acres of new ponds. The historically irrigated area will be reduced by 2.0 acres or more and all irrigated areas will be served from the Irrigation Company source and not the domestic well (domestic exemption waived).

Up to 2.0 cfs of water will be re-circulated from the lower pond to the inlets of the upper ponds to provide flow through the system.

The ponds will be lined and the initial filling from the Irrigation Company flow will occur during the first season. No irrigation will occur the first season so the water stored will be offset by the forgone irrigation application resulting in no net depletion of the resource. If the ponds are subsequently emptied for emergency reasons or maintenance, the same procedure will be utilized to mitigate the effect of storage.

A well in the gravel aquifer will pump up to 2.0 cfs of cooler ground water for re-circulation within the pond system when air temperatures are high. The pumped groundwater flowing out of the lower pond will be recharged into the shallow aquifer at the northwest corner of the property. This ground water will be utilized during the irrigation season only when there is sufficient Irrigation Company water to mitigate for pond evaporation and only when water temperature becomes elevated or dissolved oxygen levels are low in the ponds. During the wintertime, any decreases in ponds levels, if excessive, will be made up from the well. Since the ponds will be lined, this could only occur if a leak occurs or wintertime evaporation exceeds precipitation, which is not likely.

Water use will be measured at three sites as anticipated requirements of the Department of Water Resources: inlet water from the Irrigation Company, pond outflow to the recharge area, and well pumping. The rate of flow and cumulative volume will be monitored for these three sites on a monthly basis and reported to the Department of Water Resources. This will allow determination of compliance with the conditions of the water right.

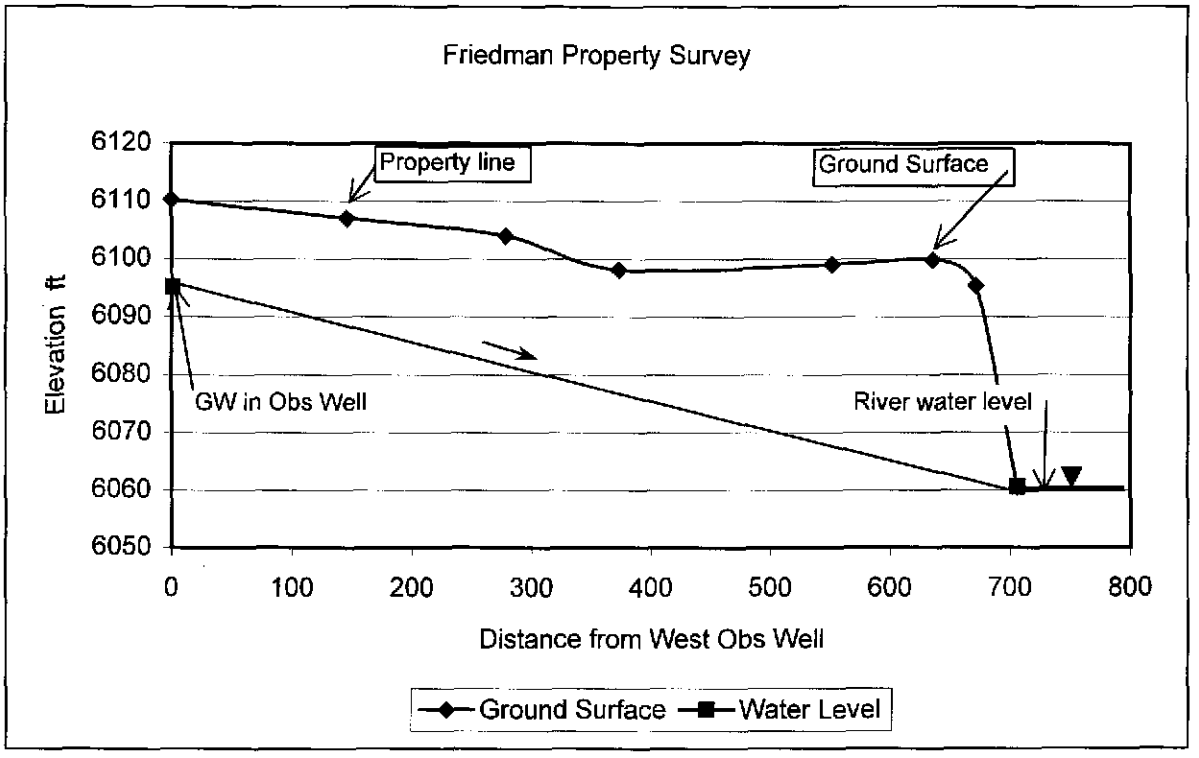
The water balance for the project shows that all pond evaporation will be mitigated and any Irrigation Company inflow in excess of evaporation and irrigation requirements will be recharged into the aquifer. This will enhance the aquifer storage and benefit downstream users and the river.

The groundwater for the project will be pumped from a well approximately 80 feet deep located some distance from the Big Wood River. Recharge of this pumped water will occur immediately after the water flows from the lower pond into a recharge area near the river. This will facilitate the river/aquifer exchange and benefit downstream users. No long term storage is required in the aquifer.

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EXHIBIT - 4

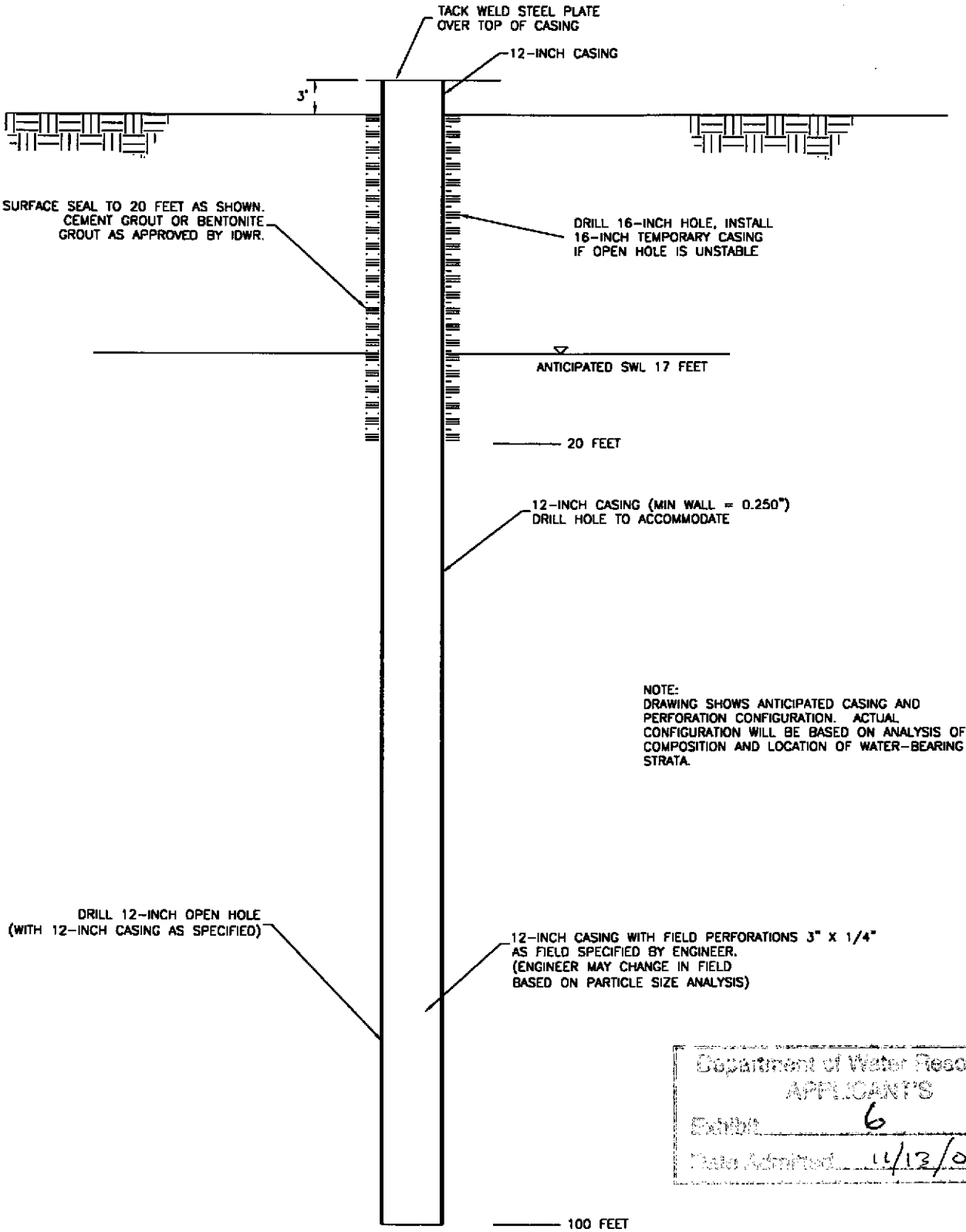
Friedman Property-Fox Creek Ranch
Survey from west observation well to Big Wood River Benchmark 10/2/2000
Map Scale 1in= 220.7 ft

Station	Dist inches	Elevation gs	Elevation ws	Description
0	0	6110.2	6095.1	Water Level in Obs well &gs
145.7	0.66	6107		Property line est gs
278.1	1.26	6104		Top Bank gs
373.0	1.69	6098.2		gs
551.8	2.5	6099.1		gs
635.6	2.88	6099.8		gs
670.9	3.04	6095.4		Top Bank gs
706.2	3.2	6060.6	6060.6	Edge of River



Department of Water Resources
APPLICANT'S
Exhibit 5
Date Admitted 11/13/02

EXHIBIT-5



Department of Water Resources
APPLICANT'S
Exhibit 6
Date Admitted 11/13/02

BROCKWAY ENGINEERING P.L.L.C. — Hydraulics ◆ Hydrology ◆ Water Resources	FRIEDMAN – FOX CREEK WELL SECTION & CONFIGURATION PROPOSED NEW WELL	SHEET 1 OF 1 DATE 10/02/00 SCALE NONE	DRAWN JSR REVISIONS A

EXHIBIT 6

Well Interference Analysis Friedman Project Well

Estimated Well Drawdown

Wellint.xls

C.E. BROCKWAY October 3, 2000 Brockway Engineering P.L.L.C.

AQUIFER PROPERTIES BASED ON USBR GROUNDWATER MANUAL-SAND AND GRAVEL ALLUVIAL AQUIFER
AND PUMPING TESTS OF WELLS ON DIP CREEK SUBDIVISION
EST. HOLE DIA. 12 INCHES

USING THEIS FORMULA S=114.6*Q/T*W(U)
S= DRAWDOWN IN FT
Q= PUMPING RATE GPM
T= COEFFICIENT OF TRANSMISSIBILITY GPD/FT
W(U)= WELL FUNCTION OF 'U'

W(U)=-.5772-LOGeU +U-U^2/(2*2!)+U^3/(3*3!)-U^4/(4*4!) .....
U=1.87*r^2*S/(T*t)
r=DISTANCE IN FT. FROM CENTER OF PUMPED WELL TO DRAWDOWN POINT
S=COEFFICIENT OF STORAGE
T=COEFFICIENT OF TRANSMISSIBILITY, GPD/FT
t= TIME SINCE PUMPING STARTED, DAYS

Department of Water Resources
APPLICANT'S
Exhibit 7
Date Admitted 11/13/02

INPUT

r1=	0.500	FT	K=	350.00	FT/DAY
r2=	100	FT	K=	0.00405093	CFS/FT^2
r3=	500	FT	K=	2.61E+03	GPD/FT^2
r4=	1000	FT	SAT. DEPTH EST.=	100	FT
r5=	5280	FT	TRANSMISSIVITY=	261100	GPD/FT
S=	0.12		TRANSMISSIVITY=	4.04E-01	FT^2/SEC
T=	261100	GPD/FT	TRANSMISSIVITY=	34906.4	FT^2/DAY
Q/WELL	897.60	GPM =	2.000	CFS	

TIME HOURS	TIME t DAYS	U w/r1 0.5	WELL FUNCT. W(U)1	DRAW DOWN @WELL	SPEC. CAP GPM/FT	U W/r2 100	WELL FUNCT. W(U)2	DRAW DOWN @ 100	U W/r3 500	WELL FUNCT. W(U)3	DRAW DOWN 500	U W/r4 1000	WELL FUNCT. W(U)4	DRAW DOWN @ 1000
5	0.21	1.031E-06	13.2075	5.20	173	4.125E-02	2.6517	1.04	1.031E+00	0.2082	0.08	4.125E+00	0.0000	0.00
10	0.42	5.157E-07	13.9006	5.48	164	2.063E-02	3.3245	1.31	5.157E-01	0.5412	0.21	2.063E+00	0.0449	0.02
24	1.00	2.149E-07	14.7761	5.82	154	8.594E-03	4.1880	1.65	2.149E-01	1.1644	0.46	8.594E-01	0.2793	0.11
48	2.00	1.074E-07	15.4692	6.09	147	4.297E-03	4.8769	1.92	1.074E-01	1.7583	0.69	4.297E-01	0.6551	0.26
144	6.00	3.581E-08	16.5678	6.53	138	1.432E-03	5.9726	2.35	3.581E-02	2.7878	1.10	1.432E-01	1.5043	0.59
480	20.00	1.074E-08	17.7718	7.00	128	4.297E-04	7.1756	2.83	1.074E-02	3.9670	1.56	4.297E-02	2.6125	1.03
960	40.00	5.372E-09	18.4650	7.27	123	2.149E-04	7.8685	3.10	5.372E-03	4.6548	1.83	2.149E-02	3.2845	1.29

HOURS	DAYS	@WELL	100	500	1000 DISTANCE FEET
0	0.00	0	0	0	0
5	0.21	-5.20	-1.04	-0.08	0.00
10	0.42	-5.48	-1.31	-0.21	-0.02
24	1.00	-5.82	-1.65	-0.46	-0.11
48	2.00	-6.09	-1.92	-0.69	-0.26
144	6.00	-6.53	-2.35	-1.10	-0.59
480	20.00	-7.00	-2.83	-1.56	-1.03
960	40.00	-7.27	-3.10	-1.83	-1.29

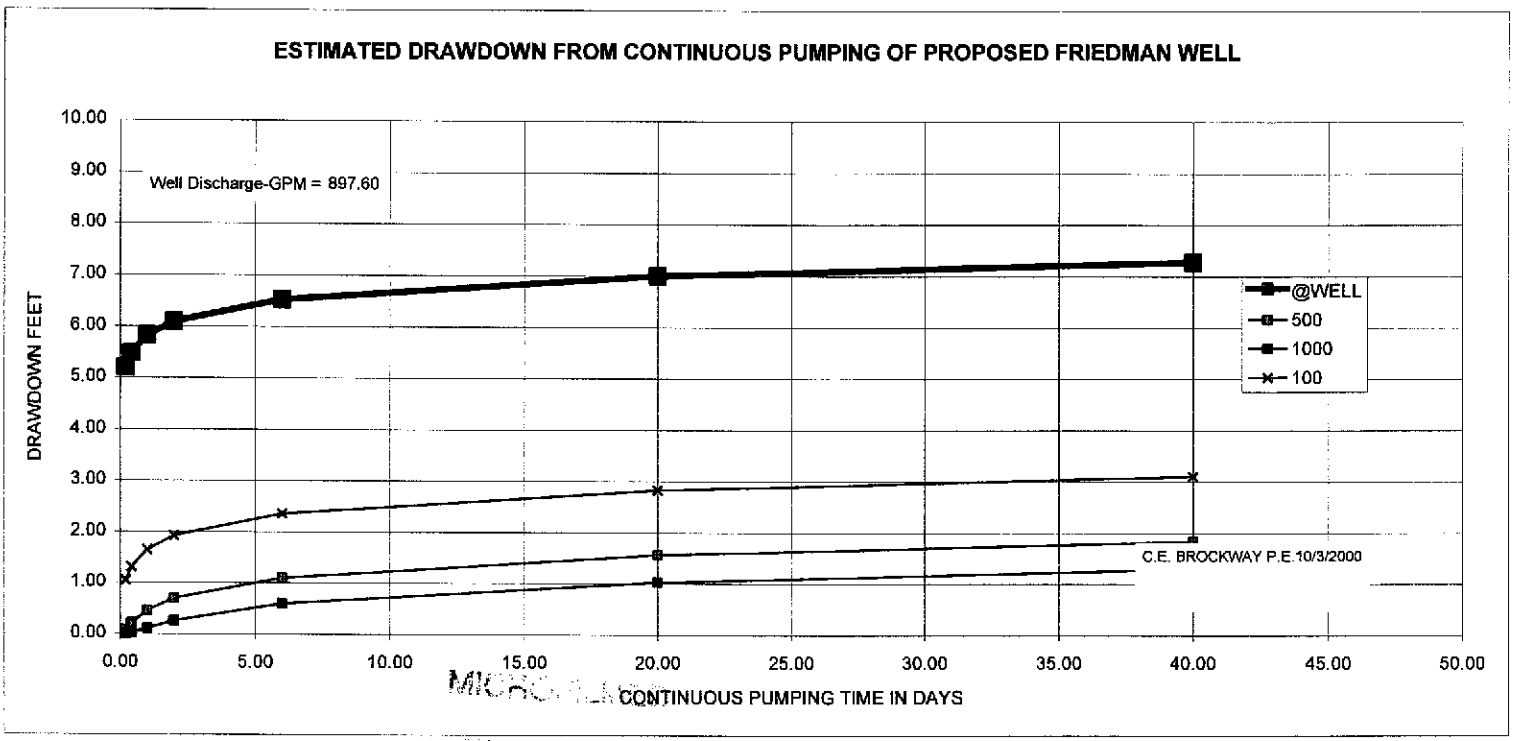
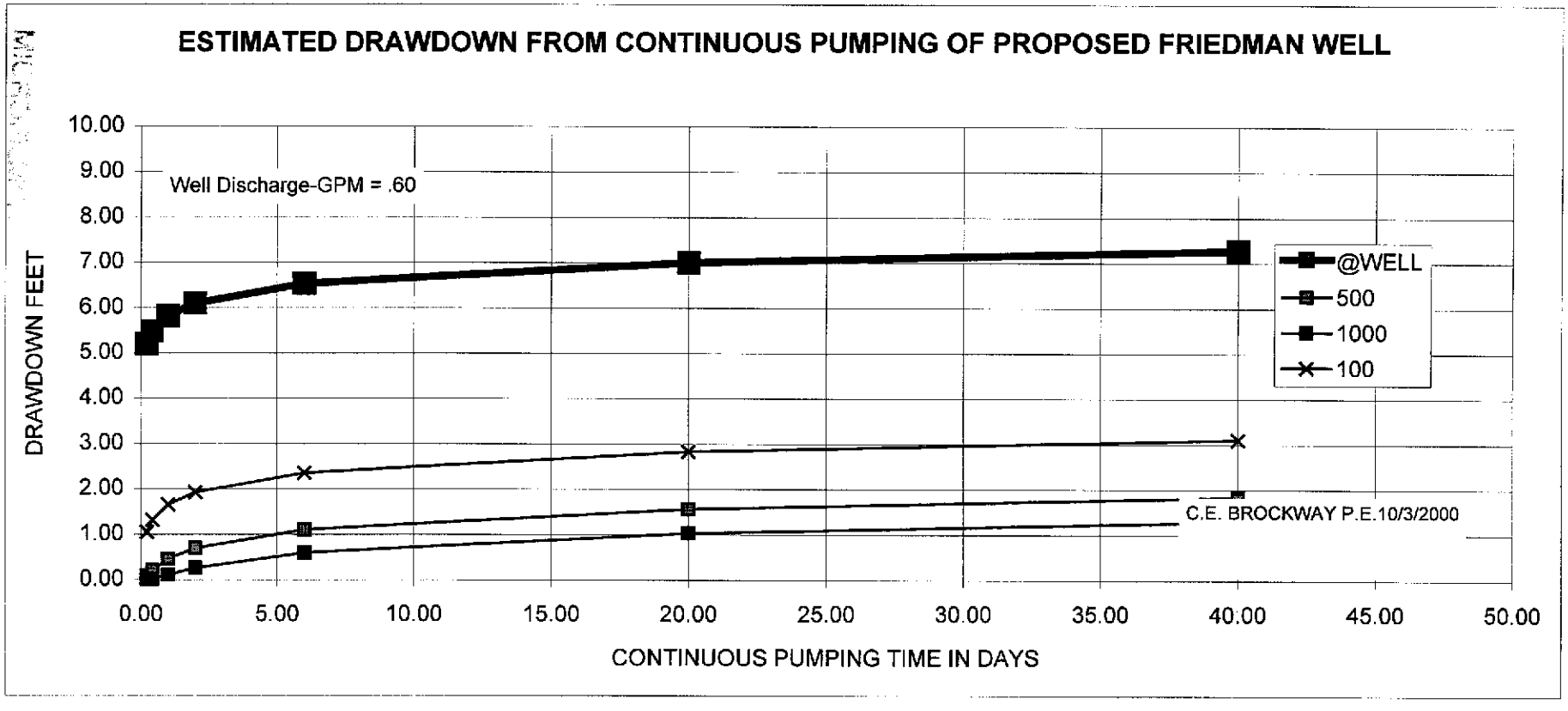
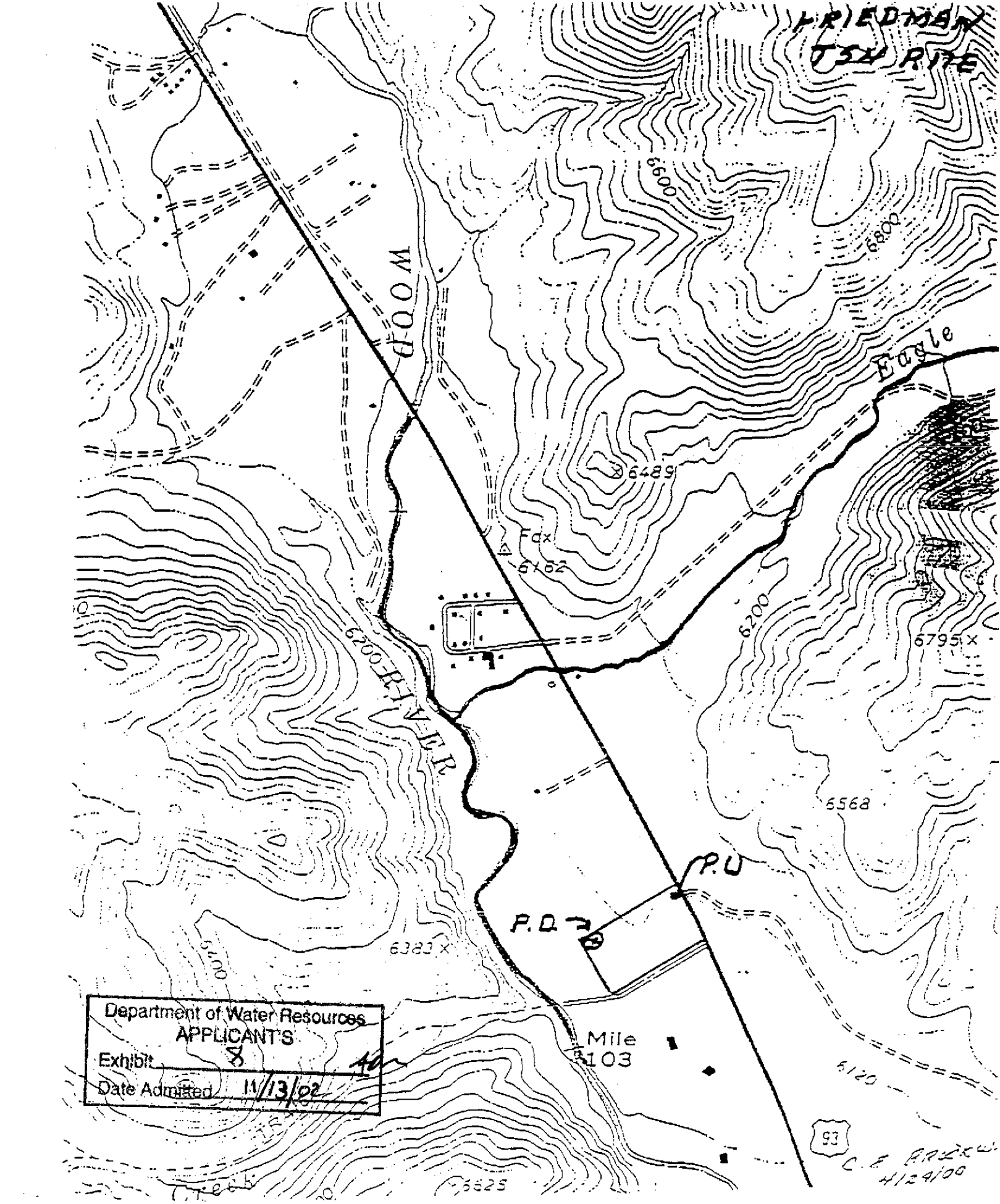


EXHIBIT-7-1

EXHIBIT - 7


ESTIMATED DRAWDOWN FROM CONTINUOUS PUMPING OF PROPOSED FRIEDMAN WELL
Well Discharge-GPM = .60
DRAWDOWN FEET
CONTINUOUS PUMPING TIME IN DAYS
@WELL
500
1000
100
C.E. BROCKWAY P.E.10/3/2000
10.00
9.00
8.00
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
0.00
5.00
10.00
15.00
20.00
25.00
30.00
35.00
40.00
45.00
50.00

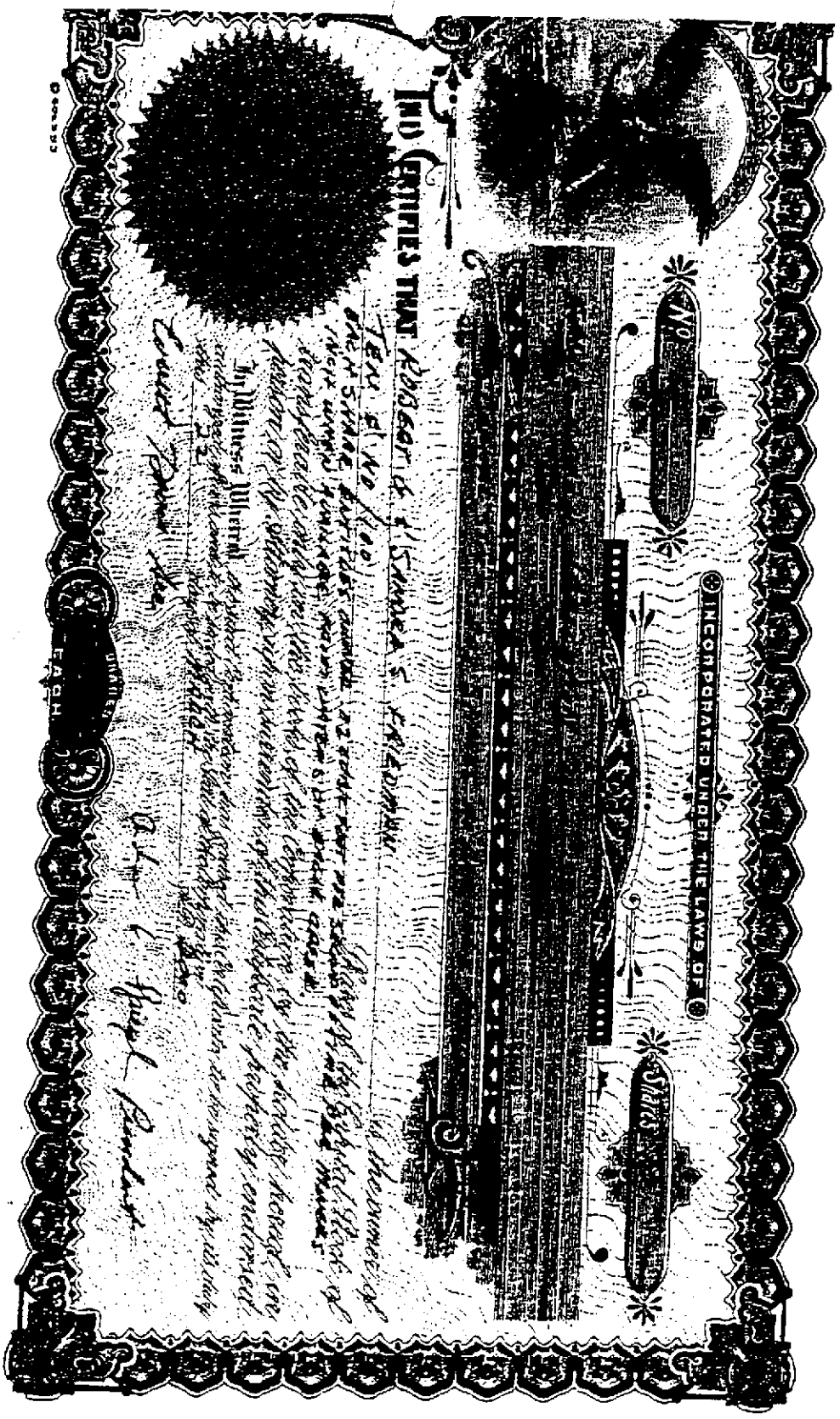


Department of Water Resources
APPLICANT'S
Exhibit 8
Date Admitted 11/13/02

EXHIBIT - 8

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Department of Water Resources
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Exhibit 9
Date Admitted 11/13/02

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EXHIBIT - 9

FRIEDMAN FOX CREEK
WATER OPERATIONS
SCHEMATIC

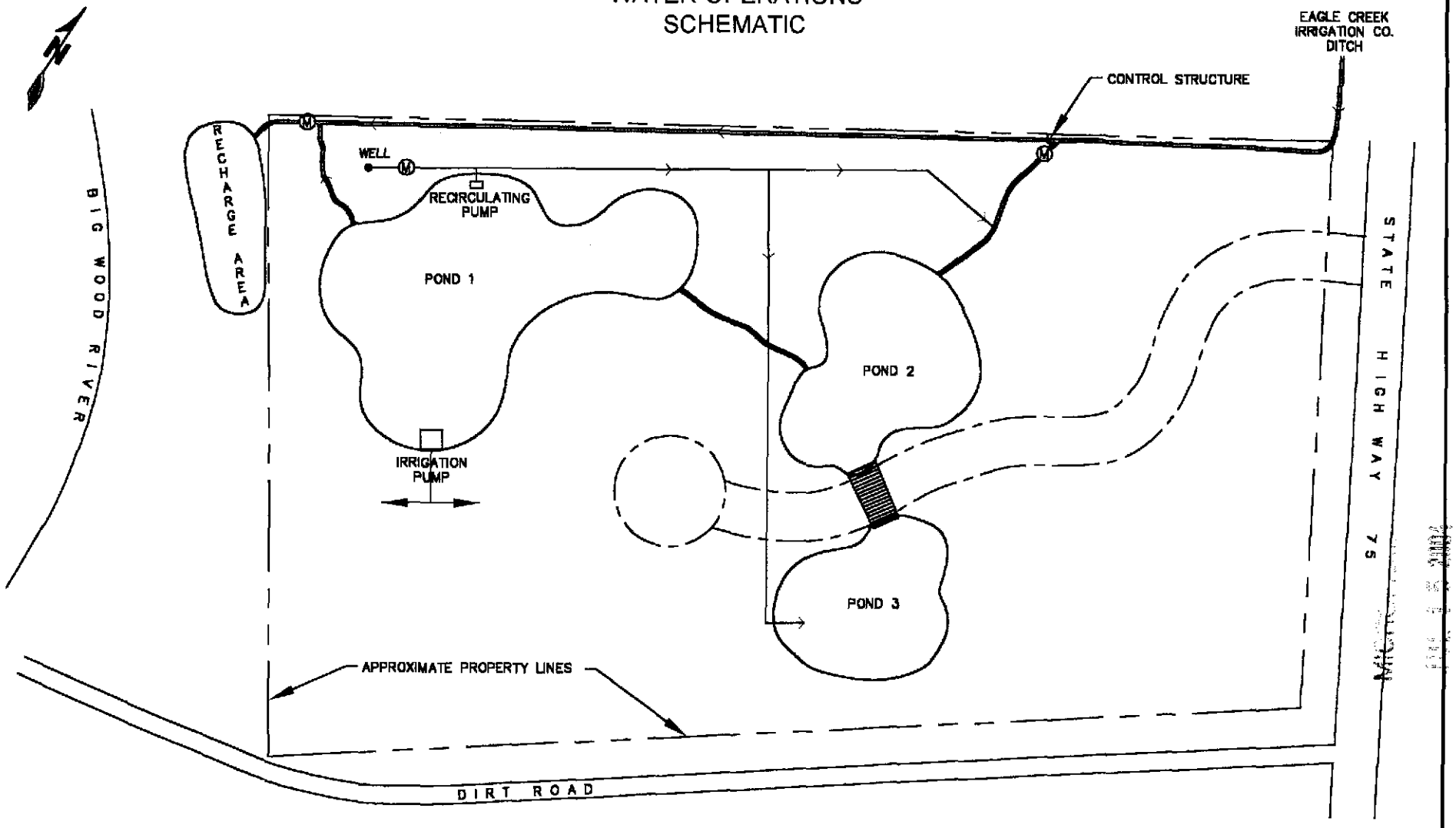
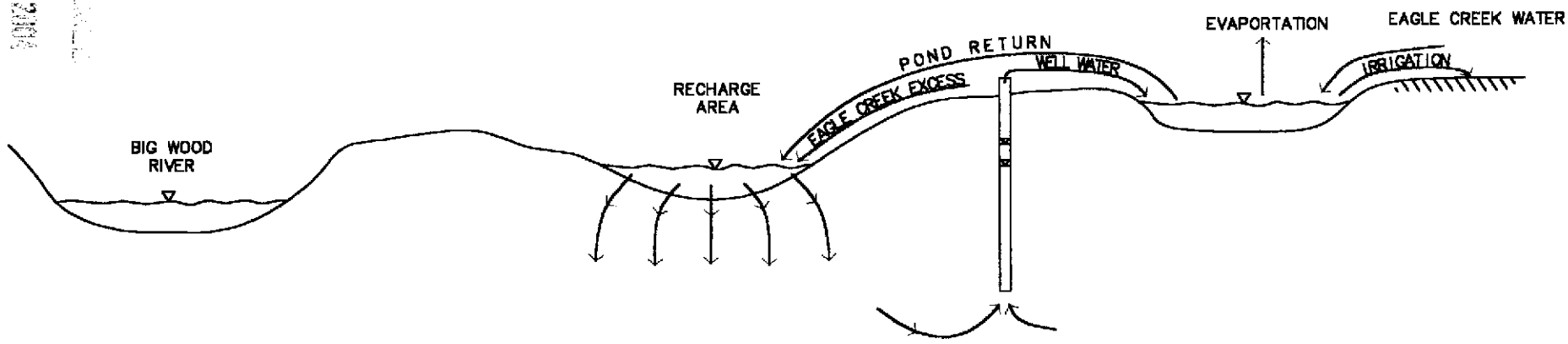


EXHIBIT - 01

Department of Water Resources
APPLICANT'S
Exhibit 10
Date Admitted 11/13/02

FRIEDMAN FOX CREEK
WATER OPERATIONS
CROSS SECTION



Department of Water Resources
APPLICANT'S
Exhibit 11
Date Admitted 11/13/02

EXHIBIT 11

410-01-2000 EAGLE CREEK
T, 5 N – R. 17 E – Section 14

Department of Water Resources
APPLICANT'S
Exhibit 12
Date Admitted 11/17/02

A00081

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EXHIBIT-124 00002

Form 238-7
8/90

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

USE TYPEWRITER OR BALLPOINT PEN

WELL DRILLER'S REPORT

State law requires that this report be filed with the Director, Department of Water Resources within 30 days after the completion or abandonment of the well.

1. WELL OWNER
Name Chris R. Stephens
Address P.O. Box 388 Sun Valley Ida 83353
Drilling Permit No. 37-91-5-088
Water Right Permit No. _____

2. NATURE OF WORK
☒ New well ☐ Deepened ☐ Replacement
☐ Well diameter increase
☐ Abandoned (describe abandonment procedures such as materials, plug depths, etc. in lithologic log)

3. PROPOSED USE
☒ Domestic ☐ Irrigation ☐ Test ☐ Municipal
☐ Industrial ☐ Stock ☐ Waste Disposal or Injection
☐ Other _____ (specify type)

4. METHOD DRILLED
☒ Rotary ☒ Air ☐ Hydraulic ☐ Reverse rotary
☐ Cable ☐ Dug ☐ Other _____

5. WELL CONSTRUCTION
Casing schedule: ☒ Steel ☐ Concrete ☒ Other P.V.C

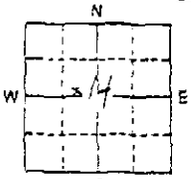
Thickness	Diameter	From	To
.250 inches	6 inches +	1 feet	70 feet
Sch 40 inches	4½ inches	60 feet	100 feet
_____ inches	_____ inches	_____ feet	_____ feet
_____ inches	_____ inches	_____ feet	_____ feet

Was casing drive shoe used? ☒ Yes ☐ No
Was a packer or seal used? ☐ Yes ☒ No
Perforated? ☒ Yes ☐ No SAW
How perforated? ☐ Factory ☐ Knife ☐ Torch ☐ Gun
Size of perforation ⅛ inches by 4 inches

Number	From	To
75 perforations	70 feet	98 feet
_____ perforations	_____ feet	_____ feet
_____ perforations	_____ feet	_____ feet

Well screen installed? ☐ Yes ☒ No
Manufacturer's name _____
Type _____ Model No. _____
Diameter ___ Slot size ___ Set from _____ feet to _____ feet
Diameter ___ Slot size ___ Set from _____ feet to _____ feet
Gravel packed? ☐ Yes ☒ No ☐ Size of gravel _____
Placed from _____ feet to _____ feet
Surface seal depth 20 Material used in seal: ☐ Cement grout
☒ Bentonite ☐ Puddling clay ☐ _____
Sealing procedure used: ☐ Slurry pit ☒ Temp. surface casing
☒ Overbore to seal depth
Method of joining casing: ☐ Threaded ☒ Welded ☒ Solvent Weld
☐ Cemented between strata
Describe access port Sanitary Well Cap

6. LOCATION OF WELL
Sketch map location must agree with written location.



Subdivision Name _____
EAGLE CREEK
Lot No. 40 Block No. MICR
County Blaine
SE ¼ NW ¼ Sec. 14 T. 5 N S R. 17 E W

7. WATER LEVEL
Static water level 47 feet below land surface.
Flowing? ☐ Yes ☒ No G.P.M. flow _____
Artesian closed-in pressure _____ p.s.i.
Controlled by: ☐ Valve ☐ Cap ☐ Plug
Temperature Cold °F. Quality Good
Describe artesian or temperature zones below

8. WELL TEST DATA
☐ Pump ☐ Bailer ☒ Air ☐ Other _____

Discharge G.P.M.	Pumping Level	Hours Pumped
20	60	2

9. LITHOLOGIC LOG

Bore Diam.	Depth From	Depth To	Material	Water Yes	Water No
6	0	1	Top Soil		✓
	1	8	Brown Dirt		✓
	8	20	Dirt - Red Shale Rock		✓
	20	40	Red Shale Rock - Clay		✓
	40	49	Broken Rock, Gravel - Clay		✓
	49	60	Sand - gravel - Shale Rock	✓	
	60	71	" " "	✓	
	71	100	Blue Basalt Rock		✓

10.
Work started 7-3-91 finished 7-4-91

11. DRILLERS CERTIFICATION
I/We certify that all minimum well construction standards were complied with at the time the rig was removed.
Scott Dreiling
Firm Name [illegible] Firm No. 727
Address Hailey, Idaho 83333 Date 7-5-91
(208) 788-5014
Signed by (Firm Official) [signature]
and
(Operator) [signature]

JUL 15 2004

USE ADDITIONAL SHEETS IF NECESSARY — FORWARD THE WHITE COPY TO THE DEPARTMENT

S14 T5N R17E

EXHIBIT - 12 of 12

A00082

00002

DEPARTMENT OF WATER RESOURCES

BALLPOINT PEN

WELL DRILLER'S REPORT

State law requires that this report be filed with the Director, Department of Water Resources within 30 days after the completion or abandonment of the well.

1. WELL OWNER

Name Dr. & Mrs. Lee Enright

Address P.O. Box 18 Ketchum, Id. 83340

Drilling Permit No. 37-91-S-046

Water Right Permit No.

2. NATURE OF WORK

☒ New well ☐ Deepened ☐ Replacement
☐ Well diameter increase
☐ Abandoned (describe abandonment procedures such as materials, plug depths, etc. in lithologic log)

3. PROPOSED USE

☒ Domestic ☐ Irrigation ☐ Test ☐ Municipal
☐ Industrial ☐ Stock ☐ Waste Disposal or Injection
☐ Other _____ (specify type)

4. METHOD DRILLED

☒ Rotary ☐ Air ☐ Hydraulic ☐ Reverse rotary
☐ Cable ☐ Dug ☐ Other _____

5. WELL CONSTRUCTION

Casing schedule: ☒ Steel ☐ Concrete ☐ Other _____

Thickness	Diameter	From	To
.250 inches	6 inches +	1½ feet	91½ feet
PVC .250 inches	5od inches	80 feet	160 feet
_____ inches	_____ inches	_____ feet	_____ feet
_____ inches	_____ inches	_____ feet	_____ feet

Was casing drive shoe used? ☒ Yes ☐ No
Was a packer or seal used? ☐ Yes ☒ No
Perforated? ☒ Yes ☐ No
How perforated? ☐ Factory ☐ Knife ☐ Torch ☐ Gun
Size of perforation ¼" inches by 3" inches Saw

Number		From	To
40	perforations	80 feet	160 feet
_____	perforations	_____ feet	_____ feet
_____	perforations	_____ feet	_____ feet

Well screen installed? ☐ Yes ☒ No
Manufacturer's name _____
Type _____ Model No. _____
Diameter ___ Slot size ___ Set from _____ feet to _____ feet
Diameter ___ Slot size ___ Set from _____ feet to _____ feet
Gravel packed? ☐ Yes ☒ No ☐ Size of gravel _____
Placed from _____ feet to _____ feet
Surface seal depth 20 Material used in seal: ☐ Cement grout ☒ Bentonite ☐ Puddling clay ☐ _____
Sealing procedure used: ☐ Slurry pit ☐ Temp. surface casing ☒ Overbore to seal depth
Method of joining casing: ☐ Threaded ☒ Welded ☐ Solvent Weld ☐ Cemented between strata
Describe access port _____

6. LOCATION OF WELL

Sketch map location must agree with written location.

N / W / E / S

Subdivision Name 85
EAGLE CREEK RD
Lot No. _____ Block No. _____
County BLAINE
NE ¼ NE ¼ Sec. 14 T. 5 ☐N ☒S R. 17 ☒E ☐W

7. WATER LEVEL

Static water level 73 feet below land surface.
Flowing? ☐ Yes ☒ No G.P.M. flow _____
Artesian closed-in pressure _____ p.s.i.
Controlled by: ☐ Valve ☐ Cap ☐ Plug
Temperature ___ °F. Quality good
Describe artesian or temperature zones below.

8. WELL TEST DATA

☐ Pump ☐ Bailer ☒ Air ☐ Other _____

Discharge G.P.M.	Pumping Level	Hours Pumped
25	140	1

9. LITHOLOGIC LOG

Bore Diam.	Depth From	Depth To	Material	Water Yes	Water No
8	0	9	topsoil		x
6	9	28	gravel and clay		x
6	28	33	sand		x
6	33	42	gravel and sand		x
6	42	72	gravel	x	
6	72	76	sand		x
6	76	84	gravel	x	
6	84	86	clay		x
6	86	91	gravel and clay	x	
6	91	160	shale	x	

RECEIVED
SEP 06 1991
Department of Water Resources
Southern Region Office

10.

Work started 9/4/91 finished 9/5/91

11. DRILLERS CERTIFICATION

I/We certify that all minimum well construction standards were complied with at the time the rig was removed.

WOOD RIVER DRILLING & PUMP INC.
Firm Name POST OFFICE BOX 420 BELLEVUE, IDAHO 83313 Firm No. 265
Address 208 788-3163 Date 9-5-91
Signed by (Firm Official) Ken Smith
and
(Operator) Rico McSandis

USE ADDITIONAL SHEETS IF NECESSARY — FORWARD THE WHITE COPY TO THE DEPARTMENT

T 5N-R17E-S 14

EXHIBIT -12-3

000023

Form 238-7
6/89

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

USE TYPEWRITER
BALLPOINT PEN

WELL DRILLER'S REPORT

RECEIVED
OCT 19 1992
Department of Water Resources
Southern Region, Twin Falls

State law requires that this report be filed with the Director, Department of Water Resources within 30 days after the completion or abandonment of the well.

1. WELL OWNER

Name Carol Peyers
Address 13506 SE 106th Place Renton, Washington
Owner's Permit No. 37-92-S-0145-000 OF

2. NATURE OF WORK

☒ New well ☐ Deepened ☐ Replacement
Well diameter increase
☐ Abandoned (describe abandonment procedures such as materials, plug depths, etc. in lithologic log)

3. PROPOSED USE

☒ Domestic ☐ Irrigation ☐ Test ☐ Municipal
☐ Industrial ☐ Stock ☐ Waste Disposal or Injection
☐ Other _____ (specify type)

4. METHOD DRILLED

☒ Rotary ☒ Air ☐ Hydraulic ☐ Reverse rotary
☐ Cable ☐ Dug ☐ Other _____

5. WELL CONSTRUCTION

Casing schedule: ☒ Steel ☐ Concrete ☐ Other _____

Thickness		Diameter		From		To	
.250	inches	6"	inches +	0	feet	80	feet
.188	inches	5"	inches	40	feet	210	feet
	inches		inches		feet		feet
	inches		inches		feet		feet

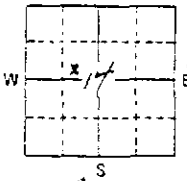
Was casing drive shoe used? ☒ Yes ☐ No
Was a packer or seal used? ☐ Yes ☒ No
Perforated? ☒ Yes ☐ No
How perforated? ☐ Factory ☐ Knife ☒ Torch ☐ Gun
Size of perforation 1/8 inches by 6" inches

Number		From		To	
45	perforations	155'	feet	175'	feet
	perforations		feet		feet
	perforations		feet		feet

Well screen installed? ☐ Yes ☒ No
Manufacturer's name _____
Type _____ Model No. _____
Diameter ___ Slot size ___ Set from ___ feet to ___ feet
Diameter ___ Slot size ___ Set from ___ feet to ___ feet
Gravel packed? ☐ Yes ☒ No ☐ Size of gravel _____
Placed from _____ feet to _____ feet
Surface seal depth 20 Material used in seal: ☐ Cement grout
☒ Bentonite ☐ Puddling clay ☐ _____
Sealing procedure used: ☐ Slurry pit ☒ Temp. surface casing
☒ Overbore to seal depth
Method of joining casing: ☐ Threaded ☒ Welded ☐ Solvent Weld
☐ Cemented between strata
Describe access port Sanitary well cap

6. LOCATION OF WELL

Sketch map location must agree with written location.



Subdivision Name Eagle
Lot No. 5 Block No. _____
County Blaine
SE ¼ NW ¼ Sec. 17 T 5 N S R 17 E W

7. WATER LEVEL

Static water level 60' feet below land surface
Flowing? ☐ Yes ☒ No G.P.M. flow _____
Artesian closed-in pressure _____ p.s.i.
Controlled by: ☐ Valve ☐ Cap ☐ Plug
Temperature ___ °F. Quality Good
Describe artesian or temperature zones below.

8. WELL TEST DATA

☐ Pump ☐ Bailer ☒ Air ☐ Other _____

Discharge G.P.M.	Pumping Level	Hours Pumped
30 gpm	147'	24

9. LITHOLOGIC LOG

Bore Diam.	Depth From	Depth To	Material	Water Yes
6	0	7	Brown dirt-Gem Rocks	
	7	15	Gravel - Dirt	
	15	20	Gravel - Sand	
	20	25	Sandy Brown dirt - Gravel	
	25	50	Gravel-Red Sand - Volc.	
	50	60	Gravel - Dirt - (Some water)	
	60	80	Brown Red Dirt - Gravel	
	80	100	Black Shale -	
	100	120	Slate Black Shale Rock	
	120	140	Hard Rock - Black Lava?	
	140	160	Black Shale Rock	
	160	175	Brown Black Rock	
	175	200	Broken Zone Shale	
	200	225	Broken Shale Rock	
			Test pumped well from 147	
			for 3 days at 30 gpm -	
			Black water cleared up.	
			5" Casing inside 6" Bore	
			To prevent cave and let	
			in adequate amount of water	

10. Work started 10-6-92 finished 10-15-92

11. DRILLERS CERTIFICATION

I/We certify that all minimum well construction standards were complied with at the time the rig was removed.

Firm Name _____ Firm No. 327 A00084
Address _____ Date 10-21-92
Signed by (Firm Official) _____
and
(Operator) _____

SE/NW
T5N R17E S14

EXHIBIT - 12-4

000024

orm 238-7
4/92

ST. OF IDAHO
DEPARTMENT OF WATER RESOURCES

USE WRITER OR
BA JINT PEN

WELL DRILLER'S REPORT

State law requires that this report be filed with the Director, Department of Water Resources within 30 days after the completion or abandonment of the well.

1. WELL OWNER

Name STEVEN H. MILLER OK

Address BOX 4127 BELLEVUE WA 98009

Drilling Permit No. 37-92-8-0153

Water Right Permit No. _____

2. NATURE OF WORK

☑ New well ☐ Deepened ☐ Replacement
☐ Well diameter increase ☐ Modification
☐ Abandoned (describe abandonment or modification procedures such as liners, screen, materials, plug depths, etc. in lithologic log, section 9.)

3. PROPOSED USE

☑ Domestic ☐ Irrigation ☐ Monitor
☐ Industrial ☐ Stock ☐ Waste Disposal or Injection
☐ Other _____ (specify type)

4. METHOD DRILLED

☑ Rotary ☐ Air ☐ Auger ☐ Reverse rotary
☐ Cable ☐ Mud ☐ Other _____ (backhoe, hydraulic, etc.)

5. WELL CONSTRUCTION

Casing schedule: ☑ Steel ☐ Concrete ☐ Other _____

Thickness	Diameter	From	To
.250 inches	4 inches	+ 1½ feet	40 feet
_____ inches	_____ inches	_____ feet	_____ feet
_____ inches	_____ inches	_____ feet	_____ feet

Was casing drive shoe used? ☑ Yes ☐ No
Was a packer or seal used? ☐ Yes ☑ No
Perforated? ☐ Yes ☑ No
How perforated? ☐ Factory ☐ Knife ☐ Torch ☐ Gun
Size of perforation? _____ inches by _____ inches

Number	From	To
_____ perforations	_____ feet	_____ feet
_____ perforations	_____ feet	_____ feet
_____ perforations	_____ feet	_____ feet

Well screen installed? ☐ Yes ☑ No
Manufacturer _____ Type _____
Top Packer or Headpipe _____
Bottom of Tailpipe _____

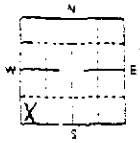
Diameter ____ Slot size ____ Set from ____ feet to ____ feet
Diameter ____ Slot size ____ Set from ____ feet to ____ feet
Gravel packed? ☐ Yes ☑ No ☐ Size of gravel _____
Placed from _____ feet to _____ feet

Surface seal depth 19 Material used in seal: ☐ Cement grout
☑ Bentonite ☐ Puddling clay ☐ _____
Sealing procedure used: ☐ Slurry pit
☑ Temp. surface casing ☑ Overbore to seal depth
Method of joining casing: ☐ Threaded ☑ Welded
☐ Solvent Weld ☐ Cemented between strata

Describe access port _____

6. LOCATION OF WELL

Sketch map location must agree with written location.



Subdivision Name FAIRHAVEN SUB
Lot No. 1 Block No. _____
County _____
Address of Well Site 13724 NW 25
(give at least name of road)
SW ¼ SW ¼ Sec. 14 T. 5 N ☑ or S ☐ R. 2 E ☑ or W ☐

7. WATER LEVEL

Static water level 8' feet below land surface.
Flowing? ☐ Yes ☑ No G.P.M. flow _____
Artesian closed-in pressure _____ p.s.i.
Controlled by: ☐ Valve ☐ Cap ☐ Plug
Temperature _____ °F. Quality _____
Describe artesian or temperature zones below.

8. WELL TEST DATA

☐ Pump ☐ Bailer ☑ Air ☐ Other _____

Discharge G.P.M.	Pumping Level	Hours Pumped
80	30	1

9. LITHOLOGIC LOG

Bore Diam.	Depth From	Depth To	Material	Water Yes	Water No
10	0	8	TOPSOIL, CLAY & GRAVEL		✓
10	8	18	BOULDER, GRAVEL & CLAY		✓
8	18	40	COARSE GRAVEL	✓	

RECEIVED
OCT 27 1992
Dept. of Water ...
Southern Region, Office

10.

Work started 10-8-92 finished 10-9-92

11. DRILLER'S CERTIFICATION

I/We certify that all minimum well construction standards were complied with at the time the rig was removed.

Firm Name WOOD RIVER DRILLING & PUMP INC. Firm No. 265
POST OFFICE BOX 420
Address BELLEVUE, IDAHO 83313 Date 10-19-92
208 788-3163
Signed by Drilling Supervisor Ron Smith

Signed _____ (Operator) _____
(If different than the Drilling Supervisor)

USE ADDITIONAL SHEETS IF NECESSARY — FORWARD THE WHITE COPY TO THE DEPARTMENT

EXHIBIT - 12-6

A00085

000025

Form 238-7
1/94

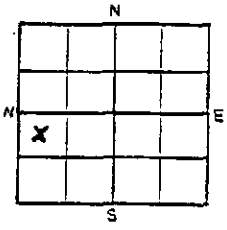
IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

Use Typewriter or Ball Point Pen

1. DRILLING PERMIT NO. 37 - 94 - S - 0111 - 000
Other IDWR No.

2. OWNER:
Name Joseph Csizmazia
Address P. O. Box 2161
City Ketchum, State ID Zip 83340

3. LOCATION OF WELL by legal description:
Sketch map location must agree with written location.



Twp. 5 North ☒ or South ☐
Rge. 17 East ☒ or West ☐
Sec. 14 NW 1/4 (10 acres) SW 1/4 (10 acres) 1/4 (160 acres)
Gov't Lot ____ County Blaine

Address of Well Site
(Give at least name of road + Distance to Road or Landmark) City

Lt. 2 Blk. 1 Sub. Name Eagle Creek Meadows

4. PROPOSED USE:
☒ Domestic ☐ Municipal ☐ Monitor ☐ Irrigation
☐ Thermal ☐ Injection ☐ Other

5. TYPE OF WORK
☒ New Well ☐ Modify or Repair ☐ Replacement ☐ Abandonment

6. DRILL METHOD
☐ Mud Rotary ☒ Air Rotary ☐ Cable ☐ Other

7. SEALING PROCEDURES

SEAL/FILTER PACK			AMOUNT	METHOD
Material	From	To	Sacks or Pounds	
Bentonite	0	19	100#	Overbore

Was drive shoe used? Y ☒ N ☐
Was drive shoe seal tested? Y ☐ N ☒ How?

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
6 5/8	1±	48	250	Steel	☒	☐	☒	☐
					☐	☐	☐	☐
					☐	☐	☐	☐

Length of Headpipe Length of Tailpipe

9. PERFORATIONS/SCREENS
☐ Perforations Method
☐ Screens Screen Type

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
						☐	☐
						☐	☐
						☐	☐

STATIC WATER LEVEL OR ARTESIAN PRESSURE:
18" ft. below ground Artesian pressure ____ lb.
Depth flow encountered ____ ft. Describe access port or control devices:

11. WELL TESTS:
☐ Pump ☐ Bailer ☒ Air ☐ Flowing Artesian

Yield gal./min.	Drawdown	Pumping Level	Time
± 40			

Water Temp. 46 Bottom hole temp.
Water Quality test or comments:

12. LITHOLOGIC LOG: (Describe repairs or abandonment)

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	Water Y	Water
8	0	3	Surface		
	3	11	Clay & gravel		
	11	16	Boulders		
	16	18	Gravel & clay	T	
	18	19	Clay & gravel		
6	19	25	Clay & gravel		
	25	33	Gravel	X	
	33	45	Clay & gravel		
	45	48	Gravel & sand	X	

RECEIVED
AUG 23 1994
Department of Water Resources
Southern Region Offic

Completed Depth 48 feet (Measurable)
Date: Started 8/16/94 Completed 8/16/94

13. DRILLER'S CERTIFICATION
I/We certify that all minimum well construction standards were complied with at the time the rig was removed.

Firm Name Walker Water Systems, Inc.
624 Pierce Street
Twin Falls, Idaho 83301
Firm No. 15
A00086

Firm Official Date 8/22/94
and
Supervisor or Operator Date
(Sign once if Firm Official & Operator)

000026

EXHIBIT 12-6

FORWARD WHITE COPY TO WATER RESOURCES

Form 238-7
7/94

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

Use Typewriter or Ball Point Pen

1. DRILLING PERMIT NO. 37-95-S-0196-000
Other IDWR No.

2. OWNER:
Name STEVEN MILLER
Address P.O. BOX 4360
City KETCHUM State ID Zip 83340

3. LOCATION OF WELL by legal description:
Sketch map location must agree with written location.

N / W / E / S

Twp. 5 North ☑ or South ☐
Rge. 17 East ☑ or West ☐
Sec. 14 1/4 NW 1/4 SW 1/4
Gov't Lot ____ County BLAINE

Address of Well Site 1346 off Hiway 75
City KETCHUM
(Give at least name of road + Distance to Road or Landmark)

Lt. 1 Blk ____ Sub. Name FOOTHILLS SUB #1

4. PROPOSED USE:
☑ Domestic ☐ Municipal ☐ Monitor ☐ Irrigation
☐ Thermal ☐ Injection ☐ Other

5. TYPE OF WORK
☑ New Well ☐ Modify or Repair ☐ Replacement ☐ Abandonment

6. DRILL METHOD
☐ Mud Rotary ☑ Air Rotary ☐ Cable ☐ Other

7. SEALING PROCEDURES

SEAL/FILTER PACK Material	From	To	AMOUNT Sacks or Pounds	METHOD
BENTONITE	0	20	10SKS	OVERBORE

Was drive shoe used? ☑ Y ☐ N Shoe Depth(s)
Was drive shoe seal tested? Y ☐ N ☑ How?

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
6"	+1½	60	.250	STEEL	☑	☐	☑	☐
					☐	☐	☐	☐
					☐	☐	☐	☐

Length of Headpipe ____ Length of Tailpipe ____

9. PERFORATIONS/SCREENS
☐ Perforations Method
☐ Screens Screen Type

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
						☐	☐
						☐	☐
						☐	☐

10. STATIC WATER LEVEL OR ARTESIAN PRESSURE:
22 ft. below ground Artesian pressure ____ lb.
Depth flow encountered ____ ft. Describe access port or control devices:

11. WELL TESTS:
☐ Pump ☐ Bailer ☑ Air ☐ Flowing Artesian

Yield gal./min.	Drawdown	Pumping Level	Time
75		50	1

Water Temp. ____ Bottom hole temp. ____
Water Quality test or comments:

12. LITHOLOGIC LOG: (Describe repairs or abandonment)

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	Wat Y
8	0	1	TOPSOIL	
6	1	25	CLAY & GRAVEL	
6	25	35	CLAY & GRAVEL	✓
6	35	40	SAND & CLAY	
6	40	55	CLAY & GRAVEL	
6	55	60	GRAVEL	✓

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NOV
Department of Water Resources
Southern Region

Completed Depth 60 ft (Measurable)
Date: Started 11-14-95 Completed 11-14-95

13. DRILLER'S CERTIFICATION
I/We certify that all minimum well construction standards were complied with at the time the rig was removed.
MUD RIVER DRILLING & PU...
BOX 837
Firm Name BELLEVUE, ID 83313 Firm No. 26
Firm Official Ken Smith Date 11-15-95
and
Supervisor or Operator Bill McIntosh Date 11-15-95
(Sign once if Firm Official & Operator)

000027

EXHIBIT 12-7

FORWARD WHITE COPY TO WATER RESOURCES

Form 238-7
1/94
C

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

Use Typewriter or Ball Point Pen

1. DRILLING PERMIT NO. 37-94-S 0032-000
Other IDWR No.

2. OWNER:
Name John Gotts
Address PO Box 2486
City Ketchum State ID Zip 83340

3. LOCATION OF WELL by legal description:
Sketch map location must agree with written location.

N / W / E / S

Twp. 5 North ☑ or South ☐
Rge. 17 East ☑ or West ☐
Sec. 14, SE 1/4 (10 acres) NE 1/4 (40 acres) ____ 1/4 (160 acres)
Gov't Lot ____ County Blaine

Address of Well Site North Side of Eagle Ck Rd, City Ketchum
(Give at least name of road + Distance to Road or Landmark)

Lt. ____ Blk. ____ Sub. Name ____

4. PROPOSED USE:
☑ Domestic ☐ Municipal ☐ Monitor ☐ Irrigation
☐ Thermal ☐ Injection ☐ Other ____

5. TYPE OF WORK
☑ New Well ☐ Modify or Repair ☐ Replacement ☐ Abandonment

DRILL METHOD
☐ Mud Rotary ☑ Air Rotary ☐ Cable ☐ Other ____

7. SEALING PROCEDURES

SEAL/FILTER PACK Material	From	To	AMOUNT Sacks or Pounds	METHOD
Bentonite	0	20	12 SKS	Dump

Was drive shoe used? Y ☑ N ☐
Was drive shoe seal tested? Y ☐ N ☑ How? ____

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
6	1	65	.250	STEEL	☑	☐	☑	☐
5	50	150	.250	STEEL	☐	☑	☑	☐
					☐	☐	☐	☐

Length of Headpipe ____ Length of Tailpipe ____

9. PERFORATIONS/SCREENS
☑ Perforations Method Torch
☐ Screens Screen Type ____

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
50	150	3"	50	1/8	Steel	☐	☑
70	140	2	150	1/4	Steel	☑	☐
						☐	☐

10. STATIC WATER LEVEL OR ARTESIAN PRESSURE:
23 ft. below ground Artesian pressure — lb.
Depth flow encountered — ft. Describe access port or control devices: ____

000025

EXHIBIT 12-8

11. WELL TESTS:
☐ Pump ☐ Bailer ☑ Air ☐ Flowing Artesian

Yield gal./min.	Drawdown	Pumping Level	Time
20			1

Water Temp. — Bottom hole temp. —
Water Quality test or comments: —

12. LITHOLOGIC LOG: (Describe repairs or abandonment)

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	Water Y	Water N
8-6	0	3	TOP SOIL		✓
8-6	3	18	CLAY & SAND		✓
8-6	18	65	ALLUVIUM		✓
6	65	140	BROKEN LIMESTONE	✓	
6	140	150	LIMESTONE		✓

RECEIVED
MAY 06 1994
Dept. of Water Resources
Southern Region Office

Completed Depth 150 (Measurable)
Date: Started 4-14-94 Completed 4-25-94

13. DRILLER'S CERTIFICATION
I/We certify that all minimum well construction standards were complied with at the time the rig was removed.

Firm Name WOOD RIVER DRILLING & PUMP 88 Firm No. 265
BOX 837
BELLEVUE, ID 83313
Firm Official Ken Smith Date 5-5-94
and
Supervisor or Operator Brad McHargue Date 5-5-94
(Sign once if Firm Official & Operator)

Form 238-7
7/94

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

Use Typewriter or Ball Point Pen

1. DRILLING PERMIT NO. 37 - 95 - S - 0166 - 000
Other IDWR No.

OWNER:
Name EVERETT DAVIS
Address P.O. BOX 195
City SUN VALLEY State ID Zip 83353

3. LOCATION OF WELL by legal description:
Sketch map location must agree with written location.

N / W / E / S

Twp. 5 North ☐ or South ☐
Rge. 17 East ☐ or West ☐
Sec. 14 1/4 (10 acres) 1/4 NE (40 acres) 1/4 SW (160 acres) 1/4
Gov't Lot ____ County BLAINE

Address of Well Site 30 EAGLE CREEK ROAD
City KETCHUM
(Give at least name of road + Distance to Road or Landmark)

Lot ____ Blk. ____ Sub. Name EAGLE CREEK

4. PROPOSED USE:
☑ Domestic ☐ Municipal ☐ Monitor ☐ Irrigation
☐ Thermal ☐ Injection ☐ Other

5. TYPE OF WORK
☑ New Well ☐ Modify or Repair ☐ Replacement ☐ Abandonment

6. DRILL METHOD
☐ Mud Rotary ☑ Air Rotary ☐ Cable ☐ Other

7. SEALING PROCEDURES

SEAL/FILTER PACK Material	From	To	AMOUNT Sacks or Pounds	METHOD
BENTONITE	0	10	250#	OVERBORE

Was drive shoe used? ☐ Y ☑ N Shoe Depth(s) ____
Was drive shoe seal tested? Y ☐ N ☐ How? ____

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
8.625	+1	86	.250	STEEL	☑	☐	☑	☐
					☐	☐	☐	☐
					☐	☐	☐	☐

Length of Headpipe ____ Length of Tailpipe ____

9. PERFORATIONS/SCREENS
☑ Perforations Method MILLS KNIFE
☐ Screens Screen Type

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
56	86	.125	480	5	STEEL	☑	☐
						☐	☐
						☐	☐

10. STATIC WATER LEVEL OR ARTESIAN PRESSURE:
46 ft. below ground Artesian pressure ____ lb.
Depth flow encountered ____ ft. Describe access port or control devices: 000029

11. WELL TESTS:
☐ Pump ☐ Bailer ☑ Air ☐ Flowing Artesian

Yield gal./min.	Drawdown	Pumping Level	Time
50			

Water Temp. 48 Bottom hole temp. ____
Water Quality test or comments: ____

12. LITHOLOGIC LOG: (Describe repairs or abandonment)

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	Water Y	Water N
8	0	4	SURFACE DIRT & GRAVEL		Y
	4	10	GRAVEL & SAND		Y
	10	30	GRAVEL & SOME CLAY		Y
	30	50	GRAVEL & CLAY		Y
	50	70	GRAVEL & SAND	Y	
	70	80	GRAVEL & SAND	Y	
	80	86	BLACK LIMESTONE QUARTZ	Y	

RECEIVED
OCT 16 1995
Department of Water Resources
Southern Region

Completed Depth 86 (Measurable)
Date: Started 09/26/95 Completed 09/28/95

13. DRILLER'S CERTIFICATION
I/We certify that all minimum well construction standards were complied with at the time the rig was removed.

Firm Name WALKER WATER SYSTEMS INC. License No. A00080
Firm Official [signature] Date 10/12/95
and
Supervisor or Operator [signature] Date 10/12/95
(Sign once if Firm Official & Operator)

EXHIBIT 12-9

FORWARD WHITE COPY TO WATER RESOURCES

Form 238-7
7/94

IDAHO DEPARTMENT OF WATER RESOURCE
WELL DRILLER'S REPORT

Use Typewriter or Ball Point Pen

1. DRILLING PERMIT NO. 37 - 95 - S - 0069 - 000
Other IDWR No.

OWNER:
Name MIKE HOLTZER
Address % NASH CONST. PO. BOX 797
City KETCHUM State ID Zip 83340

2. LOCATION OF WELL by legal description:
Sketch map location must agree with written location.

N / W / E / S

Twp. 5 North ☒ or South ☐
Rge. 17 East ☒ or West ☐
Sec. 14, 1/4 (10 acres) SE 1/4 (40 acres) SW 1/4 (160 acres)
Gov't Lot ____ County BLAINE

Address of Well Site
City
(Give at least name of road + Distance to Road or Landmark)

Subdivision Name ____ Blk. ____ Sub. Name

3. PROPOSED USE:
☐ Domestic ☐ Municipal ☐ Monitor ☐ Irrigation
☐ Thermal ☐ Injection ☐ Other

4. TYPE OF WORK
☐ New Well ☐ Modify or Repair ☐ Replacement ☐ Abandonment

5. DRILL METHOD
☐ Mud Rotary ☐ Air Rotary ☐ Cable ☐ Other

6. SEALING PROCEDURES

SEAL/FILTER PACK Material	From	To	AMOUNT Sacks or Pounds	METHOD
BENTONITE	0	30	400#	OVERBORE

Was drive shoe used? ☐ Y ☐ N Shoe Depth(s)
Was drive shoe seal tested? Y☐ N☐ How?

7. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
10.000	+3	+19	.250	STEEL	☒	☐	☒	☐
6.065	+1.5	379	.280	STEEL	☒	☐	☒	☐
					☐	☐	☐	☐

Length of Headpipe ____ Length of Tailpipe

8. PERFORATIONS/SCREENS
☐ Perforations Method TORCH
☐ Screens Screen Type

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
						☐	☐
						☐	☐
						☐	☐

MIKE HOLTZER
JUL 25 2006

9. STATIC WATER LEVEL OR ARTESIAN PRESSURE:
34 ft. below ground Artesian pressure ____ lb.
Depth flow encountered ____ ft. Describe access port or control devices: 000936

11. WELL TESTS:
☐ Pump ☐ Bailer ☒ Air ☐ Flowing Artesian

Yield gal./min.	Drawdown	Pumping Level	Time
30-40			

Water Temp. 54 Bottom hole temp.
Water Quality test or comments:

12. LITHOLOGIC LOG: (Describe repairs or abandonment)

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	Water Y	Water N
10	0	1	SURFACE DIRT		X
	1	6	GRAVEL		X
	6	17	SILTY CLAY		X
	17	18	BROKEN GRANITE		X
	18	19	GRANITE		X
6	19	38	BROWN DECOMPOSED GRANITE		X
	38	60	GREY GRANITE		X
	60	64	BROWN GRANITE		X
	64	95	GREY GRANITE		X
	95	115	BROWN GRANITE		X
	115	150	GREY GRANITE		X
	150	190	BROWN DECOMPOSED GRANITE		X
	190	260	GREY GRANITE		X
	260	275	BROWN GRANITE		X
	275	325	GREY GRANITE WITH		X
	325	335	SOFT RED CLAY		X
	335	347	HARD GREY CLAY		X
	347	367	GREY BLACK GRANITE	X	
	367	378	VERY HARD GREY		X
	367	378	GRANITE		X

RECEIVED
AUG 22 1995
Department of Water Resources
Southern Region

Completed Depth 378 (Measurable)
Date: Started 06 23 95 Completed 06/28/95

13. DRILLER'S CERTIFICATION
I/We certify that all minimum well construction standards were complied with at the time the rig was removed.

Firm Name WALKER WATER SYSTEMS INC. Firm No. A000905
Firm Official [signature] Date 08/09/95
and
Supervisor or Operator Date 08/09/95
(Sign once if Firm Official & Operator)

EXHIBIT 12-10

Form 238-7
7/94

IDAHO DEPARTMENT OF WATER RESOURCE
WELL DRILLER'S REPORT

Use Typewriter or Ball Point Pen

1. DRILLING PERMIT NO. 37 -95 -S -0090 00

Other IDWR No.

2. OWNER:
Name ANDY SABEL
Address P.O. BOX 5583
City KETCHUM State ID Zip 83340

3. LOCATION OF WELL by legal description:
Sketch map location must agree with written location.

N / W / E / S

Twp. 5 North X or South ☐
Rge. 17 East X or West ☐
Sec. 14 1/4 NW 1/4 SW 1/4
Gov't Lot ____ County BLAINE
(10 acres, 40 acres, 160 acres)

Address of Well Site 5 EAGLE CREEK ROAD
City KETCHUM
(Give at least name of road + Distance to Road or Landmark)

Lot ____ Blk. ____ Sub. Name COLVEN

4. PROPOSED USE:
X Domestic ☐ Municipal ☐ Monitor ☐ Irrigation
☐ Thermal ☐ Injection ☐ Other

5. TYPE OF WORK
☐ New Well ☐ Modify or Repair ☐ Replacement ☐ Abandonment

DRILL METHOD
☐ Mud Rotary ☐ Air Rotary ☐ Cable ☐ Other

6. SEALING PROCEDURES

SEAL/FILTER PACK Material	From	To	AMOUNT Sacks or Pounds	METHOD
BENTONITE	0	18	500#	OVERBORE

Was drive shoe used? ☐ Y X ☐ N Shoe Depth(s)
Was drive shoe seal tested? Y ☐ N ☐ How?

7. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
8"	+2	31	250	STEEL	X ☐	☐	X ☐	☐
					☐	☐	☐	☐
					☐	☐	☐	☐

Length of Headpipe ____ Length of Tailpipe ____

PERFORATIONS/SCREENS
☐ Perforations Method
☐ Screens Screen Type

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
						☐	☐
						☐	☐
						☐	☐

8. STATIC WATER LEVEL OR ARTESIAN PRESSURE:
W.S. ft. below ground Artesian pressure ____ lb.
Depth flow encountered ____ ft. Describe access port or control devices:

11. WELL TESTS:
☐ Pump ☐ Bailer X Air ☐ Flowing Artesian

Yield gal./min.	Drawdown	Pumping Level	Time
50			

Water Temp. 48 Bottom hole temp.
Water Quality test or comments:

12. LITHOLOGIC LOG: (Describe repairs or abandonment)

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	Water Y	Water N
8	0	3	SURFACE DIRT		X
	3	9	LARGE BOULDERS		X
	9	16	CLAY & BOULDERS		X
	16	21	GRAVEL & CLAY	X	
	21	25	CLAY BOULDERS BROKEN		X
	21	25	LIMESTONE		X
	25	31	GRAVEL & BROKEN	X	
	25	31	ROCK	X	

RECEIVED
JUL
Department of Water Resources
Southern Region

Completed Depth 31 (Measurable)
Date: Started 06/29/95 Completed 06/29/95

13. DRILLER'S CERTIFICATION
I/We certify that all minimum well construction standards were complied with at the time the rig was removed.

Firm Name WALKER WATER SYSTEMS INC. Firm No. A000915
Firm Official Date 07/19/95
and
Driller, Supervisor or Operator Date 07/19/95
(Sign once if Firm Official & Operator)

MICROFILMED
JUN 15 2005

EXHIBIT 12

0000

3/95

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

Use Typewriter or Ballpoint Pen

Office Use Only
Inspected by _____
Twp ____ Rge ____ Sec ____
____1/4 ____1/4 ____1/4
Lat: : : Long: : :

1. DRILLING PERMIT NO. 37-97-S 0100-000
Other IDWR No. 00002070

2. OWNER:
Name CHILD, STEVEN & PAULA
Address 2067 PHEASANT CIRCLE
City SALT LAKE CITY State UT Zip 84121

3. LOCATION OF WELL by legal description:
Sketch map location must agree with written location.

N / W / E / S

Twp. 5 North X or South ☐
Rge. 17 East X or West ☐
Sec. 14 ____ 1/4 SE 1/4 NW 1/4
(10 acres) (40 acres) (160 acres)
Gov't Lot ____ County BLAINE
Lat: : : Long: : :
Address of Well Site EAGLE CREEK RD.
City KETCHUM
(Give at least name of road + Distance to Road or Landmark)

Lot 4017 Blk. ____ Sub. Name EAGLE CREEK

4. USE:
X Domestic ☐ Municipal ☐ Monitor ☐ Irrigation
☐ Thermal ☐ Injection ☐ Other ____

5. TYPE OF WORK check all that apply (Replacement etc.)
X New Well ☐ Modify ☐ Abandonment ☐ Other ____

6. DRILL METHOD
X Air Rotary ☐ Cable ☐ Mud Rotary ☐ Other ____

7. SEALING PROCEDURES

SEAL/FILTER PACK Material	From	To	AMOUNT Sacks or Pounds	METHOD
BENTONITE	0	20	14SKS	OVERBORE

Was drive shoe used? X Y ☐ N Shoe Depth(s) ____
Was drive shoe seal tested? ☐ Y X N How? ____

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
6	+1.5	154	.250	STEEL	X	☐	X	☐
6	130	190	.250	STEEL	X	☐	X	☐
					☐	☐	☐	☐

Length of Headpipe ____ Length of Tailpipe ____

PERFORATIONS/SCREENS
Perforations Method TORCH
Screens Screen Type ____

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
30	190	1.5	30	.75	STEEL	X	☐
						☐	☐
						☐	☐

MICROFILMED
JUL 15 2004

9. STATIC WATER LEVEL OR ARTESIAN PRESSURE:
____ ft. below ground Artesian pressure ____ lb.
Main flow encountered ____ ft. Describe access port or control devices: ____

10. WELL TESTS:
☐ Pump ☐ Bailer X Air ☐ Flowing Artesian

Yield gal./min.	Drawdown	Pumping Level	Time
40		120	1

Water Temp. ____ Bottom hole temp. ____
Water Quality test or comments: ____
Depth first Water Encountered ____

12. LITHOLOGIC LOG: (Describe repairs or abandonment)

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	Water Y	Water N
8	0	1	TOPSOIL		X
8	1	20	CLAY & GRAVEL		X
6	20	55	CLAY & GRAVEL		X
6	55	70	GRAVEL & SUBSOIL	X	
6	70	80	BROKEN GRANITE		X
6	80	150	BROKEN LIMESTONE		X
6	150	190	LIMESTONE	X	

RECEIVED
AUG 19 1997
Department of Water Resources
Southern Region

Completed Depth 190 (Measurable)
Date: Started 08/11/97 Completed 08/13/97

13. DRILLER'S CERTIFICATION
I/We certify that all minimum well construction standards were complied with at the time the rig was removed.

Firm Name WOOD RIVER DRILLING INC. Firm No. 265
Firm Official Ken Smith Date 08/18/97
and
Supervisor or Operator Rick McHargue Date 08/18/97
(Sign once if Firm Official is Operator)

Steel Casing From +1.5 to 190 Clean

FORWARD WHITE COPY TO WATER RESOURCES

EXHIBIT - 12

Form 238-7
11/97

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

Office Use Only
Inspected by _____
Twp ____ Rge ____ Sec ____
____ 1/4 ____ 1/4 ____ 1/4
Lat: : : Long: : :

1. WELL TAG NO. D _____
DRILLING PERMIT NO. 37-98-S-0141-000
Other IDWR No. 00002851

2. OWNER:
Name TUTTLE, DONNA
Address 1800 CENTURY PK E # 210
City LOS ANGELES State CA Zip 90067

3. LOCATION OF WELL by legal description:
Sketch map location must agree with written location.

N / W / E / S

Twp. 5 North ☒ or South ☐
Rge. 17 East ☒ or West ☐
Sec. 14 ____ 1/4 SW 1/4 NE 1/4
Gov't Lot ____ County BLAINE
Lat: : : Long: : :
Address of Well Site 47 EAGLE CREEK ROAD
City KETCHUM
(Give at least name of road + Distance to Road or Landmark)

Lt. 4019 Blk. _____ Sub. Name EAGLE CREEK

4. USE:
☒ Domestic ☐ Municipal ☐ Monitor ☐ Irrigation
☐ Thermal ☐ Injection ☐ Other _____

5. TYPE OF WORK check all that apply (Replacement etc.)
☒ New Well ☐ Modify ☐ Abandonment ☐ Other _____

6. DRILL METHOD
☒ Air Rotary ☐ Cable ☐ Mud Rotary ☐ Other _____

7. SEALING PROCEDURES

SEAL/FILTER PACK Material	From	To	AMOUNT Sacks or Pounds	METHOD
BENTONITE	0	10	250#	OVERBORE

Was drive shoe used? ☒ Y ☐ N Shoe Depth(s) _____
Was drive shoe seal tested? ☐ Y ☒ N How? _____

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
8.625	+5	67	250	STEEL	☒	☐	☒	☐
5.625	+1	112	250	STEEL	☒	☐	☒	☐
					☐	☐	☐	☐

Length of Headpipe _____ Length of Tailpipe _____

9. PERFORATIONS/SCREENS
☒ Perforations Method Mills Knife
Screens Screen Type _____

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
79	109	125	64	5.625	STEEL	☒	☐
						☐	☐
						☐	☐

1998 NOV 25 2003

STATIC WATER LEVEL OR ARTESIAN PRESSURE:
50 ft. below ground Artesian pressure ____ lb.
Depth flow encountered ____ ft. Describe access port or control devices: CAP

11. WELL TESTS:
☐ Pump ☐ Bailer ☐ Air ☐ Flowing Artesian

Yield gal./min.	Drawdown	Pumping Level	Time
75			

Water Temp. 46 Bottom hole temp. ____
Water Quality test or comments: _____
Depth first Water Encounter ____

12. LITHOLOGIC LOG: (Describe repairs or abandonment)

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	Water Y	Water
8	0	3	SURFACE DIRT		X
	3	53	TAN SHALE & CLAY		X
	53	56	TAN LIMESTONE BOULDER	X	
	56	57	TAN LIMESTONE SHALE	X	
6	57	71	TAN LIMESTONE SHALE		X
	71	83	GREEN LIMESTONE	X	
	83	84	WHITE PINK CALCITE	X	
	84	94	TAN LIMESTONE	X	
	94	106	BLACK LIMESTONE		X
	106	112	TAN LIMESTONE		X

RECEIVED
NOV 23 1998
Department of Water Resources
Southern Region

Completed Depth 112 (Measuracle)
Date: Started 11/03/98 Completed 11/09/98

13. DRILLER'S CERTIFICATION
I/We certify that all minimum well construction standards were complied with at the time the rig was removed.

Company Name WALKER WATER SYSTEMS INC. Firm No. A00093 15
Firm Official [signature] Date 11/10/98
and
Driller or Operator [signature] Date 11/10/98
(Sign once if Firm Official & Operator)

00003

EXHIBIT 12-1

FORWARD WHITE COPY TO WATER [illegible]

USE TYPEWRITER OR BALL POINT PEN

WELL DRILLER'S REPORT

State Department of Reclamation

State law requires that this report be filed with the State Reclamation Engineer within 30 days after completion or abandonment of the well.

1. WELL OWNER

Name: Devon Arlett

Address: Lime Valley Idaho

Owner's Permit No.

2. NATURE OF WORK

☒ New well ☐ Deepened ☐ Replacement

☐ Abandoned (describe method of abandoning)

3. PROPOSED USE

☒ Domestic ☐ Irrigation ☐ Test

☐ Municipal ☐ Industrial ☐ Stock

4. METHOD DRILLED

☒ Cable ☐ Rotary ☐ Dug ☐ Other

5. WELL CONSTRUCTION

Diameter of hole 6 inches Total depth 72-5 feet

Casing schedule ☐ Steel ☐ Concrete

Thickness	Diameter	From	To
28 inches	6 inches	+2 feet	72-5 feet
inches	inches	feet	feet
inches	inches	feet	feet
inches	inches	feet	feet
inches	inches	feet	feet
inches	inches	feet	feet

Was a packer or seal used? ☐ Yes ☒ No

Perforated? ☐ Yes ☒ No

How perforated? ☐ Factory ☐ Knife ☐ Torch

Size of perforation inches by inches

Number	From	To
perforations	feet	feet
perforations	feet	feet
perforations	feet	feet

Well screen installed? ☐ Yes ☒ No

Manufacturer's name

Type Model No.

Diameter Slot size Set from feet to feet

Diameter Slot size Set from feet to feet

Gravel packed? ☐ Yes ☒ No Size of gravel

Placed from feet to feet

Surface seal? ☒ Yes ☐ No To what depth 20 feet

Material used in seal ☐ Cement grout ☒ Puddling clay

6. LOCATION OF WELL

Sketch map location must agree with written location.

N

W E

S

County Owyhee

¼ ¼ Sec. 14 T. 7 S R. 7 E W M

7. WATER LEVEL

Static water level 52 feet below land surface

Flowing ☐ Yes ☒ No G.P.M. flow

Temperature °F. Quality

Artesian closed-in pressure p.s.i.

Controlled by ☐ Valve ☐ Cap ☐ Plug

8. WELL TEST DATA

☐ Pump ☐ Bailer ☐ Other

Discharge G.P.M.	Draw Down	Hours Pumped
26	0	3 Hrs

9. LITHOLOGIC LOG

Hole Diam.	Depth From	Depth To	Material	Water Yes	Water No
6"	1	8	Gravel & Shale Clay		X
	8	26	Gravel & Boulders		X
	26	60	Cement Gravel		X
	64	68	" "	X	
			S.G.T.M.		
	68	72.5	Fine Gravel (Sea	X	

10. Work started 10-9-69 finished 10-17-69

11. DRILLER'S CERTIFICATION

This well was drilled under my supervision and this report is true to the best of my knowledge.

Roesler Well Drilling 9

Driller's or Firm's Name Number

Address Shoshone Ida

Signed By Date 11-24-69

EXHIBIT 12-74

0003

L ... RITER
BALL POINT PEN

Department of Water Administration

WELL DRILLER'S REPORT

State law requires that this report be filed with the Director, Department of Water Administration within 30 days after the completion or abandonment of the well.

1. WELL OWNER

Name Steve Pfeifer

Address Ketchum Idaho

Owner's Permit No. _____

2. NATURE OF WORK

☒ New well ☐ Deepened ☐ Replacement _____

☐ Abandoned (describe method of abandoning)

_____

3. PROPOSED USE

☒ Domestic ☐ Irrigation ☐ Test

☐ Municipal ☐ Industrial ☐ Stock

4. METHOD DRILLED

☒ Cable ☐ Rotary ☐ Dug ☐ Other

5. WELL CONSTRUCTION

Diameter of hole 6 inches Total depth 38 feet

Casing schedule: ☒ Steel ☐ Concrete

Thickness	Diameter	From	To
.272 inches	70.D. inches	1 feet	38 feet
_____ inches	_____ inches	_____ feet	_____ feet
_____ inches	_____ inches	_____ feet	_____ feet
_____ inches	_____ inches	_____ feet	_____ feet
_____ inches	_____ inches	_____ feet	_____ feet

Was a packer or seal used? ☐ Yes ☒ No

Perforated? ☐ Yes ☒ No

How perforated? ☐ Factory ☐ Knife ☐ Torch

Size of perforation _____ inches by _____ inches

Number		From	To
_____	perforations	_____ feet	_____ feet
_____	perforations	_____ feet	_____ feet
_____	perforations	_____ feet	_____ feet

Well screen installed? ☐ Yes ☒ No

Manufacturer's name _____

Type _____ Model No. _____

Diameter ___ Slot size ___ Set from _____ feet to _____ feet

Diameter ___ Slot size ___ Set from _____ feet to _____ feet

Gravel packed? ☐ Yes ☒ No Size of gravel _____

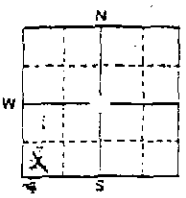
Placed from _____ feet to _____ feet

Surface seal? ☒ Yes ☐ No To what depth 18 feet

Material used in seal ☐ Cement grout ☒ Puddling clay

6. LOCATION OF WELL

Sketch map location must agree with written location.



37

County Blaine

SW ¼ SW ¼ Sec. 14 T 5 N N/S, R 17 E/W

7. WATER LEVEL

Static water level 7 feet below land surface

Flowing? ☐ Yes ☒ No G.P.M. flow _____

Temperature _____ ° F. Quality Good

Artesian closed-in pressure _____ p.s.i.

Controlled by ☐ Valve ☐ Cap ☐ Plug

8. WELL TEST DATA

☐ Pump ☒ Bailer ☐ Other

Discharge G.P.M.	Draw Down	Hours Pumped
30	6Ft.	1

9. LITHOLOGIC LOG

Hole Diam.	Depth From	Depth To	Material	Water Yes	Water No
8	0	5	Top Soil and gravel		x
6	5	10	Gravel set in clay		x
6	10	15	Gravel and sand	x	
6	15	28	Gravel set in clay		x
6	28	38	Pea gravel and coarse sand	x	

10.

Work started Dec 31, 1973 finished Jan. 10, 1974

11. DRILLER'S CERTIFICATION

This well was drilled under my supervision and this report is true to the best of my knowledge.

Ken Smith Well Drilling A00095
Driller's or Firm's Name Number

Box 367 Dietrich Idaho 83324
Address

Kenneth R Smith Feb 11 1974
Signed By Date

USE ADDITIONAL SHEETS IF NECESSARY FORWARD THE WHITE, BLUE AND [illegible]

EXHIBIT 12-15

MICROFILMED
JUL 13 2004

000035

WRITE OR TYPE IN INK

State of Idaho
Department of Water Administration

WELL DRILLER'S REPORT

State law requires that this report be filed with the State Reclamation Engineer within 30 days after completion or abandonment of the well.

1. WELL OWNER
Name James Messenger
Address Twin Falls, Idaho, Route #3
Owner's Permit No.

2. NATURE OF WORK
☐ New well ☐ Deepened ☐ Replacement
☐ Abandoned (describe method of abandoning)

3. PROPOSED USE
☐ Domestic ☐ Irrigation ☐ Test
☐ Municipal ☐ Industrial ☐ Stock

4. METHOD DRILLED
☒ Cable ☐ Rotary ☐ Dug ☐ Other

5. WELL CONSTRUCTION
Diameter of hole 6" inches Total depth 40 feet
Casing schedule: ☐ Steel ☐ Concrete

Thickness	Diameter	From	To
.250 inches	6 inches	0 feet	40 feet
inches	inches	feet	feet
inches	inches	feet	feet
inches	inches	feet	feet
inches	inches	feet	feet

Was a packer or seal used? ☐ Yes ☒ No
Perforated? ☐ Yes ☐ No
How perforated? ☐ Factory ☐ Knife ☐ Torch
Size of perforation inches by inches

Number	From	To
perforations	feet	feet
perforations	feet	feet
perforations	feet	feet

Well screen installed? ☒ Yes ☐ No
Manufacturer's name
Type Model No.
Diameter Slot size Set from feet to feet
Diameter Slot size Set from feet to feet
Gravel packed? ☐ Yes ☒ No Size of gravel
Placed from feet to feet
Surface seal? ☒ Yes ☐ No To what depth 18 feet
Material used in seal ☐ Cement grout ☒ Puddling clay

6. LOCATION OF WELL
Sketch map location must agree with written location.

N
W E
S

County Twin Falls
Sec. 36 T. 10S N or S R. 17E E or W

7. WATER LEVEL
Static water level 6 feet below land surface
Flowing? ☐ Yes ☒ No G.P.M. flow
Temperature °F. Quality
Artesian closed-in pressure p.s.i.
Controlled by ☐ Valve ☐ Cap ☐ Plug

8. WELL TEST DATA
☐ Pump ☒ Bailer ☐ Other
Discharge G.P.M. | Draw-Down | Hours Pumped
5 G.P.M. | None | 2 Hr.

9. LITHOLOGIC LOG

Hole Diam.	Depth From	Depth To	Material	Water Yes	Water No
6"	0	6	Dry Gravel		X
6"	6	40	Water bearing gravel	X	

10. Work started Sept. 15 finished Sept. 18, 19

11. DRILLER'S CERTIFICATION
This well was drilled under my supervision and this report is true to the best of my knowledge.

Date Chas. A. Moore - Well Drilling
Driller's or Firm's Name
Address 102 Ximes Ave., Twin Falls, Idaho
Signed by Chas. A. Moore Date

EXHIBIT 12-16

000036

USE TYPEWRITER OR BALL POINT PEN

Department of Water Administration

WELL DRILLER'S REPORT

State law requires that this report be filed with the Director, Department of Water Administration within 30 days after the completion or abandonment of the well.

1. WELL OWNER

Name Jack Tolman

Address Ketchum Idaho

Owner's Permit No. _____

2. NATURE OF WORK

☑ New well ☐ Deepened ☐ Replacement

☐ Abandoned (describe method of abandoning)

3. PROPOSED USE

☑ Domestic ☐ Irrigation ☐ Test

☐ Municipal ☐ Industrial ☐ Stock

4. METHOD DRILLED

☑ Cable ☐ Rotory ☐ Dug ☐ Other

5. WELL CONSTRUCTION

Diameter of hole ____ inches Total depth ____ feet

Casing schedule: ☐ Steel ☐ Concrete

Thickness	Diameter	From	To
250 inches	6 inches	1 feet	32 feet
____ inches	____ inches	____ feet	____ feet
____ inches	____ inches	____ feet	____ feet
____ inches	____ inches	____ feet	____ feet
____ inches	____ inches	____ feet	____ feet

Was a packer or seal used? ☐ Yes ☑ No

Perforated? ☐ Yes ☑ No

How perforated? ☐ Factory ☐ Knife ☐ Torch

Size of perforation ____ inches by ____ inches

Number		From	To
____	perforations	____ feet	____ feet
____	perforations	____ feet	____ feet
____	perforations	____ feet	____ feet

Well screen installed? ☐ Yes ☑ No

Manufacturer's name _____

Type _____ Model No. _____

Diameter ___ Slot size ___ Set from _____ feet to _____ feet

Diameter ___ Slot size ___ Set from _____ feet to _____ feet

Gravel packed? ☐ Yes ☐ No Size of gravel _____

Placed from _____ feet to _____ feet

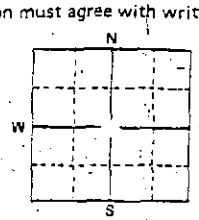
Surface seal? ☐ Yes ☑ No To what depth 18 feet

Material used in seal ☑ Cement grout ☐ Puddling clay

93 sacks

6. LOCATION OF WELL

Sketch map location must agree with written location.



37

185

County Blaine

NE NW SW ¼ Sec. 24 T. 5 N/S, R. 17 E/W

7. WATER LEVEL

Static water level 9 feet below land surface

Flowing? ☐ Yes ☑ No G.P.M. flow _____

Temperature _____ ° F. Quality _____

Artesian closed-in pressure _____ p.s.i.

Controlled by ☐ Valve ☐ Cap ☐ Plug

8. WELL TEST DATA

☐ Pump ☑ Bailer ☐ Other

Discharge G.P.M.	Draw Down	Hours Pumped
15	16 ft	1

9. LITHOLOGIC LOG

Hole Diam.	Depth From	Depth To	Material	Water Yes	Water No
8	0	1	Surface		✓
	1	4	Gravel Sand		✓
	4	10	Rock Boulders		✓
	10	32	Water	✓	
	10	32	gravel sand Trace water		✓
	32		Red Rock		
	32	42	Rock Broken		✓

10. Work started 14 Oct 72 finished 18 Nov 1972

11. DRILLER'S CERTIFICATION

This well was drilled under my supervision and this report is true to the best of my knowledge.

Eugene Walker #20097

Driller's or Firm's Name Number

624 Pierce ST Twin Falls

Address

Eugene Walker 12 Jan 73

Signed By Date

USE ADDITIONAL SHEETS IF NECESSARY FORWARD THE WHITE, BLUE AND PINK COPIES TO DEPARTMENT

MICROFILMED JUL 15 2004

EXHIBIT 12

USE TYPEWRITER OR BALL POINT PEN

State of Idaho
Department of Reclamation

WELL DRILLER'S REPORT

State law requires that this report be filed with the State Reclamation Engineer within 30 days after completion or abandonment of the well.

1. WELL OWNER

Name FREDERICK BLECKMAN

Address KETCHUM IDAHO

Owner's Permit No. ______

2. NATURE OF WORK

☑ New well ☐ Deepened ☐ Replacement

☐ Abandoned (describe method of abandoning)

3. PROPOSED USE

☑ Domestic ☐ Irrigation ☐ Test

☐ Municipal ☐ Industrial ☐ Stock

4. METHOD DRILLED

☑ Cable ☐ Rotary ☐ Dug ☐ Other

5. WELL CONSTRUCTION

Diameter of hole 8 inches Total depth 42 feet

Casing schedule: ☐ Steel ☐ Concrete

Thickness	Diameter	From	To
inches	6 inches	feet	42 feet
inches	inches	feet	feet
inches	inches	feet	feet
inches	inches	feet	feet
inches	inches	feet	feet

Was a packer or seal used? ☐ Yes ☑ No

Perforated? ☑ Yes ☐ No

How perforated? ☐ Factory ☑ Knife ☐ Torch

Size of perforation ______ inches by ______ inches

Number	From	To
perforations	32 feet	42 feet
perforations	feet	feet
perforations	feet	feet

Well screen installed? ☐ Yes ☑ No

Manufacturer's name ______

Type ______ Model No. ______

Diameter ___ Slot size ___ Set from ______ feet to ______ feet

Diameter ___ Slot size ___ Set from ______ feet to ______ feet

Gravel packed? ☐ Yes ☑ No Size of gravel ______

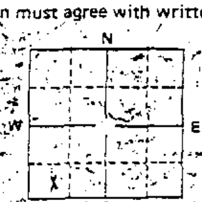
Placed from ______ feet to ______ feet

Surface seal? ☑ Yes ☐ No To what depth ______ feet

Material used in seal ☑ Cement grout ☐ Puddling clay

6. LOCATION OF WELL

Sketch map location must agree with written location.



County BLAINE

Sec. ___ T. ___ N/S, R. ___ E/W

7. WATER LEVEL

Static water level 12 feet below land surface

Flowing? ☐ Yes ☑ No G.P.M. flow ______

Temperature 45 °F. Quality OK

Artesian closed-in pressure ______ p.s.i.

Controlled by ☐ Valve ☐ Cap ☐ Plug

8. WELL TEST DATA

☐ Pump ☐ Bailer ☐ Other

Discharge G.P.M.	Draw Down	Hours Pumped
[illegible]	[illegible]	[illegible]

9. LITHOLOGIC LOG

Hole Diam.	Depth From	Depth To	Material	Water Yes	Water No
			[illegible]		
			[illegible]		
			[illegible]		
	[illegible]	[illegible]	[illegible]		
	[illegible]	[illegible]	[illegible]		

10. Work started 21 Jul. finished 4 Aug.

11. DRILLER'S CERTIFICATION

This well was drilled under my supervision and this report is true to the best of my knowledge.

A00098

Driller's or Firm's Name ______ Number ______

Address ______

Signed By ______ Date ______

MICROFILMED JUL 15 2002

000038

EXHIBIT 12-18

USE TYPEWRITER OR BALL POINT PEN

State of Idaho
Department of Water Administration

WELL DRILLER'S REPORT

State law requires that this report be filed with the Director, Department of Water Administration within 30 days after the completion or abandonment of the well.

1. WELL OWNER

Name DAVE MILLER

Address KETCHUM Idaho.

Owner's Permit No. _____

2. NATURE OF WORK

☒ New well ☐ Deepened ☐ Replacement

☐ Abandoned (describe method of abandoning)

_____

3. PROPOSED USE

☒ Domestic ☒ Irrigation ☐ Test ☐ Other (specify type)

☐ Municipal ☐ Industrial ☐ Stock ☐ Waste Disposal or Injection

4. METHOD DRILLED

☒ Cable ☐ Rotary ☐ Dug ☐ Other

5. WELL CONSTRUCTION

Diameter of hole 8 inches Total depth 117 feet

Casing schedule: ☒ Steel ☐ Concrete

Thickness	Diameter	From	To
1/4 inches	8 inches	+1 feet	96' 10" feet
_____ inches	_____ inches	_____ feet	_____ feet
_____ inches	_____ inches	_____ feet	_____ feet
_____ inches	_____ inches	_____ feet	_____ feet
_____ inches	_____ inches	_____ feet	_____ feet

Was a packer or seal used? ☐ Yes ☒ No

Perforated? ☒ Yes ☐ No

How perforated? ☐ Factory ☒ Knife ☐ Torch

Size of perforation 2 inches by 1/16 inches

Number		From		To	
36	perforations	34	feet	29	feet
36	perforations	44	feet	48	feet
24 / 12	perforations	51½ / 56	feet	55½ / 57	feet

Well screen installed? ☐ Yes ☒ No

Manufacturer's name _____

Type _____ Model No. _____

Diameter ___ Slot size ___ Set from _____ feet to _____ feet

Diameter ___ Slot size ___ Set from _____ feet to _____ feet

Gravel packed? ☐ Yes ☒ No Size of gravel _____

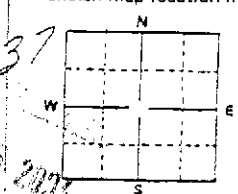
Placed from _____ feet to _____ feet

Surface seal depth 18 ft. Material used in seal ☒ Cement grout ☐ Puddling clay ☐ Well cuttings

Sealing procedure used ☐ Slurry pit ☒ Temporary surface casing ☒ Overbore to seal depth

6. LOCATION OF WELL

Sketch map location must agree with written location.



Subdivision Name Broadford Creek

Lot No. _____ Block No. _____

County Blaine

SW ¼ NE ¼ Sec. 14, T. 5 N N/S, R. 17 E E/W

7. WATER LEVEL

Static water level 34 feet below land surface

Flowing? ☐ Yes. ☒ No G.P.M. flow _____

Temperature 46 ° F. Quality 1

Artesian closed-in pressure _____ p.s.i.

Controlled by ☐ Valve ☐ Cap ☐ Plug

8. WELL TEST DATA

☐ Pump ☒ Bailer ☐ Other

Discharge G.P.M.	Draw Down	Hours Pumped
15 ONLY	TO Bottom of Hole	3

9. LITHOLOGIC LOG

Hole Diam.	Depth From	Depth To	Material	Water Yes	Water No
10"	0	18	GRAVEL AND DIRT		X
8"	18	34	GRAVEL AND DIRT		X
8"	34	38½	GRAVEL	X	
8"	38½	44	GRAVEL AND DIRT		X
8"	44	48	GRAVEL	X	
8"	48	51½	GRAVEL AND DIRT		X
8"	51½	57	GRAVEL	X	
8"	57	87	GRAVEL AND DIRT		X
8"	87	97	LIME SHALE	X	
8"	97	117	LIME	X	

10.

Work started 7-11-74 finished 7-22-74

11. DRILLERS CERTIFICATION

Firm Name EUGENE W. WELKER Firm No. 15

Address TWIN FALLS IDAHO. Date 7-29-74

Signed by (Firm Official) Eugene W. Welker

and

(Operator) Steve Tillard

EXHIBIT - 12-19

0000039

USE TYPEWRITER OR BALL POINT PEN

State of Idaho
Department of Water Administration

WELL DRILLER'S REPOR

RECEIVED
JAN 5 1977
Department of Water Resources
Southern District Office

State law requires that this report be filed with the Director, Department of Water Administration within 30 days after the completion or abandonment of the well.

1. WELL OWNER

Name Dave Miller
Address Box 660 Sun Valley

Owner's Permit No. _____

2. NATURE OF WORK

☐ New well ☑ Deepened ☐ Replacement

☐ Abandoned (describe method of abandoning)

3. PROPOSED USE

☑ Domestic ☐ Irrigation ☐ Test ☐ Other (specify type)

☐ Municipal ☐ Industrial ☐ Stock ☐ Waste Disposal or Injection

4. METHOD DRILLED

☑ Cable ☐ Rotary ☐ Dug ☐ Other

5. WELL CONSTRUCTION

Diameter of hole 8 inches Total depth 142 feet
Casing schedule: ☑ Steel ☐ Concrete

Thickness	Diameter	From	To
.250 inches	8 inches	20 feet	142 feet
_____ inches	_____ inches	_____ feet	_____ feet
_____ inches	_____ inches	_____ feet	_____ feet
_____ inches	_____ inches	_____ feet	_____ feet
_____ inches	_____ inches	_____ feet	_____ feet

Was a packer or seal used? ☐ Yes ☑ No
Perforated? ☑ Yes ☐ No
How perforated? ☐ Factory ☐ Knife ☑ Torch
Size of perforation .325 inches by 3 inches

Number	From	To
_____ perforations	_____ feet	_____ feet
_____ perforations	_____ feet	_____ feet
_____ perforations	_____ feet	_____ feet

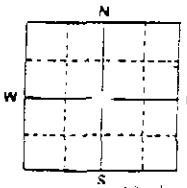
Well screen installed? ☐ Yes ☑ No
Manufacturer's name _____
Type _____ Model No. _____
Diameter ___ Slot size ___ Set from _____ feet to _____ feet
Diameter ___ Slot size ___ Set from _____ feet to _____ feet

Gravel packed? ☐ Yes ☐ No Size of gravel _____
Placed from _____ feet to _____ feet

Previous Log
Surface seal depth _____ Material used in seal ☐ Cement grout ☐ Puddling clay ☐ Well cuttings
Seeling procedure used ☐ Slurry pit ☐ Temporary surface casing ☐ Overbore to seal depth

6. LOCATION OF WELL

Sketch map location must agree with written location.



31
Subdivision Name Eagle Creek
Lot No. _____ Block No. _____

County Blaine
SW ¼ NE ¼ Sec. 14 T. 5 N/S, R. 17 E/W

7. WATER LEVEL

Static water level 55 feet below land surface
Flowing? ☐ Yes ☑ No G.P.M. flow _____
Temperature 46° F. Quality _____
Artesian closed-in pressure _____ p.s.i.
Controlled by ☐ Valve ☐ Cap ☐ Plug

8. WELL TEST DATA

☐ Pump ☑ Bailer ☐ Other

Discharge G.P.M.	Draw Down	Hours Pumped
5		2

9. LITHOLOGIC LOG

Hole Diam.	Depth From	Depth To	Material	Water Yes	Water No
6	117	140	Lime Shale	?	
	140	142	Lime Shale (Caved)		✓

Previous Log

10.

Work started Nov 19 finished Dec 9

11. DRILLERS CERTIFICATION

Firm Name Wilkes Water Systems Firm No. 15
Address 421 Pierce St A000100 Date
Signed by (Firm Official) _____
and
(Operator) _____

MICROFILMED
JUL 15 2004

EXHIBIT - 12-20

TYPEWRITER OR BALL POINT PEN

Department of Water Administration

WELL DRILLER'S REPORT

State law requires that this report be filed with the State Reclamation Engineer within 30 days after completion or abandonment of the well.

RECEIVED
OCT 30 1973
Department of Water Administration
Southern District Office

1. WELL OWNER

Name Walt Beam

Address Ketchum Idaho

Owner's Permit No. _____

2. NATURE OF WORK

☑ New well ☐ Deepened ☐ Replacement

☐ Abandoned (describe method of abandoning)

3. PROPOSED USE

☑ Domestic ☐ Irrigation ☐ Test

☐ Municipal ☐ Industrial ☐ Stock

4. METHOD DRILLED

☑ Cable ☐ Rotary ☐ Dug ☐ Other

5. WELL CONSTRUCTION

Diameter of hole 6 inches Total depth 54 feet

Casing schedule: ☑ Steel ☐ Concrete

Thickness	Diameter	From	To
.250 inches	6 inches	+1 feet	60½ feet
____ inches	____ inches	____ feet	____ feet
____ inches	____ inches	____ feet	____ feet
____ inches	____ inches	____ feet	____ feet
____ inches	____ inches	____ feet	____ feet

Was a packer or seal used? ☐ Yes ☑ No

Perforated? ☑ Yes ☐ No

How perforated? ☐ Factory ☑ Knife ☐ Torch

Size of perforation 5/16 inches by 1½ inches

Number	From	To
360 perforations	45 feet	54 feet
____ perforations	____ feet	____ feet
____ perforations	____ feet	____ feet

Well screen installed? ☐ Yes ☑ No

Manufacturer's name _____

Type _____ Model No. _____

Diameter ___ Slot size ___ Set from ____ feet to ____ feet

Diameter ___ Slot size ___ Set from ____ feet to ____ feet

Gravel packed? ☐ Yes ☑ No Size of gravel _____

Placed from _____ feet to _____ feet

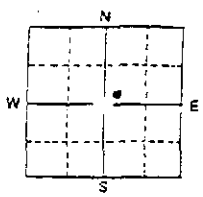
Surface seal? ☑ Yes ☐ No To what depth 10 feet

Material used in seal ☑ Cement grout ☐ Puddling clay

5½ sacks

6. LOCATION OF WELL

Sketch map location must agree with written location.



County Blaine

SW¼ NE¼ Sec. 14 T. 5 N/S. R. 17 E/W

7. WATER LEVEL

Static water level 38½ feet below land surface

Flowing? ☐ Yes ☑ No G.P.M. flow _____

Temperature 46° F. Quality _____

Artesian closed-in pressure _____ p.s.i.

Controlled by ☐ Valve ☐ Cap ☐ Plug

8. WELL TEST DATA

☐ Pump ☑ Bailer ☐ Other

Discharge G.P.M.	Draw Down	Hours Pumped
20	Slight	2

9. LITHOLOGIC LOG

Hole Diam.	Depth From	Depth To	Material	Water Yes	Water No
8	0	5	Surface		✓
8	5	11	Boulders + Gravel		✓
8	11	18	Gravel		✓
6	18	32	Gravel - some clay		✓
6	32	45	Clay & Gravel		✓
6	45	55	Gravel	✓	
6	55	107	Gravel & Sand		✓
6	107	114	Broken Rock	✓	

10. Work started May 21 finished June 12

11. DRILLER'S CERTIFICATION

This well was drilled under my supervision and this report is true to the best of my knowledge.

A000101

Eugene W. Walker IS
Driller's or Firm's Name Number

524 Pierce Street Twin Falls Idaho
Address

Eugene W. Walker June 14 1973
Signed By Date

USE ADDITIONAL SHEETS IF NECESSARY FORWARD THE WHITE COPY TO THE DEPARTMENT

EXHIBIT 12-21

MICROFILMED
JUL 15 2004

0000111

USE TYPEWRITER OR BALL POINT PEN

State of Idaho
Department of Reclamation

WELL DRILLER'S REPORT

State law requires that this report be filed with the State Reclamation Engineer within 30 days after completion or abandonment of the well.

1. WELL OWNER
Name [illegible]
Address [illegible]
Owner's Permit No.

2. NATURE OF WORK
☑ New well ☐ Deepened ☐ Replacement
☐ Abandoned (describe method of abandoning)

3. PROPOSED USE
☑ Domestic ☐ Irrigation ☐ Test
☐ Municipal ☐ Industrial ☐ Stock

4. METHOD DRILLED
☑ Cable ☐ Rotary ☐ Dug ☐ Other

5. WELL CONSTRUCTION
Diameter of hole [illegible] inches Total depth 79 feet
Casing schedule: ☑ Steel ☐ Concrete

Thickness	Diameter	From	To
[illegible] inches	[illegible] inches	[illegible] feet	80 feet
inches	inches	feet	feet
inches	inches	feet	feet
inches	inches	feet	feet
inches	inches	feet	feet

Was a packer or seal used? ☐ Yes ☑ No
Perforated? ☑ Yes ☐ No
How perforated? ☐ Factory ☑ Knife ☐ Torch
Size of perforation [illegible] inches by 1/4 inches

Number	From	To
perforations	[illegible] feet	62 feet
[illegible] perforations	[illegible] feet	79 feet
perforations	feet	feet

Well screen installed? ☐ Yes ☑ No
Manufacturer's name
Type Model No.
Diameter Slot size Set from feet to feet
Diameter Slot size Set from feet to feet
Gravel packed? ☐ Yes ☑ No Size of gravel
Placed from feet to feet
Surface seal? ☐ Yes ☐ No To what depth feet
Material used in seal ☑ Cement grout ☐ Puddling clay

6. LOCATION OF WELL
Sketch map location must agree with written location.
N
NW NE
W E
SW SE
S
County
Sec. T. N. R. W.

7. WATER LEVEL
Static water level [illegible] feet below land surface
Flowing? ☐ Yes ☑ No G.P.M. flow
Temperature [illegible] F. Quality
Artesian closed-in pressure p.s.i.
Controlled by ☐ Valve ☐ Cap ☐ Plug

8. WELL TEST DATA
☐ Pump ☑ Bailer ☐ Other

Discharge G.P.M.	Draw Down	Hours Pumped
[illegible]	None	

9. LITHOLOGIC LOG

Hole Diam.	Depth From	Depth To	Material	Water Yes	Water No
6	0	3	SURFACE		✓
6	3	9	Clay & Hard gravel		✓
6	9	20	gravel & Clay		✓
6	20	30	gravel & Clay		✓
6	30	51	gravel & Clay		✓
6	51	62	gravel & Sand		✓
6	62	79	Gravel, Sand & Rock		✓

10.
Work started [illegible] finished [illegible]

11. DRILLER'S CERTIFICATION
This well was drilled under my supervision and this report is true to the best of my knowledge.
Driller or Firm's Name [illegible] Number
Address
Signed By Date

EXHIBIT - 12+22

USE TYPEWRITER OR BALL POINT PEN

State of Idaho
Department of Reclamation

WELL DRILLER'S REPORT

State law requires that this report be filed with the State Reclamation Engineer within 30 days after completion or abandonment of the well.

1. WELL OWNER

Name KEN BAILEY

Address Kuna Idaho

Owner's Permit No.

2. NATURE OF WORK

☑ New well ☐ Deepened ☐ Replacement

☐ Abandoned (describe method of abandoning)

3. PROPOSED USE

☑ Domestic ☐ Irrigation ☐ Test

☐ Municipal ☐ Industrial ☐ Stock

4. METHOD DRILLED

☑ Cable ☐ Rotary ☐ Dug ☐ Other

5. WELL CONSTRUCTION

Diameter of hole 6 inches Total depth 74 feet

Casing schedule: ☑ Steel ☐ Concrete

Thickness	Diameter	From	To
inches	inches	feet	feet
inches	inches	feet	feet
inches	inches	feet	feet
inches	inches	feet	feet
inches	inches	feet	feet

Was a packer or seal used? ☐ Yes ☑ No

Perforated? ☑ Yes ☐ No

How perforated? ☐ Factory ☑ Knife ☐ Torch

Size of perforation inches by inches

Number	From	To
perforations	feet	feet
perforations	feet	feet
perforations	feet	feet

Well screen installed? ☐ Yes ☑ No

Manufacturer's name

Type Model No.

Diameter Slot size Set from feet to feet

Diameter Slot size Set from feet to feet

Gravel packed? ☐ Yes ☑ No Size of gravel

Placed from feet to feet

Surface seal? ☐ Yes ☐ No To what depth feet

Material used in seal ☑ Cement grout ☐ Puddling clay

6. LOCATION OF WELL

Sketch map location must agree with written location.

N W E S

County

¼ ¼ Sec. T N, R E W

7. WATER LEVEL

Static water level 27 feet below land surface

Flowing? ☐ Yes ☑ No G.P.M. flow

Temperature 46 ° F. Quality

Artesian closed-in pressure p.s.i.

Controlled by ☐ Valve ☐ Cap ☐ Plug

8. WELL TEST DATA

☐ Pump ☑ Bailer ☐ Other

Discharge G.P.M.	Draw Down	Hours Pumped
9		2

9. LITHOLOGIC LOG

Hole Diam.	Depth From	Depth To	Material	Water Yes	Water No.
6	0	3	SURFACE		
	3	9	[illegible]		
			[illegible]		
	9	30	[illegible]		
	30	51	[illegible]		
	51	74	[illegible]		

10. Work started 7-14-79 finished

11. DRILLER'S CERTIFICATION

This well was drilled under my supervision and this report is true to the best of my knowledge.

A000103

Driller's or Firm's Name Number

Address

Signed By Date

EXHIBIT 12-23

0000

USE INK, TYPEWRITER OR BALL POINT PEN

Idaho
Department of Water Administration

WELL DRILLER'S REPORT

State law requires that this report be filed with the Director, Department of Water Administration within 30 days after the completion or abandonment of the well.

RECEIVED
OCT 30 1973
Department of Water Administration
Southern District Office

1. WELL OWNER

Name Robert S Wright

Address Kitchum Idaho

Owner's Permit No.

2. NATURE OF WORK

☑ New well ☐ Deepened ☐ Replacement

☐ Abandoned (describe method of abandoning)

3. PROPOSED USE

☑ Domestic ☐ Irrigation ☐ Test

☐ Municipal ☐ Industrial ☐ Stock

4. METHOD DRILLED

☑ Cable ☐ Rotary ☐ Dug ☐ Other

5. WELL CONSTRUCTION

Diameter of hole 6 inches Total depth 150 feet

Casing schedule: ☐ Steel ☐ Concrete

Thickness	Diameter	From	To
.250 inches	6 inches	+ 1 feet	23 feet
inches	inches	feet	feet
inches	inches	feet	feet
inches	inches	feet	feet
inches	inches	feet	feet

Was a packer or seal used? ☐ Yes ☑ No

Perforated? ☐ Yes ☑ No

How perforated? ☐ Factory ☐ Knife ☐ Torch

Size of perforation inches by inches

Number		From	To
perforations		feet	feet
perforations		feet	feet
perforations		feet	feet

Well screen installed? ☐ Yes ☑ No

Manufacturer's name

Type Model No.

Diameter Slot size Set from feet to feet

Diameter Slot size Set from feet to feet

Gravel packed? ☐ Yes ☑ No Size of gravel

Placed from feet to feet

Surface seal? ☑ Yes ☐ No To what depth 18 feet

Material used in seal ☑ Cement grout ☐ Puddling clay

6. LOCATION OF WELL

Sketch map location must agree with written location.

37
125 W
N
S
E
HES 329

County Blaine

NE ¼ SW ¼ Sec. 14 T. 5 N/S, R. 17 E/W

7. WATER LEVEL

Static water level 26 feet below land surface

Flowing? ☐ Yes ☑ No G.P.M. flow

Temperature 46 ° F. Quality

Artesian closed-in pressure p.s.i.

Controlled by ☐ Valve ☐ Cap ☐ Plug

8. WELL TEST DATA

☐ Pump ☑ Bailer ☐ Other

Discharge G.P.M.	Draw Down	Hours Pumped
8 GPM		
After Well Being Bailed Dry		

9. LITHOLOGIC LOG

Hole Diam.	Depth From	Depth To	Material	Water Yes	Water No
8	0	9	Surface		✓
8	9	18	Red Rock - Solid		✓
6	18	60	Red Rock - TRACE Water	60	
	60	105	~~Soft~~ Red Rock		✓
	105	110	Soft Rock 4 GPM	✓	
	110	135	Red Rock		✓
	135	140	Soft Black Rock 4 GPM	✓	
	140	150			✓

Copy
This was Log
Previously Mailed
& Received
1971

10. Work started 10 June 71 finished 18 June 71

11. DRILLER'S CERTIFICATION

This well was drilled under my supervision and this report is true to the best of my knowledge.

EUGENE W WALKER A000104
Driller's or Firm's Name Number

624 PIERCE ST. TWIN FALLS
Address

Eugene W Walker 3 July 1971
Signed By Date

USE ADDITIONAL SHEETS IF NECESSARY FORWARD THE WHITE, BLUE AND PINK ...

EXHIBIT 12-24

110000

USE TYPEWRITER OR BALL POINT PEN

State of Idaho
Department of Reclamation

WELL DRILLER'S REPORT

State law requires that this report be filed with the State Reclamation Engineer within 30 days after completion or abandonment of the well.

1. WELL OWNER

Name: Thomas Mallane

Address: Ketchum, Idaho

Owner's Permit No.:

2. NATURE OF WORK

☒ New well ☐ Deepened ☐ Replacement

☐ Abandoned (describe method of abandoning)

3. PROPOSED USE

☒ Domestic ☐ Irrigation ☐ Test

☐ Municipal ☐ Industrial ☐ Stock

4. METHOD DRILLED

☒ Cable ☐ Rotary ☐ Dug ☐ Other

5. WELL CONSTRUCTION

Diameter of hole 6 inches. Total depth 38 feet.

Casing schedule: ☒ Steel ☐ Concrete

Thickness	Diameter	From	To
.250 inches	6 inches	1 feet	38 feet
inches	inches	feet	feet
inches	inches	feet	feet
inches	inches	feet	feet
inches	inches	feet	feet

Was a packer or seal used? ☐ Yes ☒ No

Perforated? ☐ Yes ☒ No

How perforated? ☐ Factory ☐ Knife ☐ Torch

Size of perforation ____ inches by ____ inches

Number		From	To
____	perforations	____ feet	____ feet
____	perforations	____ feet	____ feet
____	perforations	____ feet	____ feet

Well screen installed? ☐ Yes ☒ No

Manufacturer's name:

Type: Model No.:

Diameter ____ Slot size ____ Set from ____ feet to ____ feet

Diameter ____ Slot size ____ Set from ____ feet to ____ feet

Gravel packed? ☐ Yes ☒ No Size of gravel:

Placed from ____ feet to ____ feet

Surface seal? ☒ Yes ☐ No To what depth 18 feet

Material used in seal: ☐ Cement grout ☒ Puddling clay

6. LOCATION OF WELL

Sketch map location must agree with written location.

NW / NE / SW / SE

County: Blaine

¼ ¼ Sec. 14 T. 5 N/S, R. 17 E/W

Stock Pile Cr. Meadows Sub. Div. Homesteads

7. WATER LEVEL

Static water level 8 feet below land surface

Flowing? ☐ Yes ☒ No G.P.M. flow:

Temperature: ° F. Quality:

Artesian closed-in pressure: p.s.i.

Controlled by: ☐ Valve ☐ Cap ☐ Plug

8. WELL TEST DATA

☐ Pump ☒ Bailer ☐ Other

Discharge G.P.M.	Draw Down	Hours Pumped
39	8	0

9. LITHOLOGIC LOG

Hole Diam.	Depth From	Depth To	Material	Water Yes	Water No
23/8	1	4'	Sand & gravel		
"	4	11'	Boulders	x	
"	11	15'	Sand & gravel	x	
"	15	18'	Clay & sand	x	
6"	18	36'	Clay & sand	x	
6"	36	38'	Sand & gravel	x	

10.

Work started 20 Aug 70 finished 25 Aug 70

11. DRILLER'S CERTIFICATION

This well was drilled under my supervision and this report is true to the best of my knowledge.

A000105

ROSSLER WELL DRILLING — 19 — Number

Driller's or Firm's Name

Shoshone, Idaho

Address

Signed [signature] 30 Aug 1970

Date

MICROFILMED
AUG 25 2000

EXHIBIT - 72-25

USE PERMANENT INK - PRINT PEN

State of Idaho
Department of Water Administration

WELL DRILLER'S REPORT

State law requires that this record be filed with the State Reclamation Engineer within 30 days after completion or abandonment of the well.

1. WELL OWNER
Name: Robert Plumb
Address: Kellogg Idaho
Owner's Permit No.:

2. NATURE OF WORK
☑ New well ☐ Deepened ☐ Replacement
☐ Abandoned (describe method of abandoning)

3. PROPOSED USE
☑ Domestic ☐ Irrigation ☐ Test
☐ Municipal ☐ Industrial ☐ Stock

4. METHOD DRILLED
☑ Cable ☐ Rotary ☐ Dug ☐ Other

5. WELL CONSTRUCTION
Diameter of hole: inches. Total depth: 150 feet
Casing schedule: ☑ Steel ☐ Concrete
Thickness | Diameter | From | To
inches | inches | 1 feet | 2 feet
Was a packer or seal used? ☐ Yes ☑ No
Perforated? ☐ Yes ☑ No
How perforated? ☐ Factory ☐ Knife ☐ Torch
Size of perforation: inches by inches
Number | From | To
perforations: feet feet
perforations: feet feet
perforations: feet feet
Well screen installed? ☐ Yes ☑ No
Manufacturer's name:
Type: Model No.:
Diameter: Slot size: Set from: feet to: feet
Diameter: Slot size: Set from: feet to: feet
Gravel packed? ☐ Yes ☑ No Size of gravel:
Placed from: feet to: feet
Surface seal? ☑ Yes ☐ No To what depth: 18 feet
Material used in seal: ☑ Cement grout ☐ Puddling clay

6. LOCATION OF WELL
Sketch map location must agree with written location.
N
NW NE
W E
SW SE
S
County: Sec. T N/S R E/W

7. WATER LEVEL
Static water level: 26 feet below land surface
Flowing? ☐ Yes ☐ No G.P.M. flow:
Temperature: 46 ° F. Quality:
Artesian closed-in pressure: p.s.i.
Controlled by: ☐ Valve ☐ Cap ☐ Plug

8. WELL TEST DATA
☐ Pump ☑ Bailer ☐ Other

Discharge G.P.M.	Draw Down	Hours Pumped
8 Gal Min	Bailing down	

9. LITHOLOGIC LOG

Hole Diam.	Depth From	Depth To	Material	Water Yes	Water No
8	0	4	Surface Gravel Rock		
8	9	18	Red Rock Solid		
6	18	60	Red Rock Trace water	60	
"	60	105	" "		
"	105	110	Lost Red Rock		
			Total 3 Hrs 8 PM		
"	110	135	Red Rock		
	135	140	Lava Black Rock		
			Caving 4 Hrs		
	140	150	Solid Rock		
			Rock Riprap 18"		
			Cinders		
			Water Raised from		
			60 to 126 ft at 125 ft		

10. Work started: 15 March finished: 18 June 71

11. DRILLER'S CERTIFICATION
This well was drilled under my supervision and this report is true to the best of my knowledge.
Driller's or Firm's Name: Eugene A. Wells Number: A000105
Address:
Signed By:

EXHIBIT 12-26

WATERPROOF PEN

Department of Water Administration

WELL DRILLER'S REPORT

State law requires that this report be filed with the State Reclamation Engineer within 30 days after completion or abandonment of the well.

1. WELL OWNER
Name MARK Spowning
Address Box 5278 - Ketchum Idaho
Owner's Permit No.

2. NATURE OF WORK
☑ New well ☐ Deepened ☐ Replacement
☐ Abandoned (describe method of abandoning)

3. PROPOSED USE
☑ Domestic ☐ Irrigation ☐ Test
☐ Municipal ☐ Industrial ☐ Stock

4. METHOD DRILLED
☑ Cable ☐ Rotary ☐ Dug ☐ Other

5. WELL CONSTRUCTION
Diameter of hole 6 inches Total depth 76 feet
Casing schedule: ☑ Steel ☐ Concrete

Thickness	Diameter	From	To
	inches		feet
	inches		feet
	inches		feet
	inches		feet
	inches		feet
	inches		feet

Was a packer or seal used? ☐ Yes ☐ No
Perforated? ☐ Yes ☐ No
How perforated? ☐ Factory ☐ Knife ☐ Torch
Size of perforation inches by inches

Number		From	To
	perforations	feet	feet
	perforations	feet	feet
	perforations	feet	feet

Well screen installed? ☐ Yes ☐ No
Manufacturer's name
Type Model No.
Diameter Slot size Set from feet to feet
Diameter Slot size Set from feet to feet
Gravel packed? ☐ Yes ☐ No Size of gravel
Placed from feet to feet
Surface seal? ☐ Yes ☐ No To what depth 18 feet
Material used in seal ☐ Cement grout ☐ Puddling clay

6. LOCATION OF WELL
Sketch map location must agree with written location.

N

W E

S

County Sec. T. N, S R. E, W

7. WATER LEVEL
Static water level 296 feet below land surface
Flowing? ☐ Yes ☐ No G.P.M. flow
Temperature 46 ° F. Quality
Artesian closed-in pressure p.s.i.
Controlled by ☐ Valve ☐ Cap ☐ Plug

8. WELL TEST DATA
☑ Pump ☐ Bailer ☐ Other

Discharge G.P.M.	Draw Down	Hours Pumped
20	slight	

9. LITHOLOGIC LOG

Hole Diam.	Depth From	Depth To	Material	Water Yes	Water No
8	0	2	Surface		✓
8	2	18	Gravel & Clay		✓
6	18	30	" "	✓	
6			Travel	30	✓
6	30	44	Gravel & Clay		✓
6	44	49	Gravel Sand & Clay	✓	
6	49	66	Gravel Sand & Clay		✓
6	66	70	Gravel Clay		✓
6	70	76	Gravel & Clay	✓	

10. Work started Oct 14-71 finished 9 June 72

11. DRILLER'S CERTIFICATION
This well was drilled under my supervision and this report is true to the best of my knowledge.

Edward A. Walker 400015
Driller or Firm's Name Number

Address 165 Pine Ave Twin Falls

Signed By 6 July 72

EXHIBIT - 12

BALLPOINT PEN

Department of Water Administration

NOV 3 1972

WELL DRILLER'S REPORT

State law requires that this report be filed with the State Reclamation Engineer Department of Water Administration within 30 days after completion or abandonment of the well.

Western District Office

1. WELL OWNER

Name Kris Christensen

Address Ketchum Idaho

Owner's Permit No. _____

2. NATURE OF WORK

☑ New well ☐ Deepened ☐ Replacement

☐ Abandoned (describe method of abandoning)

3. PROPOSED USE

☑ Domestic ☐ Irrigation ☐ Test

☐ Municipal ☐ Industrial ☐ Stock

4. METHOD DRILLED

☐ Cable ☐ Rotary ☐ Dug ☐ Other

5. WELL CONSTRUCTION

Diameter of hole 6 inches Total depth 110 feet

Casing schedule: ☐ Steel ☐ Concrete

Thickness	Diameter	From	To
250 inches	6 inches	+1 feet	feet
inches	inches	feet	feet
inches	inches	feet	feet
inches	inches	feet	feet
inches	inches	feet	feet

Was a packer or seal used? ☐ Yes ☑ No

Perforated? ☐ Yes ☑ No

How perforated? ☐ Factory ☐ Knife ☐ Torch

Size of perforation ____ inches by ____ inches

Number	From	To
perforations	feet	feet
perforations	feet	feet
perforations	feet	feet

Well screen installed? ☐ Yes ☑ No

Manufacturer's name _____

Type _____ Model No. _____

Diameter ___ Slot size ___ Set from ____ feet to ____ feet

Diameter ___ Slot size ___ Set from ____ feet to ____ feet

Gravel packed? ☐ Yes ☑ No Size of gravel _____

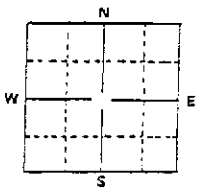
Placed from _____ feet to _____ feet

Surface seal? ☑ Yes ☐ No To what depth 15 feet

Material used in seal ☑ Cement grout ☐ Puddling clay

6. LOCATION OF WELL

Sketch map location must agree with written location.



County BLAINE

SE ¼ SW ¼ Sec. 14 T. 5 N/S, R. 17 E/W

7. WATER LEVEL

Static water level 40 feet below land surface

Flowing? ☐ Yes ☑ No G.P.M. flow _____

Temperature 46° F. Quality _____

Artesian closed-in pressure _____ p.s.i.

Controlled by ☐ Valve ☐ Cap ☐ Plug

8. WELL TEST DATA

☐ Pump ☐ Bailer ☐ Other

Discharge G.P.M.	Draw Down	Hours Pumped
8.5		2
after Hrs	Bailed Dry	
8.5 GPM		

9. LITHOLOGIC LOG

Hole Diam.	Depth From	Depth To	Material	Water Yes	Water No
8	0	1	[illegible]		✓
8	1	8	[illegible]		✓
8	8	16	[illegible]		✓
6	16	32	[illegible]		✓
6	32	[illegible]	Rock Soft Trans Water	✓	
			Sand		
6	44	66	Water Trans	✓	
6	66	105	P.P.M-4		
			Water 105	✓	
	105	110	P.P.M-4		

10. Work started 5 July 72 finished 10 July 1972

11. DRILLER'S CERTIFICATION

This well was drilled under my supervision and this report is true to the best of my knowledge.

Fuhrman Mole A000108

Driller's or Firm's Name Number

[illegible] Twin Falls

Address

[illegible] 10 Oct 72

Signed By Date

USE ADDITIONAL SHEETS IF NECESSARY FORWARD THE WHITE, BLUE AND PINK COPIES TO THE DEPARTMENT

EXHIBIT 12

Micro [illegible] AUG 1 [illegible]

000018

USE TYPEWRITER OR BALL POINT PEN

State of Idaho
Department of Reclamation

WELL DRILLER'S REPORT

State law requires that this report be filed with the State Reclamation Engineer within 30 days after completion or abandonment of the well.

1. WELL OWNER
Name Norman Cuttur
Address Ketchum Idaho
Owner's Permit No.

2. NATURE OF WORK
☐ New well ☐ Deepened ☐ Replacement
☐ Abandoned (describe method of abandoning)

3. PROPOSED USE
☐ Domestic ☐ Irrigation ☐ Test
☐ Municipal ☐ Industrial ☐ Stock

4. METHOD DRILLED
☐ Cable ☐ Rotary ☐ Dug ☐ Other

5. WELL CONSTRUCTION
Diameter of hole 6 inches. Total depth 80 feet
Casing schedule: ☐ Steel ☐ Concrete

Thickness	Diameter	From	To
	inches	inches	feet feet
	inches	inches	feet feet
	inches	inches	feet feet
	inches	inches	feet feet
	inches	inches	feet feet

Was a packer or seal used? ☐ Yes ☐ No
Perforated? ☐ Yes ☐ No
How perforated? ☐ Factory ☐ Knife ☐ Torch
Size of perforation inches by inches

Number		From	To
	perforations	feet	feet
	perforations	feet	feet
	perforations	feet	feet

Well screen installed? ☐ Yes ☐ No
Manufacturer's name
Type Model No.
Diameter Slot size Set from feet to feet
Diameter Slot size Set from feet to feet
Gravel packed? ☐ Yes ☐ No Size of gravel
Placed from feet to feet
Surface seal? ☐ Yes ☐ No To what depth feet
Material used in seal ☐ Cement grout ☐ Puddling clay

6. LOCATION OF WELL
Sketch map location must agree with written location.

County Blaine
T. 4 S. W. Sec. 14 N/S R. E/W

7. WATER LEVEL
Static water level 54 feet below land surface
Flowing? ☐ Yes ☐ No G.P.M. flow
Temperature 46 F. Quality
Artesian closed-in pressure p.s.i.
Controlled by ☐ Valve ☐ Cap ☐ Plug

8. WELL TEST DATA
☐ Pump ☐ Bailer ☐ Other

Discharge G.P.M.	Draw Down	Hours Pumped
30	Unk	

9. LITHOLOGIC LOG

Hole Diam.	Depth From	Depth To	Material	Water Yes	Water No
8	0	3	Surface		
8	3	18	Clay & Gravel		
6			Cap		
6	18	25	Clay & Gravel		
6	25	32	Gravel & Clay		
	32	39	Fine Water		
	39	43	Gravel & Clay		
	43	60	Gravel & Sand		
			Sand Clay		
	60	70	Clay & Gravel		
	70	80	Rock Boulders & Water		

10. Work started 22 Jan 70 finished 26 Jan 70

11. DRILLER'S CERTIFICATION
This well was drilled under my supervision and this report is true to the best of my knowledge.
A000109
Driller's or Firm's Name Number
Address
Signed By Eugene M Walker Date 1-29-70

EXHIBIT

TYPEWRITER OR BALL POINT PEN

Department of Water Resources

WELL DRILLER'S REPORT

DEC 21 1978

State law requires that this report be filed with the Director, Department of Water Resources within 30 days after the completion or abandonment of the well.

Department of Water Resources Southern District Office

1. WELL OWNER

Name Carl Rixon

Address Box 462 Sun Valley ID

Owner's Permit No.

2. NATURE OF WORK

☑ New well ☐ Deepened ☐ Replacement

☐ Abandoned (describe method of abandoning)

3. PROPOSED USE

☑ Domestic ☐ Irrigation ☐ Test ☐ Other (specify type)

☐ Municipal ☐ Industrial ☐ Stock ☐ Waste Disposal or Injection

4. METHOD DRILLED

☑ Cable ☐ Rotary ☐ Dug ☐ Other

5. WELL CONSTRUCTION

Diameter of hole 6 inches Total depth 105 feet

Casing schedule: ☑ Steel ☐ Concrete

Thickness	Diameter	From	To
5/16 inches	6 inches	+ 1 feet	32" feet
inches	inches	feet	feet
inches	inches	feet	feet
inches	inches	feet	feet
inches	inches	feet	feet

Was casing drive shoe used? ☑ Yes ☐ No

Was a packer or seal used? ☐ Yes ☐ No

Perforated? ☐ Yes ☐ No

How perforated? ☐ Factory ☑ Knife ☐ Torch

Size of perforation ____ inches by ____ inches

Number	From	To
12 perforations	40½ feet	42½ feet
40 perforations	56 feet	63 feet
20 perforations	67 feet	74 feet

Well screen installed? ☐ Yes ☑ No

Manufacturer's name

Type Model No.

Diameter Slot size Set from feet to feet

Diameter Slot size Set from feet to feet

Gravel packed? ☐ Yes ☑ No Size of gravel

Placed from feet to feet

Surface seal depth 15 Material used in seal ☐ Cement grout ☑ Puddling clay ☐ Well cuttings

Sealing procedure used ☐ Slurry pit ☐ Temporary surface casing ☐ Overbore to seal depth

6. LOCATION OF WELL

Sketch map location must agree with written location. (37)

N / W / E / S

Subdivision Name

Lot No. Block No.

County Blaine

¼ NE¼ Sec. 10 T. 5 N/S R. 17 E/W

7. WATER LEVEL

Static water level 56 feet below land surface

Flowing? ☐ Yes ☑ No G.P.M. flow

Temperature ° F. Quality

Artesian closed-in pressure p.s.i.

Controlled by ☐ Valve ☐ Cap ☐ Plug

8. WELL TEST DATA

☐ Pump ☑ Bailer ☐ Other

Discharge G.P.M.	Draw Down	Hours Pumped
25	slight	1
65	6 inch	Perm. Pump

9. LITHOLOGIC LOG

Hole Diam.	Depth From	Depth To	Material	Water Yes	Water No
6	0	2	Surface Water Dirt		
	2	7	Clay Gravel		
	7	11	Boulders		
	11	41	Clay Gravel		
	41	43	Gravel	✓	
	43	51	Clay & sand		
	51	56	Clay & gravel		
	56	60	Gravel	✓	
	60	65	Clay gravel	?	
	65	69	Clay & clay		
	69	76	Gravel	✓	
	76	105	Gravel Rock	✓	

10.

Work started SEPT 12-78 finished 9-21-78

11. DRILLERS CERTIFICATION

Firm Name Wahlstrom Sustin Firm No. 15

Address Twin Falls Idaho Date A000000078

Signed by (Firm Official)

and (Operator) Merle Rollins

MICROFILMED JUL 15 2004

EXHIBIT - 12-30

000030

Form 238-7
9/82

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

WELL DRILLER'S REPOR

State law requires that this report be filed with the Director, Department of Water Resources within 30 days after the completion or abandonment of the well.

LEAVE WRITER OR BALLPOINT PEN

RECEIVED
OCT 11 1985
Department of Water Resources
Southern Idaho Office

1. WELL OWNER

Name Ron Gates

Address P. O. Box 2723 Sun Valley, ID

Owner's Permit No. 37-8S-C-0008-000

2. NATURE OF WORK

☒ New well ☐ Deepened ☐ Replacement
☐ Abandoned (describe abandonment procedures such as materials, plug depths, etc. in lithologic log)

3. PROPOSED USE

☐ Domestic ☐ Irrigation ☐ Test ☐ Municipal
☐ Industrial ☒ Stock ☐ Waste Disposal or Injection
☐ Other _____ (specify type)

4. METHOD DRILLED

☒ Rotary ☒ Air ☐ Hydraulic ☐ Reverse rotary
☐ Cable ☐ Dug ☐ Other _____

5. WELL CONSTRUCTION

Casing schedule: ☒ Steel ☐ Concrete ☐ Other _____

Thickness	Diameter	From	To
.250 inches	6 5/8 inches +	1 feet	71 feet
inches	inches	feet	feet
inches	inches	feet	feet
inches	inches	feet	feet

Was casing drive shoe used? ☒ Yes ☐ No
Was a packer or seal used? ☐ Yes ☒ No
Perforated? ☒ Yes ☐ No
How perforated? ☐ Factory ☒ Knife ☐ Torch
Size of perforation 1/4 inches by 1 inches

Number	From	To
320 perforations	48 feet	68 feet
perforations	feet	feet
perforations	feet	feet

Well screen installed? ☐ Yes ☒ No
Manufacturer's name _____
Type _____ Model No. _____
Diameter ___ Slot size ___ Set from _____ feet to _____ feet
Diameter ___ Slot size ___ Set from _____ feet to _____ feet
Gravel packed? ☐ Yes ☒ No ☐ Size of gravel _____
Placed from _____ feet to _____ feet
Surface seal depth 19 Material used in seal: ☐ Cement grout ☒ Bentonite ☐ Puddling clay ☐ _____
Sealing procedure used: ☐ Slurry pit ☐ Temp. surface casing ☒ Overbore to seal depth
Method of joining casing: ☐ Threaded ☒ Welded ☐ Solvent Weld ☐ Cemented between strata
Describe access port Well cap

6. LOCATION OF WELL

Sketch map location must agree with written location.

N / W / E / S

Subdivision Name _____
Eagle Creek
Lot No. _____ Block No. _____

County Blaine

SW ¼ NE ¼ Sec 14 T 5 N/S R 17 E/W

7. WATER LEVEL

Static water level 48'3" feet below land surface.
Flowing? ☐ Yes ☒ No G.P.M. flow _____
Artesian closed-in pressure _____ p.s.i.
Controlled by: ☐ Valve ☐ Cap ☐ Plug
Temperature 48 °F. Quality _____
Describe artesian or temperature zones below.

8. WELL TEST DATA

☐ Pump ☐ Bailer ☒ Air ☐ Other _____

Discharge G.P.M.	Pumping Level	Hours Pumped
30-35		2

9. LITHOLOGIC LOG

Bore Diam.	Depth From	Depth To	Material	Water Yes	Water No
6	0	4	Surface dirt & gravel		
	4	8	Clay		
	8	9	Gravel		
	9	11	Clay & gravel		
	11	12	Gravel & clay		
	12	28	Clay & gravel		
	28	31	Gravel & clay		
	31	48	Gravel & clay		
	48	49	Clean gravel	X	
	49	51	Clay & gravel		
	51	71	Gravel & clay	X?	
	71	108	Rock limestone (Brown) w/ layers		
	108	110	Black limestone		

RECEIVED
OCT 28 1985
Department of Water Resources

MICROFILMED

10.

Work started 9/19/85 finished 9/19/85

11. DRILLERS CERTIFICATION

I/We certify that all minimum well construction standards were complied with at the time the rig was removed.

Firm Name Walker Water Systems, Inc. Firm No. 15
62nd Pierce Street
Address Twin Falls, Idaho 83301 Date 9/23/85

Signed by (Firm Official) Fred Walker

and

(Operator) Fred Walker

MICROFILMED
JUL 15 2008

EXHIBIT - 12-37

000051

m 238-7
8

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

USE TYPEWRITER OR BALLPOINT PEN

WELL DRILLER'S REPORT

State law requires that this report be filed with the Director, Department of Water Resources within 30 days after the completion or abandonment of the well.

RECEIVED SEP 1981

WELL OWNER

Name Stratton Laggis

Address Box 217A Ketchum, ID

Owner's Permit No. _____

7. WATER LEVEL

Static water level 38½ feet below land surface

Flowing? ☐ Yes ☒ No G.P.M. flow _____

Artesian closed-in pressure _____ p.s.i.

Controlled by: ☐ Valve ☐ Cap ☐ Plug

Temperature 58 °F. Quality _____

NATURE OF WORK

☐ New well ☒ Deepened ☐ Replacement

☐ Abandoned (describe method of abandoning) _____

8. WELL TEST DATA

☐ Pump ☐ Bailer ☒ Air ☐ Other _____

Discharge G.P.M.	Pumping Level	Hours Pumped
20		

PROPOSED USE

☒ Domestic ☐ Irrigation ☐ Test ☐ Municipal

☐ Industrial ☐ Stock ☐ Waste Disposal or Injection

☐ Other _____ (specify type)

9. LITHOLOGIC LOG

Hole Diam.	Depth From	Depth To	Material	Water Yes	Water No
6	150	165	Brown lime	X	
	165	206	Grey lime		
	206	208	Greenish colored lime (?)		
	208	211	Grey lime with streaks of brown		
	211	238	Softened up-brown & white (quartz?)		
	238	252	Brown & red lava	X	
	252	254	Grey lava		
	254	262	Brown lime (?)	?X	
	262	275	Grey lime		

METHOD DRILLED

☒ Rotary ☒ Air ☐ Hydraulic ☐ Reverse rotary

☐ Cable ☐ Dug ☐ Other _____

WELL CONSTRUCTION

Casing schedule: ☐ Steel ☐ Concrete ☐ Other _____

Thickness	Diameter	From	To
_____ inches	_____ inches +	_____ feet	_____ feet
_____ inches	_____ inches	_____ feet	_____ feet
_____ inches	_____ inches	_____ feet	_____ feet
_____ inches	_____ inches	_____ feet	_____ feet

Was casing drive shoe used? ☐ Yes ☐ No

Was a packer or seal used? ☐ Yes ☐ No

Perforated? ☐ Yes ☐ No

How perforated? ☐ Factory ☐ Knife ☐ Torch

Size of perforation _____ inches by _____ inches

Number	From	To
_____ perforations	_____ feet	_____ feet
_____ perforations	_____ feet	_____ feet
_____ perforations	_____ feet	_____ feet

Well screen installed? ☐ Yes ☐ No

Manufacturer's name _____

Type _____ Model No. _____

Diameter ___ Slot size ___ Set from _____ feet to _____ feet

Diameter ___ Slot size ___ Set from _____ feet to _____ feet

Gravel packed? ☐ Yes ☐ No ☐ Size of gravel _____

Placed from _____ feet to _____ feet

Surface seal depth _____ Material used in seal: ☐ Cement grout ☐ Puddling clay ☐ Well cuttings

Sealing procedure used: ☐ Slurry pit ☐ Temp. surface casing ☐ Overbore to seal depth

Method of joining casing: ☐ Threaded ☐ Welded ☐ Solvent Weld ☐ Cemented between strata

Describe access port _____

10.

Work started 7/16/81 finished 7/16/81

LOCATION OF WELL

Sketch map location must agree with written location.

N / W / E / S

Subdivision Name _____

Lot No. _____ Block No. _____

County Blaine

SW ¼ NW ¼ Sec. 14 T. 5 N. ☒ S. R. 17 E. ☒ W.

11. DRILLERS CERTIFICATION

I/We certify that all minimum well construction standards were complied with at the time the rig was removed.

Firm Name Walker Water Systems, Inc. Firm No. 15

Address 624 Pierce Street Twin Falls, Idaho 83301 Date 7/31/81 A000112

Signed by (Firm Official) Richard R Walker

and

(Operator) C A R Walker

EXHIBIT - 12-32

Form 238-7
9/82

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

USE TYPEWRITER OR BALLPOINT PEN

WELL DRILLER'S REPORT

State law requires that this report be filed with the Director, Department of Water Resources within 30 days after the completion or abandonment of the well.

1. WELL OWNER

Name: Randy Updyke
% Evergreen Landscaping
Address: P. O. Box 1157 Ketchum, ID 83340

Owner's Permit No. 37-87-S-026 cont'd

2. NATURE OF WORK

☒ New well ☐ Deepened ☐ Replacement
☐ Abandoned (describe abandonment procedures such as materials, plug depths, etc. in lithologic log)

3. PROPOSED USE

☐ Domestic ☒ Irrigation ☐ Test ☐ Municipal
☐ Industrial ☒ Stock ☐ Waste Disposal or Injection
☐ Other _____ (specify type)

4. METHOD DRILLED

☒ Rotary ☒ Air ☐ Hydraulic ☐ Reverse rotary
☐ Cable ☐ Dug ☐ Other _____

5. WELL CONSTRUCTION

Casing schedule: ☒ Steel ☐ Concrete ☐ Other _____

Thickness		Diameter		From		To	
.250	inches	8 5/8	inches +	1½	feet	104	feet
	inches		inches		feet		feet
	inches		inches		feet		feet
	inches		inches		feet		feet

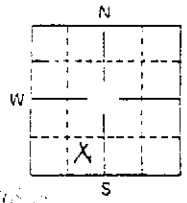
Was casing drive shoe used? ☒ Yes ☐ No
Was a packer or seal used? ☐ Yes ☒ No
Perforated? ☒ Yes ☐ No
How perforated? ☐ Factory ☒ Knife ☐ Torch
Size of perforation 1/4 inches by 1½ inches

Number		From		To	
500	perforations	55	feet	99	feet
	perforations		feet		feet
	perforations		feet		feet

Well screen installed? ☐ Yes ☒ No
Manufacturer's name _____
Type _____ Model No. _____
Diameter ___ Slot size ___ Set from ___ feet to ___ feet
Diameter ___ Slot size ___ Set from ___ feet to ___ feet
Gravel packed? ☐ Yes ☒ No ☐ Size of gravel _____
Placed from _____ feet to _____ feet
Surface seal depth 19 Material used in seal: ☐ Cement grout
☒ Bentonite ☐ Puddling clay ☐ _____
Sealing procedure used: ☐ Slurry pit ☐ Temp. surface casing
☒ Overbore to seal depth
Method of joining casing: ☐ Threaded ☒ Welded ☐ Solvent Weld
☐ Cemented between strata
Describe access port well cap

6. LOCATION OF WELL

Sketch map location must agree with written location.



Subdivision Name _____
Lot No. _____ Block No. _____
County Blaine
SE ¼ SW ¼ Sec. 14 T. 5 N/S R. 17 E/W.

7. WATER LEVEL

Static water level 52'7" feet below land surface.
Flowing? ☐ Yes ☒ No G.P.M. flow _____
Artesian closed-in pressure _____ p.s.i.
Controlled by: ☐ Valve ☐ Cap ☐ Plug
Temperature 48 °F. Quality Good
Describe artesian or temperature zones below.

8. WELL TEST DATA

☐ Pump ☐ Bailer ☒ Air ☐ Other _____

Discharge G.P.M.	Pumping Level	Hours Pumped
50+		

9. LITHOLOGIC LOG

Bore Diam.	Depth From	Depth To	Material	Water Yes	Water No
8	0	3	Surface dirt		
	3	11	Gravel		
	11	55	Clay & gravel		
	55	57	Gravel	X	
	57	65	Clay & gravel		
	63	84	Gravel & clay	X	
	84	91	Clay & gravel	?	
	91	99	Gravel & clay	X	
	99	104	Clay & broken black lime-stone		X
	104	105	Black limestone		

RECEIVED
OCT 20 1987
Department of Water Resources
Southern Region Office

10.

Work started 10/3/87 finished 10/9/87

11. DRILLERS CERTIFICATION

I/We certify that all minimum well construction standards were complied with at the time the rig was removed.

Firm Name Walker Water Systems, Inc. Firm No. 15
~~631 Fleming~~
Address Twin Falls, Idaho 83301 Date ~~10/13/87~~ 10/13/87
Signed by (Firm Official) Ted Walk
and
(Operator) Ted Walk

MICRO
JUL 95

EXHIBIT 12-33

0000503

Form 238-7
9/82

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

WELL DRILLER'S REPO

State law requires that this report be filed with the Director, Department of Water Resources within 30 days after the completion or abandonment of the well.

L...E... ...TER OR BALLPOINT PEN

1. WELL OWNER

Name Sid Schneider

Address Box 1584 Ketchum, Id. 83340

Owner's Permit No. 37-89-S-071

2. NATURE OF WORK

☒ New well ☐ Deepened ☐ Replacement
☐ Abandoned (describe abandonment procedures such as materials, plug depths, etc. in lithologic log)

3. PROPOSED USE

☒ Domestic ☐ Irrigation ☐ Test ☐ Municipal
☐ Industrial ☐ Stock ☐ Waste Disposal or Injection
☐ Other _____ (specify type)

4. METHOD DRILLED

☒ Rotary ☒ Air ☐ Hydraulic ☐ Reverse rotary
☐ Cable ☐ Dug ☐ Other _____

5. WELL CONSTRUCTION

Casing schedule: ☒ Steel ☐ Concrete ☐ Other _____

Thickness	Diameter	From	To
.250 inches	6 inches +	1 feet	38 feet
_____ inches	_____ inches	_____ feet	_____ feet
_____ inches	_____ inches	_____ feet	_____ feet
_____ inches	_____ inches	_____ feet	_____ feet

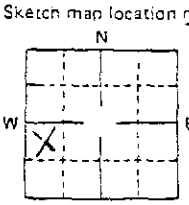
Was casing drive shoe used? ☒ Yes ☐ No
Was a packer or seal used? ☐ Yes ☒ No
Perforated? ☐ Yes ☒ No
How perforated? ☐ Factory ☐ Knife ☐ Torch
Size of perforation _____ inches by _____ inches

Number	From	To
_____ perforations	_____ feet	_____ feet
_____ perforations	_____ feet	_____ feet
_____ perforations	_____ feet	_____ feet

Well screen installed? ☐ Yes ☐ No
Manufacturer's name _____
Type _____ Model No. _____
Diameter ___ Slot size ___ Set from _____ feet to _____ feet
Diameter ___ Slot size ___ Set from _____ feet to _____ feet
Gravel packed? ☒ Yes ☐ No ☐ Size of gravel _____
Placed from _____ feet to _____ feet
Surface seal depth 20 Material used in seal: ☐ Cement grout
☒ Bentonite ☐ Puddling clay ☐ _____
Sealing procedure used: ☐ Slurry pit ☐ Temp. surface casing
☒ Overbore to seal depth
Method of joining casing: ☐ Threaded ☒ Welded ☐ Solvent Weld
☐ Cemented between strata
Describe access port _____

6. LOCATION OF WELL

Sketch map location must agree with written location.



Subdivision Name _____
Lot No. _____ Block No. _____
County BLAINE
NW SW ¼ Sec. 14 T. 5 ☒N/S, R. 17 ☐W.

7. WATER LEVEL

Static water level 7 feet below land surface.
Flowing? ☒ Yes ☐ No G.P.M. flow _____
Artesian closed-in pressure _____ p.s.i.
Controlled by: ☐ Valve ☐ Cap ☐ Plug
Temperature _____ °F. Quality good
Describe artesian or temperature zones below.

8. WELL TEST DATA

☐ Pump ☐ Bailer ☒ Air ☐ Other _____

Discharge G.P.M.	Pumping Level	Hours Pumped
40	35	1

9. LITHOLOGIC LOG

Bore Diam.	Depth From	Depth To	Material	Water Yes
8	0	20	Gravel set in dirt	X
6	20	25	Boulders	X
6	25	38	Water Gravel	x

RECEIVED
SEP 14 1989
Department of Water Resources
Southern Region Office

10.
Work started 8-31-89 finished 8-31-89

11. DRILLERS CERTIFICATION

I/We certify that all minimum well construction standards w complied with at the time the rig was removed.

Firm Name Wood River Drilling Firm No. 265
Address Box 1165 Hailey, ID 83333 Date 9-15-89
Signed by (Firm Official) Ron Smith
and
(Operator) Gary Jones

EXHIBIT 12-2

9/82

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

USE TYPEWRITER OR BALLPOINT PEN

WELL DRILLER'S REPOR

State law requires that this report be filed with the Director, Department of Water Resources within 30 days after the completion or abandonment of the well.

Sun Valley Partners

1. WELL OWNER Steve Miller

Name [redacted]

Address [redacted] Eaglecreek Ketchum

Owner's Permit No. 37-87-S.002

2. NATURE OF WORK OF MB

☒ New well ☐ Deepened ☐ Replacement
☐ Abandoned (describe abandonment procedures such as materials, plug depths, etc. in lithologic log)

3. PROPOSED USE

☒ Domestic ☐ Irrigation ☐ Test ☐ Municipal
☐ Industrial ☐ Stock ☐ Waste Disposal or Injection
☐ Other _____ (specify type)

4. METHOD DRILLED

☒ Rotary ☐ Air ☐ Hydraulic ☐ Reverse rotary
☐ Cable ☐ Dug ☐ Other _____

5. WELL CONSTRUCTION

Casing schedule: ☒ Steel ☐ Concrete ☐ Other _____

Thickness	Diameter	From	To
.250 inches	8 inches +	1 feet	32 feet
_____ inches	_____ inches	_____ feet	_____ feet
_____ inches	_____ inches	_____ feet	_____ feet
_____ inches	_____ inches	_____ feet	_____ feet

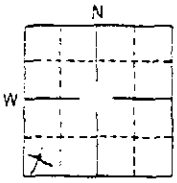
Was casing drive shoe used? ☒ Yes ☐ No
Was a packer or seal used? ☐ Yes ☒ No
Perforated? ☐ Yes ☒ No
How perforated? ☐ Factory ☐ Knife ☐ Torch
Size of perforation _____ inches by _____ inches

Number	From	To
_____ perforations	_____ feet	_____ feet
_____ perforations	_____ feet	_____ feet
_____ perforations	_____ feet	_____ feet

Well screen installed? ☐ Yes ☒ No
Manufacturer's name _____
Type _____ Model No. _____
Diameter ___ Slot size ___ Set from _____ feet to _____ feet
Diameter ___ Slot size ___ Set from _____ feet to _____ feet
Gravel packed? ☐ Yes ☒ No ☐ Size of gravel _____
Placed from _____ feet to _____ feet
Surface seal depth 20 Material used in seal: ☐ Cement grout
☒ Bentonite ☐ Puddling clay ☐ _____
Sealing procedure used: ☐ Slurry pit ☐ Temp. surface casing ☒ Overbore to seal depth
Method of joining casing: ☐ Threaded ☒ Welded ☐ Solvent Weld ☐ Cemented between strata
Describe access port _____

6. LOCATION OF WELL

Sketch map location must agree with written location.



Subdivision Name _____
Lot No. _____ Block No. _____

County Blaine

SW ¼ SW ¼ Sec. 14 T. 5 (N/S, R. 17 E/W.

7. WATER LEVEL

Static water level 8 feet below land surface.
Flowing? ☐ Yes ☒ No G.P.M. flow _____
Artesian closed-in pressure _____ p.s.i.
Controlled by: ☐ Valve ☐ Cap ☐ Plug
Temperature ____ oF. Quality Good
Describe artesian or temperature zones below.

8. WELL TEST DATA

☐ Pump ☐ Bailer ☒ Air ☐ Other _____

Discharge G.P.M.	Pumping Level	Hours Pumped
60	30	1

9. LITHOLOGIC LOG

Bore Diam.	Depth From	Depth To	Material	Water Yes	Water No
10	0	8	Top soil		X
10	8	9	Boulders		X
10	9	20	Hard pan gravel set in clay		X
8	20	30	Boulders		X
8	30	32	Gravel-water	X	

RECEIVED
FEB 25 1988
DEPARTMENT OF WATER RESOURCES
STATE OF IDAHO

10. Work started Oct. 16, 1987 finished Oct. 16, 1987

11. DRILLERS CERTIFICATION

I/We certify that all minimum well construction standards were complied with at the time the rig was removed.

WOOD RIVER DRILLING AND PUMP
Firm Name [redacted] 726-3163 Firm No. 765
[redacted] AHO 83333
Address _____ Date 10-21-87
Signed by (Firm Official) K. Smith
and
(Operator) Gary Jones

000055

EXHIBIT 12-35

Form 238-7
9/82

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

WELL DRILLER'S REPOR.

State law requires that this report be filed with the Director, Department of Water Resources within 30 days after the completion or abandonment of the well.

USE TYPEWRITER OR BALLPOINT PEN

RECEIVED
AUG 21 1984
Department of Water Resources
Southern Idaho Area Office

1. WELL OWNER

Name Martin McBroom
% Wes Nash, Contractor
Address P. O. Box 797 Ketchum, ID 83340

Owner's Permit No. 32-84-C-0035-200

2. NATURE OF WORK

☐ New well ☐ Deepened ☒ Replacement
☐ Abandoned (describe abandonment procedures such as materials, plug depths, etc. in lithologic log)

3. PROPOSED USE

☒ Domestic ☐ Irrigation ☐ Test ☐ Municipal
☐ Industrial ☐ Stock ☐ Waste Disposal or Injection
☐ Other _____ (specify type)

4. METHOD DRILLED

☒ Rotary ☒ Air ☐ Hydraulic ☐ Reverse rotary
☐ Cable ☐ Dug ☐ Other _____

5. WELL CONSTRUCTION

Casing schedule: ☒ Steel ☐ Concrete ☐ Other _____

Thickness	Diameter	From	To
.264 inches	8 5/8 inches	+ 1½ feet	34 feet
_____ inches	_____ inches	_____ feet	_____ feet
_____ inches	_____ inches	_____ feet	_____ feet
_____ inches	_____ inches	_____ feet	_____ feet

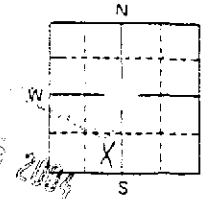
Was casing drive shoe used? ☒ Yes ☐ No
Was a packer or seal used? ☐ Yes ☒ No
Perforated? ☐ Yes ☒ No
How perforated? ☐ Factory ☐ Knife ☐ Torch
Size of perforation _____ inches by _____ inches

Number	From	To
_____ perforations	_____ feet	_____ feet
_____ perforations	_____ feet	_____ feet
_____ perforations	_____ feet	_____ feet

Well screen installed? ☐ Yes ☒ No
Manufacturer's name _____
Type _____ Model No. _____
Diameter ___ Slot size ___ Set from _____ feet to _____ feet
Diameter ___ Slot size ___ Set from _____ feet to _____ feet
Gravel packed? ☐ Yes ☒ No ☐ Size of gravel _____
Placed from _____ feet to _____ feet
Surface seal depth 18 Material used in seal: ☐ Cement grout
☒ Bentonite ☐ Puddling clay ☐ _____
Sealing procedure used: ☐ Slurry pit ☐ Temp. surface casing
☒ Overbore to seal depth
Method of joining casing: ☐ Threaded ☒ Welded ☐ Solvent Weld
☐ Cemented between strata
Describe access port Well Cap

6. LOCATION OF WELL

Sketch map location must agree with written location.



Subdivision Name _____
Eagle Creek Meadows
Lot No. _____ Block No. _____
County XXX Blaine

7. WATER LEVEL

Static water level 36' 10½" feet below land surface
Flowing? ☐ Yes ☒ No G.P.M. flow _____
Artesian closed-in pressure _____ p.s.i.
Controlled by: ☐ Valve ☐ Cap ☐ Plug
Temperature 50 °F. Quality _____
Describe artesian or temperature zones below.

8. WELL TEST DATA

☐ Pump ☐ Bailer ☒ Air ☐ Other _____

Discharge G.P.M.	Pumping Level	Hours Pumped
(Lots) 50+		2

9. LITHOLOGIC LOG

Bore Diam.	Depth From	Depth To	Material	Water Yes	Water No
10	0	3	Surface dirt		
	3	5	Gravel & clay		
8	5	26	Yellow clay & snad		
	26	30	Gravel	X	
	30	34	Brown clay & gravel		
	34	74	Red rock (soft)		
	74	92	Red & brown rock (Harder)		
	92	102	Brown w/ a little red		
	102	103	Black rock		
	103	109	Red & brown w/ some black		
	109	126	Black w/ some brown (harder) quartz		
	126	182	Brown w/ some black & quartz		
			Water at 126	X	
	182	185	Black w/ some yellow & green		
	185	232	Brown w/ yellow & green		
	232	237	Brown w/ yellow & green	X	
	237	241	Brown w/ yellow & green		X
	241	253	Brown w/ yellow & green	X	

AUG 20 1984
Department of Water Resources

10.

Work started 8/3/84 finished 8/6/84

11. DRILLERS CERTIFICATION

I/We certify that all minimum well construction standards were complied with at the time the rig was removed.

Firm Name Walker Water Systems, Inc. Firm No. 15
624 Pierce Street A000116
Address Twin Falls, Idaho 83301 Date 8/14/84

Signed by (Firm Official) _____
and
(Operator) _____

000056

EXHIBIT - 12436

orm 238-7
/82

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

USE TYPEWRITER OR BALLPOINT PEN

JUL 3 1986

Department of Water Resources
Southern Basin Office

WELL DRILLER'S REPOR

State law requires that this report be filed with the Director, Department of Water Resources within 30 days after the completion or abandonment of the well.

1. WELL OWNER

Name: Ned Washburn & Kate Wilson
Address: 119 Summit Avenue, Mill Valley, California 94941
Owner's Permit No.:

2. NATURE OF WORK

☒ New well ☐ Deepened ☐ Replacement
☐ Abandoned (describe abandonment procedures such as materials, plug depths, etc. in lithologic log)

3. PROPOSED USE

☒ Domestic ☐ Irrigation ☐ Test ☐ Municipal
☐ Industrial ☐ Stock ☐ Waste Disposal or Injection
☐ Other _____ (specify type)

4. METHOD DRILLED

☒ Rotary ☒ Air ☐ Hydraulic ☐ Reverse rotary
☐ Cable ☐ Dug ☐ Other _____

5. WELL CONSTRUCTION

Casing schedule: ☒ Steel ☐ Concrete ☐ Other

Thickness	Diameter	From	To
.250 inches	8 5/8 inches	+ 1 feet	66 feet
inches	inches	feet	feet
inches	inches	feet	feet
inches	inches	feet	feet

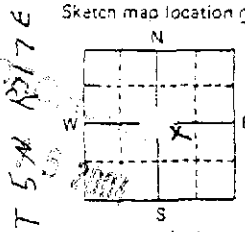
Was casing drive shoe used? ☒ Yes ☐ No
Was a packer or seal used? ☐ Yes ☒ No
Perforated? ☒ Yes ☐ No
How perforated? ☐ Factory ☒ Knife ☐ Torch
Size of perforation 1/4 inches by 1/4 inches

Number	From	To
212 perforations	40 feet	53 feet
perforations	feet	feet
perforations	feet	feet

Well screen installed? ☐ Yes ☒ No
Manufacturer's name
Type Model No.
Diameter Slot size Set from feet to feet
Diameter Slot size Set from feet to feet
Gravel packed? ☐ Yes ☒ No ☐ Size of gravel
Placed from feet to feet
Surface seal depth 19 Material used in seal: ☐ Cement grout
☒ Bentonite ☐ Puddling clay ☐
Sealing procedure used: ☐ Slurry pit ☐ Temp. surface casing
☒ Overbore to seal depth
Method of joining casing: ☐ Threaded ☒ Welded ☐ Solvent Weld
☐ Cemented between strata
Describe access port well cap

6. LOCATION OF WELL

Sketch map location must agree with written location.



Subdivision Name
Eagle Creek
Lot No. Block No.
County Blaine
NW ¼ SE ¼ Sec. 14 T. 5 N/S R 17 E/W

T 5 N R 17 E SEC 14

7. WATER LEVEL

Static water level 14' 8½" feet below land surface.
Flowing? ☐ Yes ☒ No G.P.M. flow
Artesian closed-in pressure p.s.i.
Controlled by: ☐ Valve ☐ Cap ☐ Plug
Temperature 46 °F. Quality
Describe artesian or temperature zones below.

8. WELL TEST DATA

☐ Pump ☐ Bailer ☒ Air ☐ Other

Discharge G.P.M.	Pumping Level	Hours Pumped
50+		1

9. LITHOLOGIC LOG

Bore Diam.	Depth From	Depth To	Material	Water Yes	Water No
8	0	3	Surface dirt & gravel		
	3	8	Gravel & clay		
	8	30	Clay & gravel		
	30	40	Gravel & clay	T	
	40	63	Gravel	X	
	63	66	Broken rock & clay		
	66	72	Brown limestone		
	72	89	Brown limestone	T	
	89	96	Broken limestone	X	

10.

Work started 6/17/86 finished 6/18/86

11. DRILLERS CERTIFICATION

I/We certify that all minimum well construction standards were complied with at the time the rig was removed.

Firm Name Walker Water Systems, 624 Pierce Street, Twin Falls, Idaho 83301 Firm No. 15 A000117
Address Date 6/20/86
Signed by (Firm Official)
and
(Operator)

EXHIBIT -12437

000057

BALL POINT PEN

WELL DRILLER'S REPORT

JUN 26 1978

State law requires that this report be filed with the Director, Department of Water Resources within 30 days after the completion or abandonment of the well.

Department of Water Resources
Southern District Office

1. WELL OWNER WELL # Two

Name Bob Stevens

Address Ketchum Idaho

Well located at North country

Owner's Permit No.

2. NATURE OF WORK

☒ New well ☐ Deepened ☐ Replacement

☐ Abandoned (describe method of abandoning)

3. PROPOSED USE

☒ Domestic ☐ Irrigation ☐ Test ☐ Other (specify type)

☐ Municipal ☐ Industrial ☐ Stock ☐ Waste Disposal or Injection

4. METHOD DRILLED

☒ Cable ☐ Rotary ☐ Dug ☐ Other

5. WELL CONSTRUCTION

Diameter of hole 6 inches Total depth 71 feet

Casing schedule: ☒ Steel ☐ Concrete

Thickness	Diameter	From	To
.250 inches	6 inches	+ 1 feet	71 feet
inches	inches	feet	feet
inches	inches	feet	feet
inches	inches	feet	feet
inches	inches	feet	feet

Was casing drive shoe used? ☒ Yes ☐ No

Was a packer or seal used? ☐ Yes ☒ No

Perforated? ☒ Yes ☐ No

How perforated? ☐ Factory ☒ Knife ☐ Torch

Size of perforation 3/8 inches by 1 1/2 inches

Number		From	To
104	perforations	40 feet	66 feet
	perforations	feet	feet
	perforations	feet	feet

Well screen installed? ☐ Yes ☒ No

Manufacturer's name

Type Model No.

Diameter Slot size Set from feet to feet

Diameter Slot size Set from feet to feet

Gravel packed? ☐ Yes ☒ No Size of gravel

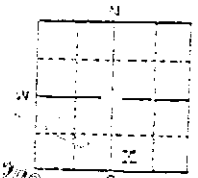
Placed from feet to feet

Surface seal depth 18 ft Material used in seal ☐ Cement grout ☒ Puddling clay ☐ Well cuttings

Sealing procedure used ☐ Slurry pit ☐ Temporary surface casing ☐ Overbore to seal depth

6. LOCATION OF WELL

Sketch map location must agree with written location. (39)



Subdivision Name

Lot No. Block No.

County Blaine

S.W. S.E. Sec. 14 T. 5 N. N/S, R. 17 E. E/W

7. WATER LEVEL

Static water level 41 feet below land surface

Flowing? ☐ Yes ☒ No G.P.M. flow

Temperature ° F. Quality

Artesian closed-in pressure p.s.i.

Controlled by ☐ Valve ☐ Cap ☐ Plug

8. WELL TEST DATA

☐ Pump ☒ Bailer ☐ Other

Discharge G.P.M.	Draw Down	Hours Pumped
45	12 Ft.	2

9. LITHOLOGIC LOG

Hole Diam.	Depth From	Depth To	Material	Water Yes	Water No
8	0	8	Top Soil & gravel		x
8	8	18	Gravel set in clay		x
6	18	39	" " " "		x
6	39	71	Gravel & clay & coarse sand with water	x	

10. Work started 11-1--1977 finished 11-8-1977

11. DRILLERS CERTIFICATION

Firm Name Ken Smith Well Drilling Firm No. 265

Address Box 1165 Hailey Idaho Date 11-8-1977

Signed by (Firm Official) Ken Smith

and (Operator)

A000118

EXHIBIT - 12 38

RECEIVED

JUN 26 1997

Department of Water Resources
Southern District Office

WELL DRILLER'S REPORT

State law requires that this report be filed with the Director, Department of Water Resources within 30 days after the completion or abandonment of the well.

1. WELL OWNER Well # one

Name Bob Stevens

Address Ketchum Idaho

Owner's Permit No. well located at north country

2. NATURE OF WORK

☒ New well ☐ Deepened ☐ Replacement

☐ Abandoned (describe method of abandoning)

3. PROPOSED USE

☒ Domestic ☐ Irrigation ☐ Test ☐ Other (specify type)

☐ Municipal ☐ Industrial ☐ Stock ☐ Waste Disposal or Injection

4. METHOD DRILLED

☒ Cable ☐ Rotary ☐ Dug ☐ Other

5. WELL CONSTRUCTION

Diameter of hole 6 inches Total depth 69 feet

Casing schedule: ☒ Steel ☐ Concrete

Thickness	Diameter	From	To
.250 inches	6 inches	+ 1 feet	69 feet
____ inches	____ inches	____ feet	____ feet
____ inches	____ inches	____ feet	____ feet
____ inches	____ inches	____ feet	____ feet
____ inches	____ inches	____ feet	____ feet

Was casing drive shoe used? ☒ Yes ☐ No

Was a packer or seal used? ☐ Yes ☒ No

Perforated? ☒ Yes ☐ No

How perforated? ☐ Factory ☒ Knife ☐ Torch

Size of perforation .all inches by 1¼ inches

Number		From		To	
100	perforations	40	feet	65	feet
____	perforations	____	feet	____	feet
____	perforations	____	feet	____	feet

Well screen installed? ☐ Yes ☒ No

Manufacturer's name ____

Type ____ Model No. ____

Diameter ___ Slot size ___ Set from ____ feet to ____ feet

Diameter ___ Slot size ___ Set from ____ feet to ____ feet

Gravel packed? ☐ Yes ☒ No Size of gravel ____

Packed from ____ feet to ____ feet

Surface seal depth 13 Material used in seal ☐ Cement grout ☐ Puddling clay ☐ Well cuttings

Did any strata contain unusable water? ☐ Clay pit ☒ Temporary surface pit ☐ Other

☐ Overboard to seal drill

6. LOCATION OF WELL

Sketch map location must agree with written location. (37)

N

W E

S

Subdivision Name ____

Lot No. ____ Block No. ____

¼ ¼ Sec. 14 T 5 N R 17 E

7. WATER LEVEL

Static water level 40 feet below land surface

Flowing? ☐ Yes ☒ No G.P.M. flow ____

Temperature ____ ° F. Quality ____

Artesian closed-in pressure ____ p.s.i.

Controlled by ☐ Valve ☐ Cap ☐ Plug

8. WELL TEST DATA

☐ Pump ☒ Bailer ☐ Other

Discharge G.P.M.	Draw Down	Time Pumped
50	5 Ft.	2

9. LITHOLOGIC LOG

Hole Diam.	Depth From	Depth To	Material	Water Yes	Water No
6	0	10	Top soil & gravel		X
6	10	18	Gravel set in clay		X
6	18	37	" " " "		X
6	37	40	Gravel and clay		
6	40	46	Brown clay		
6	46	69	Gravel & clay & sand	15	

10. Work started 10-26-1977 finished 11-1-1977

11. DRILLING CONTRACTOR

Firm Name Rex Smith or Bill Dalton License No. 265

Address 1115 Valley Idaho A000119

Signed by (Firm Official) ____

and

(Driller) ____

MICROFILMED
JUL 15 2004

EXHIBIT-12-89

BALL POINT PEN

WELL DRILLER'S REPORT

State law requires that this report be filed with the Director, Department of Water Resources within 30 days after the completion or abandonment of the well.

1. WELL OWNER

Name Moore & Hopkins Contractors

Address Ketchum Idaho Box 637

Owner's Permit No. _____

2. NATURE OF WORK

☑ New well ☐ Deepened ☐ Replacement

☐ Abandoned (describe method of abandoning)

3. PROPOSED USE

☑ Domestic ☐ Irrigation ☐ Test ☐ Other (specify type)

☐ Municipal ☐ Industrial ☐ Stock ☐ Waste Disposal or Injection

4. METHOD DRILLED

☑ Cable ☐ Rotary ☐ Dug ☐ Other

5. WELL CONSTRUCTION

Diameter of hole 6 inches Total depth 43½ feet

Casing schedule: ☐ Steel ☐ Concrete

Thickness	Diameter	From	To
¼ inches	6 inches +	14 feet	43½ feet
_____ inches	_____ inches	_____ feet	_____ feet
_____ inches	_____ inches	_____ feet	_____ feet
_____ inches	_____ inches	_____ feet	_____ feet
_____ inches	_____ inches	_____ feet	_____ feet

Was casing drive shoe used? ☑ Yes ☐ No

Was a packer or seal used? ☐ Yes ☑ No

Perforated? ☐ Yes ☐ No

How perforated? ☐ Factory ☐ Knife ☐ Torch

Size of perforation _____ inches by _____ inches

Number	From	To
_____ perforations	_____ feet	_____ feet
_____ perforations	_____ feet	_____ feet
_____ perforations	_____ feet	_____ feet

Well screen installed? ☐ Yes ☑ No

Manufacturer's name _____

Type _____ Model No. _____

Diameter ___ Slot size ___ Set from _____ feet to _____ feet

Diameter ___ Slot size ___ Set from _____ feet to _____ feet

Gravel packed? ☐ Yes ☑ No Size of gravel _____

Placed from _____ feet to _____ feet

Surface seal depth 14 Material used in seal ☐ Cement grout ☑ Puddling clay ☐ Well cuttings

Sealing procedure used ☑ Slurry pit ☐ Temporary surface casing ☑ Overbore to seal depth

6. LOCATION OF WELL

(37)

Sketch map location must agree with written location.

N / W / E / S

Subdivision Name _____

Lot No. _____ Block No. _____

County BLAINE

NW¼ SE¼ Sec. 14 T. 5 N. N.S. R. 17 E. W.

7. WATER LEVEL

Static water level 3½ feet below land surface

Flowing? ☐ Yes ☑ No G.P.M. flow _____

Temperature 46 ° F. Quality _____

Artesian closed-in pressure _____ p.s.i.

Controlled by ☐ Valve ☐ Cap ☐ Plug

8. WELL TEST DATA

☐ Pump ☑ Bailer ☐ Other

Discharge G.P.M.	Draw Down	Hours Pumped
20	2	1

9. LITHOLOGIC LOG

Hole Diam.	Depth From	Depth To	Material	Water Yes	Water No
18"	0	2½	Surface		
	2½	14	Boulders	✓	
6"	14	28	clay & gravel		✓
	28	30	gravel	✓	
	30	38	Gravel clay		✓
	38	43½	Gravel	✓	

10. Work started 8-15-78 finished 15 Aug 1978

11. DRILLERS CERTIFICATION

Firm Name WALKER WATER SYSTEMS Firm No. 45

Address 624 Pine St Boise Idaho 83702

Signed by (Firm Official) Eugene F Walker

and

(Operator) Melton H Robbins

RECEIVED JUL 19 2000

EXHIBIT - 12-48

000000

BALL POINT PEN

Department of Water Resources

WELL DRILLER'S REPORT

State law requires that this report be filed with the Director, Department of Water Resources within 30 days after the completion or abandonment of the well.

RECEIVED SEP 21 1978 Water Office

1. WELL OWNER

Name J P Stockmagn

Address Ketchum

Owner's Permit No.

2. NATURE OF WORK

☑ New well ☐ Deepened ☐ Replacement

☐ Abandoned (describe method of abandoning)

3. PROPOSED USE

☑ Domestic ☐ Irrigation ☐ Test ☐ Other (specify type)

☐ Municipal ☐ Industrial ☐ Stock ☐ Waste Disposal or Injection

4. METHOD DRILLED

☑ Cable ☐ Rotary ☐ Dug ☐ Other

5. WELL CONSTRUCTION

Diameter of hole 6 inches Total depth 78 feet

Casing schedule: ☑ Steel ☐ Concrete

Thickness	Diameter	From	To
1/4 inches	6 inches	+ 1 feet	72 feet
inches	inches	feet	feet
inches	inches	feet	feet
inches	inches	feet	feet
inches	inches	feet	feet

Was casing drive shoe used? ☑ Yes ☐ No

Was a packer or seal used? ☐ Yes ☑ No

Perforated? ☑ Yes ☑ No

How perforated? ☐ Factory ☑ Knife ☐ Torch

Size of perforation inches by inches

Number	From	To
12 perforations	43½ feet	46 feet
16 perforations	56 feet	61½ feet
20 perforations	63 feet	78 feet

Well screen installed? ☐ Yes ☑ No

Manufacturer's name

Type Model No.

Diameter Slot size Set from feet to feet

Diameter Slot size Set from feet to feet

Gravel packed? ☐ Yes ☑ No Size of gravel

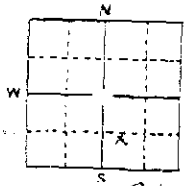
Placed from feet to feet

Surface seal depth 18 Material used in seal ☐ Cement grout ☑ Puddling clay ☐ Well cuttings

Sealing procedure used ☐ Slurry pit ☐ Temporary surface casing ☑ Overbore to seal depth

6. LOCATION OF WELL

Sketch map location must agree with written location. (37)



Subdivision Name

Lot No. Block No.

County BLAINE

NW ¼ SW ¼ Sec. 14 T. 5N N/S, R. 17 E/W

7. WATER LEVEL

Static water level 42 feet below land surface

Flowing? ☐ Yes ☑ No G.P.M. flow

Temperature 46 ° F. Quality

Artesian closed-in pressure p.s.i.

Controlled by ☐ Valve ☐ Cap ☐ Plug

8. WELL TEST DATA

☐ Pump ☐ Bailer ☐ Other

Discharge G.P.M.	Draw Down	Hours Pumped
15	Slight	1

9. LITHOLOGIC LOG

Hole Diam.	Depth From	Depth To	Material	Water Yes	Water No
8"	0	2	Sub Soil		
	2	12	clay & gravel		
6"	12	25	gravel & clay		
	25	43½	clay & gravel		
	43½	46	gravel	✓	
	46	52	gravel & clay		✓
	52	56	clay & gravel		
	56	61½	gravel	✓	
	61½	63½	clay & gravel		
	63½	71	gravel	✓	
	71	78	granite	✓	

10.

Work started 8-22-78 finished 15 Sept 1978

11. DRILLER'S CERTIFICATION

Firm Name Wells Water Systems Firm No. 15

Address 124 Pine St T F Phone 733-0078

Signed by (Firm Official) Edgar D Wells

and (Operator) Walton H Wells

MAILED JUL 13 2004

EXHIBIT 12-2-11

USE ADDITIONAL SHEETS IF NECESSARY FORWARD THE WHITE COPY TO THE DEPARTMENT

190000

USE TYPEWRITER OR BALL POINT PEN

State of Idaho
Department of Water Resources

WELL DRILLER'S REPORT

State law requires that this report be filed with the Director, Department of Water Resources within 30 days after the completion or abandonment of the well.

1. WELL OWNER

Name Mark Hopkins-Contractor

Address Kitchen Idaho Box 637

Owner's Permit No. _____

2. NATURE OF WORK

☑ New well ☐ Deepened ☐ Replacement

☐ Abandoned (describe method of abandoning)

_____

3. PROPOSED USE

☑ Domestic ☐ Irrigation ☐ Test ☐ Other (specify type)

☐ Municipal ☐ Industrial ☐ Stock ☐ Waste Disposal or Injection

4. METHOD DRILLED

☑ Cable ☐ Rotary ☐ Dug ☐ Other

5. WELL CONSTRUCTION

Diameter of hole 6 inches Total depth 43½ feet

Casing schedule: ☐ Steel ☐ Concrete

Thickness	Diameter	From	To
43½ inches	6 inches	+ 1½ feet	43½ feet
___ inches	___ inches	___ feet	___ feet
___ inches	___ inches	___ feet	___ feet
___ inches	___ inches	___ feet	___ feet
___ inches	___ inches	___ feet	___ feet

Was casing drive shoe used? ☑ Yes ☐ No

Was a packer or seal used? ☐ Yes ☑ No

Perforated? ☐ Yes ☐ No

How perforated? ☐ Factory ☐ Knife ☐ Torch

Size of perforation ___ inches by ___ inches

Number	From	To
___ perforations	___ feet	___ feet
___ perforations	___ feet	___ feet
___ perforations	___ feet	___ feet

Well screen installed? ☐ Yes ☑ No

Manufacturer's name _____

Type _____ Model No. _____

Diameter ___ Slot size ___ Set from ___ feet to ___ feet

Diameter ___ Slot size ___ Set from ___ feet to ___ feet

Gravel packed? ☐ Yes ☑ No Size of gravel _____

Placed from _____ feet to _____ feet

Surface seal depth 15 Material used in seal ☐ Cement grout ☑ Puddling clay ☐ Well cuttings

Seeding procedure used ☑ Slurry pit ☐ Temporary surface casing ☑ Overbore to seal depth

6. LOCATION OF WELL

Sketch map location must agree with written location.

37

N / W / E / S

Subdivision Name _____

Lot No. _____ Block No. _____

County Blaine

7. WATER LEVEL

Static water level 3½ feet below land surface

Flowing? ☐ Yes ☑ No G.P.M. flow _____

Temperature 46 ° F. Quality _____

Artesian closed-in pressure _____ p.s.i.

Controlled by ☐ Valve ☐ Cap ☐ Plug

8. WELL TEST DATA

☐ Pump ☑ Bailer ☐ Other

JAN 16 1979

Discharge G.P.M.	Draw Down	Hours Pumped
20	2	1

9. LITHOLOGIC LOG

Hole Diam.	Depth From	Depth To	Material	Water Yes	Water No
8"	0	2½	Surface		
	2½	14	Boulders	✓	
6"	14	28	clay & gravel	✓	
	28	30	gravel	✓	
	30	35	Gravel & clay	✓	
	35	43½	gravel	✓	

10. Work started 9-15-78 finished 10 Oct 78

11. DRILLERS CERTIFICATION

Firm Name WALKER WATER SYSTEMS A000122

Address 624 Pine St Twin Falls Date 12 Dec 78

Signed by (Firm Official) Eugene V. Walker

and

(Operator) _____

Received JUL 15 2004

000067

EXHIBIT - 12-42

Form 238-7
9/82

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

WELL DRILLER'S REPORT

State law requires that this report be filed with the Director, Department of Water Resources within 30 days after the completion or abandonment of the well.

USE BALLPOINT PEN

RECEIVED
FEB 4 1985
Department of Water Resources
Southern District Office

1. WELL OWNER

Name HANLEY DAWSON TTE
C/O DATES FRYBERGER 83353
Address P.O. Box 564, SUN VALLEY, IDA.

Owner's Permit No. _____

7. WATER LEVEL

Static water level 9 feet below land surface.
Flowing? ☐ Yes ☒ No G.P.M. flow _____
Artesian closed-in pressure _____ p.s.i.
Controlled by: ☐ Valve ☐ Cap ☐ Plug
Temperature _____ °F. Quality _____
Describe artesian or temperature zones below

2. NATURE OF WORK

☒ New well ☐ Deepened ☐ Replacement
☐ Abandoned (describe abandonment procedures such as materials, plug depths, etc. in lithologic log)

8. WELL TEST DATA

☐ Pump ☐ Bailer ☐ Air ☐ Other _____

Discharge G.P.M.	Pumping Level	Hours Pumped
	UNTESTED	

3. PROPOSED USE

☒ Domestic ☐ Irrigation ☐ Test ☐ Municipal
☐ Industrial ☐ Stock ☐ Waste Disposal or Injection
☐ Other _____ (specify type)

9. LITHOLOGIC LOG

Bore Diam.	Depth From	Depth To	Material	Water Yes
8"	0	1	BROWN TOP SOIL & GRAVEL	
"	1	22	LARGE BOULDERS & GRAVEL	X
"	22	38	LARGE GRAVEL & SAND	X
"	38	42	COARSE SAND	X
"	42	53	COARSE SAND & RED GRAVEL	X
"	53	62	SOFT BROWN SANDSTONE	

4. METHOD DRILLED

☐ Rotary ☐ Air ☐ Hydraulic ☐ Reverse rotary
☒ Cable ☐ Dug ☐ Other _____

5. WELL CONSTRUCTION

Casing schedule: ☒ Steel ☐ Concrete ☐ Other _____

Thickness	Diameter	From	To
.250 inches	8 inches +	1 feet	60 feet
inches	inches	feet	feet
inches	inches	feet	feet
inches	inches	feet	feet

Was casing drive shoe used? ☒ Yes ☐ No
Was a packer or seal used? ☐ Yes ☒ No
Perforated? ☒ Yes ☐ No
How perforated? ☐ Factory ☒ Knife ☐ Torch
Size of perforation 5/16 inches by 4 inches

Number		From	To
23	perforations	40 feet	53 feet
	perforations	feet	feet
	perforations	feet	feet

Well screen installed? ☐ Yes ☒ No
Manufacturer's name _____
Type _____ Model No. _____
Diameter ___ Slot size ___ Set from ___ feet to ___ feet
Diameter ___ Slot size ___ Set from ___ feet to ___ feet
Gravel packed? ☐ Yes ☒ No ☐ Size of gravel _____
Placed from ___ feet to ___ feet
Surface seal depth 15 Material used in seal: ☐ Cement grout ☐ Bentonite ☒ Puddling clay ☐ _____
Sealing procedure used: ☒ Slurry pit ☐ Temp. surface casing ☐ Overbore to seal depth
Method of joining casing: ☐ Threaded ☒ Welded ☐ Solvent Weld ☐ Cemented between strata
Describe access port _____

10.

Work started 12-12-84 finished 12-5-84

6. LOCATION OF WELL

Sketch map location must agree with written location

N / W / E / S

Subdivision Name _____
Lot No. ___ Block No. ___
County BLAINE
SW ¼ NW ¼ Sec. 14 T. 5 N/S R. 17 E/W

11. DRILLERS CERTIFICATION

I/We certify that all minimum well construction standards were complied with at the time the rig was removed.

Firm Name [illegible] Firm No. 262
Address [illegible] Date 12-12-84
Signed by (Firm Official) [signature]
and
(Operator) [signature]

MAY NOT BE USED
JUL 15 2004

000063

EXHIBIT - 12-43

Form 238-7
1/78

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

USE TYPEWRITER OR BALLPOINT PEN

WELL DRILLER'S REPORT

State law requires that this report be filed with the Director, Department of Water Resources within 30 days after the completion or abandonment of the well.

1. WELL OWNER

Name Bill Evans

Address Ketchum Id. (North Fork)

Owner's Permit No. _____

2. NATURE OF WORK

☒ New well ☐ Deepened ☐ Replacement
☐ Abandoned (describe method of abandoning) _____

3. PROPOSED USE

☒ Domestic ☐ Irrigation ☐ Test ☐ Municipal
☐ Industrial ☐ Stock ☐ Waste Disposal or Injection
☐ Other _____ (specify type)

4. METHOD DRILLED

☐ Rotary ☐ Air ☐ Hydraulic ☐ Reverse rotary
☒ Cable ☐ Dug ☐ Other _____

5. WELL CONSTRUCTION

Casing schedule: ☒ Steel ☐ Concrete ☐ Other _____

Thickness	Diameter	From	To
.250 inches	6 inches +	1 feet	47 feet
____ inches	____ inches	____ feet	____ feet
____ inches	____ inches	____ feet	____ feet
____ inches	____ inches	____ feet	____ feet

Was casing drive shoe used? ☒ Yes ☐ No
Was a packer or seal used? ☐ Yes ☒ No
Perforated? ☐ Yes ☒ No
How perforated? ☐ Factory ☐ Knife ☐ Torch
Size of perforation ____ inches by ____ inches

Number	From	To
____ perforations	____ feet	____ feet
____ perforations	____ feet	____ feet
____ perforations	____ feet	____ feet

Well screen installed? ☐ Yes ☒ No
Manufacturer's name _____
Type _____ Model No. _____
Diameter ___ Slot size ___ Set from _____ feet to _____ feet
Diameter ___ Slot size ___ Set from _____ feet to _____ feet
Gravel packed? ☐ Yes ☒ No ☐ Size of gravel _____
Placed from _____ feet to _____ feet
Surface seal depth 22' Material used in seal: ☒ Cement grout ☐ Puddling clay ☐ Well cuttings
Sealing procedure used: ☐ Slurry pit ☒ Temp. surface casing ☐ Overbore to seal depth
Method of joining casing: ☐ Threaded ☐ Welded ☐ Solvent Weld ☐ Cemented between strata
Describe access port _____

6. LOCATION OF WELL

Sketch map location must agree with written location.

N
W E
S

Subdivision Name _____
Lot No. ____ Block No. ____
County Blaine
SW ¼ NE ¼ Sec. 14 T. 5 (N/S) R. 17 (E/W)

7. WATER LEVEL

Static water level 5' feet below land surface.
Flowing? ☐ Yes ☒ No G.P.M. flow _____
Artesian closed-in pressure _____ p.s.i.
Controlled by: ☐ Valve ☐ Cap ☐ Plug
Temperature ____ °F. Quality _____

8. WELL TEST DATA

☐ Pump ☒ Bailer ☐ Air ☐ Other _____

Discharge G.P.M.	Pumping Level	Hours Pumped
30 GPM	16 ft.	1

9. LITHOLOGIC LOG

Hole Diam.	Depth From	Depth To	Material	Water Yes
6	0	1	Topsoil	
6	1	16	Silty gravel, some boulders	
6	16	38	Poorly graded sand, clay	X
6	38	47	Fine grained coarse sand, clay	X

RECEIVED
JUN 2 1980
Department of Water Resources
Southern District Office

10. Work started 5/12/80 finished 5/15/80

11. DRILLERS CERTIFICATION

I/We certify that all minimum well construction standards were complied with at the time the rig was removed.

R. Smith Well Drilling Firm No. 765
Firm Name _____
Box 1165 Twin Falls Date 6-19-80
Address _____
Signed by (Firm Official) R. Smith
and
(Operator) Byron Peterson

MICROFILMED
JUL 15 2004

000064

EXHIBIT - 12-44

TYPEWRITER OR BALL POINT PEN

Department of Water Administration

WELL DRILLER'S REPORT

State law requires that this report be filed with the Director, Department of Water Administration within 30 days after the completion or abandonment of the well.

1. WELL OWNER

Name John Stanbury

Address 1488 Prospect - Newport Beach

Owner's Permit No. Calif. 92665

2. NATURE OF WORK

☑ New well ☐ Deepened ☐ Replacement

☐ Abandoned (describe method of abandoning)

3. PROPOSED USE

☑ Domestic ☐ Irrigation ☐ Test ☐ Other (specify type)

☐ Municipal ☐ Industrial ☐ Stock ☐ Waste Disposal or Injection

4. METHOD DRILLED

☑ Cable ☐ Rotary ☐ Dug ☐ Other

5. WELL CONSTRUCTION

Diameter of hole 6 inches Total depth 40 feet

Casing schedule: ☑ Steel ☐ Concrete

Thickness	Diameter	From	To
5/16 inches	6" inches	+ 1 feet	42 feet
____ inches	____ inches	____ feet	____ feet
____ inches	____ inches	____ feet	____ feet
____ inches	____ inches	____ feet	____ feet
____ inches	____ inches	____ feet	____ feet

Was a packer or seal used? ☐ Yes ☑ No

Perforated? ☐ Yes ☑ No

How perforated? ☐ Factory ☐ Knife ☐ Torch

Size of perforation ____ inches by ____ inches

Number	From	To
____ perforations	____ feet	____ feet
____ perforations	____ feet	____ feet
____ perforations	____ feet	____ feet

Well screen installed? ☐ Yes ☑ No

Manufacturer's name ____

Type ____ Model No. ____

Diameter ___ Slot size ___ Set from ____ feet to ____ feet

Diameter ___ Slot size ___ Set from ____ feet to ____ feet

Gravel packed? ☐ Yes ☐ No Size of gravel ____

Placed from ____ feet to ____ feet

Surface seal depth 13 Material used in seal ☐ Cement grout ☑ Puddling clay ☐ Well cuttings

Sealing procedure used ☐ Slurry pit ☐ Temporary surface casing ☑ Overbore to seal depth

6. LOCATION OF WELL

Sketch map location must agree with written location. (37)

N / W / E / S

Subdivision Name Eagle Creek Meadows 1

Lot No. ____ Block No. 5

County ORANGE

1/4 E 1/4 of Sec. 14 T 5 N/S R 11 E/W

7. WATER LEVEL

Static water level 62 feet below land surface

Flowing? ☐ Yes ☑ No G.P.M. flow ____

Temperature 76° F. Quality ____

Artesian closed-in pressure ____ p.s.i.

Controlled by ☐ Valve ☐ Cap ☐ Plug

8. WELL TEST DATA

☐ Pump ☑ Bailer ☐ Other

Discharge G.P.M.	Draw Down	Hours Pumped
15	2	1

9. LITHOLOGIC LOG

Hole Diam.	Depth From	Depth To	Material	Water Yes	Water No
9"	0	4½	surface		
	4½	19	Builders	✓	
6"	19	24	clay & gravel		
	24	26	gravel	✓	
	26	37	clay gravel		
	37	40	gravel	✓	

10.

Work started 8-10-78 finished 8-15-78

11. DRILLER'S CERTIFICATION

Firm Name Walker Water Systems No. A000125

Address 624 Fiber St Date 8-23-78

Signed by (Firm Official) Raymond Walker

and

(Operator) Mark Walker

MUNICIPAL WATER DISTRICT JUL 15 2004

EXHIBIT 12-45

BALL POINT PEN

Department of Water Resources

WELL DRILLER'S REPORT

DEC 27 1978

State law requires that this report be filed with the Director, Department of Water Resources within 30 days after the completion or abandonment of the well.

1. WELL OWNER

Name John Stanberry

Address 1488 Prospect - Newport Beach Calif. 92663

Owner's Permit No.

2. NATURE OF WORK

☑ New well ☐ Deepened ☐ Replacement

☐ Abandoned (describe method of abandoning)

3. PROPOSED USE

☑ Domestic ☐ Irrigation ☐ Test ☐ Other (specify type)

☐ Municipal ☐ Industrial ☐ Stock ☐ Waste Disposal or Injection

4. METHOD DRILLED

☑ Cable ☐ Rotary ☐ Dug ☐ Other

5. WELL CONSTRUCTION

Diameter of hole 6 inches Total depth 40 feet

Casing schedule: ☑ Steel ☐ Concrete

Thickness	Diameter	From	To
5/16 inches	6" inches	+ 1 feet	40 feet
inches	inches	feet	feet
inches	inches	feet	feet
inches	inches	feet	feet
inches	inches	feet	feet

Was a packer or seal used? ☐ Yes ☑ No

Perforated? ☐ Yes ☑ No

How perforated? ☐ Factory ☐ Knife ☐ Torch

Size of perforation inches by inches

Number	From	To
perforations	feet	feet
perforations	feet	feet
perforations	feet	feet

Well screen installed? ☐ Yes ☑ No

Manufacturer's name

Type Model No.

Diameter Slot size Set from feet to feet

Diameter Slot size Set from feet to feet

Gravel packed? ☐ Yes ☐ No Size of gravel

Placed from feet to feet

Surface seal depth 18 Material used in seal ☐ Cement grout ☑ Puddling clay ☐ Well cuttings

Sealing procedure used ☐ Slurry pit ☐ Temporary surface casing ☑ Overbore to seal depth

6. LOCATION OF WELL

Sketch map location must agree with written location.

37

N / W / E / S

Subdivision Name EAGLE CREEK MEADOWS 1

Lot No. Block No. 5

County ELAINE

NE 1/4 SW 1/4 Sec. 14 T. 5 N/S. R. 17 E/W

7. WATER LEVEL

Static water level 6 feet below land surface

Flowing? ☐ Yes ☑ No G.P.M. flow

Temperature 46° F. Quality

Artesian closed-in pressure p.s.i.

Controlled by ☐ Valve ☐ Cap ☐ Plug

8. WELL TEST DATA

☐ Pump ☑ Bailer ☐ Other

Discharge G.P.M.	Draw Down	Hours Pumped
15	2	1

9. LITHOLOGIC LOG

Hole Diam.	Depth From	Depth To	Material	Water Yes	Water No
9"	0	4½	surface		
	4½	14	Boulders	✓	
6"	14	24	clay & gravel		
	24	26	gravel	✓	
	26	37	clay gravel		✓
	37	40	gravel	✓	

10. Work started 8-10-78 finished 8-15-78

11. DRILLERS CERTIFICATION

Firm Name WALKER WATER SYSTEMS Firm No. 15

Address 624 PIERCE ST Date 12-26-78

Signed by (Firm Official) Eugene R. Walker

and

(Operator) Melton H. Robbins

USE ADDITIONAL SHEETS IF NECESSARY FORWARD THE WHITE COPY TO THE DEPARTMENT

MICROFILMED JUL 15 2004

EXHIBIT 12-24

000000

410-01-2000 EAGLE CREEK
T, 5 N – R. 17 E – Section 23

JUL 15 2004

EXHIBIT - 12-47

6/89

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

USE [illegible] OR BALLPOINT PEN

WELL DRILLER'S REPORT

State law requires that this report be filed with the Director, Department of Water Resources within 30 days after the completion or abandonment of the well.

1. WELL OWNER

Name Dr. and Mrs. Norman Nelson

Address Box 2619 Sun Valley, Id. 83340 OK

Owner's Permit No. 37-90-S-173

2. NATURE OF WORK

☐ New well ☒ Deepened ☐ Replacement
☐ Well diameter increase
☐ Abandoned (describe abandonment procedures such as materials, plug depths, etc. in lithologic log)

3. PROPOSED USE

☒ Domestic ☐ Irrigation ☐ Test ☐ Municipal
☐ Industrial ☐ Stock ☐ Waste Disposal or Injection
☐ Other _____ (specify type)

4. METHOD DRILLED

☒ Rotary ☐ Air ☐ Hydraulic ☐ Reverse rotary
☐ Cable ☐ Dug ☐ Other _____

5. WELL CONSTRUCTION

Casing schedule: ☒ Steel ☐ Concrete ☐ Other _____

Thickness	Diameter	From	To
.250 inches	6 inches	1'6" feet	100 feet
_____ inches	_____ inches	_____ feet	_____ feet
_____ inches	_____ inches	_____ feet	_____ feet
_____ inches	_____ inches	_____ feet	_____ feet

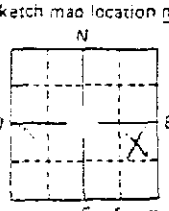
Was casing drive shoe used? ☐ Yes ☒ No
Was a packer or seal used? ☐ Yes ☒ No
Perforated? ☐ Yes ☒ No
How perforated? ☐ Factory ☐ Knife ☐ Torch ☐ Gun
Size of perforation _____ inches by _____ inches

Number	From	To
_____ perforations	_____ feet	_____ feet
_____ perforations	_____ feet	_____ feet
_____ perforations	_____ feet	_____ feet

Well screen installed? ☒ Yes ☐ No
Manufacturer's name _____
Type _____ Model No. _____
Diameter ___ Slot size ___ Set from _____ feet to _____ feet
Diameter ___ Slot size ___ Set from _____ feet to _____ feet
Gravel packed? ☐ Yes ☒ No ☐ Size of gravel _____
Placed from _____ feet to _____ feet
Surface seal depth ___ Material used in seal: ☐ Cement grout
☒ Bentonite ☐ Puddling clay ☐ _____
Sealing procedure used: ☐ Slurry pit ☐ Temp. surface casing
☒ Overbore to seal depth
Method of joining casing: ☐ Threaded ☒ Welded ☐ Solvent Weld
☐ Cemented between strata
Describe access port _____

6. LOCATION OF WELL

Sketch map location must agree with written location.



Subdivision Name FOX CREEK RD N COUNTRY
Lot No. 7 Block No. _____
County BLAINE
NE ¼ SE ¼ Sec. 23 T. 5 N S R. 17 E W

7. WATER LEVEL

Static water level 50 feet below land surface.
Flowing? ☐ Yes ☒ No G.P.M. flow _____
Artesian closed-in pressure _____ p.s.i.
Controlled by: ☐ Valve ☐ Cap ☐ Plug
Temperature ___ °F. Quality good
Describe artesian or temperature zones below.

8. WELL TEST DATA

☐ Pump ☐ Bailer ☒ Air ☐ Other _____

Discharge G.P.M.	Pumping Level	Hours Pumped
50	85	1

9. LITHOLOGIC LOG

Bore Diam.	Depth From	Depth To	Material	Water Yes	Water No
6	60	100	deepen sand and gravel	x	

RECEIVED
NOV 28 1990
Department of Water Resources
Southern Region Office

RECEIVED
DEC - 1 1990
Department of Water Resources
Southern Region Office

10.

Work started 1-13-90 finished 11-14-90

11. DRILLERS CERTIFICATION

I/We certify that all minimum well construction standards were complied with at the time the rig was removed.

Firm Name Wood River Drilling Inc. Firm No. 215
Address Box 1165 Hailey, ID 83333 Date 11-30-90
Signed by (Firm Official) Ken Smith A000128
and
(Operator) [illegible]

USE ADDITIONAL SHEETS IF NECESSARY — FORWARD THE WHITE COPY TO THE DEPARTMENT

37-90-S-173

MICROFILMED
JUL 15 2004

000068

EXHIBIT 12-48

6/93

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

Use Typewriter or Ball Point Pen

1. DRILLING PERMIT NO. 37-93-S-0164-000
Other IDWR No. _____

2. OWNER:
Name BOB STILO
Address 157 MATIS ST
City SO PLAIN FIELD State NJ Zip 07080

3. LOCATION OF WELL by legal description:
Sketch map location must agree with written location.

N / W / E / S

T. 5 North ☑ or South ☐
R. 17 East ☑ or West ☐
Sec. 23, ____ 1/4 NW 1/4 (40 acres) NE 1/4 (160 acres)
Gov't Lot ____ County BLAINE

Address of Well Site 110 FOX CREEK RD
(Give at least Direction + Distance to Road or Landmark)
Lot No. 10 Block No. _____ Subd. Name NORTH COUNTRY

4. PROPOSED USE:
☑ Domestic ☐ Municipal ☐ Monitor ☐ Irrigation
☐ Thermal ☐ Injection ☐ Other _____

5. TYPE OF WORK
☑ New Well ☐ Modify or Repair ☐ Replacement ☐ Abandonment

6. DRILL METHOD
☐ Mud Rotary ☑ Air Rotary ☐ Cable ☐ Other _____

7. SEALING PROCEDURES

SEAL/FILTER PACK Material	From	To	AMOUNT Sacks or Pounds	METHOD
BENTONITE	0	20	10SKS	DUMP

Was drive shoe seal tested? Y☐ N☑ How? _____

8. CASING/LINER:

Diameter	From	To	Guage	Casing	Liner	Steel	Plastic	Welded	Threaded
8"	3	100	.250	✓		☑	☐	☐	☐
						☐	☐	☐	☐
						☐	☐	☐	☐
						☐	☐	☐	☐

Final location of shoes 100 ft.
Top Packer or Headpipe _____ Bottom Tailpipe _____

9. PERFORATIONS/SCREENS KNIFE
☑ Perforations Method _____
☐ Screens Type _____ Material _____

From	To	Slot Size	Number	Diameter	Tele/Pipe Size	Casting	Liner
80	100	2"	400	1/8		☑	☐
						☐	☐
						☐	☐
						☐	☐

000065
JUL 15 2004

10. WELL TESTS:
☐ Pump ☐ Bailer ☑ Air ☐ Flowing Artesian

Yield gal./min.	Drawdown	Pumping Depth	Time
100		90	1

Temperature of water ____ Was a water analysis done? Yes ☐ No ☑
By whom? _____
Water Quality (odor, etc.) _____
Bottom Hole Temperature _____

11. STATIC WATER LEVEL:
30 ft. below surface Depth artesian flow found _____
Artesian pressure _____ lb. Describe access port _____
Describe Controlling Devices: _____

12. LITHOLOGIC LOG: (Describe repairs or abandonment)

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	GPM	W L SW
8	0	3	TOP SOIL		L
8	3	12	GRAVEL & CLAY		L
8	12	34	GRAVEL & SAND		L
8	34	68	GRAVEL & CLAY	✓	
8	68	93	GRAVEL	✓	
8	93	100	CLAY & GRAVEL		L

Date: Started 11-10-93 Completed 11-22-93

13. DRILLER'S CERTIFICATION
I/We certify that all minimum well construction standards were complied with at the time the rig was released.

Firm Name TWIN RIVER DRILLING & PUMP BOX 837 BELLEVUE, ID 83313 Firm No. 265 A000129
Firm Official _____ Date _____
and
Supervisor or Operator _____ Date 12/22/93
Sign once if Firm Official is Driller

FORWARD WHITE COPY TO WATER RESOURCES

EXHIBIT 12-4

Form 238-7
7/94

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

Use Typewriter or Ball Point Pen

1. DRILLING PERMIT NO. 37-95-S-0168-200
Other IDWR No.

2. OWNER:
Name HAROLD PRICE
Address P.O. BOX 547
City KETCHUM State ID Zip 83340

3. LOCATION OF WELL by legal description:
Sketch map location must agree with written location.

N / W / E / S

Twp. 5 North ☑ or South ☐
Rge. 17 East ☑ or West ☐
Sec. 23 1/4 SW 1/4 SE 1/4
Gov't Lot ____ County BLAINE

Address of Well Site 13316 HWY 75
City KETCHUM
(Give at least name of road – Distance to Road or Landmark)

Lot 1 AMENDED Blk. ____ Sub. Name PETERS SUB

4. PROPOSED USE:
☑ Domestic ☐ Municipal ☐ Monitor ☐ Irrigation
☐ Thermal ☐ Injection ☐ Other

5. TYPE OF WORK
☐ New Well ☐ Modify or Repair ☑ Replacement ☐ Abandonment

6. DRILL METHOD
☐ Mud Rotary ☑ Air Rotary ☐ Cable ☐ Other

7. SEALING PROCEDURES

SEAL/FILTER PACK Material	From	To	AMOUNT Sacks or Pounds	METHOD
BENTONITE	0	20	10SKS	OVERPOUR

Was drive shoe used? ☐ Y ☐ N Shoe Depth(s)
Was drive shoe seal tested? Y ☐ N ☑ How?

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
10"	1½'	58	.25	STEEL	☑	☐	☑	☐
					☐	☐	☐	☐
					☐	☐	☐	☐

Length of Headpipe ____ Length of Tailpipe ____

9. PERFORATIONS/SCREENS
☐ Perforations Method
☐ Screens Screen Type

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
						☐	☐
						☐	☐
						☐	☐

10. STATIC WATER LEVEL OR ARTESIAN PRESSURE:
7 ft. below ground Artesian pressure ____ lb.
Depth flow encountered ____ ft. Describe access port or control devices:

11. WELL TESTS:
☐ Pump ☐ Bailer ☑ Air ☐ Flowing Artesian

Yield gal./min.	Drawdown	Pumping Level	Time
150		50	1

Water Temp. ____ Bottom hole temp. ____
Water Quality test or comments:

12. LITHOLOGIC LOG: (Describe repairs or abandonment)

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	Water Y	Water N
16	0	3	TOP SOIL		☐
16	3	18	CLAY & GRAVEL	☑	
10	18	31	GRAVEL, CLAY, SAND	☑	
10	31	39	BROWN CLAY		☐
10	39	58	GRAVEL, COARSE SAND	☑	

RECEIVED
Department of Water Resources
Southern Region

Completed Depth 58 (Measurable)
Date: Started 9-21-95 Completed 9-22-95

13. DRILLER'S CERTIFICATION
I/We certify that all minimum well construction standards were complied with at the time the rig was removed.

Firm Name WOOD RIVER DRILLING & PUMP BOX 837 BELLEVUE, ID 83313 Firm No. A000130 265

Firm Official Ken Smith Date 9-28-95

and

Supervisor or Operator [signature] Date 9-28-95
(Sign once if Firm Official & Operator)

EXHIBIT - 12-50

Form 238-7
3/95

IDAHO DEPART. ENT OF WATER RESOURCES
WELL DRILLER'S REPORT

Use Typewriter or Ballpoint Pen

Office Use Only
Inspected by _____
Twp ____ Rge ____ Sec ____
____1/4 ____1/4 ____1/4
Lat: : : Long: : :

1. DRILLING PERMIT NO. 17- 96- S 0046 - 000
Other IDWR No. _____

2. OWNER:
Name JIM & JEANNE WELCH
Address P.O. BOX 3178
City KETCHUM State ID Zip 83340

3. LOCATION OF WELL by legal description:
Sketch map location must agree with written location.

N / W / E / S

Twp. 5 North ☐ X or South ☐
Rge. 17 East ☐ X or West ☐
Sec. 23, ____ 1/4 (10 acres) SW 1/4 (40 acres) NE 1/4 (160 acres)
Gov't Lot ____ County BLAINE
Lat: : : Long: : :
Address of Well Site 113 Fox Creek Rd.
City KETCHUM
(Give at least name of road + Distance to Road or Landmark)

Lt. 1 Blk. _____ Sub. Name NORTH COUNTRY SUBD.

4. USE:
☐ Domestic ☐ Municipal ☐ Monitor ☐ Irrigation
☐ Thermal ☐ Injection ☐ Other _____

5. TYPE OF WORK check all that apply (Replacement etc.)
☐ X New Well ☐ Modify ☐ Abandonment ☐ Other _____

6. DRILL METHOD
☒ Air Rotary ☐ Cable ☐ Mud Rotary ☐ Other _____

7. SEALING PROCEDURES

SEAL/FILTER PACK Material	From	To	AMOUNT Sacks or Pounds	METHOD
BENTONITE	0	19	200#	OVERBORE

Was drive shoe used? ☐ Y ☐ N X Shoe Depth(s) _____
Was drive shoe seal tested? ☐ Y ☐ N X How? _____

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
9 5/8	+1	88	1/8	STEEL	☐ X	☐	☐ X	☐
					☐	☐	☐	☐
					☐	☐	☐	☐

Length of Headpipe _____ Length of Tailpipe _____

9. PERFORATIONS/SCREENS
☐ Perforations Method _____
☐ Screens Screen Type _____

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
						☐	☐
						☐	☐
						☐	☐

10. STATIC WATER LEVEL OR ARTESIAN PRESSURE:
____ ft. below ground Artesian pressure ____ lb.
Depth flow encountered ____ ft. Describe access port or control devices: CAP

11. WELL TESTS:
☐ Pump ☐ Bailer ☐ Air ☐ Flowing Artesian

Yield gal./min.	Drawdown	Pumping Level	Time
50			

Water Temp. 49 Bottom hole temp. ____
Water Quality test or comments: _____
Depth first Water Encountered ____

12. LITHOLOGIC LOG: (Describe repairs or abandonment)

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	Water Y	Water N
10	0	4	SURFACE DIRT		
	4	18	CLAY & GRAVEL		
8	18	44	CLAY & GRAVEL		
	44	48	GRAVEL & SAND		X
	48	52	CLAY & GRAVEL		
	52	60	GRAVEL & SAND		X
	60	64	CLAY & GRAVEL		
	64	67	GRAVEL SAND CLAY		X
	67	88	GRAVEL & SAND		X
	88				

RECEIVED
JUL 16 1996
Department of Water Resources
Southern Region

Completed Depth 88' (Measurable)
Date: Started 05/21/96 Completed 05/23/96

13. DRILLER'S CERTIFICATION
I/We certify that all minimum well construction standards were complied with at the time the rig was removed.

Firm Name WALKER WATER SYSTEMS INC. Firm No. 15
Firm Official _____ Date 06/12/96
and
Supervisor or Operator _____ Date 06/12/96
(Signature of Firm Official or Operator)

FORWARD WHITE COPY TO WATER RESOURCES

EXHIBIT - 12-51

7/94

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

Use Typewriter or Ball Point Pen

1. DRILLING PERMIT NO. 37 - 95 - S - 0089 - 000
Other IDWR No.

2. OWNER:
Name J.H. BLECHMANN
Address P.O. BOX 184
City SUN VALLEY State ID Zip 83353

3. LOCATION OF WELL by legal description:
Sketch map location must agree with written location.

N / W / E / S

Twp. 5 North ☒ or South ☐
Rge. 17 East ☒ or West ☐
Sec. 23, 1/4 (10 acres) SW 1/4 (40 acres) NW 1/4 (160 acres)
Gov't Lot ____ County BLAINE

Address of Well Site 13406 HIGHWAY 75
City KETCHUM
(Give at least name of road + Distance to Road or Landmark)

Lt. ____ Blk. ____ Sub. Name ____

4. PROPOSED USE:
☐ Domestic ☐ Municipal ☐ Monitor ☐ Irrigation
☐ Thermal ☐ Injection ☐ Other

5. TYPE OF WORK
☐ New Well ☐ Modify or Repair ☐ Replacement ☐ Abandonment

6. DRILL METHOD
☐ Mud Rotary ☒ Air Rotary ☐ Cable ☐ Other

7. SEALING PROCEDURES

SEAL/FILTER PACK Material	From	To	AMOUNT Sacks or Pounds	METHOD
BENTONITE	0	13	150#	OVERBORE

Was drive shoe used? ☐ Y ☐ N Shoe Depth(s)
Was drive shoe seal tested? Y☐ N☐ How?

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
6.625	0	47.5	.280	STEEL	☒	☐	☒	☐
					☐	☐	☐	☐
					☐	☐	☐	☐

Length of Headpipe ____ Length of Tailpipe ____

9. PERFORATIONS/SCREENS TORCH
☐ Perforations Method
☐ Screens Screen Type

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
43	47.5	.125	15	6.625	STEEL	☐	☐
						☐	☐
						☐	☐

STATIC WATER LEVEL OR ARTESIAN PRESSURE:
4 ft. below ground Artesian pressure ____ lb.
Depth flow encountered ____ ft. Describe access port or control devices:

11. WELL TESTS:
☐ Pump ☐ Bailer ☒ Air ☐ Flowing Artesian

Yield gal./min.	Drawdown	Pumping Level	Time
38			

Water Temp. 49 Bottom hole temp.
Water Quality test or comments:

12. LITHOLOGIC LOG: (Describe repairs or abandonment)

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	Wat Y
6	0	3	SURFACE DIRT	
	3	10	GRAVEL CLAY	
	10	30	GRAVEL SAND	Y
	30	46	GRAVEL CLAY	Y
	46	47.5	GRAVEL	Y

RECEIVED
OCT 18 1995
Department of Water Resources
Southern Region

Completed Depth 47.5 (Measurable)
Date: Started 09/21/95 Completed 09/25/95

13. DRILLER'S CERTIFICATION
I/We certify that all minimum well construction standards were complied with at the time the rig was removed.

Firm Name WALKER WATER SYSTEMS INC. Firm No. A000132 15
Firm Official [signature] Date 10/12/95
and
Supervisor or Operator [signature] Date 10/12/95
(Sign once if Firm Official is Supervisor or Operator)

EXHIBIT - 12-32

Form 238-7
3/95

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

Use Typewriter or Ballpoint Pen

Office Use Only
Inspected by _____
Twp ____ Rge ____ Sec ____
____1/4 ____1/4 ____1/4
Lat: : : Long: : :

1. DRILLING PERMIT NO. 37 97 S 0077 - 000
Other IDWR No. _____

2. OWNER:
Name R. RAYMOND CAIRNCROSS
Address P.O. BOX 6164
City KETCHUM State ID Zip 83340

3. LOCATION OF WELL by legal description:
Sketch map location must agree with written location.

N / W / E / S

Twp. 5 North ☐ X or South ☐
Rge. 17 East ☐ X or West ☐
Sec. 23 ____ 1/4 NW 1/4 SE 1/4
(10 acres / 40 acres / 160 acres)
Gov't Lot ____ County BLAINE
Lat: : : Long: : :
Address of Well Site _____
City KETCHUM
(Give at least name of road - Distance to Road or Landmark)

Lt. 12 Blk. _____ Sub. Name NORTH COUNTRY ESTATE

4. USE:
☐ Domestic ☐ Municipal ☐ Monitor ☐ Irrigation
☐ Thermal ☐ Injection ☐ Other _____

5. TYPE OF WORK check all that apply (Replacement etc.)
☐X New Well ☐ Modify ☐ Abandonment ☐ Other _____

5. DRILL METHOD
☐X Air Rotary ☐ Cable ☐ Mud Rotary ☐ Other _____

7. SEALING PROCEDURES

SEAL/FILTER PACK			AMOUNT	METHOD
Material	From	To	Sacks or Pounds	
BENTONITE	0	13	250#	OVERBORE

Was drive shoe used? ☐ Y ☐ N Shoe Depth(s) _____
Was drive shoe seal tested? ☐Y ☐N How? _____

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
5.625	+1.0	60	.250	STEEL	☐X	☐	☐X	☐
					☐	☐	☐	☐
					☐	☐	☐	☐

Length of Headpipe _____ Length of Tailpipe _____

9. PERFORATIONS/SCREENS
☐ Perforations Method _____
☐ Screens Screen Type _____

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
						☐	☐
						☐	☐
						☐	☐

JUL 15 2004

10. STATIC WATER LEVEL OR ARTESIAN PRESSURE:
_____ ft. below ground Artesian pressure _____ lb.
Depth flow encountered _____ ft. Describe access port or control devices: _____

11. WELL TESTS:
☐ Pump ☐ Bailer ☐X Air ☐ Flowing Artesian

Yield gal./min.	Drawdown	Pumping Level	Time
50			

Water Temp. 48 Bottom hole temp. ____
Water Quality test or comments: _____
Depth first Water Encountered ____

12. LITHOLOGIC LOG: (Describe repairs or abandonment)

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature
9.5	0	8	SURFACE DIRT
	8	13	GRAVEL & CLAY
	13	23	GRAVEL & CLAY
	23	27	GRAVEL & SAND
	27	44	GRAVEL & CLAY
	44	50	GRAVEL & SAND
	50	60	GRAVEL & SAND & CLAY
	60	66	GRAVEL & SAND
	66		

RECEIVED
JUL 17 1997
Department of Water Resources

Completed Depth 66 (Measurable)
Date: Started 06/19/97 Completed 06/19/97

13. DRILLER'S CERTIFICATION
I/We certify that all minimum well construction standards were complied with at the time the rig was removed.

Firm Name WALKER WATER SYSTEMS INC. A000133 Firm No. 15
Firm Official _____ Date 07/15/97
and
Supervisor or Operator _____ Date 07/15/97
(Signature of Firm Official & Operator)

EXHIBIT 12-53

Form 238-7
3/95

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT
Use Typewriter or Ballpoint Pen

Office Use Only
Inspected by _____
Twp ____ Rge ____ Sec ____
____1/4 ____1/4 ____1/4
Lat: : : Long: : :

1. DRILLING PERMIT NO. 37-97-S-0099-200
Other IDWR No. 00002082

2. OWNER:
Name MATTHESEN, CHARLES
Address P.O. BOX 2340
City KETCHUM State ID Zip 83340

3. LOCATION OF WELL by legal description:
Sketch map location must agree with written location.

N / W / E / S

Twp. 3 North ☒ or South ☐
Rge. 17 East ☒ or West ☐
Sec. 22, SE 1/4 (10 acres) SE 1/4 (40 acres) SE 1/4 (160 acres)
Gov't Lot ____ County BLAINE
Lat: : : Long: : :
Address of Well Site _____
City _____
(Give at least name of road + Distance to Road or Landmark)
Lt. ____ Blk. ____ Sub. Name DIP CREEK

4. USE:
☐ Domestic ☐ Municipal ☐ Monitor ☐ Irrigation
☐ Thermal ☐ Injection ☒ Other OTHER

5. TYPE OF WORK check all that apply (Replacement etc.)
☐ New Well ☐ Modify ☐ Abandonment ☐ Other _____

DRILL METHOD
☐ Air Rotary ☐ Cable ☐ Mud Rotary ☐ Other _____

7. SEALING PROCEDURES

SEAL/FILTER PACK Material	From	To	AMOUNT Sacks or Pounds	METHOD
BENTONITE	0	20	400#	GRAVITY

Was drive shoe used? ☐ Y ☐ N Shoe Depth(s) _____
Was drive shoe seal tested? ☐ Y ☐ N How? _____

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
6"	0	95			☒	☐	☒	☐
					☐	☐	☐	☐
					☐	☐	☐	☐

Length of Headpipe _____ Length of Tailpipe _____

9. PERFORATIONS/SCREENS
Perforations Method _____
Screens Screen Type _____

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
						☐	☐
						☐	☐
						☐	☐

10. STATIC WATER LEVEL OR ARTESIAN PRESSURE:
110" ft. below ground Artesian pressure _____ lb.
Depth flow encountered _____ ft. Describe access port or control devices: _____

11. WELL TESTS:
☐ Pump ☐ Bailer ☒ Air ☐ Flowing Artesian

Yield gal./min.	Drawdown	Pumping Level	Time
1430	12'	25'	10.5

Water Temp. 46 Bottom hole temp. ____
Water Quality test or comments: _____
Depth first Water Encountered ____

12. LITHOLOGIC LOG: (Describe repairs or abandonment)

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	Water Y	Water N
12	0	1	SURFACE DIRT		X
	1	12	BOULDERS GRAVEL		X
	12	30	GRAVEL	X	
	30	35	GRAVEL	X	
	30	35	CLAY GRAVEL		X
	35	70	GRAVEL BOULDERS	X	
	70	90	GRAVEL	X	
	90	95	GRAVEL	X	
	95	100	GRAVEL CLAY		X
	100	105	BOULDERS		X

Completed Depth 105 (Measurable)
Date: Started 10/13/97 Completed 10/13/97

13. DRILLER'S CERTIFICATION EXHIBIT - 12-24
I/We certify that all minimum well construction standards were complied with at the time the rig was removed. A000134
Firm Name WALKER WATER SYSTEMS INC. Firm No. 15
Firm Official _____ Date 11/04/97
and
Supervisor or Operator _____ Date 11/04/97

RECEIVED
NOV 05 1997
DEPARTMENT OF WATER RESOURCES

Form 238-7
11/97

C

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

Office Use Only
Inspected by _____
Twp ____ Rge ____ Sec ____
____ 1/4 ____ 1/4 ____ 1/4
Lat : : Long: : :

1. WELL TAG NO. D _____
DRILLING PERMIT NO. 37 98 S 0068 000
Other IDWR No. 00002535

OWNER:
Name MATHIESEN, CHUCK
Address P.O. BOX 2540
City KETCHUM State ID Zip 83340

3. LOCATION OF WELL by legal description:
Sketch map location must agree with written location.

N / W / E / S

Twp. 5 North ☒ or South ☐
Rge. 17 East ☒ or West ☐
Sec. 23 ____ 1/4 NE 1/4 SE 1/4
Gov't Lot ____ County BLAINE
Lat : : Long: : :
Address of Well Site _____
City KETCHUM
(Give at least name of road + Distance to Road or Landmark)

Subdivision Name DIP CREEK Blk. _____ Sub. Name _____

4. USE:
☐ Domestic ☐ Municipal ☐ Monitor ☐ Irrigation
☐ Thermal ☐ Injection ☐ Other _____

5. TYPE OF WORK check all that apply (Replacement etc.)
☐ New Well ☐ Modify ☐ Abandonment ☐ Other _____

DRILL METHOD
☐ Air Rotary ☐ Cable ☐ Mud Rotary ☐ Other _____

6. SEALING PROCEDURES

SEAL/FILTER PACK Material	From	To	AMOUNT Sacks or Pounds	METHOD
BENTONITE	0	40	700#	OVERSORE

Was drive shoe used? ☒ Y ☐ N Shoe Depth(s) _____
Was drive shoe seal tested? ☐ Y ☒ N How? _____

CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
6.625	0	80	.250	STEEL	☒	☐	☒	☐
5.563	0.5	360	.250	STEEL	☐	☒	☒	☐
					☐	☐	☐	☐

Length of Headpipe _____ Length of Tailpipe _____

8. PERFORATIONS/SCREENS
☒ Perforations Method _____
☒ Screens Screen Type _____

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
80	360	.025	280	5.563	STEEL	☐	☒
			MIC			☐	☐
						☐	☐

JUL 15 2004

9. STATIC WATER LEVEL OR ARTESIAN PRESSURE:
____ ft. below ground Artesian pressure ____ lb.
Depth flow encountered ____ ft. Describe access port or control devices: _____

11. WELL TESTS:
☐ Pump ☐ Bailer ☐ Air ☐ Flowing Artesian

Yield gal./min.	Drawdown	Pumping Level	Time
50			

Water Temp. 46 Bottom hole temp. ____
Water Quality test or comments: _____
Depth first Water Encounter ____

12. LITHOLOGIC LOG: (Describe repairs or abandonment)

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	Water Y	Water N
10	0	5	SOIL		X
	5	20	SOIL BROKEN LIMESTONE	X	
	20	70	SOFT TAN LIMESTONE	X	
	70	84	FIRM TAN LIMESTONE		X
8	84	90	TAN LIMESTONE & CLAY		X
	90	120	SOFT TAN LIMESTONE	X	
	120	125	GREY CLAY		X
	125	170	GREEN DECOMPOSED LIMESTONE	X	
	125	170	WITH CALCITE	X	
	170	250	DECOMPOSED GREEN LIMESTONE	X	
	170	250	& GREEN CLAY	X	
	250	320	GREEN LIMESTONE	X	
	320	360	HARD GREEN LIMESTONE	X	

RECEIVED
AUG 31 1998
Department of Water Resources
Southern Region

Completed Depth 360 (Measurable)
Date: Started 07/03/98 Completed 07/21/98

13. DRILLER'S CERTIFICATION
I/We certify that all minimum well construction standards were complied with at the time the rig was removed.

EXHIBIT -12-56

A000135

Company Name WALKER WATER SYSTEMS INC. Firm No. 15
Firm Official _____ Date 08/24/98
and
Driller or Operator _____ Date 08/24/98
(Signature of Firm Official &/Operator)

00075

MAR 2 5 1999

Form 238-7 11/97 Department of Water Resources Southern Region

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

Office Use Only
Inspected by _____
Twp ____ Rge ____ Sec ____
____ 1/4 ____ 1/4 ____ 1/4
Lat : : Long: : :

1. WELL TAG NO. D _____

DRILLING PERMIT NO. 37-99-S-0013-300

Other IDWR No. _____

2. OWNER:

Name Kevin Grant

Address P.O. Box 4123

City Ketchum State ID Zip 83320

3. LOCATION OF WELL by legal description:

Sketch map location must agree with written location.

N / W / E / S — x

Twp. 5 North ☐ or South ☐

Rge. 17 East ☒ or West ☐

Sec. 23 ____ 1/4 SE 1/4 NW 1/4

Gov't Lot ____ County Blaine

Lat : : Long: : :

Address of Well Site 13382 Hwy 75

City Ketchum

(One at least name or road - Distance to Road or Landmark)

Lt. _____ Blk. _____ Sub. Name _____

4. USE:

☐ Domestic ☐ Municipal ☐ Monitor ☐ Irrigation
☐ Thermal ☐ Injection ☐ Other _____

5. TYPE OF WORK check all that apply (Replacement etc.)

☐ New Well ☐ Modify ☒ Abandonment ☐ Other _____

6. DRILL METHOD

☐ Air Rotary ☐ Cable ☐ Mud Rotary ☐ Other _____

7. SEALING PROCEDURES

SEAL/FILTER PACK Material	From	To	AMOUNT Sacks or Pounds	METHOD
Bentonite Chip	0	5	3sks	

Was drive shoe used? ☐Y ☐ N Shoe Depth(s) _____

Was drive shoe seal tested? ☐ Y☐ N How? _____

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
					☐	☐	☐	☐
					☐	☐	☐	☐
					☐	☐	☐	☐

Length of Headpipe _____ Length of Tailpipe _____

9. PERFORATIONS/SCREENS

Perforations Method _____

Screens Screen Type _____

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
						☐	☐
						☐	☐
						☐	☐

STATIC WATER LEVEL OR ARTESIAN PRESSURE:

____ ft. below ground Artesian pressure ____ lb.

Depth flow encountered ____ ft. Describe access port or control devices: _____

11. WELL TESTS:

☐ Pump ☐ Bailer ☐ Air ☐ Flowing Artesian

Yield gal./min.	Drawdown	Pumping Level	Time

Water Temp. _____ Bottom hole temp. _____

Water Quality test or comments: _____

Depth first Water Encountered _____

12. LITHOLOGIC LOG: (Describe repairs or abandonment)

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	Water Y	Water N
			Abanon 47 ft. 6" Well filled with bentonite chips to 5 ft. Sealed with 1/4" steel plate		

Completed Depth _____ (Measurable)

Date: Started 3-17-1999 Completed 3-18-1999

13. DRILLER'S CERTIFICATION

I/We certify that all minimum well construction standards were complied with at the time the rig was removed.

Company Name Wood River Dilling and Pump Inc Firm No. 260136

Firm Official Ken Smith Date 3-22-99

and

Driller or Operator _____ Date _____

(Sign once if Firm Official & Operator)

FORWARD WHITE COPY TO WATER RESOURCES

EXHIBIT-12-56

Form 4a -7
11/97

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

Office Use Only
Inspected by
Twp ___ Rge ___ Sec ___
___ 1/4 ___ 1/4 ___ 1/4
Lat: : : Long: : :

1. WELL TAG NO. D 0002935 200
DRILLING PERMIT NO. 37-99-S 0011 ~~-006~~
Other IDWR No.

2. OWNER:
Name Kevin Grant
Address P.O. Box 4123
City Ketchum State ID Zip 83340

3. LOCATION OF WELL by legal description:
Sketch map location must agree with written location.

N / W / E / S

Twp. 5 North ☒ or South ☐
Rge. 17 East ☒ or West ☐
Sec. 23 ___ 1/4 (10 acres) SW 1/4 (40 acres) NW 1/4 (160 acres)
Gov't Lot ___ County Blaine
Lat: : : Long: : :
Address of Well Site 13382 Hwy 75
City Ketchum
(Give at least name of road + Distance to Road or Landmark)

Lt. ___ Blk. ___ Sub. Name ___

4. USE:
☒ Domestic ☐ Municipal ☐ Monitor ☐ Irrigation
☐ Thermal ☐ Injection ☐ Other ___

5. TYPE OF WORK check all that apply (Replacement etc.)
☐ New Well ☐ Modify ☐ Abandonment ☒ Other Replacement

6. DRILL METHOD
☒ Air Rotary ☐ Cable ☐ Mud Rotary ☐ Other ___

7. SEALING PROCEDURES

SEAL/FILTER PACK Material	From	To	AMOUNT Sacks or Pounds	METHOD
Betonite	0	20	11	Overbore

Was drive shoe used? ☒ Y ☐ N Shoe Depth(s) ___
Was drive shoe seal tested? ☐ Y ☒ N How? ___

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
6"	+1	62	.250	Steel	☒	☐	☒	☐
					☐	☐	☐	☐
					☐	☐	☐	☐

Length of Headpipe ___ Length of Tailpipe ___

9. PERFORATIONS/SCREENS
Perforations Method ___
Screens Screen Type ___

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
						☐	☐
						☐	☐
						☐	☐

STATIC WATER LEVEL OR ARTESIAN PRESSURE:
18 ft. below ground Artesian pressure ___ lb.
Depth flow encountered ___ ft. Describe access port or control devices: ___

11. WELL TESTS:
☐ Pump ☐ Bailer ☐ Air ☐ Flowing Artesian

Yield gal./min.	Drawdown	Pumping Level	Time
100			1 Hr

Water Temp. ___ Bottom hole temp. ___
Water Quality test or comments: ___
Depth first Water Encounter ___

12. LITHOLOGIC LOG: (Describe repairs or abandonment)

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	W
8	0	2	Top Soil	
8	2	20	Gravel-Clay-Boulders	
6	20	25	Gravel-Clay-Boulders	
6	25	62	Gravel-Clay	X

RECEIVED
APR 02 1999
Department of Water Resources
Southern Region

Completed Depth 62 (Measurable)
Date: Started 03-24-99 Completed 03-24-99

13. DRILLER'S CERTIFICATION
I/We certify that all minimum well construction standards were complied with at the time the rig was removed.

Company Name Wood River Drilling & Pump Co. Inc. Contractor's License No. 7265
Firm Official Ross Smith Date 3-26-99
and
Driller or Operator ___
(Sign once if Firm Official & Operator)

EXHIBIT-12-57

FORWARD WHITE COPY TO WATER RESOURCES

USE TYPEWRITER OR BALL POINT PEN

State of Idaho
Department of Reclamation

WELL DRILLER'S REPORT

State law requires that this report be filed with the State Reclamation Engineer within 30 days after completion or abandonment of the well.

1. WELL OWNER

Name G. T. Nuttcomb

Address Rt 3 Twin Falls Idaho

Owner's Permit No.

2. NATURE OF WORK

☑ New well ☐ Deepened ☐ Replacement

☐ Abandoned (describe method of abandoning)

3. PROPOSED USE

☑ Domestic ☑ Irrigation ☐ Test

☐ Municipal ☐ Industrial ☐ Stock

4. METHOD DRILLED

☑ Cable ☐ Rotary ☐ Dug ☐ Other

5. WELL CONSTRUCTION

Diameter of hole 6 inches. Total depth 51 feet

Casing schedule: ☑ Steel ☐ Concrete

Thickness	Diameter	From	To
14 inches	6 inches	+1 feet	51 feet
inches	inches	feet	feet
inches	inches	feet	feet
inches	inches	feet	feet
inches	inches	feet	feet

Was a packer or seal used? ☐ Yes ☑ No

Perforated? ☐ Yes ☐ No

How perforated? ☐ Factory ☐ Knife ☐ Torch

Size of perforation inches by inches

Number		From	To
24	perforations	27 feet	45 feet
	perforations	feet	feet
	perforations	feet	feet

Well screen installed? ☐ Yes ☑ No

Manufacturer's name

Type Model No.

Diameter Slot size Set from feet to feet

Diameter Slot size Set from feet to feet

Gravel packed? ☐ Yes ☑ No Size of gravel

Placed from feet to feet

Surface seal? ☑ Yes ☐ No To what depth 18 feet

Material used in seal ☑ Cement grout ☐ Puddling clay

6. LOCATION OF WELL

Sketch map location must agree with written location.

N / W / E / S

County Blaine

NW ¼ Sec. 2 T. 10 N/S R. 17 E/W

7. WATER LEVEL

Static water level 8 feet below land surface

Flowing? ☐ Yes ☐ No G.P.M. flow

Temperature 46 °F. Quality

Artesian closed-in pressure p.s.i.

Controlled by ☐ Valve ☐ Cap ☐ Plug

8. WELL TEST DATA

☑ Pump ☐ Bailer ☐ Other

Discharge G.P.M.	Draw Down	Hours Pumped
50 GPM	34 ft	2

9. LITHOLOGIC LOG

Hole Diam.	Depth From	Depth To	Material	Water Yes	Water No
8	0	2	SURFACE		✓
8	2	6	Gravel, Small Boulders		✓
8	6	15	Water 14	✓	
			Small Boulders Gravel	✓	
8			& Clay	✓	
8	15	18	gravel Clay	✓	
6	18	30	Gravel & Clay	✓	
	30	36	Coarse Sand & Clay	✓	✓
	36	50	Layers of gravel & Clay	✓	✓

10. Work started 26 June finished 2 July 19 52

11. DRILLER'S CERTIFICATION

This well was drilled under my supervision and this report is true to the best of my knowledge.

Edwin A. Walker A000138

Driller's or Firm's Name Number

Address 2nd Edwin A. Walker Twin Falls

Signed By Date

RECEIVED
JUL 25 2005

EXHIBIT-12-58

USE TYPEWRITER OR BALLPOINT PEN

Idaho Department of Reclamation

WELL DRILLER'S REPORT

State law requires that this report be filed with the State Reclamation Engineer within 30 days after completion or abandonment of the well.

1. WELL OWNER

Name Charles Schuler

Address Ketchum Idaho

Owner's Permit No.

2. NATURE OF WORK

☑ New well ☐ Deepened ☑ Replacement

☐ Abandoned (describe method of abandoning)

3. PROPOSED USE

☑ Domestic ☐ Irrigation ☐ Test

☐ Municipal ☐ Industrial ☐ Stock

4. METHOD DRILLED

☑ Cable ☐ Rotary ☐ Dug ☐ Other

5. WELL CONSTRUCTION

Diameter of hole 6 inches Total depth 463 feet

Casing schedule: ☐ Steel ☐ Concrete

Thickness	Diameter	From	To
.250 inches	8 inches	5 feet	41½ feet
inches	inches	feet	feet
inches	inches	feet	feet
inches	inches	feet	feet
inches	inches	feet	feet

Was a packer or seal used? ☐ Yes ☑ No

Perforated? ☑ Yes ☐ No

How perforated? ☐ Factory ☑ Knife ☐ Torch

Size of perforation inches by inches

Number		From	To
52	perforations	38 feet	44 feet
	perforations	feet	feet
	perforations	feet	feet

Well screen installed? ☐ Yes ☑ No

Manufacturer's name

Type Model No.

Diameter Slot size Set from feet to feet

Diameter Slot size Set from feet to feet

Gravel packed? ☐ Yes ☑ No Size of gravel

Placed from feet to feet

Surface seal? ☑ Yes ☐ No To what depth feet

Material used in seal ☑ Cement grout ☐ Puddling clay

FURNISHED

6. LOCATION OF WELL

Sketch map location must agree with written location.

N

W E

S

County Blaine

Sec. 25 T. 5 S R. 18 E

7. WATER LEVEL

Static water level 8 feet below land surface

Flowing? ☐ Yes ☑ No G.P.M. flow

Temperature 46 ° F. Quality

Artesian closed-in pressure p.s.i.

Controlled by ☐ Valve ☐ Cap ☐ Plug

8. WELL TEST DATA

☐ Pump ☐ Bailer ☐ Other

Discharge G.P.M.	Draw Down	Hours Pumped
50	10	8

9. LITHOLOGIC LOG

Hole Diam.	Depth From	Depth To	Material	Water Yes	Water No
8	0	3	SURFACE		
	3	12	gravel sand cobbles		
			Rock		
	12	20	gravel sand		
	20	30	gravel sand clay		
	30	38			
	38	46	LAYERS gravel & Clay		

10. Work started 16 July finished 29 July 1969

11. DRILLER'S CERTIFICATION

This well was drilled under my supervision and this report is true to the best of my knowledge.

EUGENE O. WALKER

Driller's or Firm's Name

Number

Address

Signed by

Date

EXHIBIT - 12

USE TYPEWRITER OR BALL POINT PEN

State of Idaho
Department of Reclamation

WELL DRILLER'S REPORT

State law requires that this report be filed with the State Reclamation Engineer within 30 days after completion or abandonment of the well.

1. WELL OWNER

Name J T Nursecoach

Address Ketchum Idaho

Owner's Permit No.

2. NATURE OF WORK

☑ New well ☐ Deepened ☐ Replacement

☐ Abandoned (describe method of abandoning)

3. PROPOSED USE

☑ Domestic ☐ Irrigation ☐ Test

☐ Municipal ☐ Industrial ☐ Stock

4. METHOD DRILLED

☑ Cable ☐ Rotary ☐ Dug ☐ Other

5. WELL CONSTRUCTION

Diameter of hole 6 inches Total depth 44½ feet

Casing schedule: ☑ Steel ☐ Concrete

Thickness	Diameter	From	To
.250 inches	6 inches	1 feet	44½ feet
inches	inches	feet	feet
inches	inches	feet	feet
inches	inches	feet	feet
inches	inches	feet	feet

Was a packer or seal used? ☐ Yes ☑ No

Perforated? ☐ Yes ☑ No

How perforated? ☐ Factory ☐ Knife ☐ Torch

Size of perforation inches by inches

Number	From	To
perforations	feet	feet
perforations	feet	feet
perforations	feet	feet

Well screen installed? ☐ Yes ☑ No

Manufacturer's name

Type Model No.

Diameter Slot size Set from feet to feet

Diameter Slot size Set from feet to feet

Gravel packed? ☐ Yes ☐ No Size of gravel

Placed from feet to feet

Surface seal? ☑ Yes ☐ No To what depth To Water feet

Material used in seal ☑ Cement grout ☐ Puddling clay

6. LOCATION OF WELL

Sketch map location must agree with written location.

N

W E

S

County Blaine

NW ¼ Sec. T 5 N. R 18 E. BM

7. WATER LEVEL

Static water level 82 feet below land surface

Flowing? ☐ Yes ☑ No G.P.M. flow

Temperature 46 °F. Quality

Artesian closed-in pressure p.s.i.

Controlled by ☐ Valve ☐ Cap ☐ Plug

8. WELL TEST DATA

☑ Pump ☐ Bailer ☐ Other

Discharge G.P.M.	Draw Down	Hours Pumped
50	Light	3

9. LITHOLOGIC LOG

Hole Diam.	Depth From	Depth To	Material	Water Yes	Water No
6	0	4	SURFACE		
	4	9	gravel sand clay		
	9	15	gravel sand clay		
	15	22	gravel sand clay		
	22	30	gravel sand		
	30	40	gravel sand clay		
	40	44	gravel water		

10. Work started 10 July finished 22 July

11. DRILLER'S CERTIFICATION

This well was drilled under my supervision and this report is true to the best of my knowledge.

Eugene Walker A0001140

Driller's or Firm's Name Number

624 Pierce

Address

Signed by Eugene A Walker Date 12-4-91

MLC

EXHIBIT - 12-4-91 000050

USE TYPEWRITER OR BALL POINT PEN

State of Idaho
Department of Reclamation

WELL DRILLER'S REPORT

State law requires that this report be filed with the State Reclamation Engineer within 30 days after completion or abandonment of the well.

1. WELL OWNER

Name Walter W. Pickett

Address % POE Richards Company
Sunvalley Idaho

Owner's Permit No.

2. NATURE OF WORK

☑ New well ☐ Deepened ☐ Replacement

☐ Abandoned (describe method of abandoning)

3. PROPOSED USE

☑ Domestic ☐ Irrigation ☐ Test

☐ Municipal ☐ Industrial ☐ Stock

4. METHOD DRILLED

☐ Cable ☑ Rotary ☐ Dug ☐ Other

5. WELL CONSTRUCTION

Diameter of hole 6 inches Total depth 40 feet

Casing schedule: ☐ Steel ☐ Concrete

Thickness	Diameter	From	To
.250 inches	6 inches	+1 feet	38 feet
inches	inches	feet	feet
inches	inches	feet	feet
inches	inches	feet	feet
inches	inches	feet	feet

Was a packer or seal used? ☐ Yes ☐ No

Perforated? ☐ Yes ☐ No

How perforated? ☐ Factory ☐ Knife ☐ Torch

Size of perforation inches by inches

Number	From	To
perforations	feet	feet
perforations	feet	feet
perforations	feet	feet

Well screen installed? ☐ Yes ☐ No

Manufacturer's name

Type Model No.

Diameter Slot size Set from feet to feet

Diameter Slot size Set from feet to feet

Gravel packed? ☐ Yes ☐ No Size of gravel

Placed from feet to feet

Surface seal? ☑ Yes ☐ No To what depth 18 feet

Material used in seal ☑ Cement grout ☐ Puddling clay

6. LOCATION OF WELL

Sketch map location must agree with written location.

N

W E

S

County Blaine

NW NW Sec. 23 T. 3 ☐N/S R. 18 ☐E/W

7. WATER LEVEL

Static water level 124 feet below land surface

Flowing? ☐ Yes ☐ No G.P.M. flow

Temperature 46° F. Quality

Artesian closed-in pressure p.s.i.

Controlled by ☐ Valve ☐ Cap ☐ Plug

8. WELL TEST DATA

☐ Pump ☐ Bailer ☐ Other

Discharge G.P.M.	Draw Down	Hours Pumped
30	5	2

9. LITHOLOGIC LOG

Hole Diam.	Depth From	Depth To	Material	Water Yes	Water No
8	0	10	Boulders & gravel		✓
8	10	12	Gravel		
8	12	18	Gravel & Clay		
6	18	21			
		31	Trace Water		✓
6	31	32	Clay & gravel		✓
	32	37	Clay & Gravel Sand		✓
	37	40	Fine Gravel & Sand Some Clay		✓

10. Work started 4 Sept finished 6 Sept 70

11. DRILLER'S CERTIFICATION

This well was drilled under my supervision and this report is true to the best of my knowledge.

EUGENE W. WALKER A000141
Driller's or Firm's Name Number

Address

Signed By Eugene W Walker Date 9-10-70

180000 11-27-71

BALL POINT PEN

Department of Water Administration

WELL DRILLER'S REPORT

NOV 3 1972

State law requires that this report be filed with the State Reclamation Engineer within 30 days after completion or abandonment of the well.

Department of Water Administration

Southern District Office

1. WELL OWNER

Name Jack Hemingway

Address Ketchum

Owner's Permit No. _____

2. NATURE OF WORK

☑ New well ☐ Deepened ☐ Replacement

☐ Abandoned (describe method of abandoning)

_____

3. PROPOSED USE

☑ Domestic ☐ Irrigation ☐ Test

☐ Municipal ☐ Industrial ☐ Stock

4. METHOD DRILLED

☑ Cable ☐ Rotary ☐ Dug ☐ Other

5. WELL CONSTRUCTION

Diameter of hole 6 inches Total depth 41 feet

Casing schedule: ☐ Steel ☐ Concrete

Thickness	Diameter	From	To
[illegible] inches	6 inches	+1 feet	_____ feet
_____ inches	_____ inches	_____ feet	_____ feet
_____ inches	_____ inches	_____ feet	_____ feet
_____ inches	_____ inches	_____ feet	_____ feet
_____ inches	_____ inches	_____ feet	_____ feet

Was a packer or seal used? ☐ Yes ☑ No

Perforated? ☐ Yes ☑ No

How perforated? ☐ Factory ☐ Knife ☐ Torch

Size of perforation _____ inches by _____ inches

Number	From	To
_____ perforations	_____ feet	_____ feet
_____ perforations	_____ feet	_____ feet
_____ perforations	_____ feet	_____ feet

Well screen installed? ☐ Yes ☑ No

Manufacturer's name _____

Type _____ Model No. _____

Diameter ___ Slot size ___ Set from _____ feet to _____ feet

Diameter ___ Slot size ___ Set from _____ feet to _____ feet

Gravel packed? ☐ Yes ☐ No Size of gravel _____

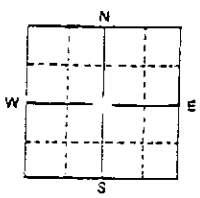
Placed from _____ feet to _____ feet

Surface seal? ☑ Yes ☐ No To what depth 15 feet

Material used in seal ☑ Cement grout ☐ Puddling clay

6. LOCATION OF WELL

Sketch map location must agree with written location.



County Blaine

NW ¼ NW ¼ Sec. 22, T. 5 N/S, R. 17 E/W

7. WATER LEVEL

Static water level 15 feet below land surface

Flowing? ☐ Yes ☑ No G.P.M. flow _____

Temperature 46° F. Quality _____

Artesian closed-in pressure _____ p.s.i.

Controlled by ☐ Valve ☐ Cap ☐ Plug

8. WELL TEST DATA

☐ Pump ☑ Bailer ☐ Other

Discharge G.P.M.	Draw Down	Hours Pumped
30	7+	1

9. LITHOLOGIC LOG

Hole Diam.	Depth From	Depth To	Material	Water Yes	Water No
8	0	7	Sandy [illegible]		✓
8	7	15	Clay [illegible]		✓
6	15	20	Gravel [illegible]	✓	
	20	34	Fine [illegible] Sand	✓	
	34	39	[illegible]		
	39	41	Gravel - sand & water	✓	

10.

Work started 27 Oct 72 finished 1 Nov 72

11. DRILLER'S CERTIFICATION

This well was drilled under my supervision and this report is true to the best of my knowledge.

Evan Walker A000142

Driller's or Firm's Name Number

[illegible] Twin Falls

Address

Signed By 7 Nov 1972 Date

USE ADDITIONAL SHEETS IF NECESSARY FORWARD THE WHITE, BLUE AND [illegible] COPIES

EXHIBIT 72-62

JUL 15 2004

USE TYPEWRITER OR BALL POINT PEN

State of Idaho
Department of Reclamation

WELL DRILLER'S REPORT

State law requires that this report be filed with the State Reclamation Engineer within 30 days after completion or abandonment of the well.

1. WELL OWNER

Name Charles Schuler

Address Kellogg Idaho

Owner's Permit No. _____

2. NATURE OF WORK

☒ New well ☐ Deepened ☐ Replacement

☐ Abandoned (describe method of abandoning)

_____

3. PROPOSED USE

☒ Domestic ☐ Irrigation ☐ Test

☐ Municipal ☐ Industrial ☐ Stock

4. METHOD DRILLED

☒ Cable ☐ Rotary ☐ Dug ☐ Other

5. WELL CONSTRUCTION

Diameter of hole 16 inches Total depth 40 feet

Casing schedule: ☐ Steel ☐ Concrete

Thickness	Diameter	From	To
.250 inches	8 inches	0 feet	40 feet
_____ inches	_____ inches	_____ feet	_____ feet
_____ inches	_____ inches	_____ feet	_____ feet
_____ inches	_____ inches	_____ feet	_____ feet
_____ inches	_____ inches	_____ feet	_____ feet

Was a packer or seal used? ☐ Yes ☒ No

Perforated? ☒ Yes ☐ No

How perforated? ☐ Factory ☒ Knife ☐ Torch

Size of perforation _____ inches by _____ inches

Number	From	To
12 perforations	30 feet	40 feet
_____ perforations	_____ feet	_____ feet
_____ perforations	_____ feet	_____ feet

Well screen installed? ☐ Yes ☒ No

Manufacturer's name _____

Type _____ Model No. _____

Diameter ___ Slot size ___ Set from _____ feet to _____ feet

Diameter ___ Slot size ___ Set from _____ feet to _____ feet

Gravel packed? ☐ Yes ☒ No Size of gravel _____

Placed from _____ feet to _____ feet

Surface seal? ☒ Yes ☐ No To what depth _____ feet

Material used in seal ☒ Cement grout ☐ Puddling clay

6. LOCATION OF WELL

Sketch map location must agree with written location.

N / W / E / S

County Shoshone

¼ ¼ ¼ Sec. 32 T. 48 N/S R. 2 E/W

7. WATER LEVEL

Static water level 5 feet below land surface

Flowing? ☐ Yes ☒ No G.P.M. flow _____

Temperature 46° F. Quality _____

Artesian closed-in pressure _____ p.s.i.

Controlled by ☐ Valve ☐ Cap ☐ Plug

8. WELL TEST DATA

☐ Pump ☐ Bailer ☐ Other

Discharge G.P.M.	Draw Down	Hours Pumped
4	10	2

9. LITHOLOGIC LOG

Hole Diam.	Depth From	Depth To	Material	Water Yes	Water No
16	0	3	Soil Fine		✓
	3	12	Gravel Boulders		✓
			Water		
	12		Gravel		✓
			Gravel Water		✓
	30		Gravel Water		✓
	37	40		✓	
	30	40	Water Gravel	✓	

10.

Work started 11 Dec. finished 27 Dec 19 3

11. DRILLER'S CERTIFICATION

This well was drilled under my supervision and this report is true to the best of my knowledge.

Finch Drilling Co. A000143

Driller's or Firm's Name Number

Address Kellogg Idaho

Signed By _____ Date 12-27-19 3

USE ADDITIONAL SHEETS IF NECESSARY

000083

MICROFILMED JUL 15 2004

EXHIBIT - 72-63

Form 238-7
9/82

Susan

11100 N Ash 726-46 — no permit filed as of 10/

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

WELL DRILLER'S REPORT

State law requires that this report be filed with the Director, Department of Water Resources within 30 days after the completion or abandonment of the well.

USE TYPEWRITER OR BALLPOINT PEN

1. WELL OWNER

Name Tim Johnson

Address Box 4860 Ketchum

Owner's Permit No. 37-89-S-005

2. NATURE OF WORK

☒ New well ☐ Deepened ☐ Replacement
☐ Abandoned (describe abandonment procedures such as materials, plug depths, etc. in lithologic log)

3. PROPOSED USE

☒ Domestic ☐ Irrigation ☐ Test ☐ Municipal
☐ Industrial ☐ Stock ☐ Waste Disposal or Injection
☐ Other _____ (specify type)

4. METHOD DRILLED

☒ Rotary ☐ Air ☐ Hydraulic ☐ Reverse rotary
☐ Cable ☐ Dug ☐ Other _____

5. WELL CONSTRUCTION

Casing schedule: ☒ Steel ☐ Concrete ☐ Other _____

Thickness	Diameter	From	To
.250 inches	6 inches +	1 feet	57 feet
_____ inches	_____ inches	_____ feet	_____ feet
_____ inches	_____ inches	_____ feet	_____ feet
_____ inches	_____ inches	_____ feet	_____ feet

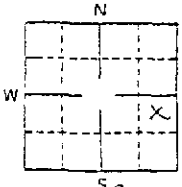
Was casing drive shoe used? ☒ Yes ☐ No
Was a packer or seal used? ☐ Yes ☒ No
Perforated? ☐ Yes ☒ No
How perforated? ☐ Factory ☐ Knife ☐ Torch
Size of perforation _____ inches by _____ inches

Number	From	To
_____ perforations	_____ feet	_____ feet
_____ perforations	_____ feet	_____ feet
_____ perforations	_____ feet	_____ feet

Well screen installed? ☐ Yes ☒ No
Manufacturer's name _____
Type _____ Model No. _____
Diameter ___ Slot size ___ Set from _____ feet to _____ feet
Diameter ___ Slot size ___ Set from _____ feet to _____ feet
Gravel packed? ☐ Yes ☒ No ☐ Size of gravel _____
Placed from _____ feet to _____ feet
Surface seal depth 20 Material used in seal: ☐ Cement grout
☒ Bentonite ☐ Puddling clay ☐ _____
Sealing procedure used: ☐ Slurry pit ☐ Temp. surface casing
☒ Overbore to seal depth
Method of joining casing: ☐ Threaded ☒ Welded ☐ Solvent Weld
☐ Cemented between strata
Describe access port _____

6. LOCATION OF WELL

Sketch map location must agree with written location.



Subdivision Name North Country Sub.
Lot No. 8 Block No. _____
County Blaine
NE SE ¼ Sec. 23 T. 5 (N/S) R. 17 (E/W)

7. WATER LEVEL

Static water level 42 feet below land surface.
Flowing? ☐ Yes ☒ No G.P.M. flow _____
Artesian closed-in pressure _____ p.s.i.
Controlled by: ☐ Valve ☐ Cap ☐ Plug
Temperature _____ °F. Quality good
Describe artesian or temperature zones below.

8. WELL TEST DATA

☐ Pump ☐ Bailer ☒ Air ☐ Other _____

Discharge G.P.M.	Pumping Level	Hours Pumped
50	50	1

9. LITHOLOGIC LOG

Bore Diam.	Depth From	Depth To	Material	Water Yes	Water No
8	0	18	Gravel and dirt		x
8	18	20	Boulders		x
6	20	50	Boulders		x
6	50	57	Gravel and water	x	

10. Work started July 7, 1988 finished July 10, 1988

11. DRILLERS CERTIFICATION

I/We certify that all minimum well construction standards were complied with at the time the rig was removed.

WOOD RIVER DRILLING AND PUMP
Firm Name BOX 1165 788-3163 Firm No. 265
HAILEY, IDAHO 83333
Address _____ Date July 14, 1988

Signed by (Firm Official) Ron Smith
and
(Operator) Tony Jones

EXHIBIT - 12 64

000084

Micro FILMED JUL 15 2005

1/78

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

USE TYPEWRITER O
BALLPOINT PEN

WELL DRILLER'S REPOR

State law requires that this report be filed with the Director, Department of Water Resources within 30 days after the completion or abandonment of the well.

1. WELL OWNER Resources
State Water Office
Name ROBERT G. STEVENS (N OF KETCHUM)
Address 220 1ST AVE E, KETCHUM IDA 83330
Owner's Permit No. _____

2. NATURE OF WORK
☒ New well ☐ Deepened ☐ Replacement
☐ Abandoned (describe method of abandoning) _____

3. PROPOSED USE
☐ Domestic ☒ Irrigation ☐ Test ☐ Municipal
☐ Industrial ☐ Stock ☐ Waste Disposal or Injection
☐ Other _____ (specify type)

4. METHOD DRILLED
☐ Rotary ☐ Air ☐ Hydraulic ☐ Reverse rotary
☒ Cable ☐ Dug ☐ Other _____

5. WELL CONSTRUCTION
Casing schedule: ☒ Steel ☐ Concrete ☐ Other _____

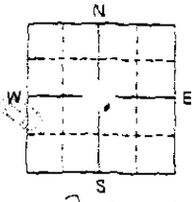
Thickness	Diameter	From	To
.250 inches	8 inches +	1 feet	60 feet
_____ inches	_____ inches	_____ feet	_____ feet
_____ inches	_____ inches	_____ feet	_____ feet
_____ inches	_____ inches	_____ feet	_____ feet

Was casing drive shoe used? ☒ Yes ☐ No
Was a packer or seal used? ☐ Yes ☒ No
Perforated? ☒ Yes ☐ No
How perforated? ☐ Factory ☒ Knife ☐ Torch
Size of perforation 3/8 inches by 4 inches

Number	From	To
175 perforations	40 feet	25 feet
_____ perforations	_____ feet	_____ feet
_____ perforations	_____ feet	_____ feet

Well screen installed? ☐ Yes ☒ No
Manufacturer's name _____
Type _____ Model No. _____
Diameter ___ Slot size ___ Set from _____ feet to _____ feet
Diameter ___ Slot size ___ Set from _____ feet to _____ feet
Gravel packed? ☐ Yes ☒ No ☐ Size of gravel _____
Placed from _____ feet to _____ feet
Surface seal depth 18 Material used in seal: ☐ Cement grout ☐ Puddling clay ☒ Well cuttings
Sealing procedure used: ☒ Slurry pit ☐ Temp. surface casing ☐ Overbore to seal depth
Method of joining casing: ☐ Threaded ☒ Welded ☐ Solvent Weld ☐ Cemented between strata
Describe access port _____

6. LOCATION OF WELL
Sketch map location must agree with written location.



Subdivision Name _____
Lot No. _____ Block No. _____
County BLAINE
Sec. 22 T. 5 N R. 17 E

7. WATER LEVEL
Static water level 15 feet below land surface.
Flowing? ☐ Yes ☒ No G.P.M. flow _____
Artesian closed-in pressure _____ p.s.i.
Controlled by: ☐ Valve ☐ Cap ☐ Plug
Temperature ____ °F. Quality _____

8. WELL TEST DATA
☐ Pump ☒ Bailer ☐ Air ☐ Other _____

Discharge G.P.M.	Pumping Level	Hours Pumped
50	15	2

9. LITHOLOGIC LOG

Hole Diam.	Depth From	Depth To	Material	Water Yes	Water No
8"	0	2	LARGE GRAVEL & BLACK SOIL		
"	2	5	LARGE GRAVEL		
"	5	19	BOULDERS & LARGE GRAVEL	X	
"	19	29	WHITE CEMENT GRAVEL	X	
"	29	31	COARSE GREY SAND	X	
"	31	32	GREEN CEMENT GRAVEL	X	
"	32	39	BROWN SOFT CLAY		
"	39	54	GRAVEL (MAIN WATER)	X	
"	54	56	MEDIUM SIZE BOULDERS & GRAVEL	X	
7 7/8"	56	71	GRAVEL & COARSE SAND	X	
"	71	80	COARSE SAND & FINE GRAVEL	X	

10. Work started 12 MAY 80 finished 18 MAY 80

11. DRILLERS CERTIFICATION
I/We certify that all minimum well construction standards were complied with at the time the rig was removed.
RAY ADESSLER
Firm Name WELL DRILLING Firm No. 262
124 5TH AVE E. A000145
Address GOODING, ID 83330 Date 21 MAY 80
Signed by (Firm Official) _____
and
(Operator) _____

EXHIBIT - 12-65

RECEIVED
JUL 15 2004
WATER RESOURCES

000283

1/78

STATE OF IDAH
DEPARTMENT OF WATER RESOURCES

BALLPOINT PEN

WELL DRILLER'S REPOR

State law requires that this report be filed with the Director, Department of Water Resources within 30 days after the completion or abandonment of the well.

1. WELL OWNER

Name P G O Development (Crocker)

Address P. O. Box 1582 Ketchum, ID 83340

Owner's Permit No. _____

2. NATURE OF WORK

☒ New well ☐ Deepened ☐ Replacement
☐ Abandoned (describe method of abandoning) _____

3. PROPOSED USE

☒ Domestic ☒ Irrigation ☐ Test ☐ Municipal
☐ Industrial ☐ Stock ☐ Waste Disposal or Injection
☐ Other _____ (specify type)

4. METHOD DRILLED

☒ Rotary ☒ Air ☐ Hydraulic ☐ Reverse rotary
☐ Cable ☐ Dug ☐ Other _____

5. WELL CONSTRUCTION

Casing schedule: ☒ Steel ☐ Concrete ☐ Other _____

Thickness		Diameter		From		To	
.250	inches	6 5/8	inches +	1	feet	61	feet
	inches		inches		feet		feet
	inches		inches		feet		feet
	inches		inches		feet		feet

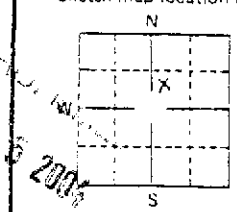
Was casing drive shoe used? ☒ Yes ☐ No
Was a packer or seal used? ☐ Yes ☒ No
Perforated? ☒ Yes ☐ No
How perforated? ☐ Factory ☐ Knife ☒ Torch
Size of perforation 1/8 inches by 3 inches

Number		From		To	
40	perforations	51	feet	61	feet
	perforations		feet		feet
	perforations		feet		feet

Well screen installed? ☐ Yes ☒ No
Manufacturer's name _____
Type _____ Model No. _____
Diameter ___ Slot size ___ Set from _____ feet to _____ feet
Diameter ___ Slot size ___ Set from _____ feet to _____ feet
Gravel packed? ☐ Yes ☒ No ☐ Size of gravel _____
Placed from _____ feet to _____ feet
Surface seal depth 18 Material used in seal: ☐ Cement grout ☒ Puddling clay ☐ Well cuttings
Sealing procedure used: ☐ Slurry pit ☐ Temp. surface casing ☒ Overbore to seal depth
Method of joining casing: ☐ Threaded ☒ Welded ☐ Solvent Weld ☐ Cemented between strata
Describe access port _____

6. LOCATION OF WELL

Sketch map location must agree with written location.



Subdivision Name _____
Lot No. _____ Block No. _____
County Blaine
NW ¼ NE ¼ Sec. 2 T 5 N/S R. 17 E/W

7. WATER LEVEL

Static water level 19½ feet below land surface.
Flowing? ☐ Yes ☒ No G.P.M. flow _____
Artesian closed-in pressure _____ p.s.i.
Controlled by: ☐ Valve ☐ Cap ☐ Plug
Temperature 46 °F. Quality _____

8. WELL TEST DATA

☐ Pump ☐ Bailer ☒ Air ☐ Other _____

Discharge G.P.M.	Pumping Level	Hours Pumped
50		1

9. LITHOLOGIC LOG

Hole Diam.	Depth From	Depth To	Material	Water Yes	Water No
6	0	4	Surface		
	4	17	Boulders, sand & clay		
	17	27	Clay, gravel & sand		
	27	28½	Gravel & sand	X	
	28½	38	Clay & gravel		
	38	40	Gravel, sand & clay	T	
	40	45	Clay, sand & small gravel		
	45	52	Gravel & clay	X	
	52	61	Gravel & sand	X	

RECEIVED
SEP 13 1982
Department of Water Resources
Southern District Office

10.

Work started 8/23/82 finished 8/24/82

11. DRILLERS CERTIFICATION

I/We certify that all minimum well construction standards were complied with at the time the rig was removed.

Firm Name Walker Water Systems, Inc. Firm No. 15
Address 624 Pierce Street Twin Falls, Idaho 83301 Date 8/27/82
Signed by (Firm Official) Edward B Walker
and
(Operator) Edward B Walker

A0000146

EXHIBIT - 12-66

178

DEPARTMENT OF WATER RESOURCES

WELL DRILLER'S REPORT

State law requires that this report be filed with the Director, Department of Water Resources within 30 days after the completion or abandonment of the well.

USE BALLPOINT PEN

RECEIVED

AUG 10 1983

Department of Water Resources
Southern District Office

1. WELL OWNER

Name ROBERT POTTERS

Address P.O. Box 1589, SUN VALLEY, IDA 83353

Owner's Permit No. _____

2. NATURE OF WORK

☒ New well ☐ Deepened ☐ Replacement
☐ Abandoned (describe method of abandoning) _____

3. PROPOSED USE

☒ Domestic ☒ Irrigation ☐ Test ☐ Municipal
☐ Industrial ☐ Stock ☐ Waste Disposal or Injection
☐ Other _____ (specify type)

4. METHOD DRILLED

☐ Rotary ☐ Air ☐ Hydraulic ☐ Reverse rotary
☒ Cable ☐ Dug ☐ Other _____

5. WELL CONSTRUCTION

Casing schedule: ☒ Steel ☐ Concrete ☐ Other _____

Thickness	Diameter	From	To
.250 inches	6 inches	+ 1 feet	49 feet
_____ inches	_____ inches	_____ feet	_____ feet
_____ inches	_____ inches	_____ feet	_____ feet
_____ inches	_____ inches	_____ feet	_____ feet

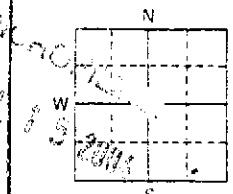
Was casing drive shoe used? ☒ Yes ☐ No
Was a packer or seal used? ☐ Yes ☒ No
Perforated? ☐ Yes ☒ No
How perforated? ☐ Factory ☐ Knife ☐ Torch
Size of perforation _____ inches by _____ inches

Number	From	To
_____ perforations	_____ feet	_____ feet
_____ perforations	_____ feet	_____ feet
_____ perforations	_____ feet	_____ feet

Well screen installed? ☐ Yes ☒ No
Manufacturer's name _____
Type _____ Model No. _____
Diameter ___ Slot size ___ Set from _____ feet to _____ feet
Diameter ___ Slot size ___ Set from _____ feet to _____ feet
Gravel packed? ☐ Yes ☒ No ☐ Size of gravel _____
Placed from _____ feet to _____ feet
Surface seal depth 18 Material used in seal: ☐ Cement grout ☒ Puddling clay ☐ Well cuttings
Sealing procedure used: ☒ Slurry pit ☐ Temp. surface casing ☐ Overbore to seal depth
Method of joining casing: ☐ Threaded ☒ Welded ☐ Solvent Weld ☐ Cemented between strata
Describe access port _____

6. LOCATION OF WELL

Sketch map location must agree with written location.



Subdivision Name _____

Lot No. 4 Block No. _____

County BLAINE

SE ¼ SE ¼ Sec. 23 T. 5 N/S R. 17 E/W

7. WATER LEVEL

Static water level 3 feet below land surface
Flowing? ☐ Yes ☒ No G.P.M. flow _____
Artesian closed-in pressure _____ p.s.i.
Controlled by: ☐ Valve ☐ Cap ☐ Plug
Temperature ____ °F. Quality _____

8. WELL TEST DATA

☐ Pump ☒ Bailer ☐ Air ☐ Other _____

Discharge G.P.M.	Pumping Level	Hours Pumped
5	3	1

9. LITHOLOGIC LOG

Hole Diam.	Depth From	Depth To	Material	Water Yes	Water No
6"	0	3	BLACK GRAVEL & SANDY SOIL		
"	3	15	LARGE BOULDERS & GRAVEL	X	
"	15	19	GRAY SANDY CLAY	X	
"	19	28	BROWN SAND & CLAY	X	
"	28	45	COARSE GRAVEL	X	
"	45	49	PEA GRAVEL	X	
			NOTE: BEDROCK AT 53'		
			PIPE PULLED BACK TO 49'		

10.

Work started 24 MAY 83 finished 25 MAY 83

11. DRILLERS CERTIFICATION

I/We certify that all minimum well construction standards were complied with at the time the rig was removed.

Firm Name ROY ROESSLER WELL DRILLING Firm No. 26-2

Address 129 5TH AVE E. GOODING, IDA. 83330 Date 26 JULY 83

Signed by (Firm Official) Roy Roessler

and

(Operator) Roy Roessler

EXHIBIT 12-67

A000147

000087

9/82

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

USE TYPEWRITER OR BALLPOINT PEN

WELL DRILLER'S REPO[illegible]

State law requires that this report be filed with the Director, Department of Water Resources within 30 days after the completion or abandonment of the well.

1. WELL OWNER

Name: Jim Welch
% Wes Nash, Contractor
P. O. Box 797
Address: Ketchum, ID 83340

Owner's Permit No. _____

2. NATURE OF WORK

☒ New well ☐ Deepened ☐ Replacement
☐ Abandoned (describe abandonment procedures such as materials, plug depths, etc. in lithologic log)

3. PROPOSED USE

☒ Domestic ☐ Irrigation ☐ Test ☐ Municipal
☐ Industrial ☐ Stock ☐ Waste Disposal or Injection
☒ Other Dogs (specify type)

4. METHOD DRILLED

☒ Rotary ☒ Air ☐ Hydraulic ☐ Reverse rotary
☐ Cable ☐ Dug ☐ Other _____

5. WELL CONSTRUCTION

Casing schedule: ☒ Steel ☐ Concrete ☐ Other _____

Thickness	Diameter	From	To
.250 inches	6 5/8 inches	+ 1 feet	88 feet
_____ inches	_____ inches	_____ feet	_____ feet
_____ inches	_____ inches	_____ feet	_____ feet
_____ inches	_____ inches	_____ feet	_____ feet

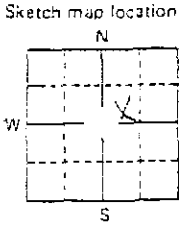
Was casing drive shoe used? ☒ Yes ☐ No
Was a packer or seal used? ☐ Yes ☒ No
Perforated? ☒ Yes ☐ No
How perforated? ☐ Factory ☒ Knife ☐ Torch
Size of perforation 1/8 inches by 1½ inches

Number		From	To
758	perforations	48 feet	85 feet
_____	perforations	_____ feet	_____ feet
_____	perforations	_____ feet	_____ feet

Well screen installed? ☐ Yes ☒ No
Manufacturer's name _____
Type _____ Model No. _____
Diameter ___ Slot size ___ Set from _____ feet to _____ feet
Diameter ___ Slot size ___ Set from _____ feet to _____ feet
Gravel packed? ☐ Yes ☒ No ☐ Size of gravel _____
Placed from _____ feet to _____ feet
Surface seal depth 19 Material used in seal: ☐ Cement grout
☒ Bentonite ☐ Puddling clay ☐ _____
Sealing procedure used: ☐ Slurry pit ☐ Temp. surface casing
☒ Overbore to seal depth
Method of joining casing: ☐ Threaded ☒ Welded ☐ Solvent Weld
☐ Cemented between strata
Describe access port well cap

6. LOCATION OF WELL

Sketch map location must agree with written location.



Subdivision Name _____
North Country Estates
Lot No. _____ Block No. _____
County Blaine
SW ¼ NE ¼ Sec. 23 T. 5 N. R. 17 E.

7. WATER LEVEL

Static water level 45'9" feet below land surface.
Flowing? ☐ Yes ☒ No G.P.M. flow _____
Artesian closed-in pressure _____ p.s.i.
Controlled by: ☐ Valve ☐ Cap ☐ Plug
Temperature 46 °F. Quality Good
Describe artesian or temperature zones below.

8. WELL TEST DATA

☐ Pump ☐ Bailer ☒ Air ☐ Other _____

Discharge G.P.M.	Pumping Level	Hours Pumped
30-35		1

9. LITHOLOGIC LOG

Bore Diam.	Depth From	Depth To	Material	Water Yes	Water No
8	0	4	Surface dirt & small gravel		
	4	14	Boulders & clay		
	14	19	Clay & gravel		
6	19	46	Clay & gravel		
	46	52	Gravel & sand	T	
	52	70	Big gravel & clay		
	70	88	Gravel & clay	X	

RECEIVED
JUN 16 1987
Department of Water Resources

10. Work started 5/7/87 finished 5/11/87

11. DRILLERS CERTIFICATION

I/We certify that all minimum well construction standards were complied with at the time the rig was removed.

Walker Water Systems, Inc.
Firm Name 624 Pierce Street Firm No. 15
Twin Falls, Idaho 83301
Address _____ Date 6/10/87
Signed by (Firm Official) Fred Walker
and
(Operator) Fred Walker

MICRO
JUL 15 20

EXHIBIT - 12-68

USE TYPEWRITER OR BALL POINT PEN

Department of Water Resources

WELL DRILLER'S REPORT

State law requires that this report be filed with the Director, Department of Water Resources within 30 days after the completion or abandonment of the well.

1. WELL OWNER

Name Carl Fraker

Address Ketchum, Idaho

Owner's Permit No. _____

2. NATURE OF WORK

☒ New well ☐ Deepened ☐ Replacement

☐ Abandoned (describe method of abandoning)

_____

3. PROPOSED USE

☒ Domestic ☐ Irrigation ☐ Test ☐ Other (specify type)

☐ Municipal ☐ Industrial ☐ Stock ☐ Waste Disposal or Injection

4. METHOD DRILLED

☒ Cable ☐ Rotary ☐ Dug ☐ Other

5. WELL CONSTRUCTION

Diameter of hole 6 inches Total depth 68 feet

Casing schedule: ☒ Steel ☐ Concrete

Thickness	Diameter	From	To
.250 inches	6 inches	+ 1 feet	68 feet
_____ inches	_____ inches	_____ feet	_____ feet
_____ inches	_____ inches	_____ feet	_____ feet
_____ inches	_____ inches	_____ feet	_____ feet
_____ inches	_____ inches	_____ feet	_____ feet

Was casing drive shoe used? ☒ Yes ☐ No

Was a packer or seal used? ☐ Yes ☒ No

Perforated? ☐ Yes ☐ No

How perforated? ☐ Factory ☐ Knife ☐ Torch

Size of perforation _____ inches by _____ inches

Number	From	To
_____ perforations	_____ feet	_____ feet
_____ perforations	_____ feet	_____ feet
_____ perforations	_____ feet	_____ feet

Well screen installed? ☐ Yes ☒ No

Manufacturer's name _____

Type _____ Model No. _____

Diameter ___ Slot size ___ Set from _____ feet to _____ feet

Diameter ___ Slot size ___ Set from _____ feet to _____ feet

Gravel packed? ☐ Yes ☒ No Size of gravel _____

Placed from _____ feet to _____ feet

Surface seal depth 18' Material used in seal ☐ Cement grout ☒ Puddling clay ☐ Well cuttings

Seating procedure used ☐ Slurry pit ☒ Temporary surface casing ☐ Overburden to seal depth

6. LOCATION OF WELL

Sketch map location must agree with written location. (37)

N

W E

S

Subdivision Name _____

Lot No. _____ Block No. _____

County Blaine

NE ¼ NE ¼ Sec. 23 T. 5 ☐N ☒S R. 17 ☐E ☒W

7. WATER LEVEL

Static water level 29 feet below land surface

Flowing? ☐ Yes ☒ No G.P.M. flow _____

Temperature _____° F. Quality Good

Artesian closed-in pressure _____ p.s.i.

Controlled by ☐ Valve ☐ Cap ☐ Plug

8. WELL TEST DATA

☐ Pump ☒ Bailer ☐ Other

Discharge G.P.M.	Draw Down	Hours Pumped
36	12'	1

9. LITHOLOGIC LOG

Hole Diam.	Depth From	Depth To	Material	Water Yes	Water No
8"	0	5	Top soil and gravel		X
8"	5	18	Gravel set in clay		X
6"	18	35	Gravel set in clay		X
6"	35	45	Gravel and clay	X	
6"	45	49	Gravel and clay		X
6"	49	68	Gravel and clay	X	

10.

Work started 5/13/77 finished 5/17/77

11. DRILLERS CERTIFICATION

Firm Name Ken Smith Well Drilling Firm No. 265

Address Box 1165 Hailey, Idaho Date 5/23/77

A000149

Signed by (Firm Official) Ken Smith

and

(Operator) _____

EXHIBIT - 12-69

MAY 19 1977

TYPEWRITER OR BALL POINT PEN

Department of Water Administration

RECEIVED

DEC 2 1975

Southern District Office

WELL DRILLER'S REPORT

State law requires that this report be filed with the Director, Department of Water Administration within 30 days after the completion or abandonment of the well.

1. WELL OWNER

Name Sid Cook

Address North Fork Ketchum, Idaho

Owner's Permit No. _____

2. NATURE OF WORK

☒ New well ☐ Deepened ☐ Replacement

☐ Abandoned (describe method of abandoning)

_____

3. PROPOSED USE

☒ Domestic ☐ Irrigation ☐ Test ☐ Other (specify type)

☐ Municipal ☐ Industrial ☐ Stock ☐ Waste Disposal or Injection

4. METHOD DRILLED

☒ Cable ☐ Rotary ☐ Dug ☐ Other

5. WELL CONSTRUCTION

Diameter of hole 8 inches Total depth 39 feet

Casing schedule: ☒ Steel ☐ Concrete

Thickness	Diameter	From	To
.288 inches	8 inches	+ 1 feet	39 feet
_____ inches	_____ inches	_____ feet	_____ feet
_____ inches	_____ inches	_____ feet	_____ feet
_____ inches	_____ inches	_____ feet	_____ feet
_____ inches	_____ inches	_____ feet	_____ feet

Was a packer or seal used? ☐ Yes ☒ No

Perforated? ☐ Yes ☒ No

How perforated? ☐ Factory ☐ Knife ☐ Torch

Size of perforation _____ inches by _____ inches

Number		From	To
_____	perforations	_____ feet	_____ feet
_____	perforations	_____ feet	_____ feet
_____	perforations	_____ feet	_____ feet

Well screen installed? ☐ Yes ☒ No

Manufacturer's name _____

Type _____ Model No. _____

Diameter __ Slot size __ Set from _____ feet to _____ feet

Diameter __ Slot size __ Set from _____ feet to _____ feet

Gravel packed? ☐ Yes ☒ No Size of gravel _____

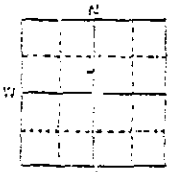
Placed from _____ feet to _____ feet

Surface seal depth 13' Material used in seal ☐ Cement grout ☒ Puddling clay ☐ Well cuttings

Sealing procedure used ☐ Slurry pit ☒ Temporary surface casing ☐ Overburden to seal coat

6. LOCATION OF WELL

Sketch map location must agree with written location.



Subdivision Name _____

Lot No. _____ Block No. _____

County Blaine

SE ¼ NW ¼ Sec. 23 T 5N N/S R 17E E/W

USE ADDITIONAL SHEETS IF NECESSARY

7. WATER LEVEL

Static water level 11 feet below land surface

Flowing? ☐ Yes ☒ No G.P.M. flow _____

Temperature _____ ° F. Quality Good

Artesian closed-in pressure _____ p.s.i.

Controlled by ☐ Valve ☐ Cap ☐ Plug

8. WELL TEST DATA

☐ Pump ☒ Bailer ☐ Other

Discharge G.P.M.	Draw Down	Hours Pumped
50	10'	1

9. LITHOLOGIC LOG

Hole Diam.	Depth From	Depth To	Material	Water Yes	Water No
10"	1	13	Top soil		X
8"	13	22	Gravel set in clay		X
8"	22	30	Gravel set in clay		X
8"	30	39	Water gravel	X	

10. Work started 6/20/75 finished 10/1/75

11. DRILLERS CERTIFICATION

Firm Name Ben Smith Well Drilling Firm No. 215

Address Box 1145 Hailey, Idaho Dat. 12/12/75

Signed by (Firm Official) _____

and A000150

(Operator) _____

FORWARD THE WHITE COPY TO THE DEPARTMENT

Received DEC 15 2000

EXHIBIT - 12-70

TYPEWRITER OR BALL POINT PEN

Department of Water Resources

WELL DRILLER'S REPORT

State law requires that this report be filed with the Director, Department of Water Resources within 30 days after the completion or abandonment of the well.

1. WELL OWNER

Name Loomis Contsruction

Address Ketchum, Idaho

Owner's Permit No. _____

2. NATURE OF WORK

☒ New well ☐ Deepened ☐ Replacement

☐ Abandoned (describe method of abandoning)

3. PROPOSED USE

☒ Domestic ☐ Irrigation ☐ Test ☐ Other (specify type)

☐ Municipal ☐ Industrial ☐ Stock ☐ Waste Disposal or Injection

4. METHOD DRILLED

☒ Cable ☐ Rotary ☐ Dug ☐ Other

5. WELL CONSTRUCTION

Diameter of hole 6 inches Total depth 64 feet

Casing schedule: ☒ Steel ☐ Concrete

Thickness	Diameter	From	To
.250 inches	6 inches	1 feet	64 feet
_____ inches	_____ inches	_____ feet	_____ feet
_____ inches	_____ inches	_____ feet	_____ feet
_____ inches	_____ inches	_____ feet	_____ feet
_____ inches	_____ inches	_____ feet	_____ feet

Was casing drive shoe used? ☒ Yes ☐ No

Was a packer or seal used? ☐ Yes ☒ No

Perforated? ☐ Yes ☒ No

How perforated? ☐ Factory ☐ Knife ☐ Torch

Size of perforation _____ inches by _____ inches

Number	From	To
_____ perforations	_____ feet	_____ feet
_____ perforations	_____ feet	_____ feet
_____ perforations	_____ feet	_____ feet

Well screen installed? ☐ Yes ☒ No

Manufacturer's name _____

Type _____ Model No. _____

Diameter ___ Slot size ___ Set from _____ feet to _____ feet

Diameter ___ Slot size ___ Set from _____ feet to _____ feet

Gravel packed? ☐ Yes ☒ No Size of gravel _____

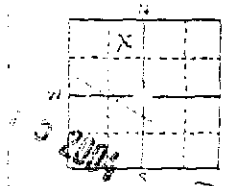
Placed from _____ feet to _____ feet

Surface seal depth 18' Material used in seal ☐ Cement grout ☒ Puddling clay ☐ Well cuttings

Sealing procedure used ☐ Slurry pit ☒ Temporary surface casing ☐ Overbore to seal depth

6. LOCATION OF WELL

Sketch map location must agree with written location. (37)



Subdivision Name _____

Lot No. _____ Block No. _____

County Blaine

NE ¼ NW ¼ Sec. 23 T. 5 ☐ N. ☐ S. R. 17 ☐ E. ☐ W.

7. WATER LEVEL

Static water level 30 feet below land surface

Flowing? ☐ Yes ☒ No G.P.M. flow _____

Temperature _____ ° F. Quality Good

Artesian closed-in pressure _____ p.s.i.

Controlled by Valve ☐ Cap ☐ Plug

8. WELL TEST DATA

☐ Pump ☒ Bailer ☐ Other

Discharge G.P.M.	Draw Down	Hours Pumped
35	2'	1

9. LITHOLOGIC LOG

Hole Diam.	Depth From	Depth To	Material	Water Yes	Water No
8"	0	5	Top soil and gravel		X
8"	5	18	Gravel set in clay		X
6"	18	45	Gravel set in clay	X	
6"	45	64	Gravel and clay	X	

10.

Work started 5/17/77 finished 5/18/77

11. DRILLERS CERTIFICATION

Firm Name Ken Smith Well Drilling Firm No. 265 A000151

Address Box 1165 Hailey, Idaho Date 5/23/77

Signed by (Firm Official) Ken Smith

and

(Operator) _____

EXHIBIT - 12-71

9/82

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

WELL DRILLER'S REPO

USE TYPEWRITER OR BALLPOINT PEN

RECEIVED

State law requires that this report be filed with the Director, Department of Water Resources within 30 days after the completion or abandonment of the well.

JUL 1 1988

Department of Water Resources
Southern Region Office

1. WELL OWNER

Name Clearence Hedrick

Address Eagle Creek

Owner's Permit No. 37-88-S-611 OT MS

2. NATURE OF WORK

☒ New well ☐ Deepened ☐ Replacement
☐ Abandoned (describe abandonment procedures such as materials, plug depths, etc. in lithologic log)

3. PROPOSED USE

☒ Domestic ☐ Irrigation ☐ Test ☐ Municipal
☐ Industrial ☐ Stock ☐ Waste Disposal or Injection
☐ Other _____ (specify type)

4. METHOD DRILLED

☒ Rotary ☐ Air ☐ Hydraulic ☐ Reverse rotary
☐ Cable ☐ Dug ☐ Other _____

5. WELL CONSTRUCTION

Casing schedule: ☒ Steel ☐ Concrete ☐ Other _____

Thickness	Diameter		From	To
.250 inches	6 inches	+	1 feet	57 feet
_____ inches	_____ inches		_____ feet	_____ feet
_____ inches	_____ inches		_____ feet	_____ feet
_____ inches	_____ inches		_____ feet	_____ feet

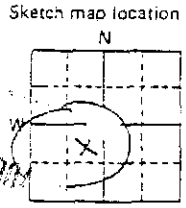
Was casing drive shoe used? ☒ Yes ☐ No
Was a packer or seal used? ☐ Yes ☒ No
Perforated? ☐ Yes ☒ No
How perforated? ☐ Factory ☐ Knife ☐ Torch
Size of perforation _____ inches by _____ inches

Number		From	To
_____	perforations	_____ feet	_____ feet
_____	perforations	_____ feet	_____ feet
_____	perforations	_____ feet	_____ feet

Well screen installed? ☐ Yes ☒ No
Manufacturer's name _____
Type _____ Model No. _____
Diameter ___ Slot size ___ Set from _____ feet to _____ feet
Diameter ___ Slot size ___ Set from _____ feet to _____ feet
Gravel packed? ☐ Yes ☒ No ☐ Size of gravel _____
Placed from _____ feet to _____ feet
Surface seal depth 20 Material used in seal: ☐ Cement grout
☒ Bentonite ☐ Puddling clay ☐ _____
Sealing procedure used: ☐ Slurry pit ☐ Temp. surface casing
☒ Overbore to seal depth
Method of joining casing: ☐ Threaded ☒ Welded ☐ Solvent Weld
☐ Cemented between strata
Describe access port _____

6. LOCATION OF WELL

Sketch map location must agree with written location.



Subdivision Name _____
Lot No. _____ Block No. _____
County Blaine
NE ¼ SW ¼ Sec. 23 T. 5 (N/S, R. 17 E W.

7. WATER LEVEL

Static water level 24 feet below land surface
Flowing? ☐ Yes ☒ No G.P.M. flow _____
Artesian closed-in pressure _____ p.s.i.
Controlled by: ☐ Valve ☐ Cap ☐ Plug
Temperature _____ °F. Quality good
Describe artesian or temperature zones below.

8. WELL TEST DATA

☐ Pump ☐ Bailer ☒ Air ☐ Other _____

Discharge G.P.M.	Pumping Level	Hours Pumped
60	50	1

9. LITHOLOGIC LOG

Bore Diam.	Depth From	Depth To	Material	Water Yes	Water No
8	0	3	Top soil		x
8	3	20	River rock set in dirt		x
6	20	50	Gravel set in clay		x
6	50	57	Gravel and water	x	

RECEIVED
JUL 1 1988
Department of Water Resources
Southern Region Office

10. Work started May 2, 1988 finished May 3, 1988

11. DRILLERS CERTIFICATION

I/We certify that all minimum well construction standards were complied with at the time the rig was removed.

Firm Name _____ Firm No. 265
Address _____ Date 6/30/88
Signed by (Firm Official) Ken Smith
and
(Operator) Gary Jones

USE ADDITIONAL SHEETS IF NECESSARY — FORWARD THE WHITE COPY TO THE DEPARTMENT

EXHIBIT 12-72

410-01-2000 EAGLE CREEK
T, 5 N – R. 17 E – Section 24

MICROFILMED
JUL 15 2004

EXHIBIT - 12-73

WELL DRILLER'S REPORT

State law requires that this report be filed with the Director, Department of Water Resources within 30 days after the completion or abandonment of the well.

1. WELL OWNER

Name Willard Van Ert

Address Box 2529 Ketchum, Id. 83340

Owner's Permit No. 37-89-S-097

2. NATURE OF WORK

☒ New well ☐ Deepened ☐ Replacement
☐ Abandoned (describe abandonment procedures such as materials, plug depths, etc. in lithologic log)

3. PROPOSED USE

☒ Domestic ☐ Irrigation ☐ Test ☐ Municipal
☐ Industrial ☐ Stock ☐ Waste Disposal or Injection
☐ Other _____ (specify type)

4. METHOD DRILLED

☒ Rotary ☐ Air ☐ Hydraulic ☐ Reverse rotary
☐ Cable ☐ Dug ☐ Other _____

5. WELL CONSTRUCTION

Casing schedule: ☒ Steel ☐ Concrete ☐ Other _____

Thickness	Diameter	From	To
.250 inches	6 inches +	1 feet	85 feet
.250 inches	5od inches	80 feet	120 feet
_____ inches	_____ inches	_____ feet	_____ feet
_____ inches	_____ inches	_____ feet	_____ feet

Was casing drive shoe used? ☒ Yes ☐ No
Was a packer or seal used? ☐ Yes ☒ No
Perforated? ☒ Yes ☐ No
How perforated? ☐ Factory ☐ Knife ☐ Torch
Size of perforation _____ inches by _____ inches

Number	From	To
_____ perforations	100 feet	120 feet
_____ perforations	_____ feet	_____ feet
_____ perforations	_____ feet	_____ feet

Well screen installed? ☐ Yes ☒ No
Manufacturer's name _____
Type _____ Model No. _____
Diameter ___ Slot size ___ Set from _____ feet to _____ feet
Diameter ___ Slot size ___ Set from _____ feet to _____ feet
Gravel packed? ☐ Yes ☒ No ☐ Size of gravel _____
Placed from _____ feet to _____ feet
Surface seal depth 20 Material used in seal: ☐ Cement grout
☒ Bentonite ☐ Puddling clay ☐ _____
Sealing procedure used: ☐ Slurry pit ☐ Temp. surface casing
☒ Overbore to seal depth
Method of joining casing: ☐ Threaded ☒ Welded ☐ Solvent Weld
☐ Cemented between strata
Describe access port _____

6. LOCATION OF WELL

Sketch map location must agree with written location.

N / W / E / S

Subdivision Name STONEGATE SUB
Lot No. 9 Block No. _____
County BLAINE
SW ¼ SW ¼ Sec. 24 T. 5 ☐N ☐S, R. 17 ☐E ☐W

7. WATER LEVEL

Static water level _____ feet below land surface.
Flowing? ☐ Yes ☒ No G.P.M. flow _____
Artesian closed-in pressure _____ p.s.i.
Controlled by: ☐ Valve ☐ Cap ☐ Plug
Temperature ____ °F. Quality good
Describe artesian or temperature zones below.

8. WELL TEST DATA

☒ Pump ☐ Bailer ☐ Air ☐ Other _____

Discharge G.P.M.	Pumping Level	Hours Pumped
10	120	1

9. LITHOLOGIC LOG

Bore Diam.	Depth From	Depth To	Material	Water Yes	Water No
8	0	10	Top soil		X
8	10	20	Gravel		X
6	20	85	Conglamerate		X
6	85	120	Limestone	X	

RECEIVED
DEC 15 1989
Department of Water Resources

10.

Work started 10-16-89 finished 10-24-89

11. DRILLERS CERTIFICATION

I/We certify that all minimum well construction standards were complied with at the time the rig was removed.

Firm Name Wood River Drilling & Pump Firm No. 265
Address Box 1165 Hailey, Id 83333 Date 12-15-89
Signed by (Firm Official) Ken Smith A0001 54
and
(Operator) Gary Ames

USE ADDITIONAL SHEETS IF NECESSARY — FORWARD THE WHITE COPY TO THE DEPARTMENT

JUL 15 2003

EXHIBIT 12-74

-000-

orm 238-7
11/91

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

USE TYPEWRITER OR BALLPOINT PEN

WELL DRILLER'S REPORT

State law requires that this report be filed with the Director, Department of Water Resources within 30 days after the completion or abandonment of the well.

1. WELL OWNER

Name Will Vaudert
Address PO Box 2529 Ketchum, Id 83340
Drilling Permit No. 37-92-S-044
Water Right Permit No. _____

2. NATURE OF WORK

☐ New well ☑ Deepened ☐ Replacement
☐ Well diameter increase ☐ Modification
☐ Abandoned (describe abandonment or modification procedures such as liners, screen, materials, plug depths, etc. in lithologic log, section 9.)

3. PROPOSED USE

☑ Domestic ☐ Irrigation ☐ Monitor
☐ Industrial ☐ Stock ☐ Waste Disposal or Injection
☐ Other _____ (specify type)

4. METHOD DRILLED

☑ Rotary ☐ Air ☐ Auger ☐ Reverse rotary
☐ Cable ☐ Mud ☐ Other _____ (backhoe, hydraulic, etc.)

5. WELL CONSTRUCTION

Casing schedule: ☒ Steel ☐ Concrete ☐ Other _____

Thickness	Diameter	From	To
.250 inches	6 inches	50 feet	173 feet
.188 inches	5 inches	+ 1 feet	480 feet
_____ inches	_____ inches	_____ feet	_____ feet

Was casing drive shoe used? ☐ Yes ☐ No
Was a packer or seal used? ☐ Yes ☐ No
Perforated? ☐ Yes ☐ No
How perforated? ☐ Factory ☐ Knife ☒ Torch ☐ Gun
Size of perforation? 1/4 inches by 2" inches

Number	From	To
200 perforations	80 feet	430 feet
_____ perforations	_____ feet	_____ feet
_____ perforations	_____ feet	_____ feet

Well screen installed? ☐ Yes ☒ No
Manufacturer _____ Type _____
Top Packer or Headpipe _____
Bottom of Tailpipe _____

Diameter ____ Slot size ____ Set from ____ feet to ____ feet
Diameter ____ Slot size ____ Set from ____ feet to ____ feet
Gravel packed? ☐ Yes ☒ No ☐ Size of gravel _____
Placed from _____ feet to _____ feet

Surface seal depth 20 Material used in seal: ☐ Cement grout
☒ Bentonite ☐ Puddling clay ☐ _____
Sealing procedure used: ☐ Slurry pit
☐ Temp. surface casing ☐ Overbore to seal depth
Method of joining casing: ☐ Threaded ☒ Welded
☐ Solvent Weld ☐ Cemented between strata

Describe access port _____

7. WATER LEVEL

Static water level 52 feet below land surface.
Flowing? ☐ Yes ☐ No G.P.M. flow _____
Artesian closed-in pressure _____ p.s.i.
Controlled by: ☐ Valve ☐ Cap ☐ Plug
Temperature _____ °F. Quality _____
Describe artesian or temperature zones below.

8. WELL TEST DATA

☐ Pump ☐ Bailer ☒ Air ☐ Other _____

Discharge G.P.M.	Pumping Level	Hours Pumped
20	180	1

9. LITHOLOGIC LOG

Bore Diam.	Depth From	Depth To	Material	Water Yes	Water No
6	80	120	GRANITE	✓	
	120	170	BROKEN GRANITE	✓	
	170	350	GRANITE & CLAY		✓
	350	610	GRANITE		✓
	610	645	GRANITE & QUARTZ	✓	
	645	660	GRANITE	✓	✓

10.

Work started 5-14-92 finished 5-15-92

LOCATION OF WELL

Sketch map location must agree with written location.



Subdivision Name _____
SAGEGATE
Lot No. 19 Block No. _____
County BLAINE
SW ¼ SW ¼ Sec. 34 T. 5 S R. 17 E W

11. DRILLER'S CERTIFICATION

I/We certify that all minimum well construction standards were complied with at the time the rig was removed.

Firm Name _____ Firm No. 265
Address _____ Date 5-26-92
Signed by Drilling Supervisor Ken Smith
and
(Operator) _____
(If different than the Drilling Supervisor)

USE ADDITIONAL SHEETS IF NECESSARY — FORWARD THE WHITE COPY TO THE DEPARTMENT

0000155

SW/SW
T5N R17E S34

EXHIBIT - 12-75

11/97

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

Office Use Only
Inspected by _____
Twp ____ Rge ____ Sec ____
____ 1/4 ____ 1/4 ____ 1/4
Lat: : : Long: : :

1. WELL TAG NO. D 0008425
DRILLING PERMIT NO. 37 .99. S. 0136 .000
Other IDWR No. _____

2. OWNER:
Name Peter Foreman
Address P.O. Box 624
City Sun Valley State ID Zip 83353

3. LOCATION OF WELL by legal description:
Sketch map location must agree with written location.

N / W / E / S — X

Twp. 5 North ☒ or South ☐
Rge. 17 East ☒ or West ☐
Sec. 24 ____ 1/4 SW 1/4 SW 1/4
Gov't Lot ____ County Blaine
Lat: : : Long: : :
Address of Well Site 109 Dip Creek Road
City Ketchum
(Give at least name of road + Distance to Road or Landmark)

Lt. 9 Blk. 1 Sub. Name Dip Creek Ranch

4. USE:
☒ Domestic ☐ Municipal ☐ Monitor ☐ Irrigation
☐ Thermal ☐ Injection ☐ Other _____

5. TYPE OF WORK check all that apply (Replacement etc.)
☒ New Well ☐ Modify ☐ Abandonment ☐ Other _____

6. DRILL METHOD
☒ Air Rotary ☐ Cable ☐ Mud Rotary ☐ Other _____

7. SEALING PROCEDURES

SEAL/FILTER PACK Material	From	To	AMOUNT Sacks or Pounds	METHOD
Bentonite	0	20	30sks	Overbore
Shale Trap		20'		

Is drive shoe used? ☒ Y ☐ N Shoe Depth(s) 200'
Is drive shoe seal tested? ☐ Y ☒ N How? _____

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
8"	+1½	200	.250	Steel	☒	☐	☒	☐
6"	190	340	.250	Steel	☐	☒	☒	☐
					☐	☐	☐	☐

Length of Headpipe _____ Length of Tailpipe _____

9. PERFORATIONS/SCREENS
Perforations Method Torch
Screens Screen Type _____

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
190	340	3"	75		Steel	☐	☒
						☐	☐
						☐	☐

10. STATIC WATER LEVEL OR ARTESIAN PRESSURE:
____ ft. below ground Artesian pressure ____ lb.
Water flow encountered _____ ft. Describe access port or control devices: _____

11. WELL TESTS:
☐ Pump ☐ Bailer ☐ Air ☐ Flowing Artesian

Yield gal./min.	Drawdown	Pumping Level	Time
60			1Hour

Water Temp. _____ Bottom hole temp. ____
Water Quality test or comments: _____
Depth first Water Encounter ____

12. LITHOLOGIC LOG: (Describe repairs or abandonment)

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	Water Y	Water
10"	0	12	Top Soil		
10"	12	55	Sub Soil		X
10"	55	65	Broken Shale & sub soil		X
10"	65	68	Hard Shale		X
10"	68	75	Broken Shale		X
10"	75	78	Hard Shale		X
10"	78	85	Granite		X
10"	85	100	Gravel		X
10"	100	115	Granite		X
10"	115	190	Gravel & Bkn Granite		X
10"	190	200	Grav Granite		X
8"	200	270	Grav Granite	X	
8"	270	280	Black Shale		X
8"	280	340	Green Granite	X	

RECEIVED
NOV 18 1999
Department of Water Resources
Southern Region

Completed Depth 340' (Measurable)
Date: Started 11-8-99 Completed 11-16-99

13. DRILLER'S CERTIFICATION
I/We certify that all minimum well construction standards were complied with at the time the rig was removed.

Company Name Wood River Drilling & Pump, Inc. Firm No. A000156
Firm Official Ken Smith Date 11-17-99
and
Driller or Operator _____ Date 11-17-99
(Sign once if Firm Official & Operator)

0000096

FORWARD WHITE COPY TO WATER RESOURCES

EXHIBIT 12-76

WEBB LANDSCAPE, INC.
P.O. BOX 744
Ketchum, ID. 83340
(208) 726-4927 FAX (208) 726-4767

ESTIMATE
Oct. 30, 2002

TO: **Rob Friedman**
718 Cresent Drive
Beverly Hills, CA 90210

PHONE: 323-956-5060
FAX:323-862-2220

RE: **FOX CREEK RANCH - PHASE 1 SUMMER 2003**

* **NOTE: ITEMS 1, 2, 3, & 4 TO BE NEGOTIATED & COORDINATED BY R. EMIK ASSOCIATES**

#1	**DOZER GRADE WORK:**			
7700	C.Y. Stripped & Stored Topsoil On Site	1.80	cy	13,860.00
20000	C.Y. Excavate Lakes Material For Berms	2.50	cy	50,000.00
40	Hrs. Dozer (D5M - Tristates) Finish Grading	105.00	hr	4,200.00
7500	C.Y. Topsoil Placed Back On Site	4.00	cy	30,000.00
4000	C.Y. Sceening Of On Site Material For Covering Pond Liner	4.00	cy	16,000.00
		sub total		**$ 114,060.00**
*	Price Reflects Not Having To Work In Ground Water			
#2	**DRIVEWAY INSTALLATION:**			
750	C.Y. Screenings For Road Base Placed	12.00	cy	9,000.00
1	12"x 40' Culvert At Hwy 75	500.00	ea	500.00
		sub total		**$ 9,500.00**
#3	**SITE AMENITIES:**			
2080	Linear Feet 42" Post & Rail Fence Installed	6.50	lf.	13,520.00
1	Stone Bridge & Culvert At Stream *	15000.00	ea.	15,000.00
1	Entry Gate & Stone Columns *	30000.00	ea.	30,000.00
		sub total		**58,520.00**
*	***Price Dependant Upon Final Design From Architect***			
#4	**TRANSFORMER INSTALLED 500' FOR HWY (INCLUDES TRENCHING)**			
1	Underground Utilities & Transformer Installed	8500.00	ea	8,500.00
		sub total		**$ 8,500.00**
*	Work Completed 60 Days After Permit Is Turned In			

Department of Water Resources
APPLICANT'S
Exhibit 13
Date Admitted 11/13/02

RECEIVED
JUL 25 2003

A000157

EXHIBIT-13-1

WEBB LANDSCAPE, INC.
P.O. BOX 744
Ketchum, ID. 83340
(208) 726-4927 FAX (208) 726-4767

ESTIMATE
Oct. 30, 2002

* **NOTE: ITEMS 6 THRU 11 TO BE COMPLETED BY WEBB LANDSCAPE**

#5	**SPRINKLER PUMP:**			
1	7.5 HP Pump 60 PSI @ 160 GPM			
1	48"x12' Culvert w/ Bottom Lid & Intake			
1	Deluxe Control Box			
1	Panel Board			
1	Sprinkler Clock Circuit			
1	Pump Start Circuit			
	Pipes, Fittings, & Wire			
		sub-total:		**$10,798.00**
#6	**SCREEN FOR INTAKE WATER W/ PUMP FOR SCREEN:**			
1	CA 224 CTC Screen w/ Quick Connection			
1	40s15-5 1 1/2 HP Pump			
1	1 1/2 HP Control			
1	20 A DP Breaker			
1	2" Pitless Adaptor			
1	Fitting Package			
		sub-total:		**$6,584.00**
#7	**WATER FEATURE BUDGET (INSTALLED):**			
133675	Sq. Ft. EPDM Rubber Linear	0.95	sf	126,991.00
1	Recirculation System (Pumps, Intake, & Wire)	14400.00	ea	14,400.00
1925	Lf 6" Recirculation Pipe & Controll Valves	4.95	lf	9,528.00
450	Linear Feet Stream Installed	30.00	lf	13,500.00
1320	C.Y. Cobble Rock On Site Installed Over Liner	20.00	cy	26,400.00
1	Fire Hydrant & Vacuum Line Installed	2700.00	ea	2,700.00
		sub total		**$ 193,619.00**
*	Price Reflects Not Having To Work In Ground Water			

PHASE 1 JOB TOTAL, ESTIMATED: ***ITEMS 1-7*** **$ 401,481.00**

MICROFILMED
JUL 15 2004

EXHIBIT - 13-2

WEBB LANDSCAPE, INC.
P.O. BOX 744
Ketchum, ID. 83340
(208) 726-4927 FAX (208) 726-4767

ESTIMATE
Oct. 30, 2002

PHASE 2 SPRING 2004 - PLANTINGS, IRRIGATION & HYDROSEED:

#8	**IRRIGATION INSTALLED BERMS,NATURAL AREAS:**			
414	Rainbird 5006 Rotors	105.00	ea	43,470.00
20	Automatic Valves	225.00	ea	4,500.00
1	Rainbird ESP 24MC Controller	2100.00	ea	2,100.00
1	Doublecheck Valve	350.00	ea	350.00
2	Sleeves	100.00	ea	200.00
1	Turbo Clean Filter 160 GPM	1065.00	ea	1,065.00
		sub total		**$ 51,685.00**

NOTE: Electrical & Plumbing Hook-ups will be an additional cost.

#9	**HYDROSEED INSTALLED & FINISH GRADE ON LOTS 2& 3:**			
49030	Square Feet Hydroseed, Natural Areas	0.12	sf	5,883.00
		sub total		**5,883.00**

#10	**PLANT MATERIAL INSTALLED:**			
10	12' Colorado Spruce	1071.00	ea	10,710.00
75	7' Colorado Spruce	249.90	ea	18,742.50
115	5' Colorado Spruce	148.75	ea	17,106.25
297	5Gal Aspen	21.00	ea	6,237.00
600	5 Gallon Shrubs	24.65	ea	14,790.00
		sub total		**$ 67,585.75**

* 15% Discount Has Been Applied To All Spruce & Shrubs Because of Direct Ship To Job Site.

#11	**HYDROSEED INSTALLED & FINISH GRADE:**			
123500	Square Feet Hydroseed, Natural Areas	0.14	sf	17,290.00
		sub total		**17,290.00**

PHASE 2 JOB TOTAL, ESTIMATED: **$ 142,443.75**

JUL 15 2004

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EXHIBIT- 13-3

WEBB LANDSCAPE, INC.
P.O. BOX 744
Ketchum, ID. 83340
(208) 726-4927 FAX (208) 726-4767

ESTIMATE
Oct. 30, 2002

PHASE 1 & 2 JOB TOTAL, ESTIMATED: **$ 543,924.75**

MID POINT PROPOSAL; SUBJECT TO CHANGE

PRICES REFLECT WORK DONE PRIOR TO NOV. 2003

WINTER WEATHER CONDITIONS MAY INCREASE COSTS.

COST ADJUSTMENTS MAY OCCUR FROM THE FOLLOWING:
*Actual quantities installed.
*Unforeseen obstacles after work has begun.

*Administration fee of 15% has been added to all sub-contractors work & has been included in price.

*Normal cost contingency on a project of this scope is **10%**

* **ADDITIONAL COSTS ITEMS WITH OWNER ARCHITECT APPROVALS PRIOR TO WORK:**

#1	**WATER FEATURE:**			
75320	Sq. Ft. Geotextile Installed	0.20	sf	15,064.00
		sub total		**15,000.00**

#2 Ditch Improvements Required To Furnish Water Rights To Lake #2
(Estimate To Follow After Ditch Is Operating)

#3 **WELL:**
Well & Pump To Produce 2CFS Water Right If Obtained By Chuck Brockway
(Estimate To Follow From Brockway)

#4 Measuring Weir If 2 CFS Water Right Is Required

#5 A Cost Savings Of 15,000+/- Could Be Relized If The Streams On Lot 2 & 3 Are Eliminated

A000160

MICRO...
JUL 15 2004

EXHIBIT- 13-4

FOX CREEK RANCH PROJECT – ROB FRIEDMAN

This project will create $266,000 worth of labor income for Webb Landscape. This money will support approximately 7500 hrs of labor, which equals 130 weeks of labor, which in turn would employ 3 people for one calendar year.

After construction approximately $17,000 a year of maintenance will be required this will employ a 1/2 Webb Landscape employee for one calendar year.

This project will not only provide jobs for Webb Landscape construction crews but also nursery employees. Webb Landscape propagates & grows some of the plant material that will be used on this job.

Micro... JUL 15 2004

EXHIBIT-13-5

Charles E. Brockway, P.E., Ph.D.

Brockway Engineering
2016 North Washington St. Suite 4
Twin Falls, ID 83301
(208) 736-8543
(208) 736-8506 FAX
E-mail: cebrock@mindspring.com
February 2002

Present title:

Senior Member – Brockway Engineering P.L.L.C
Formerly-Research Professor – Civil and Agricultural Engineering: Supervision of research conducted by the University Water Resources Research Institute and the College of Engineering at Kimberly, Idaho. Graduate student supervision and directed studies instruction in Water Management and Water Resources related subjects.
Associate Director – Idaho Water Resources Research Institute

Summary of education beyond high school:

Institution, Degree, Year
University of Idaho 1955-1959, B.S.-Civil Engineering, 1959
California Institute of Technology 1959-1960, M.S. – Civil Engineering, 1960
University of Colorado, Denver, Colorado, Management, 1963
University of Denver, Denver, Colorado, Civil Engineering, 1964
Utah State University, Ph.D.-Water Resources Engineering, 1977

Number of years service on Uofl faculty: 32

Date of original appointment: 1965
Dates of advancement in rank:
Associate Research Professor: 1974
Professor – 50% Agricultural Engineering, 50% Civil Engineering: 1978

Subjects and courses taught:

CE 500, CE 600, CE 502

Summary of academic experience:

University of Idaho – Research Professor–Civil and Agricultural Engineering, 1978
University of Idaho – Associate Research Professor, Civil Engineering, 1974-1978
University of Idaho – Assistant Research Professor, Civil Engineering, 1965-1974
Boise College – Instructor in Engineering, 1961-1963

Summary of other experience:

Senior Member, Brockway Engineering P.L.L.C Water Resources Engineering
University of Idaho – USAID Pakistan Project on Irrigation Systems Management Research, 1984
U.S. Bureau of Reclamation – Hydraulic Research Laboratory, Denver, Colorado – Hydraulic Research Engineer, 1963-1965
U.S. Bureau of Reclamation – Boise, Idaho – Hydraulic Engineer, 1961-1963

Department of Water Resources
APPEARANCES
Exhibit 15
Date Received 11/13/02
EXHIBIT-15-1

Converse Foundation Engineering, Inc. – Pasadena, California – Foundation Engineer, 1960-1961
California Institute of Technology – Pasadena, California – Assistant Project Engineer, U.S. Public Health Services Research Project, 1959-1960

Partial Client List:

Twin Falls Canal Company – Twin Falls, Idaho – Hydrology and water use
North Side Canal Company – Jerome, Idaho – Hydrology and water use
Micron Technology – Ground water and water supply
J.R. Simplot Company – Land disposal of processing waste, water supply, water rights
City of Twin Falls – Water supply and hydrology
Idaho Trout Processors – Hydraulics and water supply
Cedar Mesa Reservoir and Canal Co– Water Management Consultant
Clear Springs Trout Company, Buhl, Idaho – Water supply and distribution systems
Idaho Power Company, Boise, Idaho – Relationships of groundwater and surface water – Upper Snake River Basin – water right adjudication
Idaho Department of Fish and Game – Evaluation of groundwater stream relationship for litigation – Parma vicinity
Blaine County, Idaho – Waste disposal systems for high density rural subdivisions
City of Mountain Home, ID Water Rights, hydrologic analysis
Rinker Company, Long Beach, CA Hydrology, water rights
U.S. Bureau of Reclamation (was Maricopa County Water District) – Arizona Flood Study
Office of Technology Assessment – U.S. Congress – Irrigation Distribution Systems
U.S. Department of Justice – Indian Water Rights
Montgomery Engineers – Ground water quality evaluations
J.U.B. Engineers, Twin Falls, Idaho – Ground-water and hydraulics
Amalgamated Sugar Company, Idaho – Hydrology and waste disposal
Pioneer Irrigation District, Idaho Water rights and hydrology
Aries Development Co. Subdivision water rights
Eagle View Farms, Castleford ID-Water rights and irrigation system
Rim View Trout Company, Wendell ID- Hydraulics

Registered Professional Engineer:

Idaho ,Colorado and Washington

Special Awards or Honors:

Honorary Membership ASTM, 1959
U.S. Army National Defense Transportation Award, 1958
Distinguished Military Graduate – University of Idaho
Top Ten Graduating Senior – University of Idaho, 1959
No. 2 in graduating class of 889, University of Idaho, 1959
Representative of USBR Division of Research at 1963 Intergovernmental Training Program, Denver, 1964
Scholarship – University of Denver, Graduate School of Management, 1964
National Science Foundation Fellowship – Utah State University, 1967-1968
Outstanding Young Engineer Award for Idaho, National Society of Professional Engineers, 1968
Engineer of the Year, 1997 American Society of Agricultural Engineers
Idaho Water Users Hall of Fame - 1998

JUL 15 2004

EXHIBIT- 15-2

Membership in professional and scholarly organizations:

National Society of Professional Engineers, 1967- present
Idaho Society of Professional Engineers, 1967- present: President 1978
American Society of Civil Engineers – Irrigation & Drainage Division Committee Chairman:

1.) Operation and Maintenance of Irrigation and Drainage Systems, 1975-1981
2.) Water Quality Committee, 1980-1984, Chairman
3.) Task Committee on Guidelines for Erosion and Sediment Control in Irrigated Agriculture, 1980-1983, Chairman
4.) Publications Committee, 1985-1992

Research Society of America
National Council of Examiners for Engineering and Surveying, 1981-1991
Idaho Board of Professional Engineers and Professional Land Surveyors, 1981-1991, Chairman
American Water Resources Association

Offices held in such organizations:

National Society of Professional Engineers
- Member – Young Engineers Committee, 1973-1974
- Chairman – Young Engineers Committee, 1975-1977
- Member – President's Committee on Board of Directors Organization, 1977
- Member – Registration and Qualification for Practice Committee, 1979-1981
- Chairman – Registration and Qualification for Practice Committee, 1982-1984
- Member – Participating Organizations Liaison Committee to NCEE, 1982-1984

Idaho Society of Professional Engineers, President 1978
- President - Magic Valley Chapter, 1970-1971
- Member – State Ethical Practices Committee, 1966-1977
- Member – State Intersociety Relations Committee, 1968
- Member – State Nominating Committee, 1975-1976
- Member – Board of Directors, 1972-1973
- Member – Board of Directors, Past President Chairman – Nominating Committee 1979
- State Director – Representative for Idaho NSPE, 1982-1983
- Nominating Committee for Idaho Board of Professional Engineers & Land Surveyors Member

American Society of Civil Engineers
- Member – Operation and Maintenance of Distribution Systems Committee Irrigation and Drainage Division, 1975-1981
- Chairman – Irrigation and Drainage Division, Operations and Maintenance Committee, 1977-1979
- Member – Water Quality Committee, Irrigation and Drainage Division, 1980-1984
- Chairman – Water Quality Committee, Irrigation and Drainage Division, 1982-1984
- Member – Task Committee on Water Measurement, 1980-1983
- Chairman – Task Committee on Guidelines for Erosion and Sediment Control in Irrigated Agriculture, 1984 – Present
- Member – Publications Committee, 1985 – Present

EXHIBIT 15-3

Corresponding Member – ASCE Irrigation and Drainage Division Committee on Operation and Maintenance of Irrigation Systems
Reviewer – ASCE Irrigation and Drainage Division Committee on Publications
Idaho Board of Professional Engineers and Land Surveyors Member, 1981
Vice Chairman, 1983-1984
Chairman, 1984-1986, 11990-1992
National Council of Engineering Examiners
Assistant Vice President, Western Zone
Member, Professional Examinations Advisory Committee
Member, Committee on Uniform Procedure and Legislative Guidelines, 1984
Member, Communications and Publications Committee, 1983
Member, Uniform Examinations and Qualifications Committee, 1984 – 1986
Member, Committee on Examination Policies and Procedures, 1987 – 1989
Member, Advisory Committee on Council Activities, 1986-1987
Assistant Vice President – Western Zone, 1986-1987
Member, Fundamentals Examination Review Committee, 1986 1988

Scholarly and creative activity:

Research:

Development of systems analysis procedures for optimization of irrigation system designs with environmental, physical, and social constrains.
Evaluation of crop consumptive use, irrigation requirements, and methods of determining basin depletion from agricultural development.
Systems analysis of water use to develop mathematical methods for studying complex ground water-surface water systems – mathematical modeling of aquifers.
Ground water quality and river system water quality evaluations for nutrient load determination and river system modeling.
Development of guidelines for design of sediment removal facilities for on-farm and irrigation distribution system waste ways.
Evaluation of attainable impacts on water quality of irrigation return flows due to implementation of best management practices for sediment and nutrient control.
Evaluation of alternate energy sources for irrigation and municipal needs in Idaho.
Analysis of operation and maintenance cost of water distribution systems and determination of the relationship of costs to known physical and organizational parameters and water use efficiency.
Evaluation of the economic potential for use of geothermal hot water and steam in Idaho.
Study of the movement of water from canals to local water tables under saturated and partially saturated conditions.
Studies of the mechanisms of microbial action, sedimentation and soil-water-chemical interactions involved in natural sealing phenomenon in canals and reservoirs.
Evaluation of irrigation management practices for sustained land disposal of geothermal fluids.
Evaluation of practices and systems for controlling sediment and other pollutant losses from irrigated lands.
Investigation of the response of aquifer systems to changes in recharge or withdrawal due to change in land use.

JUL 13 2004

EXHIBIT 15-4

Evaluation of procedures for estimating crop water requirements.
Development of cost effective procedures and equipment for measurement of irrigation diversions and power use in open and closed systems.

Community services and other relevant activities:

Member – Intermountain District Church of the Nazarene; Camps Board – 1976-1984, Board of Church Properties – 1976-1979
Member and Vice President, Twin Falls Reformed Church Consistory 2000-Present
Member – Twin Falls City Planning and Zoning Commission 12/1978-9/1979
Member – College of Southern Idaho Geothermal Energy Commission
Member – Governor's Committee on Energy Use – 1980-1981
Member – Idaho Technical Advisory Committee for Sediment in Surface Water
Chairman – Snake River Technical Advisory Committee – Idaho Legislative Council, 1983-1985
Advisor – Governor's Snake River Advisory Committee – 1985
Member – Water Resources Foundation Board of Directors – 1985
Chairman – Idaho Technical Committee of Hydrology
Member – Idaho Department of Health & Welfare Sediment Citeria Committee
Member – Snake Plain Advisory Committee of Idaho Department of Health & Welfare
Member – Idaho Water Users Water Quality Committee – 1980
Member – INEL Dose Evaluation and Risk Assessment Committee
Member – Columbia River System Operations Review
Member – Mid Snake River Nutrient Management Advisory Committee
Member - Mid Snake River Irrigation Water Quality Coordination Committee
Technical Advisor – Middle Snake River Committee
Member – Liaison Committee, U.S. Geological Survey National Water Quality Assessment Program, Snake River Basin
Member – Snake River Studies Committee, Idaho Department of Water Resources
Member – City of Twin Falls Wellhead Protection Committee
Member-Eastern Snake River Plain Groundwater Modeling Committee

Publications:

Brockway, C.E. 1964. Progress Report – Investigation of a Seepage Meter Designed by the Agricultural Research Service – Lower Cost Canal Lining Program. Bureau of Reclamation Hydraulic Branch HYD-529.

Brockway, C.E. 1964. Flow Resistance Coefficients of Three Sizes of Cast-in-Place Concrete Pipe. Bureau of Reclamation Hydraulic Branch, HYD-533,1964.

Brockway, C.E. 1965. Investigation of the Effect of Turnout Geometry on the Registration Accuracy of a Propeller-Type Open Flowmeter. Bureau of Reclamation, HYD-545, 1965.

Brockway, C.E. 1966. Groundwater Investigations and Canal Seepage Studies. Engineering Experiment Station, University of Idaho, Progress Report No. 1, 1966.

Schuster, J.C. and C.E. Brockway. 1967. Investigation of a 4-Inch Magnetic Flowmeter. Bureau of Reclamation, HYD-574.

JUL 3 2002

EXHIBIT-15-5

Worstell, R.V. and C.E. Brockway. 1967. Estimating Seasonal Changes in Irrigation Canal Seepage. Presented at Spokane, Washington October 20, 1967.

Worstell, R.V. and C.E. Brockway. 1967 Groundwater Investigations and Canal Seepage Studies. Engineering Experiment Station, University of Idaho, Progress Report No. 2

Bloomsburg, G.L. and C.E. Brockway. 1968. Movement of Water from Canals to Groundwater Tables. Research Technical Completion Report, Idaho Water Resources Institute.

Worstell, R.V. and C.E. Brockway. 1968. Field Evaluation of Seepage Measurement Methods. Presented at 2nd Seepage Symposium, Phoenix, Arizona February 1968.

Bondurant, J.A., C.E. Brockway, and R.V. Worstell. 1968. Plastic Casings for Soil Cores. Soil Science, Vol. 107 No. 1

Herbig, A.E. and C.E. Brockway. 1970. Operations and Maintenance Costs of Irrigation Distribution Systems. Proceedings, National Irrigation Symposium, Lincoln, Nebraska.

Bondurant, J.A., C.E. Brockway and R.V. Worstell. 1971. Systems Analysis of Irrigation Water Management in Eastern Idaho. Progress Report No. 1, University of Idaho Engineering Experiment Station.

Brockway, C.E. 1971. What Does It Cost to Operate an Irrigation District?. Proceedings, Fifth Regional Water Users' Conference, Bakersfield, California.

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EXHIBIT -15-

Friedman Property

Flow Measurements-Eagle Creek Irrig. Dist. Ditch to Property

Flow measurements made with a calibrated trapazoidal weir
by Brockway Engineering

Date	Time	Head ft	Discharge cfs	Discharge miners inches	Photo
8/2/00	5:00pm	0.52	0.33	16.5	x
7/19/00		0.43	0.22	11.0	x
7/26/02	3:30pm	0.39	0.18	9.0	
9/26/02		0.39	0.18	9.0	x

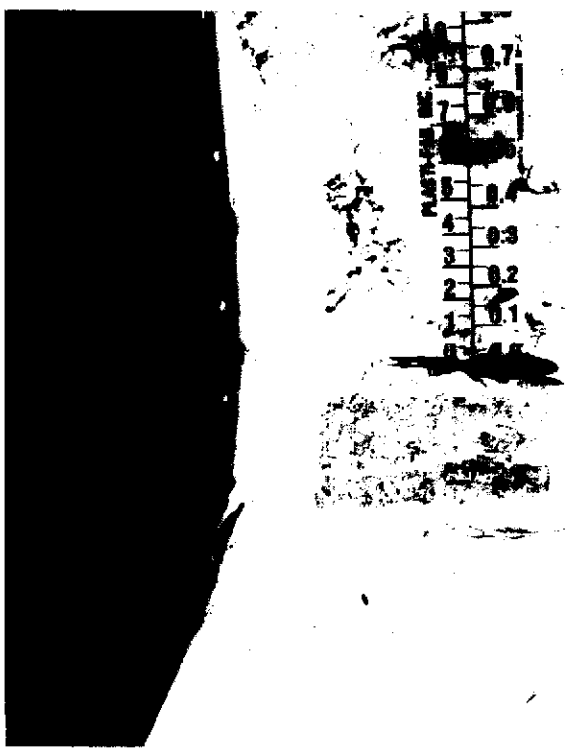
Department of Water Resources
APPLICANT'S
Exhibit 16
Date Admitted 11/13/02

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EXHIBIT-16-1

Friedman Ditch Water Measurement
September 26, 2002



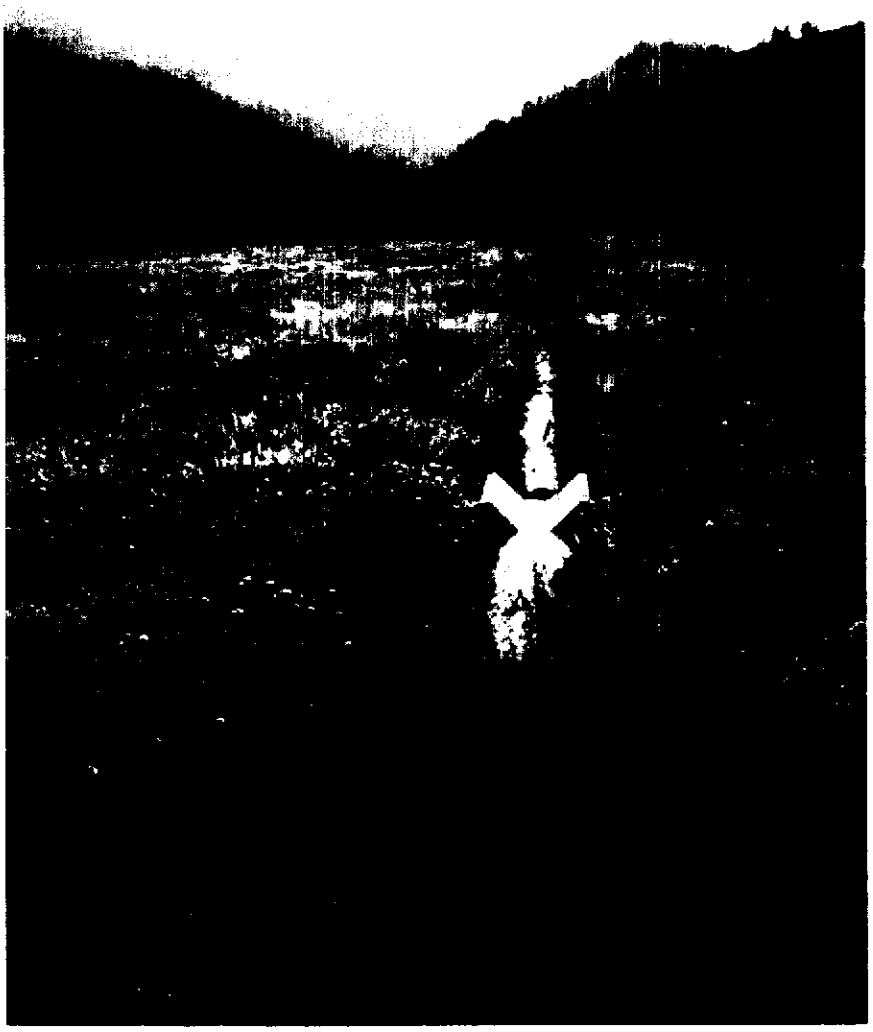


Flow = 0.18 cfs

Brockway Engineering, PLLC
November 2002

EXHIBIT - 16-2

Friedman Ditch Water Measurement
July 19, 2000

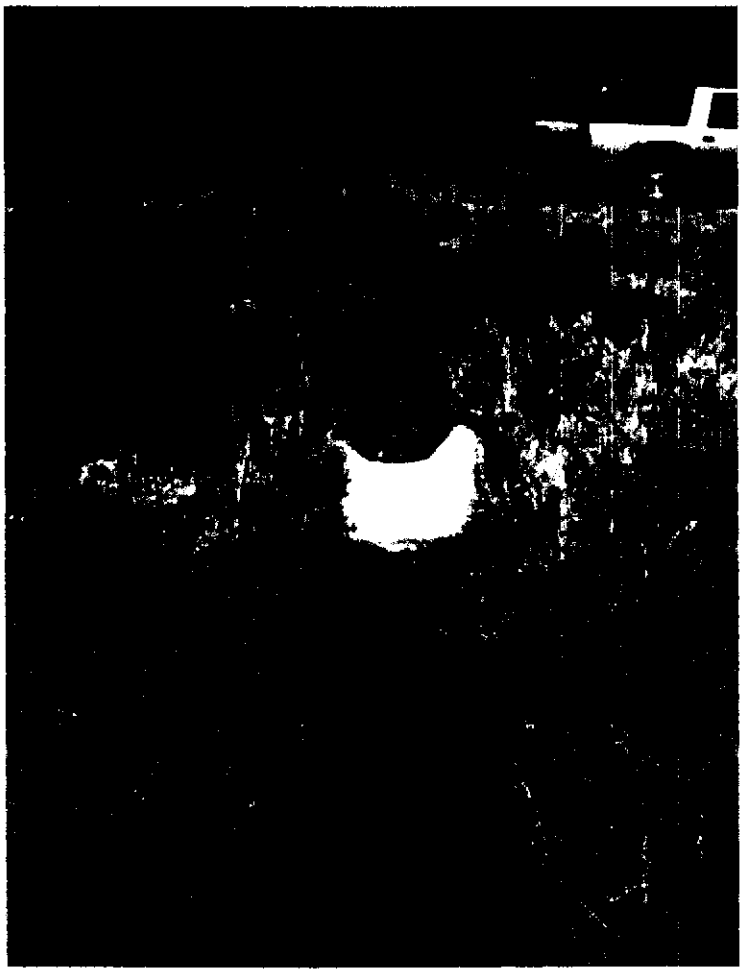


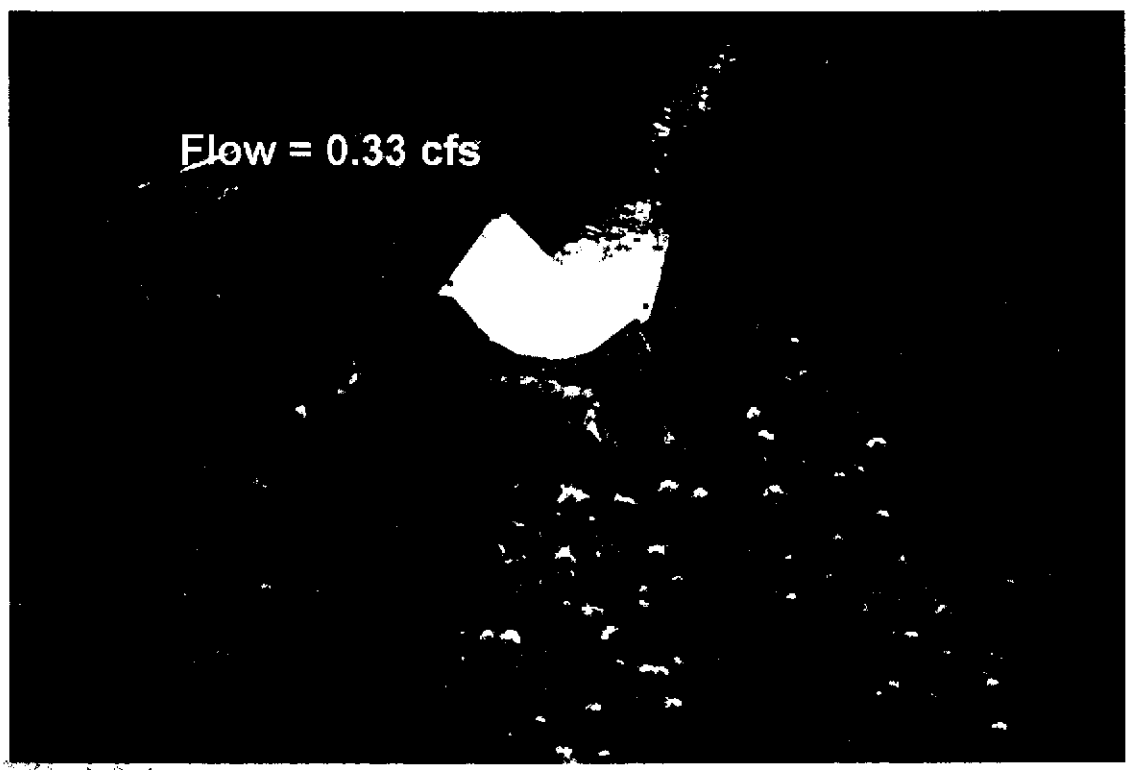
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Brockway Engineering, PLLC
November 2002

EXHIBIT - 16-3

Friedman Ditch Water Measurement
August 2, 2000

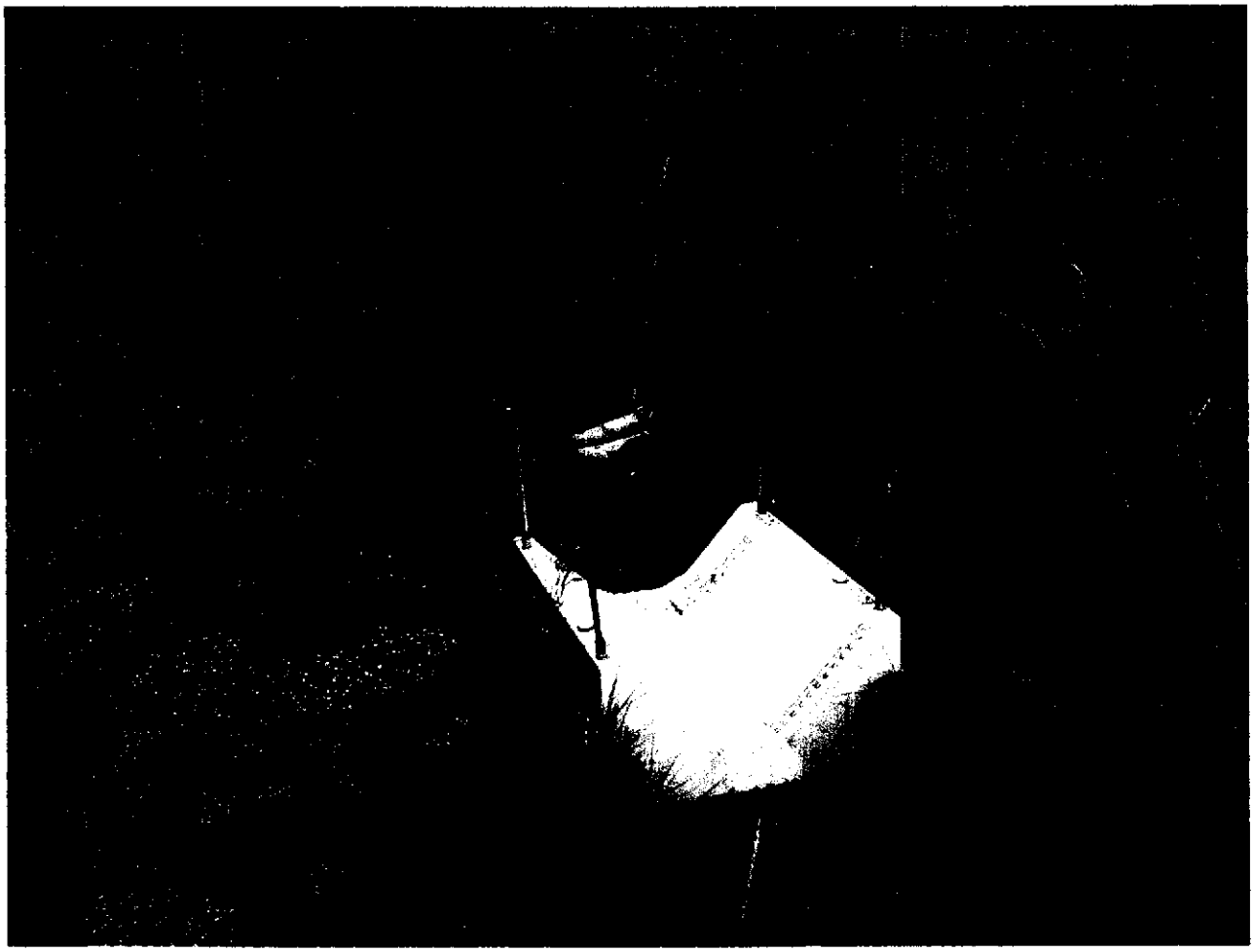


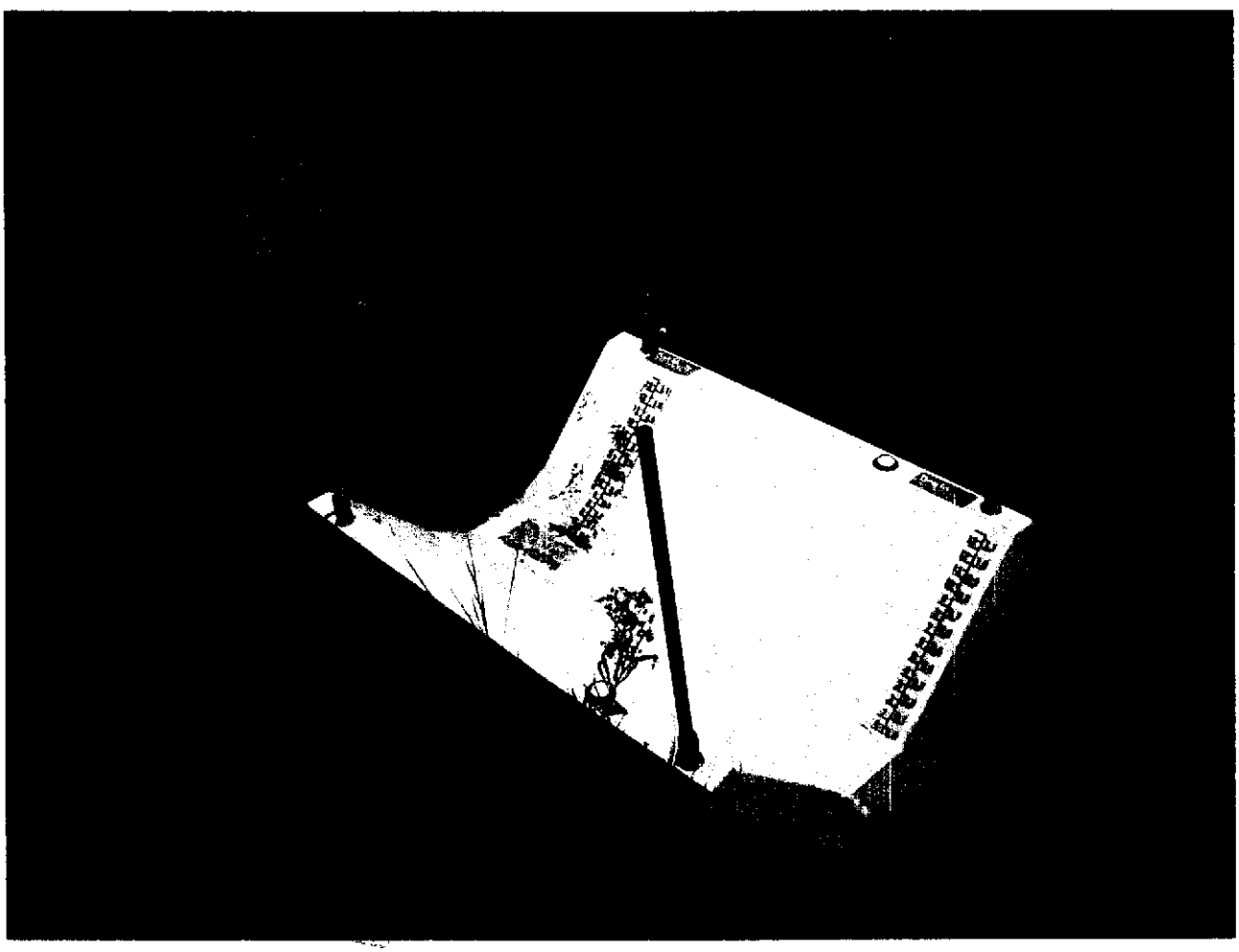


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November 2002

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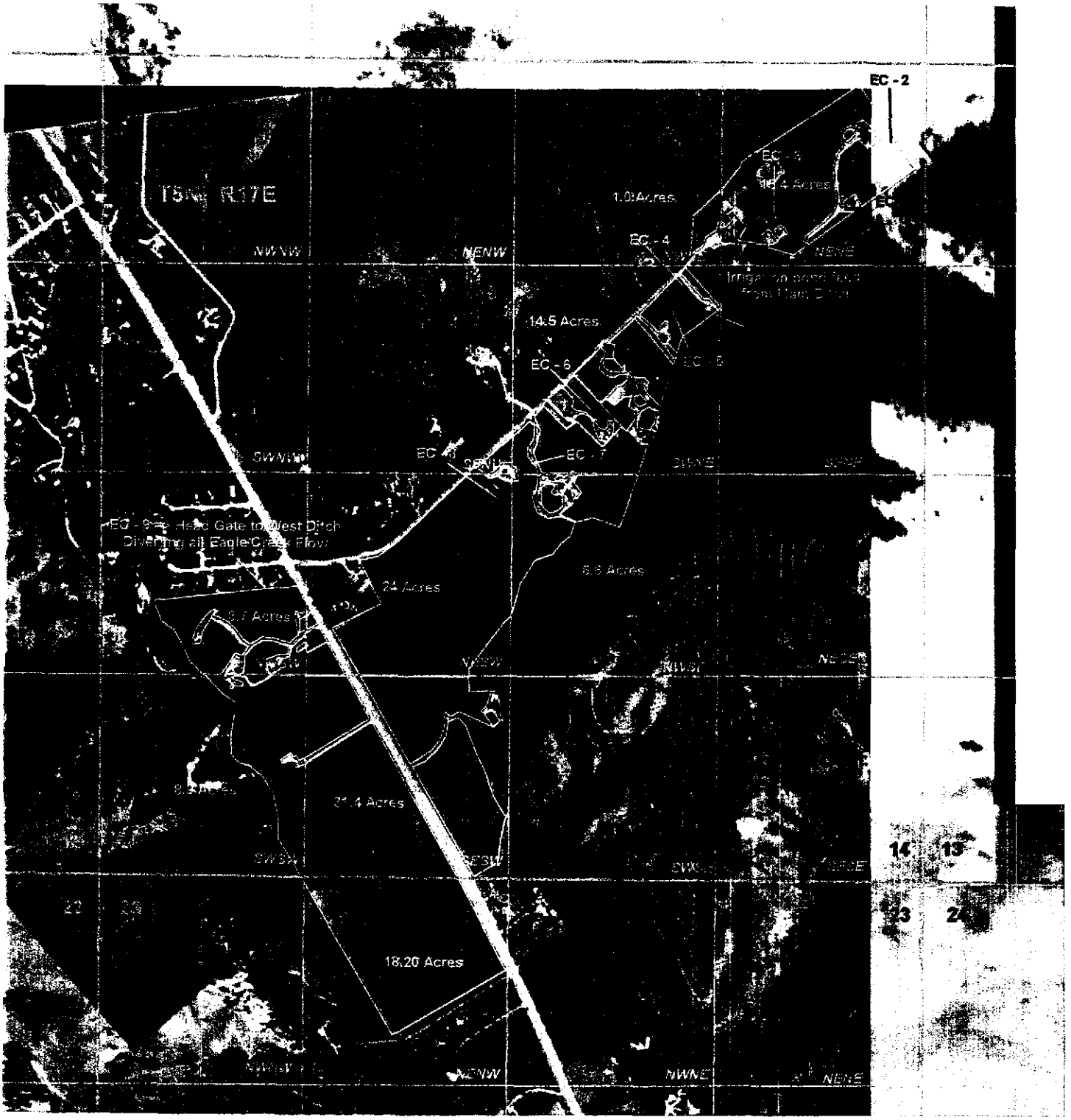
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Eagle Cre[illegible]rigation Company - Section 14 and 2[illegible]5N, R17E
Amended Irrigation Claim - Place of Use, Acreage and Points of Diversions
Figure One



SCALE 1:11,000
One inch = 900 feet

900 0 900 1800 2700 3600 Feet

N

NOTE: Points of diversion noted along Eagle Creek (EC)

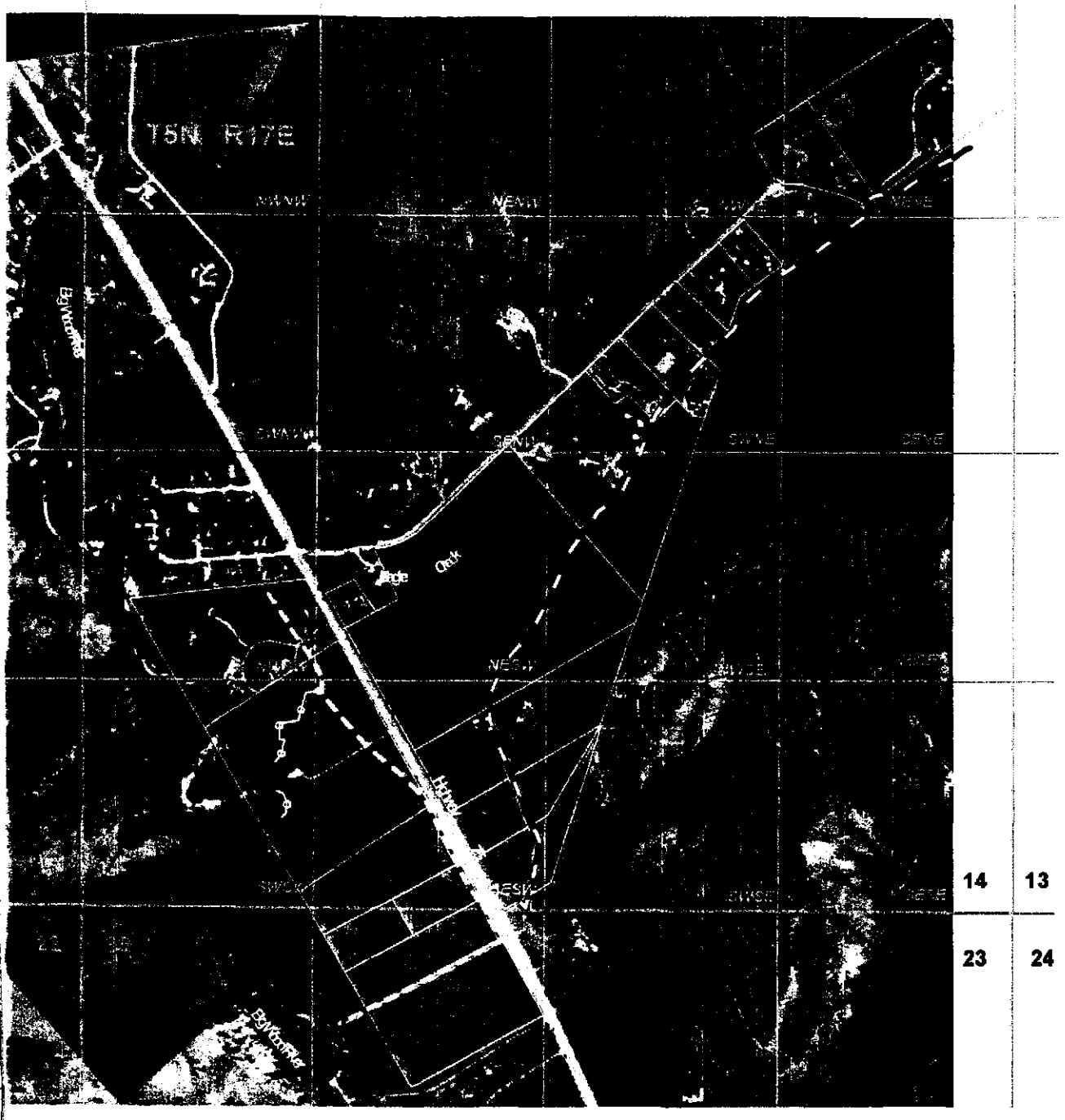
Rectified FSA Aerial Photos, 1999
Brockway Engineering, PLLC
Revised May, 2002

PROPOSED
JUL 15 2005

Department of Water Resources
APPLICANT'S
Exhibit 17
Date Admitted 11/13/02

EXHIBIT-17

Eagle Creek Irrigation Company - Section 14 and 23, T5N, R17E
Present Ditch Diversion System
Figure Two



SCALE 1:10,800
One Inch = 900 feet

1000 0 1000 Feet

N

Ponds

Pickrell Ditch
Main Ditch
West Ditch
Present Property Lines
Diversions by ECIC Members

Rectified FSA Aerial Photos, 1999
Brockway Engineering, PLLC
Revised May, 2002

Department of Water Resources
APPLICANTS
Exhibit 18
Date Admitted 11/13/02

EXHIBIT - 18

Protestant's
Exhibits

BEFORE THE DIRECTOR OF THE DEPARTMENT OF WATER RESOURCES

OF THE

STATE OF IDAHO

Department of Water Resources
PROTESTANT'S
Exhibit A
Date Admitted 11/13/02

IN THE MATTER OF DESIGNATING THE BIG WOOD RIVER GROUND WATER MANAGEMENT AREA

ORDER

This matter having come before the Director of the Idaho Department of Water Resources as a result of concern over the relationship between ground water pumping and the flow of surface streams in the Big Wood River drainage, the Director Finds, Concludes and Orders as follows:

FINDINGS OF FACT

1. The Director of the Department of Water Resources has the responsibility to administer the use of ground water in the state of Idaho to protect prior rights and yet allow full economic development of the resource.

2. The surface and ground waters of the Big Wood River drainage are interconnected. Diversion of ground water from wells can deplete the surface water flow in streams and rivers. New ground water uses can also deplete available supplies for other users and affect basin underflow which presently accumulates in the Magic Reservoir.

3. There are a number of Applications for Permit to Appropriate Water pending before the department which propose additional consumptive uses of ground water within the Big Wood River drainage.

4. Injury could occur to prior surface and ground water rights including the storage right in Magic Reservoir if the flows of streams, rivers and ground water underflow in the Big Wood River Basin are intercepted by junior priority ground water diversions.

CONCLUSIONS OF LAW

1. Section 42-226, Idaho Code, declares all ground waters to be the property of the state, whose duty it is to supervise the appropriation and allotment of the same. One of the goals is to assure that early appropriations of ground water are protected in the maintenance of reasonable ground water pumping levels.

2. In order to determine whether withdrawals from the existing and proposed wells will have an adverse impact on prior water rights diverted from surface water and/or ground water, the

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EXHIBIT

construction and use of additional wells in the area must be monitored and controlled.

3. Section 42-233b, Idaho Code, authorizes the Director of the Idaho Department of Water Resources to designate "ground water management areas" to allow increased management of the ground water resources.

4. The director of the department of water resources should designate a ground water management area for a portion of the Big Wood River basin upstream from Magic Reservoir and from which ground water pumping can have an effect on flows of streams and rivers in the basin.

ORDER

NOW, THEREFORE IT IS HEREBY ORDERED that the following described area be included within and designated as the "Big Wood River Ground Water Management Area" pursuant to the provisions of Section 42-233b, Idaho Code:

> Beginning at Magic Dam on Big Wood River and continuing eastward approximately one mile to the drainage divide at Rattlesnake Butte, which separates tributaries of the Big Wood River above Magic Dam from those below the dam, thence northward approximately three miles and eastward approximately fourteen miles along the divide to a point where the divide crosses the north-south section line common to sections 28, 29, 32 and 33, T1S, R20E,BM, which is near the NE corner of Section 32, T1S, R20E,BM., thence east approximately five miles to the divide separating Silver Creek tributaries from the upper Little Wood River basin, thence continuing in a counterclockwise direction along the entire topographic boundary of the upper Silver Creek and Big Wood River basins, including Camas Creek returning to the point of beginning at Magic Dam.

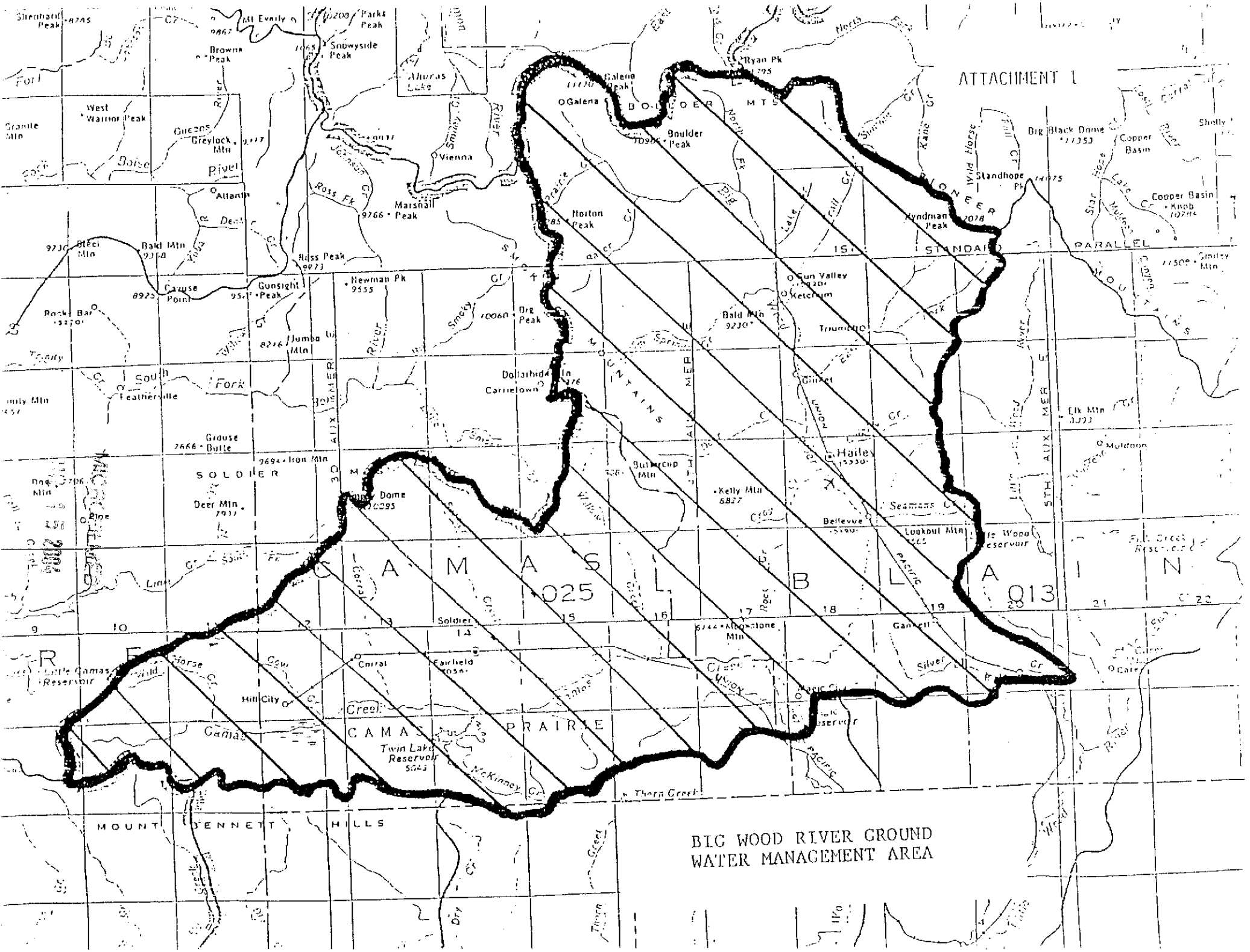
Attached to this order is a map identified as Attachment 1. which graphically shows the boundaries of the management area.

DATED this 28TH day of JUNE, 1991.

R. KEITH HIGGINSON
Director

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JUL 15 2004

ATTACHMENT 1



Department of Water Resources
PROTESTANT'S
Exhibit B
Date Admitted 11/13/02

MANAGEMENT POLICY

FOR

THE BIG WOOD RIVER GROUND WATER MANAGEMENT AREA

I. GENERAL

A. Introduction

The Big Wood River drainage basin is located in southcentral Idaho within Blaine, Camas, Lincoln and Gooding Counties. In the approximate center of this basin is Magic Reservoir with a water storage capacity of 191,000 acre feet. This reservoir generally divides the basin into two distinct areas. The area upstream from the reservoir is herein referred to as the upper Big Wood River Basin.

The headwaters of Silver Creek are located east of the Big Wood River in the Bellevue Triangle. Silver Creek provides water to users who divert from the creek and from the Little Wood River to which it is tributary.

The upper Big Wood River Basin (including Silver Creek), particularly in Blaine County, is an area of continued economic growth and development. Water resource development to support some of this growth has occurred through transfers of existing water rights and new water appropriations.

B. Geohydrologic Characteristics of the Big Wood River Basin

The surface and ground water system in the upper Big Wood River Basin is interconnected. Diversion and use of water from a tributary stream or well will impact the total water supply available in the system. Downstream from Magic Reservoir, the river and ground water system are not as directly connected and there are other sources of water supply including canals bringing water from the Snake River and the Snake Plain ground water system. Magic Reservoir collects much of the water which moves through the upper Big Wood River Basin and which is not diverted and used upstream from that point. Except during periods of high runoff when Magic Reservoir fills and spills, the available water supply, both surface and ground water, upstream from Magic Reservoir is fully appropriated. Camas Creek and the Big Wood River are the major surface water tributaries upstream from Magic Reservoir.

Silver Creek is fed by numerous springs whose flows depend partly on percolating seepage resulting from Big Wood River irrigation diversion and use upstream in the Bellevue area. Ground water inflow contributes to the surface flow of Silver Creek and its tributaries from the he

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a point approximately two miles upstream of Picabo, where Silver Creek ceases to be a gaining stream.

Diversions of ground water in the Bellevue Triangle, and generally in locations hydrologically upstream from Picabo, will deplete the surface flow of Silver Creek. Prior water right holders who divert from the Little Wood River also depend on surface water flow from Silver Creek. Depletion of Silver Creek flow will injure these earlier-in-time right holders. Many of the Little Wood River right holders also receive storage water from Magic Reservoir.

C. Present and Proposed Uses

Approximately 73 applications for permit to appropriate ground water upstream from Magic Reservoir and in the upper Silver Creek area are pending before the Department of Water Resources. Protests have been filed with the department against some of these applications. Complaints have also been lodged that continued granting of permits to develop new ground water uses in the upper Big Wood River Basin is interfering with prior surface water rights.

D. Recent Declines

The water years 1987 to the present have been below average within the basin. As a result, Magic Reservoir has not filled to its capacity within that time period. It has been suggested that this has been caused, in part, by the diversion of water within the basin under water rights with priority dates later in time than the Magic Reservoir rights.

Many natural flow rights have been cut off because of insufficient surface water flows. Since the water supply of the basin is finite, any withdrawal and consumption of water which would otherwise contribute water to a surface water source, when the source is fully appropriated, will injure another water user.

Various estimates have been made of the quantity of water within the basin. The studies have not all agreed on the total quantity of water but all have generally agreed that the surface and ground waters of the area are interconnected and that withdrawal and use of water from either source will impact the total supply.

E. Past Department Designation

In 1980, the Director of the Department of Water Resources issued a policy memorandum by which he declared that the surface water of the Big Wood River upstream from Magic Reservoir was fully appropriated. Since that date, no new permits for consumptive purposes have been issued for the use of the river or any of its tributaries. The department has continued, however, to issue permits for the use of ground water within the watershed. It now appears

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that this policy must be changed with respect to new consumptive uses of ground water.

II. STATUTORY REQUIREMENTS AND AUTHORITIES

A. Section 42-226, Idaho Code, declares all ground water to be the property of the state, and charges the state with supervising the appropriation and allotment of the same. One of the purposes of this is to assure that early appropriators of ground water are protected in the maintenance of reasonable ground water pumping levels.

B. Section 42-233b., Idaho Code, authorizes the Director of the Department of Water Resources to designate a "Ground water Management Area" when the water supply in the area may be approaching conditions which could lead to designation as a critical ground water area.

C. Section 42-237 a.g., Idaho Code, empowers the Director to prohibit or limit the withdrawal of water from any well during the period that he determines that water to fill any water right is not available.

D. Policy 1F of the State Water Plan adopted by the Idaho Water Resource Board provides that "It is the policy of Idaho that where evidence of hydrologic connection exists between ground and surface water, they be managed as a single resource."

III. MANAGEMENT POLICY

Management policies which could be used in connection with future use of water in the upper Big Wood River Basin include the designation of all or a portion of the drainage as a groundwater management area, a critical ground water area or to issue a moratorium on additional permits for development.

The designation of a ground water management area for the upper Big Wood River Basin is the preferred management policy. Under this policy, additional approvals of ground water for consumptive uses can be granted upon a showing by an applicant and a determination by the department that the water supply is adequate and other water rights will not be injured. After the water rights of the basin are determined in the Snake River Basin Adjudication, and a method for the co-regulation of surface and ground water rights has been determined, the Director may require record keeping and reporting and may also issue orders if needed to reduce or stop ground water diversions.

This management policy allows the processing of all pending filings. Most consumptive use applications will be denied unless the applicants can demonstrate there will be no injury or can provide acceptable mitigation to prior rights.

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JUL 15 2004

The department will continue to consider the approval of applications for permit which propose non-consumptive uses, municipal uses, stockwater and domestic uses as defined in Section 42-111, Idaho Code. Domestic uses meeting the definition of Section 42-111, Idaho Code, are not subject to the application for permit filing requirements of Section 42-229, Idaho Code.

Section 42-111, Idaho Code, defines "domestic uses" as

A. The use of water for homes, organization camps, public campgrounds, livestock and for any other purpose in connection therewith, including irrigation of up to one-half (1/2) acre of land, if the total use is not in excess of thirteen thousand (13,000) gallons per day, or

B. Any other uses, if the total use does not exceed a diversion rate of four one-hundredths (0.04) cubic feet per second and a diversion volume of twenty-five hundred (2,500) gallons per day.

For purposes of this management policy, applications for ground water permits seeking water for multiple ownership subdivisions or mobile home parks will be considered provided each unit satisfies the definition for the exception of need to file an application for permit as described above.

While an incorporated city has wide latitude under state law to beneficially use its water rights for municipal purposes, any new large consumptive use within the municipal limits, such as irrigation of lands not associated with a dwelling, or irrigation of more than one-half acre associated with a dwelling, must be mitigated by the municipality.

The department will continue to accept and process new applications for permit and applications seeking amendment or transfer of existing water rights. Applications for amendment or applications for transfer which propose a change in the point of diversion from outside the ground water management area to within the area which would directly or indirectly result in the irrigation of new land will be treated as a proposed new appropriation of water.

Dated this 28TH day of JUNE, 1991.

R. KEITH HIGGINSON
Director

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JUL 15 2004

CERTIFICATE OF MAILING

I hereby certify that on the 28th day of June, I mailed a true and correct copy of the Order and the Management Policy for the Big Wood River Ground Water Management Area, postage prepaid, to the following individuals:

John T. Peavey
P.O. Box 88
Carey, ID 83320

Pattie Nafziger
1787 East 3100 South
Wendell, ID 83355

Lynn S. Tominaga
Route 5, Box 184
Rupert, ID 83350

Mark D. Stubbs
2030 Bitterroot Dr.
Twin Falls, ID 83301

City of Ketchum
480 East Avenue North
Ketchum, ID 83340

City of Bellevue
115 E. Poplar Boulevard
Bellevue, ID 83313

City of Hailey
12 W. Carbonate
Hailey, ID 83333

Camas County Commissioners
Fairfield, ID 83327

Lincoln County Commissioners
111 W. B
Shoshone, ID 83352

City of Fairfield
City Office
Fairfield, ID 83327

W. Clinton Stennett
P.O. Box 475
Ketchum, ID 83340

Laird Noh
3442 Addison Ave. E.
Kimberly, ID 83341

Russell W. Newcomb
666 Shoshone St.
Twin Falls, ID 83301

Ralph B. Peters
601 E. Avenue A
Jerome, ID 83338

City of Sun Valley
Sun Valley, ID 83353

Ralph Cisco
Planning and Zoning
206 1 Avenue South
Hailey, ID 83333

City of Picabo
Picabo, ID 83348

Blaine County Commissioners
206 1 Avenue South
Hailey, ID 83333

Shoshone County Commissioners
Courthouse
Wallace, ID 83873

Lynn Stevenson
Box 100
Fairfield, ID 83327

JUL 15 2004

Gwinn Rice
Box 131
Hill City, ID 83337

Matt and Debbie McLamm
P.O. Box 253
Fairfield, ID 83327

Brian L. Ballard
319 Walnut Avenue North
Ketchum, ID 83340

Lee Peterson
Box T
Shoshone, ID 83352

Steve Hansen
Box 2315
Ketchum, ID 83340

Nick Purdy
Box 748
Picabo, ID 83348

Mike Medberry
Box 2671
Ketchum, ID 83340

Melina Pinkstaff
206 Easy
Hailey, ID 83333

Doug Brearey
Box 1628
Hailey, ID 83333

Dick Oneida
Box C
Shoshone, ID 83352

Charles Brockway
706 Sunrise Boulevard North
Kimberly, ID 83341

Jim Speck
Box 9871
Ketchum, ID 83340

Gary Slette
Box 1906
Twin Falls, ID 83301

JENNIFER SEIFERT
Secretary

APP. PROCESSING NO. 20

State of Idaho

DEPARTMENT OF WATER RESOURCES

STATE OFFICE, 450 W. State Street, Boise, Idaho

20

JOHN V. EVANS
Governor

C. STEPHEN ALLRED
Director

Mailing address:
Statehouse
Boise, Idaho 83720
(208) 334-4440

Department of Water Resources
PROTESTANT'S
Exhibit C
Date Admitted 11/12/02

TO: Staff

January 22, 1980

FROM: C. Stephen Allred

RE: Big Wood River Appropriations.

Effective immediately, no additional water permits for consumptive use* of surface water during the period June 15 to November 1 will be issued on the Big Wood River and tributaries in the reach upstream from the Magic Reservoir damsite.

The water in this reach of the river has been determined to be fully appropriated by the existing waterusers, and therefore, no water is available for any additional consumptive uses.

Persons wishing to file applications for permit in this area should be advised of the limited season of use and possible denial of the permit.

Applications for permit downstream from the Magic Reservoir damsite must still be evaluated individually to determine whether water is available.

*For purposes of this memo, the consumptiveness of a use must be evaluated on a case-by-case basis. Irrigation and municipal uses are always consumptive, but industrial, commercial, mining, stockwater, recreation, wildlife, fish propagation, power, heating, cooling and aesthetics may or may not be consumptive depending on the circumstances of the use. Domestic can be considered to be non-consumptive, but a condition will be added that no water can be used for irrigation, lawn or garden watering as a part of the domestic water right.

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EXHIBIT

State of Idaho
DEPARTMENT OF WATER RESOURCES
STATE OFFICE. 450 W. State Street. Boise. Idaho

20

JOHN V. EVANS
Governor

C. STEPHEN ALLRED
Director

Mailing address:
Statehouse
Boise, Idaho 83720
(208) 334-4440

MEMORANDUM

TO: Regional Offices and Water Allocation Section

THRU: Bob Fleenor DDF

FROM: Dave Tuthill DDT

DATE: February 1, 1980

RE: Director's Memos on the Boise River and Big Wood River Drainages.

The new Director's Memos, attached, represent a change in the interpretation of consumptive use as related to the use of surface water. For example, a new domestic application can be approved in either of the two drainages, but a condition of approval will be placed on the permit which prohibits use of the water for lawn or garden watering.

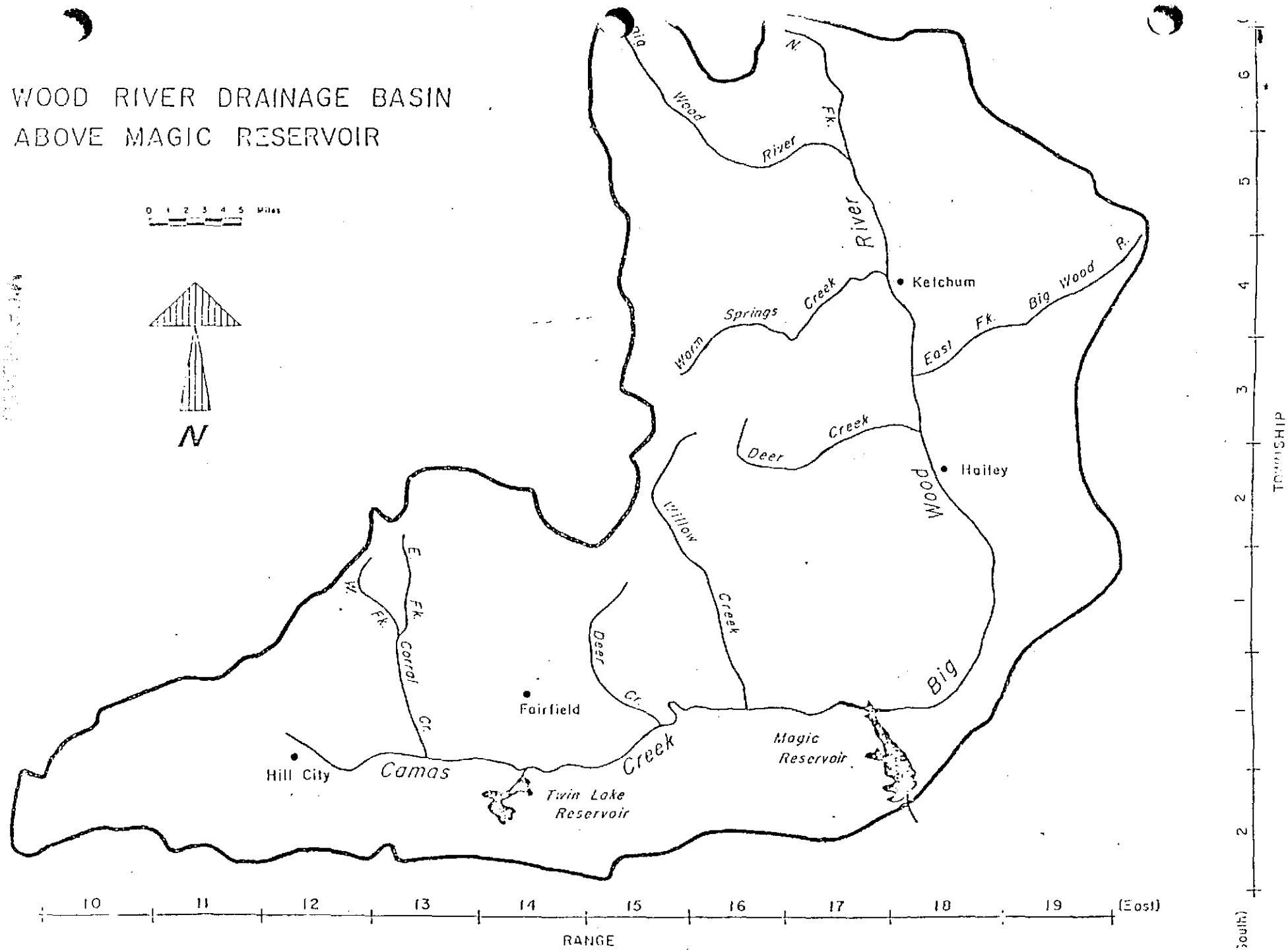
Be sure to read the final paragraph of the memo carefully so that you can advise applicants of possible restrictions.

Department of Water Resources
PROTESTANT'S
Exhibit D
Date Admitted 11/12/02

JAN 15 2004

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EXHIBIT

BIG WOOD RIVER DRAINAGE BASIN
ABOVE MAGIC RESERVOIR



RECEIVED
JUL 13 2000

PICABO LIVESTOCK CO., INC.
Box 688
PICABO, IDAHO 83348

Tel 208-788-3530
fax 208-788-0214
npurdy@earthlink.net

July 13, 2000

TO: Ms. Mary Ann Mix, Chairman
Board of County Commissioners
206 First Avenue South, Suite 300
Hailey, Idaho 83333
Ph: 208-788-5500
Fax: 208-788-5576

FROM: Nick Purdy
Ph: 208-788-3530
Fax: 208-788-0214

RE: Drought Disaster Declaration

Dear Mary Ann:

There is a disaster developing in the farming areas which depend on water from the Wood River and Silver Creek in Blaine County. With the dry weather and the poor winter,the streams and creeks are dropping rapidly. The Wood River water rights have been cut to the 1884s and the Silver Creek rights are in the 1885s. This leaves a great deal of farm land without adequate water to raise crops the rest of the summer.

I am told that if the Board of Commissioners request the Governor to declare Blaine County a Drought Disaster Area,and if such happens, the IDWR would allow farmers to rent water from other users who have surplus water and transfer the water to their land to save their crops. The declaration would also make farmers eligible for other government funds in the form of loans or grants.

Please consider this issue because it is vital for the survival of many corps for South Blaine County Farmers.

Department of Water Resources
PROTESTANT'S
Exhibit E
Date Admitted 11/13/02

Sincerely,

Nick Purdy
cc: The Honorable Governor Dirk Kempthorn

JUL 15 2000

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EXHIBIT

THE BOARD O 3LAINE COUNTY CO MISSIONERS

206 FIRST AVENUE SOUTH, SUITE 300
HAILEY, IDAHO 83333
PHONE: (208) 788-5500 * FAX: (208) 788-5576

Mary Ann Mix, Chairman * Leonard Harlig, Commissioner * Dennis Wright, Commissioner

July 17, 2000

The Honorable Governor Dirk Kempthorne
P.O. Box 83720
Boise, Id 83720-0034

Dear Governor Kempthorne,

RE: Drought Disaster Declaration for Blaine County

In reference to the accompanying letter from Mr. Purdy, and as a result of subsequent discussions with other area farmers and ranchers and local irrigation district water users, the Blaine County Board of Commissioners would like to request that Blaine County be declared a Drought Disaster Area.

As you may know, along with other Idaho counties, Blaine County has been experiencing very dry weather conditions which is having a serious affect on local water levels.

We respectfully request this declaration be made as soon as possible so that our local farmers may take necessary steps to ensure the survival of their crops.

Thank you for your time and consideration in this matter, please feel free to contact us if you have any questions or need further information.

With kindest regards,

Mary Ann Mix
Chair

Dennis Wright
Vice Chairman

Leonard Harlig
Commissioner

Cc: Norm Young, Idaho Department of Water Resources
Nick Purdy

Department of Water Resources
PROTESTANT'S
Exhibit F
Date Admitted 11/13/02

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EXHIBIT

BEFORE THE DEPARTMENT OF WATER RESOURCES

OF THE STATE OF IDAHO

IN THE MATTER OF A DECLARATION OF DROUGHT EMERGENCY FOR BLAINE COUNTY	ORDER DECLARING DROUGHT EMERGENCY

WHEREAS, Blaine County is experiencing severely restricted water supplies available for the current irrigation season as demonstrated by hydrologic data showing that the discharge of the Big Wood River at Hailey in May and June was only 79 percent and 56 percent of the respective 30 year averages. Flows of the Big Wood River at Hailey are about 50 percent of the long term average for the week of July 11. Unusual wind and temperature conditions have exacerbated the conditions; and

WHEREAS, the Blaine County Commissioners have requested declaration of a drought emergency to allow administrative actions to lessen the severe impacts of the drought conditions in the county; and

WHEREAS, section 42-222A, Idaho Code, provides that upon declaration of a drought emergency for an area designated by the Director of the Department of Water Resources and approved by the Governor, the director is authorized to allow temporary changes in the point of diversion, the place of use, and the purpose of use for valid existing water rights when the director determines that such changes can be accomplished in accordance with the provisions of section 42-222A, Idaho Code; and

WHEREAS, the existing Amended Moratorium Order of the Director of the Department of Water Resources, dated April 30, 1993, applicable to the Eastern Snake River Plain Area, including Blaine County, does not prohibit the processing or approval of applications for transfer of existing water rights;

NOW, THEREFORE, IT IS HEREBY ORDERED that pursuant to the authority of the Director of the Department of Water Resources provided in section 42-222A, Idaho Code, a drought emergency for purposes of section 42-222A, Idaho Code, is hereby declared for Blaine County, Idaho.

IT IS FURTHER HEREBY ORDERED that pursuant to this declared drought emergency and the provisions of section 42-222A, Idaho Code, the following procedures and requirements shall apply to the filing, processing, and approval of any application for a temporary change to an existing water right within Blaine County during the pendency of this declared drought emergency:

ORDER - Page 1

2004

Department of Water Resources
PROTESTANT'S
Exhibit G
Date Admitted 11/13/02

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EXHIBIT

1. An application for a temporary change to an existing water right shall be made upon forms provided by the department and shall be accompanied by an application fee of fifty dollars ($50.00) per application.

2. The director is not required to publish notice of the proposed change pursuant to the provisions of section 42-211 or 42-222(1), Idaho Code, and is not required to make findings as provided in said sections. A temporary change may be approved upon completion of the application form, payment of the filing fee, and a determination by the director that the proposed change can be properly administered and there is no information that the change will injure any other water right. If the right to be changed is administered by a watermaster within a water district, the director shall obtain and consider the recommendations of the watermaster before approving the temporary change application.

3. All temporary changes approved pursuant to the provisions of this order shall expire on the date shown in the approval which shall not be later than December 31, 2000, and thereafter, the water right shall revert to the point of diversion and place of use existing prior to the temporary change. Nothing herein shall be construed as approval to authorize construction of a new well as a new point of diversion or to alter a stream channel.

4. The recipient of an approved temporary change issued pursuant to this order shall assume all risk of curtailment or mitigation should the diversion and use of water under the temporary change cause injury to other water rights, constitutes an enlargement in use of the original right, be inconsistent with the conservation of water resources within the state of Idaho, or not be in the local public interest.

5. Temporary changes shall only be approved for the purpose of providing a replacement water supply to lands or other uses which normally have a full water supply, except for the drought condition. Temporary changes may not be approved to provide water for new development or to allow expansion of the use of water under existing water rights. If the right to use the water, the diversion works of the water delivery system is represented by shares of stock in a corporation, or if the diversion works or delivery system for such right is owned or managed by an irrigation district, no change in point of diversion or place or nature of use of such water shall be made or allowed without the written consent of such corporation or irrigation district.

6. Any applicant for a temporary change who is aggrieved by a denial of the director for a temporary change pursuant to this order and the provisions of section 42-222A, Idaho Code, may request a hearing pursuant to

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section 42-1701A(3), Idaho Code, and may seek judicial review of the final order of the director pursuant to the provisions of section 42-1701A(4), Idaho Code.

IT IS FURTHER HEREBY ORDERED that this order is effective upon approval of the Governor and expires on December 31, 2000, unless extended or terminated by order of the director.

DATED this 18TH day of July, 2000.

for KARL J. DREHER
Director

APPROVED this 18th day of July, 2000.

DIRK KEMPTHORNE
Governor

MICROFILMED
JUL 13 2000

State of Idaho
DEPARTMENT OF WATER RESOURCES
Southern Region, 222 Shoshone St. East, Twin Falls, Idaho 83301-6105 (208) 736-3033
Fax (208) 736-3037

PHILIP E. BATT
Governor

KARL J. DREHER
Director

August 26, 1996

Board of County Commissioners
PO Box 400
Hailey, ID 83333

RE: Use of Water in Blaine County for Aesthetic Purposes

Gentlemen:

Thank you for your letter dated August 13th, 1996, expressing the commissioner's concerns about aesthetic water uses within Blaine County.

The department shares your concerns about the water resources in your county. As you may know the department in 1980 closed the Big Wood River and its tributaries upstream from Magic Reservoir to new appropriations of consumptive surface water uses between the dates of June 15th and November 1st of each year. This was done since it was determined that the surface waters in this area are fully appropriated. In 1991 the department placed essentially the same area upstream of Magic Reservoir into what is know as the Big Wood River Groundwater Management Area and established a management policy for the area. (Please find copies of department memos and orders regarding these actions.) Realizing the benefit of keeping water in the streams, the department has licensed several "minimum in stream flow" water rights in the Big Wood drainage including rights 37-07919, 37-08258 and 37-08307. (Please find enclosed proof reports of these rights.)

Since the closure of the surface water in 1980 and establishment of policy for groundwater in 1991 the department continues to process new permits and transfers pursuant to Title 42, Chapter 2 of the IDAHO CODE and the "Water Appropriation Rules" (IDAPA 37.03.08) which qualify under the management policy for the area. The present types of applications the department can process can be characterized as:

-New applications for permits for:
  -Nonconsumptive uses.
  -Domestic type uses.
  -New uses which are somehow mitigated.

-Applications for transfers of existing rights for:
  -Change of Point of Diversion or Source.
  -Change of Place of Use.
  -Change of Nature of Use.

Department of Water Resources
PROTESTANT'S
Exhibit H
Date Admitted 11/13/02

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EXHIBIT

Included in these processes can be development of aesthetic type uses.

Although you characterize aesthetic use as trivial this type of use is recognized as a beneficial use of water. In regulation of aesthetic uses, as for all other uses, the emphasis is on the priority date and not the type of use. In Idaho it is "first in time is first in right". However, it is recognized in Idaho's constitution that there can be given preference of one use over another but in this scenario when a higher preference use with a junior priority wishes to bump a lower preference use with a senior priority the senior water right must be condemned. To my knowledge this condemnation procedure has rarely been used.

In the application and transfer processes listed above, the department must consider the "local public interest" when approving, denying or conditioning such applications. As part of these processes **all** are welcome to press the issue of "local public interest" as well as other issues if they wish to file a formal protest of the application being considered. If the commissioners choose to file formal protests on pending applications you can be assured that your concerns would be addressed by the department. By filing protests the protestants also have the opportunity to appeal decisions by the department to the district court. As representatives of the county the commissioners have the unique opportunity to aid the department in understanding the "local public interest". Your input on this matter would be considered by the department as well as other issues such as "takings", "expansion of use", "affect on other rights", "forfeiture", etc.

I invite our further discussion about these matters. I'm open to meet with the commissioners. If the commissioners would suggest several dates, I will invite representatives of the department's administration, to see if we can arrange a time to meet.

Respectfully,

Allen Merritt, PE
Southern Region Manager

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JUL 15 2004

WATER

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Resolution

BLAINE CO. REQUEST
OF: BLAINE COUNTY
COMMISSIONERS

'98 JAN 28 PM 3 17

MARY GREEN, CLERK

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BLAINE COUNTY RESOLUTION 98- 1

A RESOLUTION OF THE COUNTY OF BLAINE, STATE OF IDAHO, ADOPTING A BLAINE COUNTY LOCAL PUBLIC INTEREST WATER POLICY.

BE IT RESOLVED BY THE BOARD OF COUNTY COMMISSIONERS OF BLAINE COUNTY, IDAHO AS FOLLOWS:

The Board of County Commissioners of Blaine County, Idaho resolves that it is in the best interest of Blaine County to adopt a "Local Public Interest Water Policy." Adoption of such a policy complies with the Blaine County Comprehensive Plan and identifies for the Idaho Department of Water Resources the "local public interest."

A copy of the policy is attached to this resolution as Exhibit "A". Blaine County Resolution 98- 1 shall be in effect upon its passage, approval and adoption.

DATED THIS 26th DAY OF JANUARY, 1998.

BLAINE COUNTY COMMISSIONERS

Leonard Harlig
LEONARD HARLIG, CHAIRMAN

MARY ANN MIX, COMMISSIONER

DENNIS WRIGHT, COMMISSIONER

BOARD OF COUNTY COMMISSIONERS BLAINE COUNTY IDAHO

ATTEST:

Department of Water Resources
PROTESTANT'S
Exhibit I
Date Admitted 11/13/02

Mary Green
MARY GREEN, BLAINE COUNTY CLERK

MICROFILMED

JUL 16 2003

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EXHIBIT

BC :D OF COUNTY COMMISSIO RS
BLAINE COUNTY
P.O. BOX 400 • HAILEY, IDAHO 83333
(208) 788-5500
FAX (208) 788-5576

LEN HARLIG, Chair • MARY ANN MIX, Commissioner • DENNIS WRIGHT, Commissioner

January 26, 1998

BLAINE COUNTY "*LOCAL PUBLIC INTEREST WATER POLICY*"

BACKGROUND FOR THE CREATION OF THE POLICY

The Blaine County Comprehensive Plan ("Plan") recognizes the importance of water to property owners, residents, and visitors of the County. Unlimited supplies of water are not always available. Conservation of water resources, and the adequacy of water supplies for future use, is deemed essential to the present and future health, safety and welfare of Blaine County's residents, visitors, and property owners. During the recent drought years of 1987 to 1994, residents in some of the canyon areas of Blaine County regularly reported dry wells or severely reduced well flows. A recent aquifer study conducted by Dr. Charles Brockway indicates that the aquifer in Blaine County has declined approximately 12 feet during the past two decades.

The Blaine County Board of Commissioners ("Board") adoption of a "*local public interest water policy*" ("*Policy*") complies with the directions of the *Plan*; helps ensure the conservation of water resources in Blaine County; and identifies for the Idaho Department of Water Resources, ("*IDWR*") the "*local public interest*" as determined by the Board, for *IDWR* consideration in accordance with applicable state law. The *Board* understands that water policy in Idaho is a State jurisdiction and is administered through the *IDWR*.

IDWR lists as one of their criteria [see I.C. §42-203A (5)] [see also: I.C. §42-211 and §42-222, and the Water Appropriations Rules, ADAPA 37.03.08] for evaluation of applications for water rights transfer, diversion, or increase of use, the following statement: "*whether the application will conflict with the local public interest, where the local public interest is defined as the affairs of the people in the area directly affected by the proposed use*" [see also, *Shokal v. Dunn (1985); Hardy v. Higgenson (1993)*].

The Blaine County Plan identifies senior water rights holders (mostly agriculture); fish and wildlife habitat; public recreation; minimum stream flows; surface and ground water quality; and Blaine County's residential and visitor populations as some of the "affairs of the people" affected by the quality and availability of water. The *Board* considers the entire County as economically interrelated and part of the "*local public interest*". The county-wide public interest may not be adequately met if the proposed transfer or diversion benefits only a single subdivision at the

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expense of the remainder of the larger public interest and senior water rights holders.

IDWR declared in 1980, through a "policy memorandum", a moratorium on issuance of permits for new consumptive uses from the Big Wood River above Magic Reservoir, declaring the surface sources fully appropriated.

In 1991, the Upper Big Wood River Basin was designated as a ground water management area, with an accompanying management plan that restricts the issuance of permits for the consumptive use of ground water. Consumptive uses are not approved unless the applicant demonstrates that no injury will occur to prior rights or provides acceptable mitigation.

Certain application requests to IDWR, for transfer or diversion of water rights, have the potential to result in an actual increase of water use that is contrary to the best interests of Blaine County's residents and visitors, and is contrary to State Legislative intent to preserve and conserve water in Idaho. Among these requests are:

1) transfers or diversions of use to private recreational and aesthetic ponds, and fire protection ponds greater in size than needed for fire protection, (all with an attendant impoundment of water that would normally be available for maintenance of instream flows, agricultural use, and the use of senior water right holders) [see §42-1503 (b), which requires that the application, "*is in the public, as opposed to private, interest*];

2) requests from developers to utilize new domestic wells in place of, or in addition to, existing surface or groundwater rights on the subject property, when these rights are already sufficient to meet domestic uses [see I.C. §42-111]; and,

3) requests to transfer limited surface water rights to year-round well groundwater rights or to transfer limited well ground-water rights to surface uses, especially when there are not enough IDWR personnel for monitoring.

The Board requests that IDWR consider this, "*Policy*" in reviewing applications for water use permits, diversions, and transfers of water rights within Blaine County.

In order to provide IDWR with a policy statement reflecting the "*local public interest*" in Blaine County, the Board convened a group of interested and knowledgeable citizens as a *Water Policy Group* ("Group") to propose guidelines to the Board for a water use policy for the County. After a series of meetings and work shop sessions, the Group presented their recommendations to the Board.

The proposed *Policy* was first presented by the Board in public hearing for wider public comment on April 7, 1997 at 6:30 PM in the Old Blaine County Courthouse. Approximately 25 people attended the hearing which lasted until 8:45 PM.

The Board met on April 14 and reviewed the *Policy*, taking into account the additional public comment and evaluation of the draft.

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The Board subsequently reviewed several revised drafts, taking into consideration additional comments they had received from interested members of the public. At a special notice workshop on June 10, 1997, the Board submitted a revised draft to the Group for their evaluation and suggestions.

The Group met again on October 6, 1997. After a review of a June 12 draft, based on the Board's June 10 workshop, the Group made specific suggestions for improvements to, and clarifications of, the draft.

A second public hearing was duly noticed and held by the Board on December 22, 1997 at 4:00 PM. The Board received valuable input from IDWR and from several members of the public at the December 22 hearing. The Policy was further reviewed by the Board and revised accordingly.

A third and final public hearing was held January 26, 1998. The Board of Commissioners adopted this Policy by Resolution #98-1 on January 26, 1998.

The Silver Creek Nature Conservancy is in the process of completing the second phase of an aquifer study of the Wood River Valley and the Silver Creek area. When that study is completed, analyzed, and peer reviewed Blaine County may supplement its "local public interest water policy" where additional data make changes or additions appropriate.

BLAINE COUNTY WATER POLICY

1. Blaine County encourages property owners and developers to utilize landscaping techniques for residential and commercial use which will reflect the limited water resource in our community.

2. Blaine County believes there can be a de facto increase of water use through the domestic purpose exemption when existing surface or groundwater rights on a subject property are available for domestic and landscape needs but they are not used for these domestic purposes. In addition:

a. Although exempt from measuring and reporting requirements (see I.C. §42-701), the present 13,000 gallon limitation on domestic wells and one-half acre landscape use should be rigorously enforced to prohibit use beyond the allowable limit. Where appropriate for new subdivisions, the Board endorses IDWR's recommendation for central water systems that would reduce the total amount of water use in subdivisions in accordance with I.C. §42-111 1 (b), 2, and 3.

b. Existing on-site surface and ground water rights should be utilized for domestic and landscape use before allowing applications for new domestic uses, especially for new subdivisions which fall under the regulations of I.C. §42-111.

c. To better monitor and regulate water use, Blaine County may require, where appropriate, separate domestic and landscaping water systems for new subdivisions.

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3. Blaine County supports the State-required loss of water rights after five years of non-use without appropriate extensions and encourages *IDWR* to enforce this statutory requirement.

4. The Board may protest diversions or transfers of water used primarily for private recreation or private aesthetic purposes in Blaine County when they are contrary to this *Policy* and contrary to I.C. §42-1503. The burden of responsibility to show a "public interest" is on the applicant. [see also, *Shokal v. Dunn (1985)*]

> When such uses are proposed for absorbing flood flows and recharging the aquifer, adding to minimum stream flows, or providing water for non-profit public recreation facilities, they may warrant an exception from this section, when there is a positive recommendation from the Board.

5. The Board may protest transfers between sub-basins in Blaine County when they are contrary to this *Policy*, except for transfers within the Big Wood Valley bounded on the southwest by Stanton Crossing (range 17E; township 1S; section 13) and on the southeast by the junction of Silver Creek and the Little Wood River (range 21E; township 2S; section 31) and where such transfers allow for the traditional recharge of Silver Creek from the Big Wood Drainage.

> Among the considerations for such transfers would be a demonstration that the transfer does not adversely affect recreational uses, minimum stream flows, water temperature and fish habitat, and the total maximum daily load of pollutants in the Big Wood River and its tributaries.

The Board will appoint an advisory body of water use experts to advise the Board on application protests for transfers and diversions under §4 and §5 of the *Policy*.

6. Blaine County believes that transfers of surface water rights to ground water rights and transfers of ground water rights to surface uses within the moratorium area can generally be a defacto increase of use because of the difficulty of monitoring new and existing meters. Before any such transfers take place in Blaine County, the Board requests *IDWR* to consider the following criteria along with existing *IDWR* review criteria:

> a. Ensure that the scale of transfer in the receiving zone does not adversely affect adjacent wells. Require applicants to utilize appropriate technologies or protocols (ie. test wells, well logs, etc.) to demonstrate compliance with this requirement.
>
> b. Require meters and monitoring to prevent expansion of use at the well site, with the priority cut-off date enforced by the Water Master.
>
> c. Require the applicant to demonstrate that their water right is not just "flood water" and that the water right can be delivered with reasonable consistency, over a reasonable number of years (as determined by USGS gauging data), and for the duration of the water season.

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d. Require appropriate recharge at the original point of diversion or at the location most likely to ensure compliance with *IDWR* regulations.

7. Blaine County supports the creation of a *Ground Water District* and/or a *Ground Water Recharge District* in the watersheds of the County.

8. The *Board* accepts its responsibility to engage in the pre-litigation dispute resolution process provided by *IDWR* for water applications, keeping in mind that the burden of proof is on the applicant to demonstrate that their water right is not just "flood water" and that the water right can be delivered with reasonable consistency, over a reasonable number of years (as determined by USGS water resource data), and for the duration of the water season, and that the application is not in actual conflict with the *Policy*.

Respectfully submitted,

Len Harlig
Chairman

Mary Ann Mix
Commissioner

Dennis Wright
Commissioner

Attachment (1)

JUL 15 2004

8-3-1

CHAPTER 3

LOCAL PUBLIC INTEREST WATER POLICY

SECTION:

8-3-1: Background For The Creation Of The Policy
8-3-2: Blaine County Water Policy

8-3-1: BACKGROUND FOR THE CREATION OF THE POLICY:

The Blaine County Comprehensive Plan ("Plan") recognizes the importance of water to property owners, residents, and visitors of the County. Unlimited supplies of water are not always available. Conservation of water resources, and the adequacy of water supplies for future use, is deemed essential to the present and future health, safety and welfare of Blaine County's residents, visitors, and property owners. During the recent drought years of 1987 to 1994, residents in some of the canyon areas of Blaine County regularly reported dry wells or severely reduced well flows. A recent aquifer study conducted by Dr. Charles Brockway indicates that the aquifer in Blaine County has declined approximately 12 feet during the past two decades.

The Blaine County Board of Commissioners ("Board") adoption of a "local public interest water policy" ("Policy") complies with the directions of the Plan; helps ensure the conservation of water resources in Blaine County; and identifies for the Idaho Department of Water Resources, ("IDWR") the "local public interest" as determined by the Board, for IDWR consideration in accordance with applicable state law. The Board understands that water policy in Idaho is a State jurisdiction and is administered through the IDWR.

IDWR lists as one of their criteria [see I.C. §42-203A (5)] [see also: I.C. §42-211 and §42-222, and the Water Appropriations Rules, ADAPA 37.03.08] for evaluation of applications for water rights transfer, diversion, or increase of use, the following statement: "whether the application will conflict with the local public interest, where the local public interest is defined as the affairs of the people in the area directly affected by the

Department of Water Resources
Blaine County
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Date Admitted 11/13/02

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proposed use" [see also. Shokal v. Dunn (1985): Hardy v. Higgenson (1993)].

The Blaine County Plan identifies senior water rights holders (mostly agriculture): fish and wildlife habitat: public recreation: minimum stream flows: surface and ground water quality: and Blaine County's residential and visitor populations as some of the "affairs of the people" affected by the quality and availability of water. The Board considers the entire County as economically interrelated and part of the "local public interest". The county-wide public interest may not be adequately met if the proposed transfer or diversion benefits only a single subdivision at the expense of the remainder of the larger public interest and senior water rights holders.

IDWR declared in 1980, through a "policy memorandum", a moratorium on issuance of permits for new consumptive uses from the Big Wood River above Magic Reservoir, declaring the surface sources fully appropriated.

In 1991, the Upper Big Wood River Basin was designated as a ground water management area, with an accompanying management plan that restricts the issuance of permits for the consumptive use of ground water. Consumptive uses are not approved unless the applicant demonstrates that no injury will occur to prior rights or provides acceptable mitigation.

Certain application requests to IDWR, for transfer or diversion of water rights, have the potential to result in an actual increase of water use that is contrary to the best interests of Blaine County's residents and visitors, and is contrary to State Legislative intent to preserve and conserve water in Idaho. Among these requests are:

1) transfers or diversions of use to private recreational and aesthetic ponds, and fire protection ponds greater in size than needed for fire protection, (all with an attendant impoundment of water that would normally be available for maintenance of instream flows, agricultural use, and the use of senior water right holders) [see §42-1503 (b), which requires that the application, "is in the public, as opposed to private, interest];

2) requests from developers to utilize new domestic wells in place of, or in addition to, existing surface or groundwater rights on the subject property, when these rights are already sufficient to meet domestic uses [see I.C. §42-111]; and,

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3) requests to transfer limited surface water rights to year-round well groundwater rights or to transfer limited well ground-water rights to surface uses, especially when there are not enough IDWR personnel for monitoring.

The Board requests that IDWR consider this, "Policy" in reviewing applications for water use permits, diversions, and transfers of water rights within Blaine County.

In order to provide IDWR with a policy statement reflecting the "local public interest" in Blaine County, the Board convened a group of interested and knowledgeable citizens as a Water Policy Group ("Group") to propose guidelines to the Board for a water use policy for the County. After a series of meetings and work shop sessions, the Group presented their recommendations to the Board.

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The Board met on April 14 and reviewed the Policy, taking into account the additional public comment and evaluation of the draft. The Board subsequently reviewed several revised drafts, taking into consideration additional comments they had received from interested members of the public. At a special notice workshop on June 10, 1997, the Board submitted a revised draft to the Group for their evaluation and suggestions.

The Group met again on October 8, 1997. After a review of a June 12 draft, based on the Board's June 10 workshop, the Group made specific suggestions for improvements to, and clarifications of, the draft.

A second public hearing was duly noticed and held by the Board on December 22, 1997 at 4:00 PM. The Board received valuable input from IDWR and from several members of the public at the December 22 hearing. The Policy was further reviewed by the Board and revised accordingly.

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The Silver Creek Nature Conservancy is in the process of completing the second phase of an aquifer study of the Wood River Valley and the Silver Creek area. When that study is completed, analyzed, and peer

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reviewed Blaine County may supplement its "local public interest water policy" where additional data make changes or additions appropriate. (Res. 98-1, 1-26-1998)

8-3-2: BLAINE COUNTY WATER POLICY:

1. Blaine County encourages property owners and developers to utilize landscaping techniques for residential and commercial use which will reflect the limited water resource in our community.

2. Blaine County believes there can be a de facto increase of water use through the domestic purpose exemption when existing surface or groundwater rights on a subject property are available for domestic and landscape needs but they are not used for these domestic purposes. In addition:

a. Although exempt from measuring and reporting requirements (see I.C. §42-701), the present 13,000 gallon limitation on domestic wells and one-half acre landscape use should be rigorously enforced to prohibit use beyond the allowable limit. Where appropriate for new subdivisions, the Board endorses IDWR's recommendation for central water systems that would reduce the total amount of water use in subdivisions in accordance with I.C. §42-111 1 (b), 2, and 3.

b. Existing on-site surface and ground water rights should be utilized for domestic and landscape use before allowing applications for new domestic uses, especially for new subdivisions which fall under the regulations of I.C. §42-111.

c. To better monitor and regulate water use, Blaine County may require, where appropriate, separate domestic and landscaping water systems for new subdivisions.

3. Blaine County supports the State-required loss of water rights after five years of non-use without appropriate extensions and encourages IDWR to enforce this statutory requirement.

4. The Board may protest diversions or transfers of water used primarily for private recreation or private aesthetic purposes in Blaine County when they are contrary to this Policy and contrary to I.C. §42-1503. The burden of responsibility to show a "public interest" is on the applicant. [see also, Shokal v. Dunn (1985)]

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When such uses are proposed for absorbing flood flows and recharging the aquifer, adding to minimum stream flows, or providing water for non-profit public recreation facilities, they may warrant an exception from this section, when there is a positive recommendation from the Board.

5. The Board may protest transfers between sub-basins in Blaine County when they are contrary to this Policy, except for transfers within the Big Wood Valley bounded on the southwest by Stanton Crossing (range 17E; township 1S; section 13) and on the southeast by the junction of Silver Creek and the Little Wood River (range 21E; township 2S; section 31) and where such transfers allow for the traditional recharge of Silver Creek from the Big Wood Drainage.

Among the considerations for such transfers would be a demonstration that the transfer does not adversely affect recreational uses, minimum stream flows, water temperature and fish habitat, and the total maximum daily load of pollutants in the Big wood River and its tributaries.

The Board will appoint an advisory body of water use experts to advise the Board on application protests for transfers and diversions under §4 and §5 of the Policy.

6. Blaine County believes that transfers of surface water rights to ground water rights and transfers of ground water rights to surface uses within the moratorium area can generally be a defacto increase of use because of the difficulty of monitoring new and existing meters. Before any such transfers take place in Blaine County, the Board requests IDWR to consider the following criteria along with existing IDWR review criteria:

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b. Require meters and monitoring to prevent expansion of use at the well site, with the priority cut-off date enforced by the Water Master.

c. Require the applicant to demonstrate that their water right is not just "flood water" and that the water right can be delivered with reasonable consistency, over a reasonable number of years (as determined by USGS gauging data), and for the duration of the water season.

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d. Require appropriate recharge at the original point of diversion or at the location most likely to ensure compliance with IDWR regulations.

7. Blaine County supports the creation of a Ground Water District and/or a Ground Water Recharge District in the watersheds of the County.

8. The Board accepts its responsibility to engage in the pre-litigation dispute resolution process provided by IDWR for water applications, keeping in mind that the burden of proof is on the applicant to demonstrate that their water right is not just "flood water" and that the water right can be delivered with reasonable consistency, over a reasonable number of years (as determined by USGS water resource data), and for the duration of the water season, and that the application is not in actual conflict with the Policy.
(Res. 98-1, 1-26-1998)

BEFORE THE DEPARTMENT OF WATER RESOURCES

OF THE STATE OF IDAHO

Protestants's Exhibit K Adm Date Admitted 11/13/02

IN THE MATTER OF APPLICATIONS FOR)
TRANSFER NO. 5174 IN THE NAME OF)
DENNIS M. BAKER AND NO. 5175 IN)
THE NAME OF HUF-N-PUF TRUST)
)

FINAL ORDER

On August 4, 1998, the hearing officer for the Idaho Department of Water Resources (the "Department") issued a Recommended Order in connection with the above captioned matter. On August 21, 1998, Huf-N-Puf Trust filed Exceptions to Recommended Order and a supporting brief with the Director of the Department. On August 24, 1998, Dennis M. Baker ("Baker") filed a Joinder in Exceptions to Recommended Order adopting by reference the Exceptions to Recommended Order filed by Huf-N-Puf Trust. On August 27, 1998, the Blaine County Commissioners filed a Response to Applicants' Exceptions to Recommended Order and Brief Opposing Exceptions and Supporting Order. On August 28, 1998, the Idaho Conservation League and Idaho Rivers United filed Intervenors' Response to Applicants' Exceptions to Recommended Order. The Director has reviewed the exceptions, supporting briefs, and responses to the exceptions and briefs, and responds as follows:

1. Finding of Fact No. 14. Huf-N-Puf Trust and Baker take exception to the description of the testimony of the expert witness for the applicants in Finding of Fact No. 14. The amount of water sought for transfer on each application for transfer is 0.09 cfs. Based on a number of assumptions, the expert witness for the applicants testified that each proposed diversion of groundwater at a rate of 0.09 cfs would cause a maximum, instantaneous depletion in the flow of the Big Wood River estimated to be about 0.02 cfs, or an annual depletion estimated to be about 5 acre-feet. Finding of Fact No. 14 in the Recommended Order recognizes the depletion in flow as small, difficult to measure, but real. Even if the maximum instantaneous depletion would not exceed 0.02 cfs and could not be measured using conventional methods, the hearing officer correctly concluded that such depletion would be "real". Finding of Fact No. 14 in this Final Order is revised to clarify the description of the testimony of the expert witness for the applicants. However, the finding that granting either transfer would result in a real depletion in the flow of the Big Wood River is not changed.

2. Finding of Fact No. 17. Huf-N-Puf Trust and Baker take exception to not including a description of the testimony of the expert witness for the applicants that the Big Wood River loses water to the adjoining aquifer in

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the reach of the river adjacent to the proposed points of diversion and places of use. The exception contends that the expert witness for the protestants did not disagree with the testimony of the applicant's expert witness. While the expert witness for the applicants did testify that the reach of the Big Wood River adjacent to the proposed points of diversion and places of use is a losing reach, and the expert witness for the protestants did not disagree with this testimony, the applicants' expert witness testified that the aquifer adjacent to this reach of the Big Wood River was hydraulically connected to the river. During a portion of the hearing on April 8, 1998, the expert witness for the applicants testified that either transfer would cause a maximum, instantaneous depletion in the flows of the Big Wood River estimated to be 0.02 cfs at Hailey, Idaho. Withdrawal of water from the aquifer adjacent to the Big Wood River would not cause depletion in the flows of the Big Wood River unless the river and the adjacent aquifer are hydraulically connected. The expert witness for the protestants also testified that the aquifer adjacent to the Big Wood River near the point of diversion proposed by Huf-N-Puf Trust is hydraulically connected to the river. He testified that the proposed transfers would reduce flows in the Big Wood River whether or not this reach of the river is a losing reach. Finding of Fact No. 17 in this Final Order has been revised to more fully reflect the testimony of the experts for the applicants and protestants on this issue.

3. Exceptions to Analysis.

a. Sixth Paragraph (now in the fifth paragraph) - Huf-N-Puf Trust and Baker take exception to the reference to the combined rate of diversion of 0.18 cfs in comparison to the rate of flow of the Big Wood River. The paragraph has been revised to clarify the description of the estimated reductions to flows in the Big Wood River if the transfers are approved.

b. Sixth Paragraph - Huf-N-Puf Trust and Baker take exception to including the theoretical maximum consumptive use that could occur if the transfers are approved. The expert witness for the applicants testified that each application would result in an annual depletion of about 5 acre-feet of water, 10 acre-feet when combined, based on irrigating vegetation having low water consumption requirements. However, if the proposed transfers are approved, the water rights would not be limited for use in irrigating vegetation having low water consumption requirements. The two applications for transfer, when combined, propose to divert a maximum volume of water of 35 acre-feet annually. This volume of water is theoretically sufficient for irrigating vegetation

having high water consumption requirements near Ketchum, Idaho. If the two applications for transfer are approved as submitted, the annual volume of water depleted from the Big Wood River, and unavailable to satisfy senior water rights, could total nearly 25 acre-feet. This volume of water is not insignificant.

c. Seventh Paragraph - Huf-N-Puf Trust and Baker contend that this paragraph treats the proposed transfers as the equivalent of applications for new water rights. This paragraph describes the physical effect the transfers would have as being equal to the physical effect new appropriations of equal amounts of water would have on the amount of water available to senior water rights during times of scarcity. However, the basis for denying the proposed transfers is injury to other water rights in accordance with Section 42-222, Idaho Code.

4. Conclusion of Law No. 8. Huf-N-Puf Trust and Baker contend that Conclusion of Law No. 8 "improperly applies Idaho law which permits transfers of water rights unless there is substantial or material injury to other water rights." Section 42-222, Idaho Code, does not describe injury in terms of "substantial or material." Rather, the word "injured" is used without modifiers or qualification. Huf-N-Puf Trust and Baker argue that for another water right to be "injured" under Section 42-222, Idaho Code, that water right must be substantially injured. In *Beecher v. Cassia Creek Irrigation Company*, 66 Idaho 1, 7, 154 P.2d 507 (1944), the Idaho Supreme Court defined "substantially injured" as "not merely a fanciful injury but a real and actual injury." The proposed transfers would cause real depletions to the flows in the Big Wood River during times of water shortages when senior water rights are curtailed. Allowing groundwater to be pumped under a junior priority from an adjacent aquifer hydraulically connected to the Big Wood River during times when downstream senior water rights from the Big Wood River are curtailed would cause "real and actual injury" which is determinable and would be wholly inconsistent with Idaho law. The conclusion of law is not changed.

5. Conclusion of Law No. 9. Huf-N-Puf Trust and Baker similarly contend that Conclusion of Law No. 9 "improperly applies Idaho law." Conclusions of Law No. 8 and No. 9 are changed to clarify that approval of the applications for transfer would injure existing water rights in the Big Wood River upstream from Magic Reservoir.

Based upon his understanding of the law and the facts in this matter, the Director makes the following Findings of Fact, Conclusions of Law and Final Order:

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FINDINGS OF FACT

1. On January 21, 1986, the Department issued License No. 37-07745 ("license") in the name of Connecticut General Life Insurance Company that provided the following:

Source:	Groundwater
Priority:	October 25, 1978
Rate of diversion:	5.53 cubic feet per second ("cfs")
Point of diversion:	Section 1, T2S, R17E, B.M.
Use:	Irrigation
Season of use:	April 1 to November 1
Place of use:	300 acres in Section 2, T2S, R17E, B.M., and Section 35, T1S, R17E, B.M.

2. On July 21, 1994, the Glen Croft Estate filed an Application for Extension of Time to Avoid Forfeiture of a Water Right in connection with the license, describing that the water was last used in October of 1990. The Department advertised the application for extension of time, and the application was not protested. On October 5, 1994, the Department granted the extension of time to avoid forfeiture requiring that use of the water right be resumed on or before October 1, 1999.

3. On October 26, 1995, the Department approved amended Transfer No. 4708, in the name of Peter and Melissa Delisser, authorizing a change in the place of use and point of diversion for part of License No. 37-07745. The amount of water transferred is 0.18 cfs for the irrigation of 10 acres. The new place of use is located near Bellevue, Idaho in the SWNE Section 2, T1N, R18E, B.M., approximately 12 miles north of the original site. The new place of use is downstream from reaches of the Big Wood River having water rights for minimum stream flows. In approving the transfer, the Director maintained jurisdiction of the transfer for up to five years to determine potential injury to existing rights near the new place of diversion.

4. On October 26, 1995, the Department also approved amended Transfer No. 4702 in the name of Dennis M. Baker, authorizing a change in the place of use and point of diversion for another part of License No. 37-07745. The amount of water transferred is 3.68 cfs for the irrigation of 200 acres in Section 16, T1S, R17E, B.M. The new place of use is located near Magic Reservoir in the Camas Creek drainage approximately 4 miles northwest of the original place of use. In approving the transfer, the Director of the Department maintained jurisdiction of the transfer for up to five years to determine potential injury to existing rights near the new point of diversion.

5. Additionally on October 26, 1995, the Department approved amended Transfer No. 4707 in the name of Steve and Kate Duinick, authorizing a change in the place of use and point of diversion for the remaining part of License No. 37-07745. The remaining amount of water transferred is 1.67 cfs for the irrigation of 90 acres. The new place of use is located in Section 35, T2N, R18E, B.M., and Section 2, T1N, R18E, B.M., near Bellevue, Idaho,

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approximately 12 miles north of the original place of use. The new place of use is downstream from reaches of the Big Wood River having water rights for minimum stream flows. The Director also maintained jurisdiction of this transfer for up to five years to determine potential injury to existing rights near the new point of diversion.

6. The Department has issued water right licenses to the Idaho Water Resource Board establishing minimum stream flows on the Big Wood River as follows:

License No:	37-07919
Source:	Big Wood River
Priority:	June 19, 1981
Rate:	70 cfs
Beginning point of reach:	SENW Section 13, T4N, R17E, B.M.
Ending point of reach:	SWNW Section 36, T2N, R18E, B.M.
Use:	Minimum stream flow
Season of use:	Year-round
Place of use:	Within the reach
Remarks:	This reach extends from the confluence of the Big Wood River with Warm Springs Creek, near Ketchum, Idaho, downstream approximately 18 miles to the heading of the Bellevue Canal near Bellevue, Idaho.

License No:	37-08258
Source:	Big Wood River
Priority:	January 16, 1986
Rate:	200 cfs from March 1 to August 31 150 cfs from September 1 to February 29
Beginning point of reach:	SENW Section 10, T5N, R17E, B.M.
Ending point of reach:	SENW Section 13, T4N, R17E, B.M.
Use:	Minimum stream flow
Place of use:	Within the reach
Remarks:	This reach extends from the intersection of the Big Wood River with the boundary of the Sawtooth National Recreation Area downstream approximately 9 miles to the confluence of the Big Wood River with Warm Springs Creek near Ketchum, Idaho.

License No:	37-08307
Source:	Big Wood River
Priority:	October 16, 1987
Rate:	119 cfs
Beginning point of reach:	SENW Section 13, T4N, R17E, B.M.
Ending point of reach:	SWNW Section 36, T2N, R18E, B.M.
Use:	Minimum stream flow

Season of use:	Year-round
Place of use:	Within the reach
Remarks:	This reach extends from the confluence of the Big Wood River with Warm Springs Creek, near Ketchum, Idaho, downstream approximately 18 miles to the heading of the Bellevue Canal near Bellevue, Idaho.

7. On October 20, 1997, Dennis M. Baker ("Baker" or "applicant") filed Application for Transfer No. 5174 ("Baker Application") with the Department seeking to change the point of diversion and the place of use for a portion of the license previously transferred under Transfer No. 4702 as follows:

License No:	37-07745 (part)
Source:	Groundwater
Priority:	October 25, 1978
Rate of diversion:	0.09 cfs
Point of diversion:	NWSE Section 1, T4N, R17E, B.M.
Use:	Irrigation for 5 acres
Season of use:	April 1 to November 1
Place of use:	NWSE Section 1, T4N, R17E, B.M.
Remarks:	The place of use is also known as lots 6 and 7, Block 1, of the Bigwood P.U.D. Subdivision

The Baker Application proposes to change the diversion of water for irrigation from groundwater underlying the Camas Creek drainage area, for use on lands in the Camas Creek drainage, to groundwater from the aquifer adjoining the Big Wood River, for use on lands adjacent to the Big Wood River, near Ketchum, Idaho. The proposed point of diversion and place of use are located approximately 30 miles north of the place of use in T1S, R17E, B.M., previously authorized by Transfer No. 4702. The new point of diversion would be from groundwater adjoining the reach of the Big Wood River for which a minimum stream flow was established under License No. 37-08258 at a location approximately 2 miles upstream from the lower end of that reach. The proposed point of diversion and place of use are also upstream from the reaches of the Big Wood River for which minimum stream flows were established under License Nos. 37-07919 and 37-08307.

8. On October 27, 1997, Huf-N-Puf Trust ("Huf-N-Puf" or "applicant") filed Application for Transfer No. 5175 ("Huf-N-Puf Application") with the Department seeking to change the point of diversion and the place of use for another portion of the license previously transferred under Transfer No. 4702 as follows:

License No:	37-07745 (part)
Source:	Groundwater
Priority:	October 25, 1978
Rate of diversion:	0.09 cfs

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Point of diversion:	SENW Section 1, T4N, R17E, B.M.
Use:	Irrigation for 5 acres
Season of use:	April 1 to November 1
Place of use:	SENW Section 1, T4N, R17E, B.M.
Remarks:	The place of use is also known as Lots 6, 7, and 8 of the Flowers Mill Subdivision.

Like the Baker Application, the Huf-N-Puf Application proposes to change the diversion of water for irrigation from groundwater underlying the Camas Creek drainage area, for use on lands in the Camas Creek drainage, to groundwater from the aquifer adjoining the Big Wood River, for use on lands adjacent to the Big Wood River, near Ketchum, Idaho. The proposed point of diversion and place of use are located approximately 30 miles north of the place of use in T1S, R17E, B.M., previously authorized by Transfer No. 4702. The new point of diversion would be from groundwater adjoining the reach of the Big Wood River for which a minimum stream flow was established under License No. 37-08258. The proposed point of diversion and place of use are also upstream from the reaches of the Big Wood River for which minimum stream flows were established as described in License Nos. 37-07919 and 37-08307.

9. The Department published notice of the applications filed by Baker and Huf-N-Puf, which were subsequently protested by the Blaine County Commissioners ("Blaine County" or "county" or "protestant"). The Department also granted a petition to intervene that was received from Idaho Rivers United and the Idaho Conservation League ("intervenors").

10. On April 8 and 9, 1998, and on May 19 and 20, 1998, the Department conducted a hearing on the protested applications for transfer in Hailey, Idaho. Applicant Huf-N-Puf was represented by James P. Speck, and applicant Baker was represented by Gary D. Slette. Blaine County was represented by James L. Kennedy. Laird J. Lucas and Deborah Hiller represented intervenors Idaho Rivers United and the Idaho Conservation League.

11. Issues identified by the protestant and intervenors include the following:

a. the proposed changes will injure other water rights;

b. the proposed changes are not in the local public interest;

c. the proposed changes will enlarge the use of the original right; and

d. the proposed changes are not consistent with the conservation of water resources within the state of Idaho

12. Exhibits offered and accepted as a part of the record include the following:

a. Applicant's Exhibit 1 - HUF-N-PUF Trust (ADF Project #96006) dated January 29, 1998

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b. Applicant's Exhibit 2 - Thomas R. Monge, Resume - Qualifications

c. Applicant's Exhibit 3 - Letter dated April 1, 1998, to Mrs. Teresa Heinz from Mary Austin Crofts

d. Applicant's Exhibit 4 - Inter-Department Memo dated August 9, 1994, from Jim Stanton to Sawtooth Sheep Co., Transfer Application

e. Applicant's Exhibit 5 - Inter-Department Memo from Jim Stanton to Croft, Ext. Of Time to Avoid Forfeiture

f. Applicant's Exhibit 6 - Letter dated October 7, 1994, to Glen Croft Estate or Jane Croft from Julie L. Yarbrough

g. Applicant's Exhibit 7 - NOT OFFERED

h. Applicant's Exhibit 8 - NOT OFFERED

i. Applicant's Exhibit 9 - NOT OFFERED

j. Applicant's Exhibit 10 - IDAPA 37.03.11 (Conjunctive Management Rules)

k. Protestant's Exhibit A - Judicial Notice Request

l. Protestant's Exhibit B

- Notice of Proposed Change of Water Right No. 5174 and County Warrant
- Notice of protest
- Letter dated December 22, 1997, to Allen Merritt from Blaine County Commission
- Letter dated February 9, 1998, to Allen Merritt from Len Harlig, Mary Ann Mix, and Dennis Wright
- Notice of Proposed Change of Water Right No. 5175 and County Warrant
- Notice of Protest signed December 23, 1997

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- Letter dated December 22, 1997, to Allen Merritt from Blaine County Commission

- Letter dated February 9, 1998, to Allen Merritt from Len Harlig, Mary Ann Mix, and Dennis Wright

m. Protestant's Exhibit C - Letter dated October 23, 1997, to Allen Merritt from Len Harlig, Mary Ann Mix, and Dennis Wright

n. Protestant's Exhibit D - Comprehensive Plan, Blaine County, Idaho, dated November 7, 1994

o. Protestant's Exhibit E - Blaine County Resolution 98-1 dated January 26, 1998, Adopting a Blaine County Local Public Interest Water Policy

p. Protestant's Exhibit F - Resume - Keith L. Anderson

q. Protestant's Exhibit G - Memorandum dated February 1, 1980, to Regional Offices and Water Allocation Section from Dave Tuthill; and memorandum dated January 22, 1980, to staff from C. Stephen Allred

r. Protestant's Exhibit H - Order of IDWR titled "In the Matter of Designating the Big Wood River Ground Water Management Area" and "Management Policy for the Big Wood River Ground Water Management Area" both dated June 28, 1991

s. Protestant's Exhibit I - Application for Extension of Time to Avoid Forfeiture of a Water Right filed in the name of Glen Croft Estate or Jane Croft

t. Protestant's Exhibit J - BLM map showing the vicinity of Ketchum, Idaho

u. Protestant's Exhibit K - Priority Cuts on the Big Wood River above Magic Reservoir for years 1992 through 1996

v. Protestant's Exhibit L - Letter dated December 22, 1997, to Board of County Commissioners from Norman C. Young

w. Protestant's Exhibit M - NOT OFFERED

x. Protestant's Exhibit N - NOT OFFERED

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y. Protestant's Exhibit O - NOT OFFERED

z. Protestant's Exhibit P - Work Sheet - Work sheet titled "Depletion of Big Wood River Flows Resulting From Pumping Wells North of Ketchum"

aa. Protestant's Exhibit Q - Plat titled "A Portion of Sheet 1 of 3 Entitled Lot Line Shift, Lots 6 & 7, Block 1, Bigwood P.U.D. Subdivision Plats Filed with Blaine Co. Recorder, 10/8/87"

ab. Protestant's Exhibit R - Water Right License No. 37-07745 in the name of Connecticut General Life Insurance Company

ac. Protestant's Exhibit S - Water Right License No. 37-08203 in the name of Flowers Mill Subdivision Ass'n, Inc.

ad. Protestant's Exhibit T - Warranty Deed from Melvin M. Melton and Lena M. Melton to Summit Corporation dated March 28, 1974

ae. Protestant's Exhibit U - Camas Creek Subdivision plat

af. Protestant's Exhibit V - Plat showing Flowers Mill Subdivision, (3 sheets)

ag. Protestant's Exhibit W - Plat titled Lot Line Shift, Lots 6 & 7, Block 1, (3 sheets)

ah. Protestant's Exhibit X - Heinz Property, plant materials list

ai. Protestant's Exhibit Y - Application for Transfer of Water Right No. 4702 in the name of Dennis M. Baker

aj. Protestant's Exhibit Z - Declaration of Protective Covenants and Restrictions, Camas Creek Subdivision

ak. Protestant's Exhibit AA - U. S. Geological Survey Report 89-4018 titled "Water Resources of the Upper Big Wood River Basin, Idaho"

al. Protestant's Exhibit AB - Phase I, Final Report titled "Hydrologic Evaluation of the Big Wood River and Silver Creek Watersheds" dated November 1994

am. Protestant's Exhibit AC - Resume of David Parrish

an. Protestant's Exhibit AD - OFFERED BUT NOT ADMITTED

ao. Protestant's Exhibit AE - Water Right License No. 37-08258 in the name of the Idaho Water Resource Board

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ap. Protestant's Exhibit AF - Water Right License No. 37-07919 in the name of the Idaho Water Resource Board

aq. Protestant's Exhibit AG - Water Right No. 37-08307 in the name of the Idaho Water Resource Board

ar. Protestant's Exhibit AH - Idaho Department of Fish and Game - 1992 Job Performance Report, Project F-71-R-17

as. Protestant's Exhibit AI - Memorandum dated June 25, 1992, from Bob Esselman to Fred Partridge

at. Protestant's Exhibit AJ - Idaho Department of Fish and Game job announcement AN#92-00841-0206 OC for Environmental Staff Biologist

au. Protestant's Exhibit AK - Order Adopting Proposed Memorandum Decision and Order, Order Issuing Proposed Memorandum Decision and Order, and Proposed Memorandum Decision and Order for License Nos. 37-08258 and 37-08307 in the name of the Idaho Water Resource Board

av. Protestant's Exhibit AL - Amended Memorandum Decision and Order for License No. 37-07919 in the name of the Idaho Water Resource Board

aw. Protestant's Exhibit AM - Memorandum Decision and Order for License No. 37-07849 in the name of the Idaho Water Resource Board

ax. Protestant's Exhibit AN - Memorandum Decision and Order for License Nos. 37-07727 and 37-07728 in the name of the Idaho Water Resource Board

ay. Protestant's Exhibit AO - Meeting Notice dated February 21, 1997, to the Water Policy Group from the Blaine County Commission

az. Protestant's Exhibit AP - Deposition of Marti Bridges dated April 20, 1998

13. During the hearing, the hearing officer officially noticed the water right file for License No. 37-07745 and the following information:

a. The Department's file for Application for Transfer Nos. 5174 and 5175 and previous transfer actions associated with License No. 37-07745

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b. Past decisions and orders of the Department as the decisions and orders may apply to the protested applications for transfer

c. The Department's water right records, specifically including minimum stream flows established on the Big Wood River under License Nos. 37-07919, 37-08258 and 37-08307

d. Reports, water measurements, and stream flow records in Department files, including U.S. Geological Survey reports

e. Order of the Department dated June 28, 1991, which designated the Big Wood River Ground Water Management Area

f. Well Driller Reports ("well logs") in Department files

g. Watermaster delivery records for Water District 37

h. Transfer No. 5143 in the name of Huf-N-Puf Trust

i. Water right files and contents of the files for the following water rights and portions of water rights:

37-07745 A, B, C, D, E, F, G and H
37-08203
37-30024
37-30024 A, B, C, and D.

j. Transfer Nos. 4702, 5086, 5143, and contents of the transfer files

14. The applicants' expert witness estimated the depletion of flows in the Big Wood River which he believed would occur if either transfer is granted for the irrigation of 5 acres in the Big Wood River drainage, as proposed in each of the applications, based on a number of assumptions. Using a "Wright-Penman FAO Blaney-Criddle" analytical approach, the applicants' expert witness estimated that a peak consumptive use of 0.04 cfs during the summer would occur under either transfer, assuming irrigation was limited to vegetation having low water consumption requirements. Based on one or more unstated assumptions, the applicants' expert witness estimated that 50 percent of the peak consumptive use may not result in a depletion to the flow in the Big Wood River at Hailey, Idaho. Thus the applicants' expert witness estimated that the maximum, instantaneous depletion to flow in the Big Wood River at Hailey under each transfer would be 0.02 cfs. The applicants' expert witness characterized this depletion in flow as small, difficult to measure, but "real."

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15. The expert witness for the protestants testified that pumping wells on the two parcels for the irrigation of 10 acres as proposed in the two applications for transfer would affect or reduce flows in the Big Wood River. He described the amount of depletion that would occur if the transfers are approved as proposed in the applications as a "real depletion" but "minor." Using a different method than the applicants' expert witness, the expert witness for the protestants calculated the depletion in flows of the Big Wood River, expressed as a percentage of water diverted, that would occur from pumping wells in the aquifer adjacent to the river north of Ketchum, Idaho, for a range of aquifer transmissivity values, point of diversion distances from the river, and pumping durations. The expert witness for the protestants testified that for transmissivity values ranging from 10,000 ft^2/day to 40,000 ft^2/day and for pumping durations ranging from 10 days to 210 days, the amount of water taken from the Big Wood River as a result of pumping wells in the adjacent aquifer would range from 77 percent to 99 percent of the amount of water pumped, as set forth in Protestants' Exhibit P. Even if the depletion to the Big Wood River is limited to the 0.04 cfs consumptive use for each of the proposed transfers estimated by the applicants' expert witness, the resulting depletions to the Big Wood River based on the analysis of the protestants' expert witness would be approximately one-and-one-half to two times as large as the depletions estimated by the applicants' expert witness.

16. The proposed new points of diversion under the applications for transfer are located in close proximity to the Big Wood River. The parcel of land associated with Application for Transfer No. 5174 is adjacent to the river, and the land associated with Application for Transfer No. 5175 is as close as approximately 50 yards to the river.

17. The expert witness for the applicants testified that the reach of the Big Wood River adjacent to the proposed points of diversion and places of use is a losing reach, and the expert witness for the protestants did not disagree with this testimony. Additionally, the applicants' expert witness testified that the aquifer adjacent to this reach of the Big Wood River was hydraulically connected to the river. During a portion of the hearing on April 8, 1998, the expert witness for the applicants testified that either transfer would cause a maximum, instantaneous depletion in the flows of the Big Wood River estimated to be 0.02 cfs at Hailey, Idaho, as previously described in Finding of Fact No. 14. Withdrawal of water from the aquifer adjacent to the Big Wood River would not cause a depletion in the flows of the Big Wood River unless the river and the adjacent aquifer are hydraulically connected. The expert witness for the protestants also testified that the aquifer adjacent to the Big Wood River near the point of diversion proposed by Huf-N-Puf Trust is hydraulically connected to the river. He testified that the proposed transfers would reduce flows in the Big Wood River whether or not this reach of the river is a losing reach.

18. The consumptive irrigation requirement for the most water-consumptive vegetation near Ketchum, Idaho, as reported by R. G. Allen and C. E. Brockway in a technical report titled "Estimating Consumptive Irrigation Requirements for Crops in Idaho", dated August 1983, is approximately 2.5 acre-feet/year/acre, and for 10 acres would equal 25 acre-feet annually.

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19. Protestant Blaine County provided extensive testimony describing the development and intended use of its "Local Public Interest Water Policy," adopted as a resolution of the county on January 26, 1998, and describing the inconsistency between the proposed transfers and its policy. Blaine County's "Local Public Interest Water Policy" describes a part of the local public interest as defined in Section 42-203A(5), but it does not constitute the whole description of the local public interest for the proposed transfers.

20. On June 28, 1991, the Department issued an order designating the Big Wood River Ground Water Management Area ("BWRGWMA") together with a Management Policy providing for increased management of the designated area. Among other findings, the order provided the following:

> The surface and ground waters of the Big Wood River drainage are interconnected. Diversion of ground water from wells can deplete the surface water flow in streams and rivers. New ground water uses can also deplete available supplies for other users and affect basin underflow which presently accumulates in the Magic Reservoir.

21. The Management Policy for the BWRGWMA provides in pertinent part as follows:

> Most consumptive use applications will be denied unless the applicants can demonstrate there will be no injury or can provide acceptable mitigation to prior rights.
>
> . . . .
>
> . . . Applications for amendment or applications for transfer which propose a change in the point of diversion from outside the ground water management area to within the area which would directly or indirectly result in the irrigation of new land will be treated as a proposed new appropriation of water.

22. Groundwater in the Camas Creek drainage from which the applicants seek to move part of License No. 37-07745 does not contribute water to the upper reaches of the Big Wood River drainage where the applicants seek to divert water as proposed in their applications.

23. The Big Wood River and Camas Creek are within Water District 37 where water deliveries are administered during times of water shortage by an elected watermaster.

24. The water delivery records of Water District 37 show that deliveries to water rights on the Big Wood River above Magic Reservoir were curtailed at times each year during the 1970 to 1996 period (27 years) due to insufficient flows in the river to supply all water rights. The records show that deliveries to surface water rights having priorities as early as May 1, 1883, were curtailed for part of the irrigation season on April 1, 1994, and again on June 7, 1994, and that water rights having priorities of August 1, 1902, or later in time have been curtailed for a portion of every year during the 1970 to 1996 period.

25. The wells from which groundwater is proposed to be diverted would be located proximate to the Big Wood River and would divert groundwater from an aquifer immediately adjoining and hydraulically connected to the Big Wood River. The landscape irrigation uses proposed at the new places of use using new points of diversion require a reliable water supply during the irrigation season.

26. Based on the watermaster records of water deliveries in Water District 37 for the years 1992 through 1996, Protestants' Exhibit K shows that the transferred water rights would have been curtailed for most, if not all, of the remaining irrigation season beginning on April 1, July 14, May 12, August 3, and July 5, respectively. Similarly, the transferred water rights would have been curtailed at some time between April 1 to November 1 during every other year of the 1970 to 1996 period. Therefore, the water available would not constitute a reliable supply for the intended use of landscape irrigation during substantial portions of the April 1 to November 1 time period.

27. There is insufficient water available at the proposed points of diversion to satisfy the intended use of landscape irrigation, as proposed in the applications for transfer, during substantial portions of the April 1 to November 1 time period without causing injury to other existing water rights.

28. The local public interest requires the protection of existing water rights including water rights numbered 37-07919, 37-08258, and 37-08307 issued to the Idaho Water Resource Board for minimum stream flow purposes. Any new diversions which reduce the supply of water available to maintain existing water rights in the Big Wood River, including minimum stream flow rights, would constitute an injury to the existing water rights and would be contrary to the local public interest.

ANALYSIS

The applicants attempted to show that injury would not occur or would be of little or no consequence. The applicants presented three general concepts to support their positions.

First, the depletions that would occur would be insignificant in comparison to the average or mean annual flow of the Big Wood River and would be so small that measurement of the depletions would be difficult, if not impossible.

Second, any call for delivery on the applicants' water by the holder of a senior water right during times of water shortage in the Big Wood River would be a "futile call." Therefore, curtailment of the applicants' diversions would not benefit senior water right holders within a reasonable time of the call.

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Third, since the Department issued an order in December 1991 in connection with License No. 37-08307 for a minimum stream flow that changed the authorized rate from 119.23 cfs to 119 cfs, any reduction in the flow of the Big Wood River that would result from the transfers as proposed and would be less than 0.23 cfs would be of no consequence and would not constitute injury.

Although the expert witnesses did not agree on the magnitude of the effect the transfers would have on flows in the Big Wood River, evidence and testimony indicate that groundwater and surface water near the points of diversion proposed in the applications for transfer are interconnected and directly respond to changes in one or the other. The expert witness for the applicants estimated a maximum, instantaneous depletion of 0.02 cfs in the flow of the Big Wood River would occur under each transfer if the applications for transfer are approved and used as to irrigate vegetation having low water consumption requirements. The testimony of the expert witness for the protestants indicated that the depletions resulting from the irrigation of vegetation having low water consumption requirements could be at least one-and-one-half to two times more than the depletions estimated by the applicants' expert witness. The applicants argue that under either estimate of depletion, the rate of depletion cannot be measured and has no significance when compared to the average rate of flow of the river or to the minimum stream flow water rights held by the Idaho Water Resource Board. Even if so, while the depletion in flow of the river would be very small on an instantaneous basis, it is nonetheless real and determinable. If the projected depletions are allowed to occur at a time when flows in the river are insufficient to supply water to all existing water rights, injury, although small, will occur.

Furthermore, although the applicants' expert witness testified that water under the proposed transfers would be used to irrigate landscape vegetation having low water consumption requirements, the water rights could not be limited for use in irrigating vegetation having low water consumption requirements. The two applications for transfer, when combined, propose to divert a maximum volume of water of 35 acre-feet annually. This volume of water is theoretically sufficient for irrigating vegetation having high water consumption requirements near Ketchum, Idaho. If the two applications for transfer are approved as submitted, the annual volume of water depleted from the Big Wood River could total nearly 25 acre-feet. This volume of water is not insignificant.

The depletion and resulting injury are real and can be determined. The watermaster records for the past 27 years clearly show that water rights with priority dates later in time than the priority date for the water right sought to be transferred by the applicants are curtailed for all or part of the irrigation season in each and every year. The applications, if approved, would have the same effect on other water rights from the Big Wood River as approving an additional (new) appropriation of water and would reduce water availability during times of scarcity. Approving the transfers and allowing groundwater to be pumped under a junior priority from an adjacent aquifer hydraulically connected to the Big Wood River during times when downstream water rights from the Big Wood River are curtailed, many of which have senior priority dates, would cause real and actual injury and would be wholly inconsistent with Idaho law.

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CONCLUSIONS OF LAW

1. Section 42-222, Idaho Code, provides in pertinent part as follows:

> The director of the department of water resources shall examine all the evidence and available information and shall approve the change in whole, or in part, or upon conditions, provided no other water rights are injured thereby, the change does not constitute an enlargement in use of the original right, and the change is consistent with the conservation of water resources within the state of Idaho and is in the local public interest as defined in section 42-203A(5), Idaho Code; . . . .

2. The Applicants carry the burden of coming forward with evidence that the proposed change will not injure other water right holders, that it will not constitute an enlargement of the use, and will be consistent with principles of conservation of the water of the state of Idaho.

3. The applicants, protestant, and intervenors have the responsibility of coming forward with evidence regarding matters of the local public interest of which they are each most cognizant.

4. The applicants have the ultimate burden of persuasion for all of the criteria of Section 42-222, Idaho Code.

5. Groundwater and surface water in the Big Wood River drainage above Magic Reservoir are interconnected such that a depletion of one directly affects the other.

6. In each of the irrigation seasons during the years 1970 through 1996, the watermaster of Water District 37 has curtailed the use of water rights having priority dates of August 1, 1902, and later on the Big Wood River upstream from Magic Reservoir due to insufficient flows in the river to supply all the water rights of record. The water rights that are curtailed, although junior in priority to other rights still receiving water, are senior in priority to the rights sought for transfer under the applications in this matter.

7. Approval of the applications will cause injury to other water rights on the Big Wood River upstream from Magic Reservoir because the transferred water rights can not provide for the irrigation intended by the transfers without out-of-priority diversions for which mitigation has not been proposed.

8. Approval of the applications for transfer allowing diversion and use of groundwater as proposed would cause the same injury to water rights having senior priority dates upstream from Magic Reservoir as would a new appropriation of water in the same amount from the surface water or groundwater at the locations proposed in the applications.

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9. Approval of the applications for transfer would not be in the local public interest.

10. The Department should deny the applications.

ORDER

IT IS THEREFORE, hereby ORDERED that Application for Transfer No. 5174 in the name of Dennis M. Baker, and Application for Transfer No. 5175 in the name of Huf-N-Puf Trust are **DENIED**.

Dated this 25th day of November, 1998.

KARL J. DREHER
Director

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CERTIFICATE OF SERVICE

I DO HEREBY CERTIFY that on the 30th day of November, 1998, the above and foregoing document was served upon the following, via certified mail, by placing a copy of the same in the United States Mail, postage prepaid and properly addressed to the following:

DENNIS M BAKER
250 S BEECHWOOD STE 120
BOISE ID 83709

GARY D SLETTE
ROSHOLT ROBERTSON TUCKER
PO BOX 1906
TWIN FALLS ID 83303-1906

JAMES P SPECK
HOGUE SPECK AANESTAD
PO BOX 987
KETCHUM ID 83340

JAMES KENNEDY
PO BOX 2165
KETCHUM ID 83340

LAIRD J LUCAS
DEBORAH L HILLER
LAND AND WATER FUND
OF THE ROCKIES
PO BOX 1612
BOISE ID 83701

Julie L. Yarbrough

JULIE L. YARBROUGH
Senior Secretary, Water Allocation Bureau

Mailed
DEC - 3 1998

BEFORE THE DEPARTMENT OF WATER RESOURCES

OF THE STATE OF IDAHO

IN THE MATTER OF A DECLARATION OF DROUGHT EMERGENCY FOR BLAINE COUNTY	**ORDER DECLARING DROUGHT EMERGENCY**

WHEREAS, Blaine County is experiencing severely restricted water supplies available for the current irrigation season as demonstrated by hydrologic data showing that basin-wide snowpack is 41 percent of average, with values for individual subbasins ranging from 47 percent of normal for the Big Wood above Hailey to 22 percent of normal for Fish Creek; and

WHEREAS, inflow to Magic Reservoir is forecast to be only 18 percent of average, which when combined with below average carry over storage will provide about 60 days of irrigation from the reservoir compared to a full season of 130 to 150 days; and

WHEREAS, the Blaine County Commissioners have requested declaration of a drought emergency to allow administrative actions to lessen the severe impacts of the drought conditions in the county; and

WHEREAS, section 42-222A, Idaho Code, provides that upon declaration of a drought emergency for an area designated by the Director of the Department of Water Resources ("Director") and approved by the Governor, the Director is authorized to allow temporary changes in the point of diversion, the place of use, and the purpose of use for valid existing water rights and temporary exchanges of water rights when the Director determines that such changes can be accomplished in accordance with the provisions of section 42-222A, Idaho Code; and

WHEREAS, the existing Amended Moratorium Order of the Director of the Department of Water Resources, dated April 30, 1993, applicable to the Eastern Snake River Plain Area, including Blaine County, does not prohibit the processing or approval of applications for transfer of existing water rights;

NOW, THEREFORE, IT IS HEREBY ORDERED that pursuant to the authority of the Director provided in section 42-222A, Idaho Code, a drought emergency for purposes of section 42-222A, Idaho Code, is hereby declared for Blaine County, Idaho.

Department of Water Resources
PROTESTANT'S
Exhibit L
Date Admitted 11/13/02

L
EXHIBIT

IT IS FURTHER HEREBY ORDERED that pursuant to this declared drought emergency and the provisions of section 42-222A, Idaho Code, the following procedures and requirements shall apply to the filing, processing, and approval of any application for a temporary change to an existing water right within Blaine County during the pendency of this declared drought emergency:

1. An application for a temporary change to an existing water right shall be made upon forms provided by the department and shall be accompanied by an application fee of fifty dollars ($50.00) per application.

2. The Director is not required to publish notice of the proposed change pursuant to the provisions of section 42-211, 42-222(1) or 42-240, Idaho Code, and is not required to make findings as provided in said sections. A temporary change may be approved upon completion of the application form, payment of the filing fee, and a determination by the Director that the proposed change can be properly administered and there is no information that the change will injure any other water right. If the right to be changed is administered by a watermaster within a water district, the Director shall obtain and consider the recommendations of the watermaster before approving the temporary change application.

3. All temporary changes approved pursuant to the provisions of this order shall expire on the date shown in the approval which shall not be later than December 31, 2001, and thereafter, the water right shall revert to the point of diversion and place of use existing prior to the temporary change. Nothing herein shall be construed as approval to authorize construction of a new well as a new point of diversion or to alter a stream channel.

4. The recipient of an approved temporary change issued pursuant to this order shall assume all risk of curtailment or mitigation should the diversion and use of water under the temporary change cause injury to other water rights or result in an enlargement in use of the original right.

5. Temporary changes shall only be approved for the purpose of providing a replacement water supply to lands or other uses which normally have a full water supply, except for the drought condition. Temporary changes may not be approved to provide water for new development or to allow expansion of the use of water under existing water rights. If the right to use the water, the diversion works of the water delivery system is represented by shares of stock in a corporation, or if the diversion works or delivery system for such right is owned or managed by an irrigation district, no change in point of diversion, place or nature of use of such water shall be made or allowed without the written consent of such corporation or irrigation district.

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6. Any applicant for a temporary change who is aggrieved by a denial of the Director for a temporary change pursuant to this order and the provisions of section 42-222A, Idaho Code, may request a hearing pursuant to section 42-1701A(3), Idaho Code, and may seek judicial review of the final order of the Director pursuant to the provisions of section 42-1701A(4), Idaho Code.

IT IS FURTHER HEREBY ORDERED that this order is effective upon approval of the Governor and expires on December 31, 2001, unless extended or terminated by order of the Director.

DATED this 19th day of April, 2001.

KARL J. DREHER
Director

APPROVED this 24 day of April, 2001.

DIRK KEMPTHORNE
Governor

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Department of Water Resources

BEFORE THE DEPARTMENT OF WATER RESOURCES

OF THE STATE OF IDAHO

IN THE MATTER OF A DECLARATION OF DROUGHT EMERGENCY FOR BLAINE COUNTY	**ORDER DECLARING DROUGHT EMERGENCY**

WHEREAS, Blaine County is experiencing severely restricted water supplies available for the current irrigation season as demonstrated by hydrologic data showing that basin-wide snowpack is 69 percent of average with estimated runoff at 45 to 55 percent of average; and

WHEREAS, observed streamflow of the Big Wood River at Hailey for the October 2001 to April 2002 period is 65 percent of average; and

WHEREAS, the Blaine County Commissioners have requested declaration of a drought emergency to allow administrative actions to lessen the severe impacts of the drought conditions in the county; and

WHEREAS, section 42-222A, Idaho Code, provides that upon declaration of a drought emergency for an area designated by the Director of the Department of Water Resources ("Director") and approved by the Governor, the Director is authorized to allow temporary changes in the point of diversion, the place of use, and the purpose of use for valid existing water rights and temporary exchanges of water rights when the Director determines that such changes can be accomplished in accordance with the provisions of section 42-222A, Idaho Code; and

WHEREAS, the existing Amended Moratorium Order of the Director of the Department of Water Resources, dated April 30, 1993, applicable to the Eastern Snake River Plain Area, including Blaine County, does not prohibit the processing or approval of applications for transfer of existing water rights;

NOW, THEREFORE, IT IS HEREBY ORDERED that pursuant to the authority of the Director provided in section 42-222A, Idaho Code, a drought emergency for purposes of section 42-222A, Idaho Code, is hereby declared for Blaine County, Idaho.

IT IS FURTHER HEREBY ORDERED that pursuant to this declared drought emergency and the provisions of section 42-222A, Idaho Code, the following procedures and requirements shall apply to the filing, processing, and approval of any application for a temporary change to an existing water right within Blaine County during the pendency of this declared drought emergency:

Department of Water Resources
PROTESTANT'S
Exhibit M
Date Admitted 11/12/02

M
EXHIBIT

1. An application for a temporary change to an existing water right shall be made upon forms provided by the department and shall be accompanied by an application fee of fifty dollars ($50.00) per application.

2. The Director is not required to publish notice of the proposed change pursuant to the provisions of section 42-211, 42-222(1) or 42-240, Idaho Code, and is not required to make findings as provided in said sections. A temporary change may be approved upon completion of the application form, payment of the filing fee, and a determination by the Director that the proposed change can be properly administered and there is no information that the change will injure any other water right. If the right to be changed is administered by a watermaster within a water district, the Director shall obtain and consider the recommendations of the watermaster before approving the temporary change application.

3. All temporary changes approved pursuant to the provisions of this order shall expire on the date shown in the approval which shall not be later than December 31, 2002, and thereafter, the water right shall revert to the point of diversion and place of use existing prior to the temporary change. Nothing herein shall be construed as approval to authorize construction of a new well as a new point of diversion or to alter a stream channel.

4. The recipient of an approved temporary change issued pursuant to this order shall assume all risk of curtailment or mitigation should the diversion and use of water under the temporary change cause injury to other water rights or result in an enlargement in use of the original right.

5. Temporary changes shall only be approved for the purpose of providing a replacement water supply to lands or other uses that normally have a full water supply, except for the drought condition. Temporary changes may not be approved to provide water for new development or to allow expansion of the use of water under existing water rights. If the right to use the water, the diversion works of the water delivery system is represented by shares of stock in a corporation, or if the diversion works or delivery system for such right is owned or managed by an irrigation district, no change in point of diversion, place or nature of use of such water shall be made or allowed without the written consent of such corporation or irrigation district.

6. Any applicant for a temporary change who is aggrieved by a denial of the Director for a temporary change pursuant to this order and the provisions of section 42-222A, Idaho Code, may request a hearing pursuant to section 42-1701A(3), Idaho Code, and may seek judicial review of the final order of the Director pursuant to the provisions of section 42-1701A(4), Idaho Code.

JUL 15 2004

IT IS FURTHER HEREBY ORDERED that this order is effective upon approval of the Governor and expires on December 31, 2002, unless extended or terminated by order of the Director.

DATED this 8th day of May, 2002.

KARL J. DREHER
Director

APPROVED this 14th day of May, 2002.

DIRK KEMPTHORNE
Governor

JUL 25 2002

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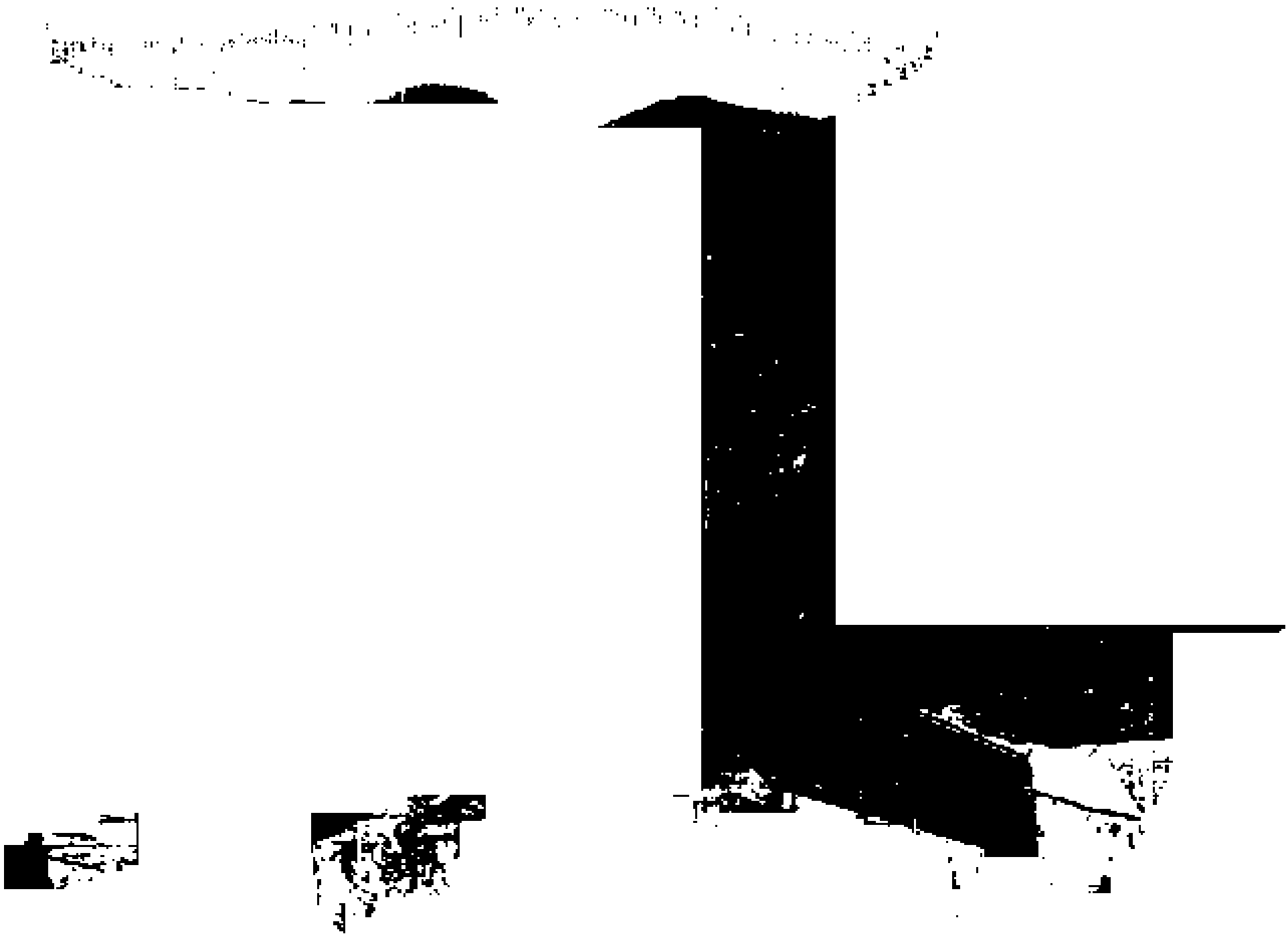


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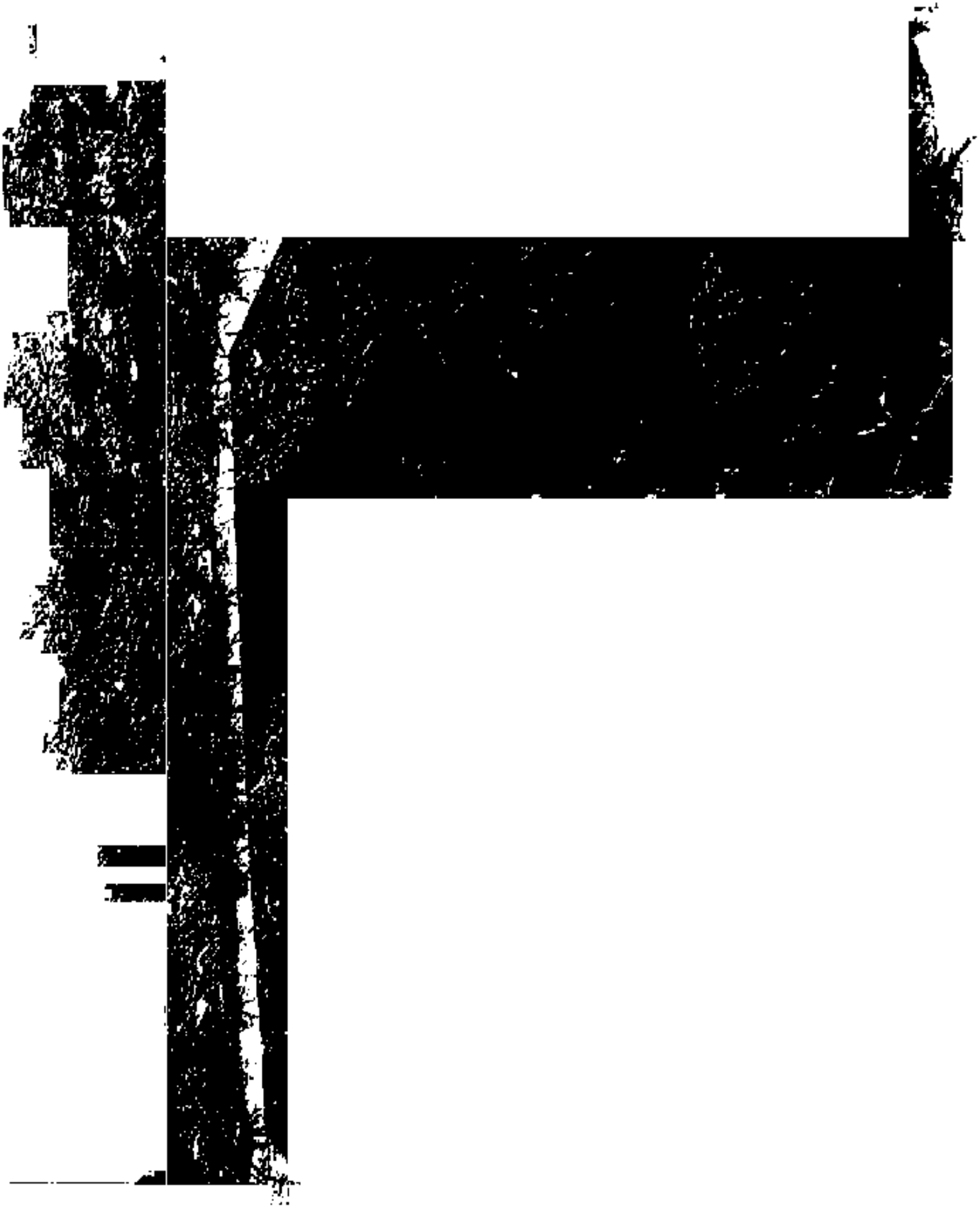
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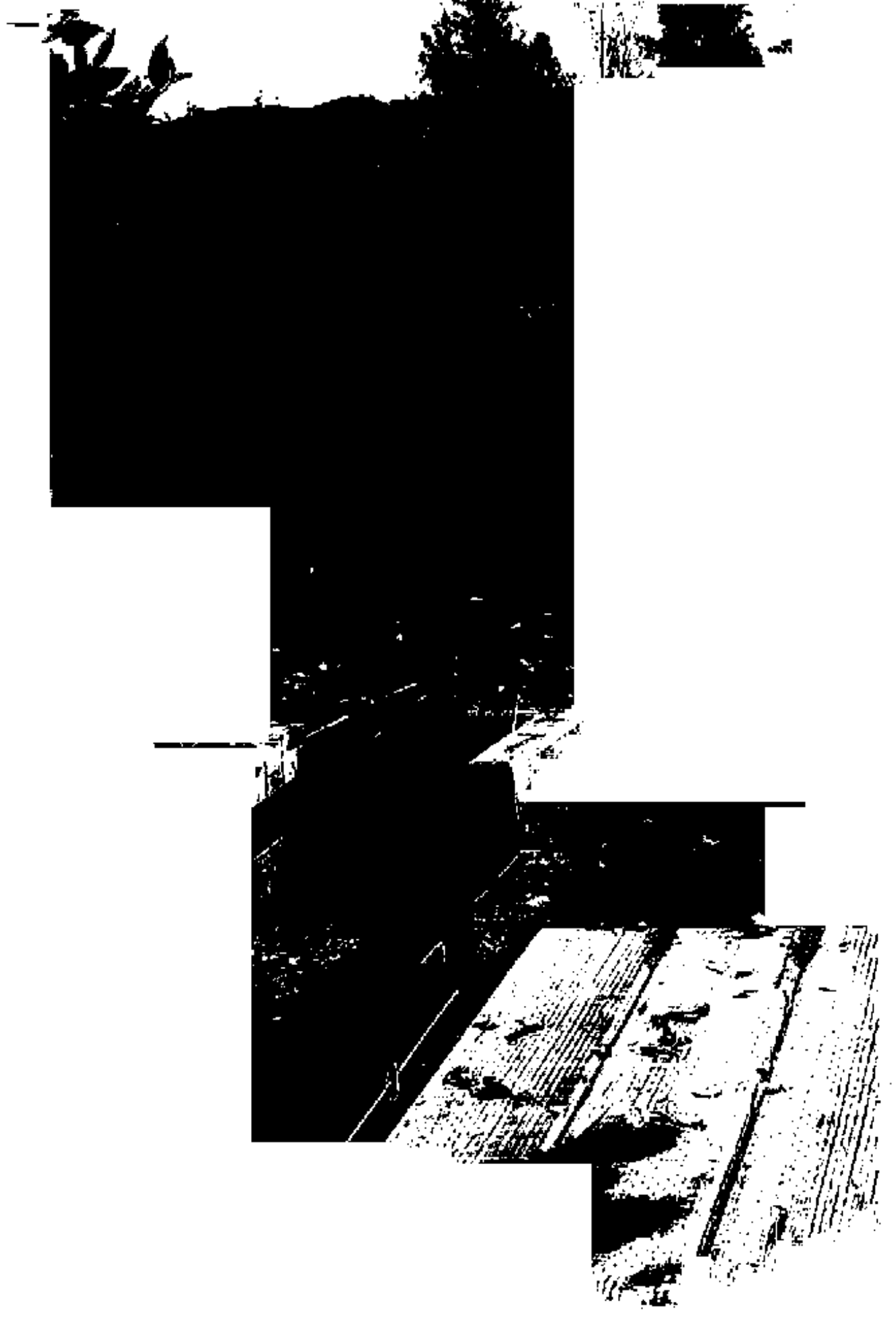
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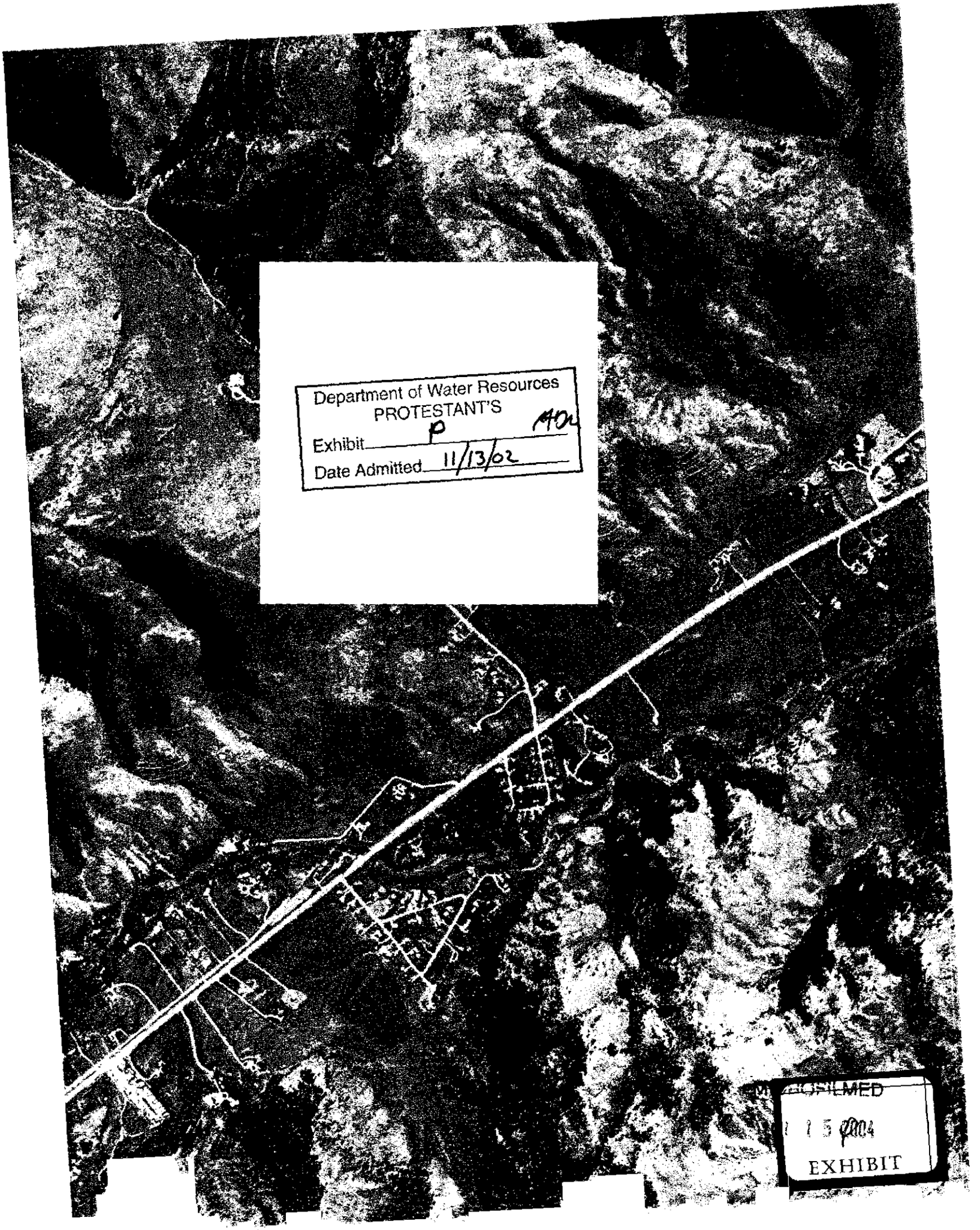


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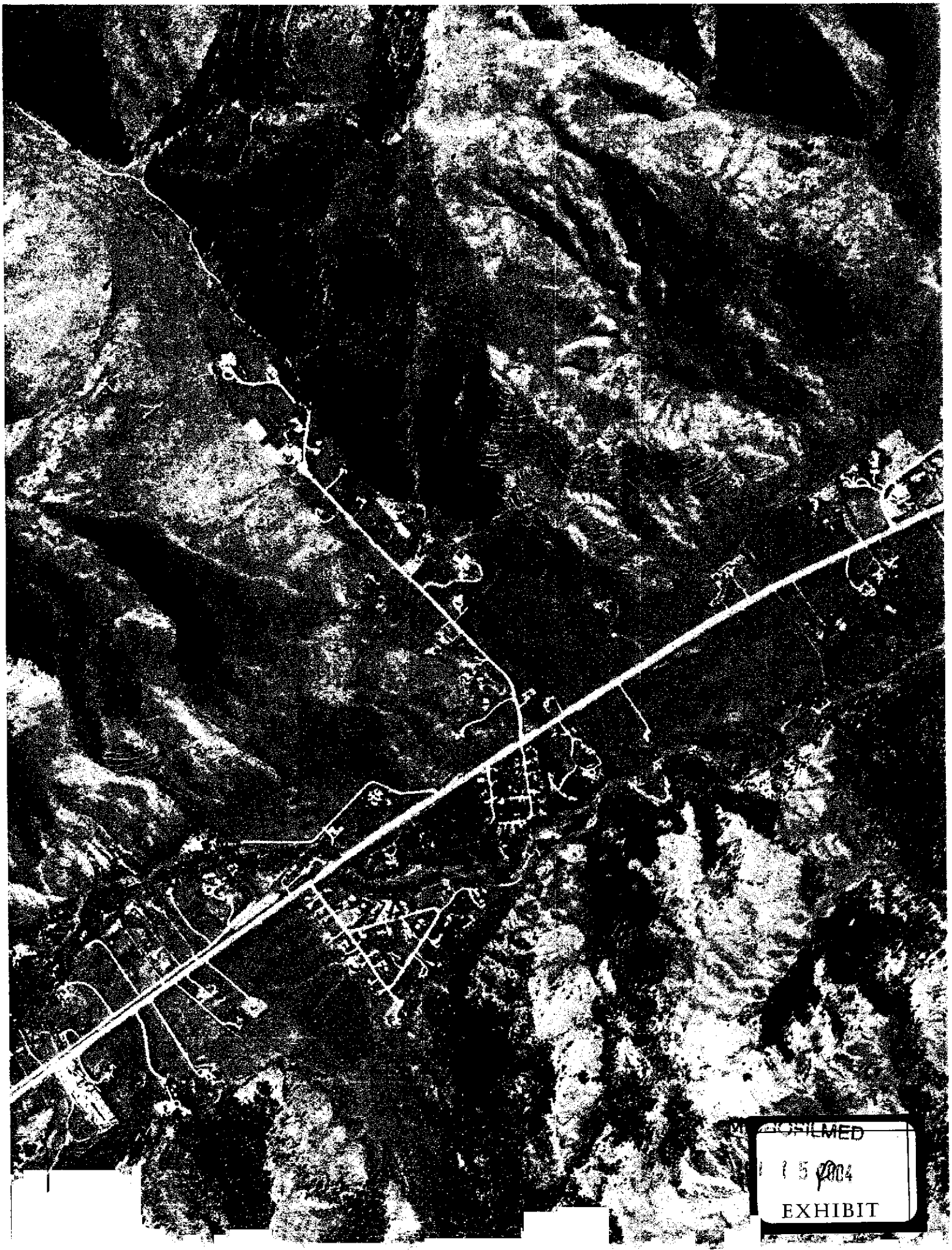
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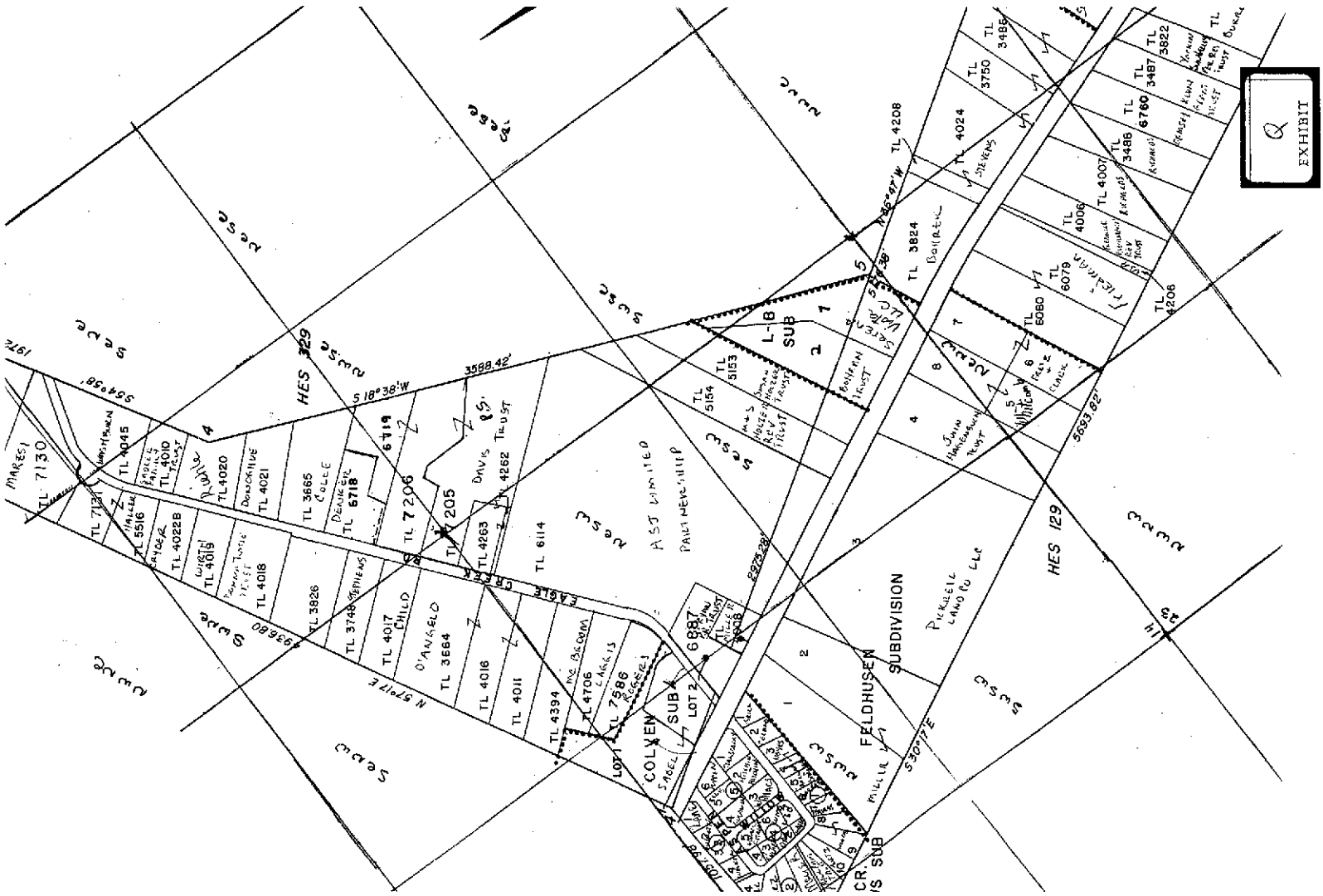


Department of Water Resources
PROTESTANT'S
Exhibit P 404
Date Admitted 11/13/02

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EXHIBIT



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EXHIBIT



Department of Water Resources
PROTESTANT'S
Exhibit Q
Date Admitted 11/13/02

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BLAINE COUNTY INTENDS TO OFFER A COPY OF THE ENTIRE
BLAINE COUNTY COMPREHENSIVE PLAN AT THE IDWR HEARING

Department of Water Resources
PROTESTANT'S
Exhibit R
Date Admitted 11/13/02

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EXHIBIT

BLAINE COUNTY RESOLUTION NO. 94-29

A RESOLUTION OF THE BLAINE COUNTY BOARD OF COMMISSIONERS ENACTED PURSUANT TO §67-6509, IDAHO CODE, ADOPTING A NEW COMPREHENSIVE PLAN FOR BLAINE COUNTY, IDAHO.

WHEREAS, the Blaine County Board of Commissioners initiated a review and update of the 1975 Blaine County Comprehensive Plan in 1989 by the creation of an ad hoc citizens committee charged with the initial task of making recommendations to the Blaine County Planning and Zoning Commission on the various sections of the Plan;

WHEREAS, during the time since the beginning of 1990, fourteen (14) separate sections of the Plan have been recommended by the ad hoc committee; have been heard following notice and hearing procedures prescribed by I.C. §67-6509 by the Planning and Zoning Commission and recommended for adoption by the Board; and have been heard following the same notice and hearing procedures by the Board of County Commissioners and approved;

WHEREAS, the Land Use Map, dated December, 1975, reflects the land use classifications presented in the text of the Comprehensive Plan that has evolved since 1990 and said map is an integral part of the Plan;

WHEREAS, it is appropriate to adopt said sections of the Comprehensive Plan together with the 1975 Land Use Map as a single document under the umbrella of a single resolution of the Board;

WHEREAS, the Planning and Zoning Commission held a hearing on October 13, 1994, following notice and hearing procedures contained in I.C. §67-6509 and recommended adoption of the Plan together with the 1975 Land Use Map by the Board;

WHEREAS, after receipt on October 17, 1994, of the recommendation by the Commission, the Board of County Commissioners held a public hearing on November 7, 1994, following hearing and notice procedures contained in I.C. §67-6509 for the purpose of considering adoption of said fourteen (14) sections comprising the updated Comprehensive Plan and 1975 Land Use Map by resolution of the Board; and,

WHEREAS, it is appropriate to replace in its entirety the Blaine County Comprehensive Plan adopted by resolution of the Board on December 22, 1975, with the updated Plan, including the 1975 Land Use Map.

NOW, THEREFORE, BE IT RESOLVED THAT THE BLAINE COUNTY BOARD OF COMMISSIONERS HEREBY ADOPTS THE BLAINE COUNTY COMPREHENSIVE PLAN, DATED NOVEMBER 7, 1994, TOGETHER WITH THE 1975 LAND USE MAP, TO BE USED AS A GENERAL GUIDE FOR THE ORDERLY DEVELOPMENT OF BLAINE COUNTY, IDAHO.

REGULARLY PASSED, APPROVED AND ADOPTED by the Board of County Commissioners of Blaine County, Idaho, on this 7th day of November, 1994.

BOARD OF COUNTY COMMISSIONERS OF BLAINE COUNTY, IDAHO

Tom Blanchard

Tom Blanchard, Chairman

Leonard Harlig

Leonard Harlig, Commissioner

Rupert House

Rupert House, Commissioner

ATTEST:

Mary Green

Mary Green, County Clerk

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COMPREHENSIVE PLAN FOR BLAINE COUNTY, IDAHO

November 7, 1994
Adopted by Resolution No. 94-29
Blaine County Board of Commissioners

CONTENTS

Agriculture

Airport Service System

Economic Development

Governmental Agencies Affecting Blaine County

Hazardous Areas

Historical Background, Social Environment, and Aesthetic Values

Housing

Implementation

Land Use

Natural Resources

Population

Public Services, Facilities, and Utilities

Recreation

Road System

Land Use Map, dated December, 1975, attached by reference

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BLAINE COUNTY COMPREHENSIVE PLAN

Adopted Sections are:

Agriculture (10/18/93)

Airport (4/26/93)

Economic (3/25/91)

Governmental (3/26/90)

Hazardous Areas (3/26/90)

Historical, Social Environmental and Aesthetic Values (3/26/90)

Housing (3/25/91)

Implementation (3/25/91)

Land Use (4/26/93)

Natural Resources (3/26/90)

Population (3/26/90)

Public Services, Facilities and Utilities (4/26/93)

Recreation (3/25/91)

Road System (3/25/91)

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adopted by Blaine County Board 10/18/93

AGRICULTURE

The purpose of this Agricultural Section is to recognize the distinct character of agriculture and its place in the unique blend of occupations that give Blaine County its special character, and to guide County government in preserving the agricultural community of Blaine County as a primary objective of this Comprehensive Plan.

AGRICULTURAL HISTORY AND ECONOMICS

Farming and ranching have been a tradition in Blaine County for over one hundred (100) years. Blaine County's climate is ideal for raising barley of the highest quality. More grain is produced in Blaine County than ever before and many of the farmers are contract growers for major beer companies. Some farmers have raised barley under contract to the same company for twenty (20) years, bringing a level of profit and stability to the industry previously unknown. Additional agricultural commodities such as wheat, oil seed, seed potatoes, sheep, horses, cattle, and other livestock are also raised commercially in Blaine County. The county's alfalfa is in demand from the growing dairy industry in Jerome and Gooding Counties. Agriculture has become an increasingly healthy and strong economic asset for the county.

As has been the case throughout the United States, farms in Blaine County have expanded for efficiency with a consequent decrease in mid-size farms. However, many people with other employment still want to live in the country and some need land to raise horses, other livestock, and hay. These small five to forty (5-40) acre farms are in increasing demand.

Agriculture contributes to the open space and rural character of Blaine County. The open expanse of irrigated green fields and pastures in this arid climate is what makes the valley floor attractive in the summer. Without these activities the valley would revert to weeds and sage brush. The agricultural community keeps these lands green and productive.

The agricultural community is a stabilizing, positive economic asset for the county. Furthermore, its demands on county services are not excessive and its contributions are many. Because of its diverse crops and livestock, its business cycle of good times and poor are separated from the historical cycles of boom and bust which affect the more recreationally-driven portions of the county's economy.

Operating these lands, keeping them productive and profitable requires a major financial investment and considerable knowledge. If the agricultural lands were to convert to residential use, much of Blaine County's rural character would be lost. Agricultural

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lands cannot be preserved solely by zoning. Zoning ordinances intended to solve problems in the Ketchum to Bellevue region may sometimes create new problems in the agricultural communities.

The agricultural lands south of Bellevue in the Silver Creek area and the drainages of the Little Wood and lower Big Wood Rivers are an asset to the county and it is a goal of this section to preserve such lands.

Agriculture presents a special challenge, with important consequences in planning for Blaine County's future. The agricultural lands of the south county are very different in character from the residential Wood River Valley north of Bellevue. Population densities, topography, soils, even weather patterns vary considerably from the north to the south. The valley itself widens from a three-quarter (3/4) mile wide alpine canyon north of Ketchum to a broad sixteen to seventeen (16-17) mile wide alluvial plain south of the Boise Base Line Meridian. The Carey community is situated in a separate drainage from the Big Wood River, between the Pioneer Mountains to the west and the vast Arco Desert to the east, thus creating a gateway community and important commercial thoroughfare.

Blaine County's agricultural open spaces are not guaranteed simply because they have always been there. A rancher's children may not want to lead the hard life of their parents, or there may be too many children for a farm to support. When estate taxes have to be paid, a sale is often necessary. As property values rise above viable agricultural values, it is tempting for the rancher to move to places where it is more affordable to operate and, especially, to where conflicts with a rapidly growing residential population can be avoided. To date, ranchers who have felt compelled to sell have found a market for their lands from other ranchers wanting to expand or from newcomers to the valley who are attracted by a new life on the land, with its streams and fields uninterrupted by subdivisions or commercial development.

In many states, rapidly rising property taxes have been a critical factor in the loss of family farms and in their transformation into subdivisions and suburban-style developments. Particularly when dispersed throughout an agricultural region, these developments generally make greater demands on countywide services and infrastructure. The State of Idaho Legislature recognized this in 1980. As set forth in I.C. 63-105CC (Compiler's Notes), "the legislature...recognize[s] the importance of agriculture to the economy and people of this state and to find and declare that...land scarcity, proximity to residential or commercial development, and recreational demands create excessive and speculative values for land used for farming." See Idaho Code 63-105CC. The Act continues, by declaring that "[t]axes based upon comparable sales would impose an inequitable and unjust tax burden upon agricultural properties which would endanger the economy of

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the state." See Idaho Code 63-105CC.

The continuation of the market in viable agricultural properties is essential to the survival of the agricultural community and its lands. Ranch and farm owners must find that their land investment is a good one. If ranch values remain strong and healthy, and the ability to carry on agricultural operation is maintained, the market can be preserved and the agricultural community can remain viable.

AGRICULTURAL RESOURCES

Water and Climate

The availability of water is what makes agriculture possible in Blaine County. The ground water and surface water was allocated by the Idaho State Department of Water Resources a long time ago. A residential house is entitled to 13,000 gallons per day for domestic use and irrigation of up to 1/2 acre of land. Desires for additional water require a water right for either ground water or surface water. If the water right does not come with the land it must be purchased elsewhere and transferred to the new point of use. This has the potential for drying up some farm ground.

Protection of decreed water for agricultural uses is necessary to maintain the quality and viability of agricultural lands.

The climate of southern Blaine County with its cool growing season is ideal for small grains and alfalfa. The normally cool, dry summers are conducive to high-quality hay and to harvesting bright plump grain without moisture damage. But, at an elevation of five thousand feet (5,000'), Blaine County's growing season is short.

Public Lands and Livestock Grazing

The public lands, including hills and deserts, bordering the county's ranches play an integral and historic part in livestock production. In April, the snow on the hills is gone and the grass is already growing while the valley floor is still wet and the pastures will not be ready for a month or more. After the long winter feeding season, livestock are turned out on the range to return to the valley pastures later in the summer when the grass is ready. Public land managers continue adopting new techniques in managing their lands with cross fencing, pasture rotation, and spring development which have enhanced the grass and in some cases increased the level of livestock and wildlife the lands support. Studies have shown that such properly managed grazing enhances rangelands.

Historic livestock business continues in Blaine County, including the trailing of sheep to and from summer mountain

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pastures. See Historical Background Section. The traditional livestock easements across public and private lands are still in use. Houses are not allowed within the easements. The county recognizes its responsibility to preserve these easements and lands available for grazing, and to encourage the preservation of the livestock industry in the county, as part of best management practices and multiple-use programs.

Hillsides and Wetlands

Hillsides and wetlands are sometimes as important an agricultural resource as open fields. Unlike subdivisions, hillsides may be a better place for agricultural buildings. It may be counter-productive to keep the hillsides barren and force ranch buildings to be built on productive lands.

With respect to wetlands, some ranches consist of wetlands entirely and some consist only of wetlands and hillsides. Ordinances affecting these lands may have an impact on ranch operations. Careful consideration is necessary to determine that the impact is appropriate and that the benefit is worth the cost.

Wetlands are used for farming and pasture and occasionally for buildings. They are currently regulated by Federal and State governments. Further protection is being provided by The Nature Conservancy in an ongoing effort to enhance stream quality.

Recreation, Hunting and Fishing

The hunting and fishing in Blaine County, whether on public or private lands, are nationally, perhaps internationally, renowned. Few meadow streams can equal Silver Creek as a rainbow and brown trout dry fly fishing site. The enjoyment of the outdoor life, the hunting and the fishing, were undoubtedly part of the lure of this part of the west for the young Ernest Hemingway. As the population of Blaine County grows and visitors arrive, a balance needs to be struck that allows the public sufficient access to enjoy the outdoor life afforded here, but also protects the rights of the county's landowners and protects the privacy to which they are entitled, both as owners and people who live on the land.

Each ranch or farm is different, with a unique mix of public land, private land, rangelands, irrigated croplands, streams and wetlands. The owners of Blaine County's farms and ranches generally recognize the public's right to enjoy the recreational aspects of the county lands. Public access to streams is provided in many locations, and hunting and fishing by permission is allowed by some private landowners.

There is, however, a growing feeling that the privilege to hunt and fish on private land or to cross private land to hunt on public land is being abused. In some instances too many people are

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trying to use a given resource, with the result that the quality of the experience is lost for the hunter or fisherman. The landowner is experiencing trash, open gates, damaged property, and alarming instances of personal intimidation and confrontation. A natural and understandable reaction on the part of some ranchers is to post the land and lock the public out.

Most farms are private and not suitable to public recreation. However, it should be possible for the individual landowners and the public to reach an understanding on what are suitable uses of the land. The public is entitled to drive and park on publicly maintained roads. Where the public road becomes a private dirt road is frequently where the problem begins. In many county locations on public and private land, foot and horseback traffic are allowed, but motorbikes and four-wheel drive vehicles are forbidden.

The Blaine County Sheriff and the Idaho Department of Fish and Game are responsible for enforcing regulations. Only certain accesses to or through private lands are open to hunters and fishermen. Ranchers are aware of the growing public pressure and believe that with the cooperation of the county and state authorities, the pressure can be accommodated without confrontation, or the loss of private property rights, and recreational opportunities.

The agricultural community is made up of businessmen, many of whom have chosen to make a large investment in land, improvements and equipment in Blaine County. The protection of agricultural private property is vital to the continued success of these businesses. For example, at present only one fishing club exists.

ENVIRONMENTAL AND RECREATIONAL VALUES IN AGRICULTURAL LANDS

A significant amount of wildlife habitat is protected on the ranches and farms in the south county. The farmers and ranchers are aware of the unique environment they live in, and they often work consciously to preserve and enhance the streams and associated habitats found on their properties. Eight (8) major land owners along Silver Creek have worked cooperatively with The Nature Conservancy through conservation easements and management agreements to protect, in perpetuity, over twenty-two (22) miles of stream and five thousand (5,000) acres in this unique high desert spring creek system. Many spring creeks like Silver Creek in the western United States have been lost to development and massive diversion projects. This cooperative work between farmers, ranchers, and The Nature Conservancy is a model for how these groups can work together to protect watersheds. If incentives are in place to continue farming and ranching rather than incentives for development, the success of wildlife and land conservation on farms and ranches will continue. Excessive development on the ranches and farms could degrade a significant portion of the

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natural values currently preserved in this area.

Irrigated lands in the Bellevue-Picabo-Stanton Crossing "triangle" of the Big Wood River and Silver Creek drainages total approximately thirty-one thousand (31,000) acres. (Brockway, 1978). According to the Brockway study, a significant portion of aquifer recharge feeding the Silver Creek springs system derives from irrigation diversions from the Big Wood River. The study states that "subdivision of prime agricultural lands with either high or low density developments defers recharge and can adversely affect the water balance of the aquifer systems."

A loss of irrigated agricultural lands and, in particular, the removal of water rights from these lands for subdivision and other development purposes throughout the county, has decreased and will continue to decrease Silver Creek flows. The Silver Creek system is very sensitive to land use changes. The influence of irrigation on this system needs to be well understood. Water use is governed by the Idaho State Department of Water Resources. The most recent six (6) year drought should serve to remind residents that water is a special resource in Blaine County. Land use decisions affecting the entire county directly impact these important water systems, the agricultural economy and the environment dependent upon them.

There are currently many recreational opportunities in the south county and most of these opportunities are not used to their full capacity. Silver Creek Preserve is entirely open and free to the public for fishing, hunting, hiking, biking, canoeing and other outdoor pursuits. In addition there is a large portion of land along Silver Creek managed by the Idaho Department of Fish and Game for the same activities. These areas include Point of Rocks, Martin Bridge, and the Hay Spur Fish Hatchery. Excellent road bicycling is available on the Gannett Road and Highways 20 and 75. Mountain biking and hiking opportunities abound in the Picabo Hills. The Carey area contains many recreational opportunities, including Little Wood and Fish Creek reservoirs, Carey Lake, and the trails in the Carey Hills.

Agriculture and Population Growth

While population levels in the county's agricultural areas has remained stable, recent years have witnessed a relative population boom in and between the incorporated areas. Most new residents are from populous out-of-state urban areas. See Population Section. Among the results of this demographic shift have been some actual conflict and much discussion over issues which affect the use and value of agricultural lands, and the rural character of Blaine County.

Many of these issues have been, and will continue to be addressed at different levels of county government. The Social Environment Section of the Comprehensive Plan expresses very well

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that Blaine County "is a vibrant and responsive community that plays host to people of many backgrounds." Ranching and agriculture are highlighted as important contributions to the county's economy. The Plan continues, "[t]he mixture of cultural values has enriched the county beyond measure." Moreover, the Social Environment Section states, "[p]eople are drawn to the county because of...an opportunity for individual voices to be heard and have a contribution in determining their own future.

Thus, it is county government's responsibility to ensure that all sides are heard, including the minority side, as these issues arise. This is perhaps the essential tenet of the American style of representative government. It is in the county's interest to ensure representation at all levels of county government from its important diverse economic and geographic groups, including the agricultural sector. See also Idaho Code 67-6504. As just one example, the agricultural community should be adequately and effectively represented on the County Planning and Zoning Commission, which under the authority of state and local statutes and ordinances has the ability to regulate land use.

DESIRABLE GOALS AND OBJECTIVES

"People are drawn to the county because of its small town rural atmosphere.... The southern portion of the county has been a traditional ranch and farm oriented community. The mixture of cultural values has enriched the county beyond measure." See Social Environment Section.

Agricultural/Residential Transition Areas

1. Location. Agricultural areas adjacent to unincorporated and incorporated cities provide the best location for agricultural/residential transition areas. This is a place to provide for county growth and higher densities to protect the remaining agricultural lands from residential encroachment. Evaluate agricultural/residential transition areas as receiving zones for development rights transfers.

2. Use Restrictions. Encourage the use of restrictions such as anti-nuisance clauses, that put buyers on notice that agricultural practices such as spraying and all night operations take place in the neighborhood.

3. Housing Setbacks. Housing in agricultural/residential transition districts should be setback from agricultural lands.

Recreation, Hunting, and Fishing

1. When considering legally entitled public access through agricultural lands, avoid disruption to farming operations. The proximity of established alternate public access shall be a

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decisive factor in determining the need for additional accesses in the same area.

2. It should be the aim of county law enforcement officials, county commissioners, and the state and federal agencies involved (the BLM, Fish and Game Department and Forest Service) to assist landowners and the public in finding solutions that are legally acceptable and that work both on public and private land.

3. Adopt polices or laws which discourage trespassing.

4. If the landowner allows hunting, but does not allow motorized vehicles, the location should be so posted and the public should respect the posting.

5. It should be made clear that fishing and hunting and other recreation on private lands is by permission only.

6. Legal historical use should be a paramount consideration when determining where public access shall be placed. Condemnation of private lands should not be a consideration.

7. It may be a reasonable and proper use of the resource for the landowner to allow hunting and fishing for a fee. Such fee arrangements should be evaluated under the Comprehensive Plan and Zoning Ordinance.

Agricultural Land Use

1. Redefine and clarify the terms "agricultural use" and "agricultural purpose" wherever they appear in county ordinances.

2. Consider ordinances to allow agricultural divisions by metes and bounds description without subdivision or survey requirements, provided the divisions are for agricultural purposes only.

3. Allow agriculture-related businesses in and near agricultural areas under a conditional use permit process.

4. Develop criteria to provide affordable housing for ranch employees and seasonal workers on or near the ranches.

5. Evaluate the possibility of allowing additional home sites for family members.

6. Assure that any subdivision within an agricultural designation addresses and eliminates, or minimizes, any negative impact to adjacent property owners.

7. Evaluate off-site density transfer and development rights transfer (See Land Use Section, Voluntary and Regulatory Land Protection Techniques) as ways to preserve agricultural lands and

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discourage residential development in agricultural areas.

8. Blaine County supports the legislative intent set forth in Idaho Code 63-105CC. (See Agricultural History and Economics contained herein.)

9. Evaluate the Voluntary Agricultural Preservation zoning ideas as shown in Appendix I.

Water and Climate

1. Support the agricultural community in protecting their water rights for general agricultural use.

2. Recognize that land use decisions throughout Blaine County have a direct impact on water availability for agricultural purposes; that reduced flows have a negative impact on recreation and riparian values; and that methods of recharging the aquifer, especially during wet years, should be explored.

APPENDIX I- AGRICULTURE SECTION

The following is only one example of a preservation technique used here for illustrative purposes. Other techniques should be evaluated as they are put forth.

Voluntary Agricultural Preservation Areas

Agricultural land holdings of forty (40) acres or larger, which are contiguous, could petition to join a "voluntary agricultural preservation area." This area would have a base density of forty (40) acres. Its purpose would be to help preserve agricultural practices and grazing.

The base density of the area would be one (1) unit per forty (40) acres. Employee housing would not be considered in the base density. The base density for the purpose of a planned unit development (PUD) would be one (1) dwelling unit per forty (40) acres and this base density may be transferred within contiguous parcels of land under the same ownership from the preservation area to either the twenty (20) or ten (10) acre zones.

Permitted uses for such areas could be:

a. Use of land for agricultural purposes.
b. Open space recreation uses.
c. Wildlife preserves.
d. Single-family residences.

Accessory or conditional uses could be the following:

a. Living quarters for persons employed on the premises.

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b. Recreation facilities for private use.
c. Guest houses and servants quarters.

A land holder with land suitable for agricultural purposes could petition to receive the Agricultural Preservation designation by requesting such designation from the Blaine County Board of Commissioners (Board). Such requests would be compiled and acted upon every six (6) months by the Board. If a request were determined to be in the best interest of the county and adjacent landholders and were for the purpose of the preservation of agriculture in Blaine County, the Commissioners shall approve the designation.

Land would be allowed to be sold within this Agricultural Preservation Area for agricultural purposes and transferred without formal survey. Legal description would be given by metes and bounds. Parcels of land less than forty (40) acres could be traded between existing land holders to consolidate holdings or make fields more efficient for agricultural purposes.

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NATURAL RESOURCES

PURPOSE

The topographic, geographic location, seasonal variation in climate, and distribution of water in Blaine County create a unique and varied natural environment which ranges from the scenic high alpine country in the northern portions of the county to the desolate lava plains and desert mountains in the southern portions of the county.

As a recreational area, the county is known throughout the United States and the world for the quality and variety of the natural environment and recreational opportunities. Consider a few of the following examples of the county's unique offerings:

The Salmon River with its headwaters in the north and the Snake River in the southern part of the County.

Silver Creek, located in the lower Wood River Valley, is a legend to fly fishermen throughout the world.

Bald Mountain, due to terrain, lifts, run locations and snow conditions is one of the finest ski facilities in the United States.

The Sawtooth, Boulder, Smokey, and Pioneer mountain ranges provide high alpine country as beautiful and inspiring as any to be found in the United States.

The Great Rift area in the southeast portion of the county is a unique land form with lava formations similar to a lunar landscape.

It is this diversity of environment and recreational opportunity that has attracted many people to Blaine County. It is from the recreation industry that a majority of Blaine County residents, directly or indirectly, derive their income.

Preservation of this environment is mandatory if Blaine County is to retain its desirability as a recreational area. In addition, these resources (especially as related to water utilization) are also of critical importance to the agricultural industry which predominates the southern portion of the county. Historically, minerals and timber had been vital to the local economy. Current zoning requirements limit the areas in which such industry can function.

In addition, climate, man-made pollution, and terrain create unique hazards which can result in the loss of life, property and extraordinary public expenditure for protection and relief. These are covered in the HAZARDOUS AREAS component of the Plan.

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Blaine County desires:

1. To protect and enhance existing natural resources in Blaine County.

2. To preserve and protect the scenic and aesthetic values of Blaine County.

3. To protect the public health and general welfare, and to minimize property loss and public expenditure from flooding, avalanche, pollution, and natural hazards.

4. To support projects that protect or enhance the natural resources of the County.

TOPOGRAPHY

Blaine County is located on the southern edge of the mountainous wilderness area which dominates the central portion of Idaho. The irregular northern boundary of the County follows the watershed demarcation line of the Pioneer, Boulder and Sawtooth mountain ranges. Hyndman Peak, located in the Pioneer Range, (approximately 18 miles northeast of Ketchum/Sun Valley) is the highest point in the county at an elevation of 12,078 feet. The higher peaks along this boundary and within the northern portion of the county normally exceed 10,000 feet. It is in these high mountain ranges that the Salmon, Big Wood, and the Little Wood Rivers originate.

The headwaters of the Salmon River run north into the Sawtooth Valley and Custer County. The Sawtooth Valley, a broad, high mountain valley (elevation approximately 7,000 feet), is flanked by the Sawtooth Range to the west and the White Cloud Range to the east. The public and private lands of this area are within the Sawtooth National Recreational Area.

The Big Wood River and its numerous tributaries, North Fork, Warm Springs Creek, Trail Creek, East Fork, Deer Creek, Croy Creek, and other minor streams follow the fault block which forms the Big Wood River Valley. Although far from uniform, the average width of the valley increases from one-half mile in the upper Sun Valley/Ketchum area to one and one-half miles in width in the Hailey/Bellevue area. Below Bellevue the high mountains terminate, and the valley fans out with the Big Wood running westerly into Magic Reservoir.

At the base of this fan subsurface waters of the Big Wood Aquifer feed Silver Creek, which runs east into the Little Wood River and the lower Big Wood River. The lower Big Wood Valley area is contained by low desert mountains running east/west along the southern boundary of the county.

To the east, the Little Wood River and Fish Creek originate off the southern face of the Pioneer Range. These streams form the Upper Little Wood and Fish Creek Valleys, which fan out into the agricultural areas around Carey. These agricultural terraces are skirted to the south by the broad lava flows which run south

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across rolling lava flows to Lake Walcott, a National Wildlife Refuge, on the Snake River. General contours of the county are shown on Topographic Map, p.3A. Elevations of landmarks, topographic areas and vegetation zones are shown on Comparative Elevation Graph, p.3B.

TOPOGRAPHIC ANALYSIS

The topography of the Upper Wood River Valley can be divided into three general categories; mountainous hillside areas; terrace areas; river zone areas. These areas have distinct natural characteristics and are schematically illustrated in the drawing on p. 3C.

Hillside Lands

Steep mountainous topography predominates the central and northern portions of the county. These hillside areas normally exceed slopes of 40 percent. Within the central areas of the county (Mountain Zone), north and east slopes generally support and contain dense forest with open and semi-arid south and west slopes.

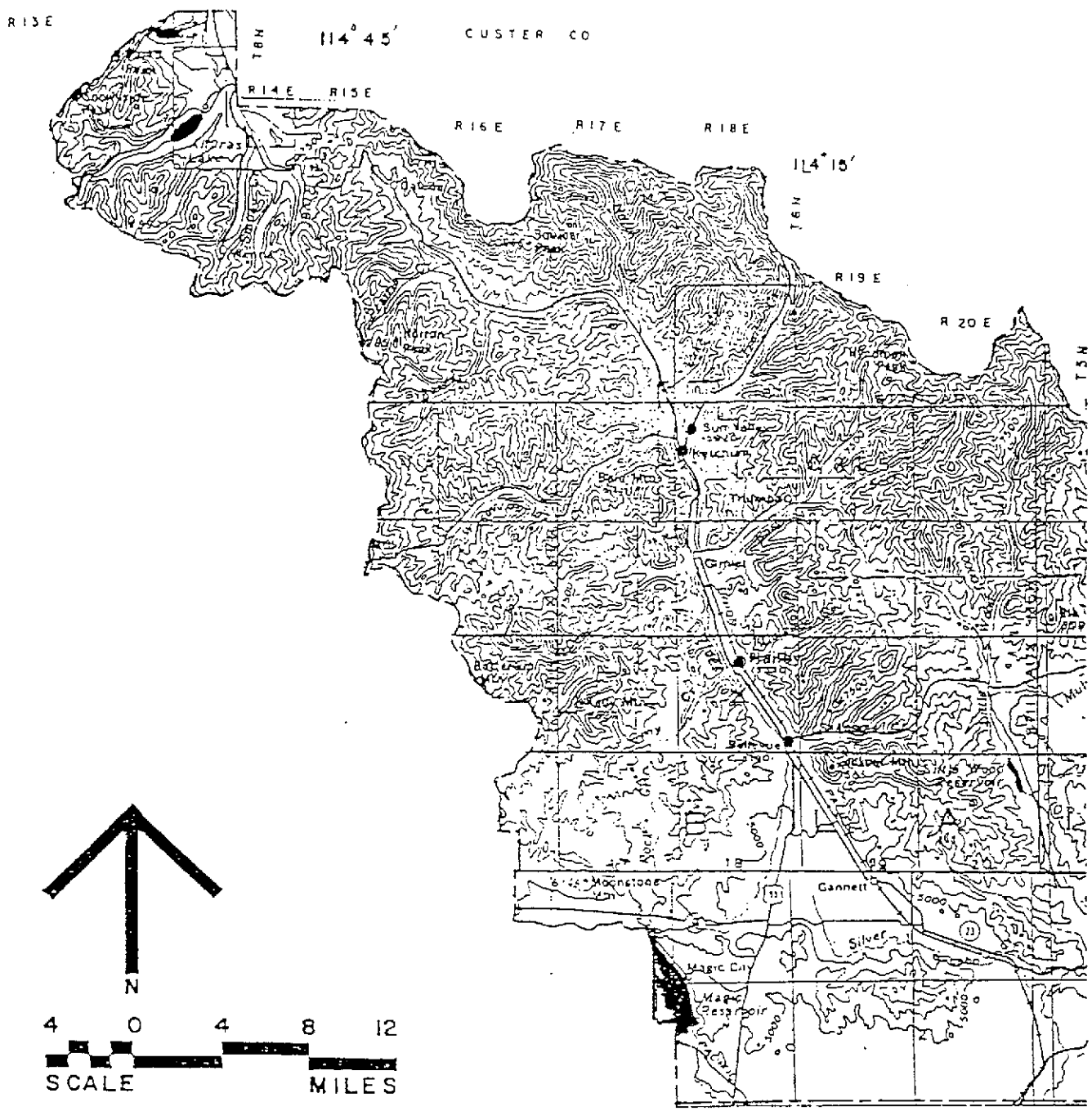
Further north, in the higher alpine zones, more hillside areas are forested. These land areas support a mixture of forestry, grazing and recreational uses and are a major element contributing to the scenic enhancement. Excessive grazing can destroy vegetation and cause erosion that damages adjoining lands as well as the used land itself. Snow and ice during winter months create severe vehicle access limitation. Blaine County's mountains and hillsides have the highest degree of visibility, and the scars created from roads or buildings distract from the scenic quality. Due to these limitations, present county zoning regulations prohibit development on lands in excess of a 25% slope.[1] Cuts, fills, and access roads to slope areas create a visual blight that deteriorates the natural quality of the scenic view.

Terrace Lands

As indicated in the preceding diagram there is usually a distinct break which occurs in the transition from hillside to the valley floor. The alluvial fans and terraces which characterize the valley floor normally range from zero to 10% slopes. These terraces are often narrow ribbons of land separated by distinct benches which vary from five to forty feet in height. Vegetation on upper terraces rely on normal precipitation and the alluvial soils which dominate the area have a low water retention characteristic; as a result, in their natural state, these areas are semi-arid and support sage brush and various grasses. The depth to subsurface ground water and river influence is the basic factor which differentiates terrace lands from river zone lands.

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TOPOGRAPHIC MAP

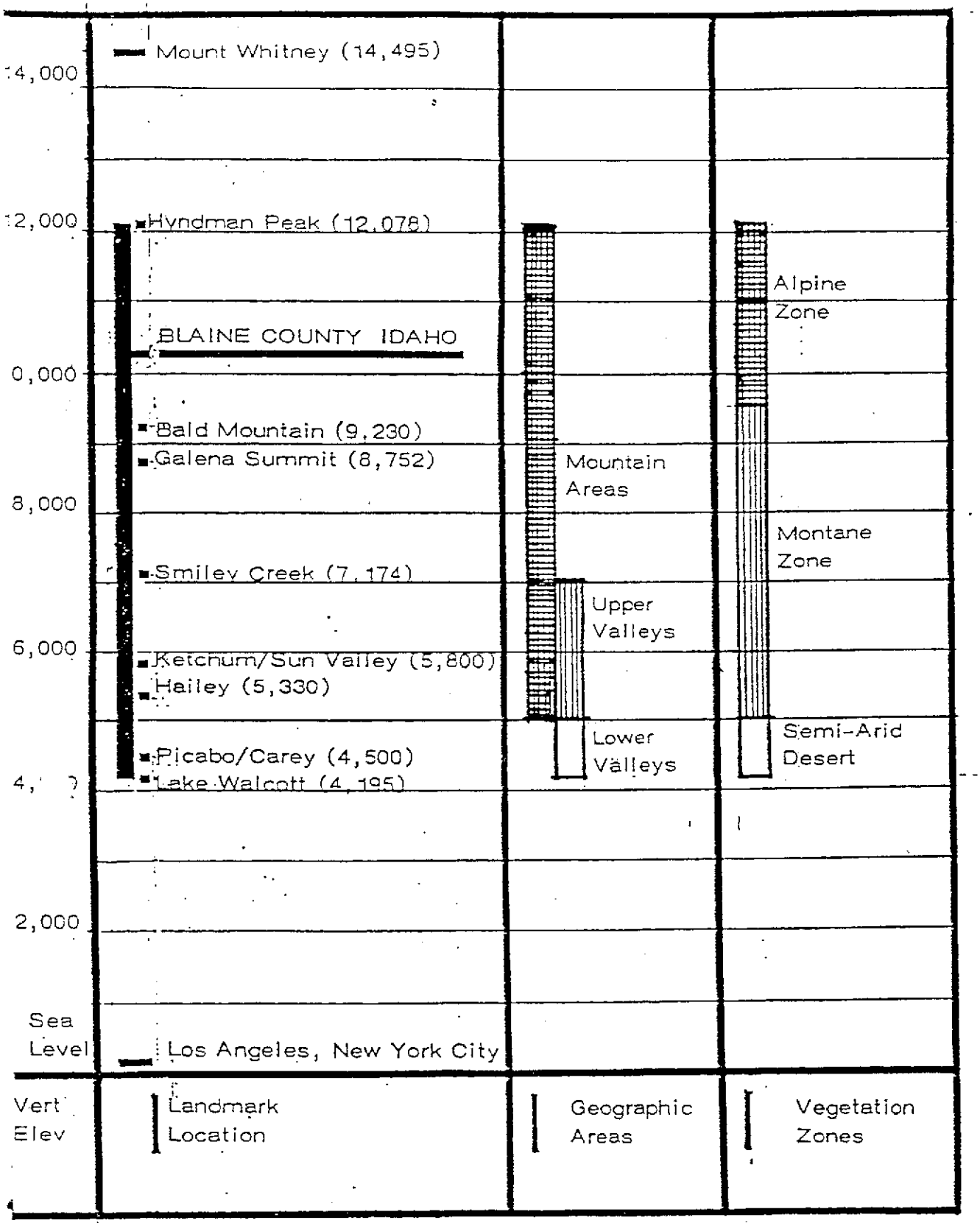
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COMPARATIVE ELEVATIONS

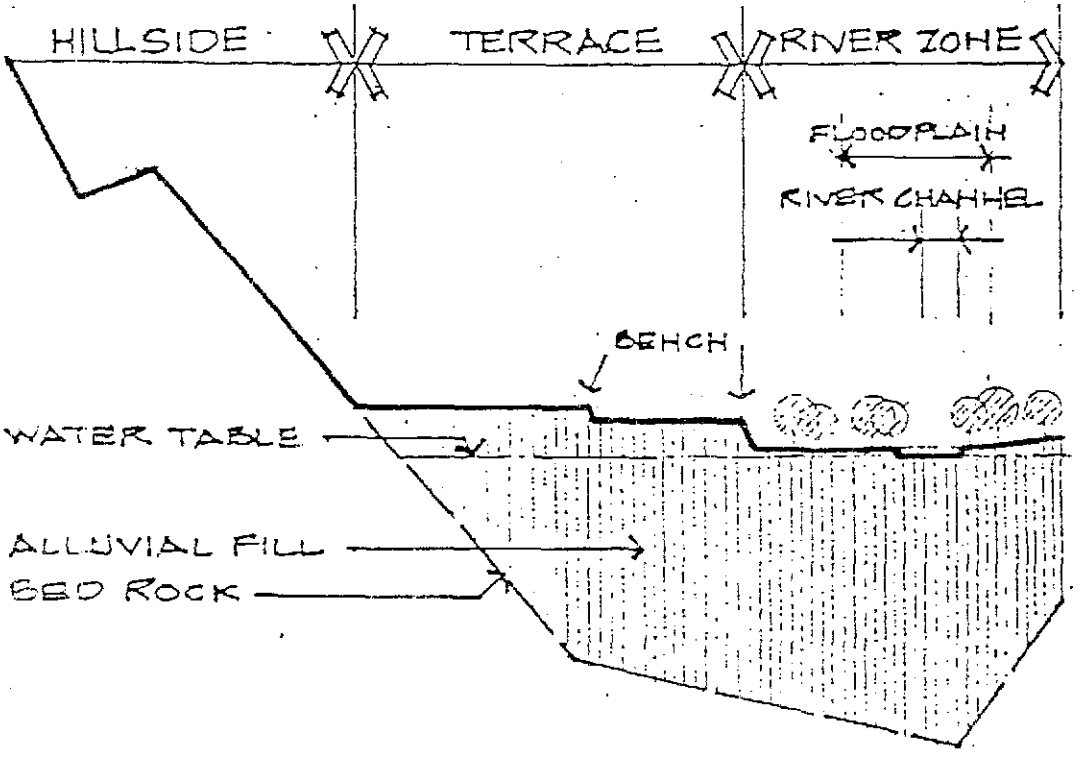


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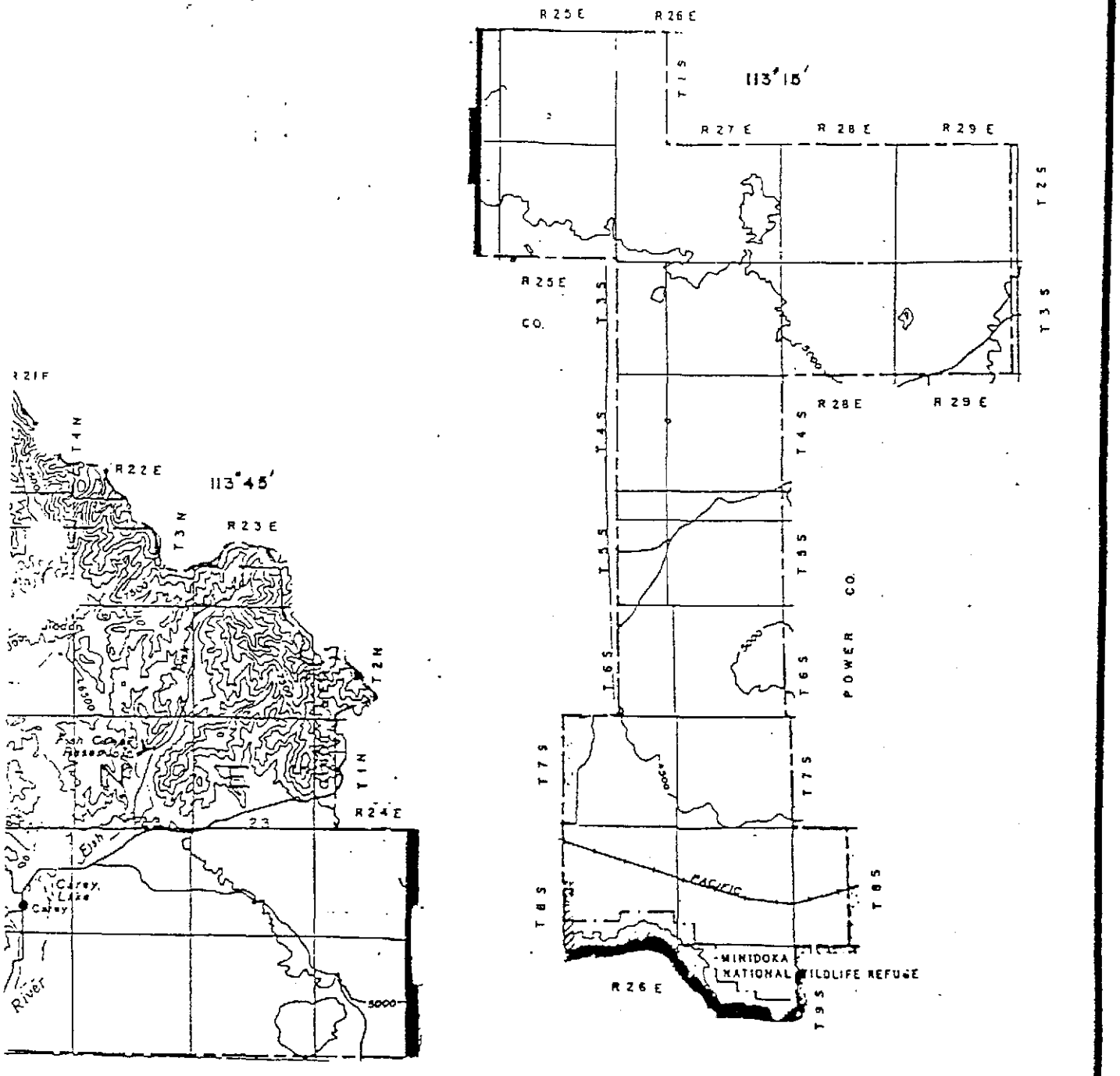
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TOPOGRAPHIC ANALYSIS

The topography of the Upper Wood River Valley can be divided into three general categories; mountainous hillside areas; terrace areas; river zone areas. These areas have distinct natural characteristics and are schematically illustrated in the following diagram:



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Legend

Contour Interval 500 feet

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3D

River Zone Lands

In contrast to terrace areas, the river zone areas which have a water table varying from zero to five feet in depth support extensive vegetation in the form of ground cover and dense stands of cotton wood and aspen trees. The vegetation and the streams which occur in the river zone provide the primary fish and game habitat within the valley and are of major recreational value. In addition, portions of the river zone are subject to flooding. As such, the consideration of river zone areas is of primary concern.

Prior to 1975 most high intensity development that has occurred in the Upper Big Wood River Valley areas has taken place on the terraces. The Sun Valley Resort complex, the central business district of Ketchum, development in the Red Top area, developed areas of Hailey and Bellevue have all occurred on these terraces. However, the recent growth in urban and rural areas, combined with a lack of geographical land area and common sense, has resulted in an increase of development in flood plain areas and pressures to develop hillside areas.

The hillsides and river areas of the Big Wood River Valley provide a distinct physical and visual setting which must be protected in a total plan for the valley.

TOPOGRAPHY AND PLANNING

Land forms are an important consideration in virtually all land development work. The integration of aesthetics and development within the context of a varied topography is vital to the success and function of any project. Numerous examples exist within the county of the problems created when topographic features are ignored. The original grid street pattern laid out for the city of Ketchum, Lake Creek and other subdivisions in Blaine County provide examples of inefficient land utilization resulting from poor topographic planning. In combination with other physiographic considerations, the following review criteria would encourage efficient and creative development design tailored to the specific site characteristics. (p. 3D)

1. Compatibility to existing contour, % grade and cut/fill requirements.

2. Maintenance of efficiency.

3. Disturbance of natural site characteristics.

4. Availability of vehicle access/private and service vehicles.

5. Proposed use interrelationships:

   a. Vehicle, pedestrian, and other circulation to proposed development location to open areas.

   b. Integration of elements within existing site characteristics.

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6. Orientation analysis:

a.Sun exposure

b.Wind direction and impact

c.Primary views

7. Degree of visibility

Some of the above considerations are presently included in the Subdivision Ordinance #77-6. The rest shall be added.

WETLANDS

Wetlands are defined as those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and in normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.

Vegetation types which dominate Wetlands Areas are trees: cottonwoods, willows, and dogwood; and grasses: red top grass, rushes, and sedges.

The water table will often be as close as 12 inches from the soil surface.

Wetlands provide food and habitat for an abundance and diversity of flora and fauna. Wetlands include swamps, marshes, bogs, and similar areas. Although there is seldom a direct productivity to people, the indirect benefits from wetlands are an abundance of fish, waterfowl, and other wildlife.

Wetlands are spawning, feeding, and cover areas for fish; and important nesting, feeding and wintering areas for waterfowl.

Additionally, wetlands provide buffer areas which protect stream banks from erosion, reduce sediment transportation, and help to break down chemical deposits in the streams. Wetlands act as a natural storage area during floods and storms by retaining high waters. Later in the season, wetlands release this water back into the system at a time when it is most needed.

Wetlands may also be groundwater recharge areas where rain and surface water can replenish underlying or nearby aquifers which are a source of drinking water.

The wetlands of Blaine County are a crucial and integral part of the environment. They serve the uses of the public and are a natural renewable resource. The protection of this resource is considered to be essential. Inventory maps of these areas are available at the County Planning and Zoning office.

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General information pertaining to surface water, ground water, and water quality in Blaine County is provided in the "Comprehensive Rural Water and Sewage Planning Study" Idaho Water Resource Board, January 1972, pages 27 through 32. It recommended the immediate authorization of a sewage master plan oriented toward the eventual development of a trunk line sewer system which would service the upper Wood River Valley. This recommendation has not been followed. The report did not evaluate future densities, effectiveness of industrial disposal systems, alternative treatment systems, or capital improvement costs. Planning experts agree that the availability of water is the primary natural resource consideration for every community in the United States.

WATER RESOURCES AND WATER QUALITY

In February 1980 the Director of the Idaho Department of Water Resources issued a moratorium on new water rights for the Big Wood River and it's tributaries. This moratorium covers the area of the Big Wood River from Magic Reservoir northward. This moratorium was instituted because it was determined that the existing water was fully appropriated.

In 1972, the South Central Health District assumed responsibility for water and sewage systems in Blaine County. Since that time the regulation and treatment of these systems has been hampered by the District's limited funding and manpower. The result is that many systems within the county are being approved without adequate testing of the impacts upon the ground water system.

Numerous specific water quality studies have been conducted in the county by the State Department of Health and Welfare and other state agencies. However, it is difficult to fund a consistent water quality monitoring program and no continuing program for this purpose currently exists. The data for this section of the Plan include the U.S.G.S. Survey (updated as of 1989). This shall serve as a baseline data for future evaluations so that any deterioration in the water system can be measured.

In 1983 and 1984 the U.S. Department of Interior funded a study of impacts of individual sewage disposal facilities on the water quality mountain valleys. This study was conducted in the Big Wood River Valley by C.E. Brockway.

A ground-water quality network of approximately 50 wells was established from which samples were collected in July-August 1983. Approximately 20 wells were then selected from which samples were collected about every six to eight weeks through March, 1984.

No case of local or regional ground-water contamination exceeding USEPA standards was found in any well or surface-water sample.

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Nitrate concentrations of surface-water samples were great enough in some instances to be of some concern in regards to eutrophication. The greatest concentrations of nitrate occurred in the Big Wood River below the Ketchum water treatment plant and in Lake Creek.

The study verified the close hydrologic connection between the surface-water and ground-water system in much of the study area. Both regional and local ground-water quality conditions will affect surface-water quality.

The study recommended that water samples be collected and analyzed particularly for nitrate on an annual or semi-annual basis from some of the wells used in the study. The study also recommended that surface-water samples be collected and analyzed from the Big Wood River on a regular basis for nitrate and orthophosphate.

A recent study[2] shows the results of water quality tests of the municipal water systems for Bellevue, Hailey and Ketchum utilizing ground-water obtained from the aquifer. These figures show a gradual degradation of water quality since 1976 especially for the Bellevue system.

These figures reinforce the need to conduct continuing collection and analysis information for both the ground-water and surface-water systems in the county.

Sanitation systems have been an obvious consideration in the review of proposed development in the past. The criteria and procedure used for future project review should be formalized in future performance ordinances. Procedures shall be coordinated with State Health, Water Administration, and other related agencies. Development which may deteriorate existing water quality levels should be prohibited.

The Snake River Adjudication is a State court action to quantify and prioritize all water uses in the Snake River drainage in Idaho. For Blaine County, this means all the waters in the Big Wood River and its tributaries. The adjudication will fully quantify the valid uses of the Big Wood River and its tributaries both within Blaine County and outside, especially downstream. This will better define the extent of the over and under appropriation of the valuable Big Wood River water resource.

The State has completed the taking of claims from the general public and will prepare a county report on preliminary findings. The Blaine County report will come out on a county-by-county schedule beginning in 1992. Federal claims in the adjudication will be negotiated with the State. For instance, the U.S. Department of Agriculture (including the Forest Service) water rights are scheduled to be negotiated by November 1992. The negotiated settlements and the county reports are subject to review by all parties; public, Federal, State and local agencies.

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Future development in Blaine County is closely tied to the availability of water. Domestic and stockwater uses are considered high beneficial uses by the State. It is not likely that these will be totally limited in the near future, except that lawn watering may not be allowed under new single family domestic permits. Alternatives such as drought resistent native plantings instead of water intensive lawn plantings may be required. Further agricultural use of water in Blaine County may be extremely limited. Blaine County's recreational draw relies heavily on the presence of high quality water flowing in the streams for aesthetics and fish and wildlife purposes.

Water is a critical life component to the residents of Blaine County. Water is a finite resource and subject to the vagaries of weather conditions in the Wood River Valley. Even with excellent snow years and bountiful rainfall, the aquifer of the valley and the rivers and streams cannot always supply unlimited amounts of water. In many years the snow and rainfall are inadequate to recharge the aquifer, causing areas of the county to experience water shortages. This condition already exists with the present 1990 population, and both domestic and agricultural uses are currently under allocation. In the event of drought conditions such allocations may be further restricted.

As the county population continues to grow, additional stress will be placed on the limited water resource. Only through careful management of the water resource can the future viability of the residents and economy of the county be maintained.

Removal of water, for decorative or aesthetic purposes, from the rivers and streams of Blaine County, in whatever amounts and for whatever distances, impairs and reduces the particular reach of the river proximate to the removal area. When the flow is reintroduced into the system, it has the potential to increase ambient temperatures, introduce chemical pollution, increase sediment loads, reduce needed agricultural water uses, and reduce fisheries habitat.

The cumulative effects of multiple removals has an ever increasing negative impact on the fisheries and wildlife habitat as well as on the water quality of the rivers and streams. These negative effects manifest themselves in reduced fisheries and wildlife habitat, increased pollution due to the introduction of toxins into the water, and a degradation of a primary county resource that provides an important aesthetic and economic benefit to the entire county.

WILDLIFE

Wildlife is an integral part of the natural environment of Blaine County. Although historic game populations and fisheries have been greatly diminished by the encroachment of civilization, county policies must assist in preserving present wildlife values. Management of wildlife in Blaine County is under the jurisdiction of the Idaho Department of Fish and Game. Critical to the success of wildlife is habitat management. In Blaine County this habitat is administered by the USDA Forest Service,

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Bureau of Land Management, State of Idaho or owned by the private sector. This section identifies specific land use/wildlife conflicts. Background information on wildlife and wildlife habitat is provided in Wildlife Communities of Sun Valley.[3]

In December 1985 the Idaho Department of Fish and Game established species management plans for wildlife throughout the state. These plans chart the course for efforts from 1986- 1990 to manage all wildlife species for aesthetic, recreational and physical products.

Wherever potential conflicts arise between subdivision development and Wildlife access and corridors, Wildlife will be preserved and development prohibited.

FISHERIES AND STREAM SIDE HABITAT

The destruction of fisheries and stream side habitat by residential development in floodplain areas is discussed in the floodplain section. Enforcement of floodplain management policies and implementation of recreational programs which seek to preserve the natural character are of major importance in future wildlife values in these areas.

In addition, review criteria shall be adopted to assess the potential impact of development adjacent to Silver Creek and other streams not specifically defined as floodplain areas.

DEER MIGRATION CORRIDORS

Mule Deer occupy high mountain terrain during the summer and migrate to lower elevations during the winter. Migration movements fall under two general classifications; those animals that winter in upper valley areas, and those which make a major migration into southern desert areas of the county. Disruption of these routes by development forces animals into less favorable wintering areas and reduces summer populations. Migration routes and wintering areas should be protected by restriction of development in such areas. Maps of existing migration routes are available in the County Planning and Zoning office.

WINTER RANGE AREAS

During the winter months, elk herds move to winter range areas located along upper draws in the county. These animals have little toleration for human habitation, and the growth of the Ketchum, Sun Valley, Warm Springs and Elkhorn canyons has reduced traditional winter range area. Continuation of this trend will further reduce winter range areas. The following have been identified as critical elk and deer winter ranges:

- Trail Creek & Corral Creek Above Sun Valley
- Elkhorn, Keystone, Parker Gulches
- Greenhorn Gulch
- Slaughter House
- Canyons South of Hailey on West Side of the Big Wood River
- Warm Springs Canyon Upper Lake Creek
- East Fork, Milligan Canyon, Quigley Canyon
- Martin Canyon
- Muldoon Canyon

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Historically deer and elk wintered in the Big Wood River bottoms along the flood plain. As a result their numbers decreased or were displaced due to increased human habitation. Presently critical winter ranges are primarily on south and west facing slopes above the flood plain. This has resulted in increased elk populations and subsequent problems associated with wintering elk adjacent to urban areas.

VEGETATION

It is vitally important that the vegetative characteristics and values be fully understood and considered in the growth and development process in Blaine County. Without this consideration and understanding, it is certain that the quality of the Blaine County environment, its natural resource base, and its standard of living will be diminished.

Three major vegetation zones are found in Blaine County; sub-alpine, mountain, and semi-arid desert. The location of these zones is indicated on comparative elevation graph, p.3B. Within these zones there are riparian and meadow zones which are associated with valley bottoms and stream courses. A detailed evaluation of the type and characteristics of the vegetation found in these zones can be found in Wildlife Communities of Sun Valley.[4]

VALUE OF INTRODUCED VS. NATIVE VEGETATION

In most situations native vegetation is the most desirable, and perhaps the only way to provide for the maintenance of a given vegetative value. It is possible that introduced species and native species may have equal ability to provide the required value. With respect to construction, it is important to use temporary vegetative cover to protect the site from erosion and sedimentation during the construction period. It is especially important to consider this practice where the construction period may extend over the winter.

Disrupted soils often become prime habitat for noxious weeds. These weeds cause maintenance and other problems at great expense to the county.

VEGETATIVE CRITERIA

It shall be the objective of the comprehensive land use plan, through the Planning and Zoning review process, to insure the maintenance and/or establishment of enduring vegetative characteristics which will allow orderly growth without degrading the high quality natural environment.

Vegetative Review Criteria:

1. Watershed values.

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2. Protection from erosion and sedimentation including the need for temporary protection during construction.

3. Beautification, scenic, and aesthetic values.

4. Wildlife forage and habitat values.

5. Livestock forage values.

6. Timber values.

7. Historic or natural area values.

8. Prevent unnecessary removal of vegetation.

9. Noxious weed control.

10. Avalanche and flood retardation values.

11. Potential hazard from mature cottonwood windfall.

SOILS

Soil characteristics vary considerably throughout Blaine County. A General Soil Map and information pertaining to soil characteristics within the County can be found in the Blaine County Area Idaho, July 1985, soil survey. These maps provide general information useful for broad area planning. Planning for specific sites requires detailed soils information in order to identify specific characteristics which may impose hazards or limitations that will affect land use. (p. 11A and 11B.)

USDA - Soil Conservation Service, working in cooperation with the Blaine Soil Conservation District, has completed soil surveys relating to the private lands in Blaine County. The map portion of the report is now in use in conjunction with county planning maps at a scale of 1" =12,000 feet. Detailed soils information for the majority of private land in the southern portion of Blaine County is published in another report - Soils Survey of Minidoka Area.

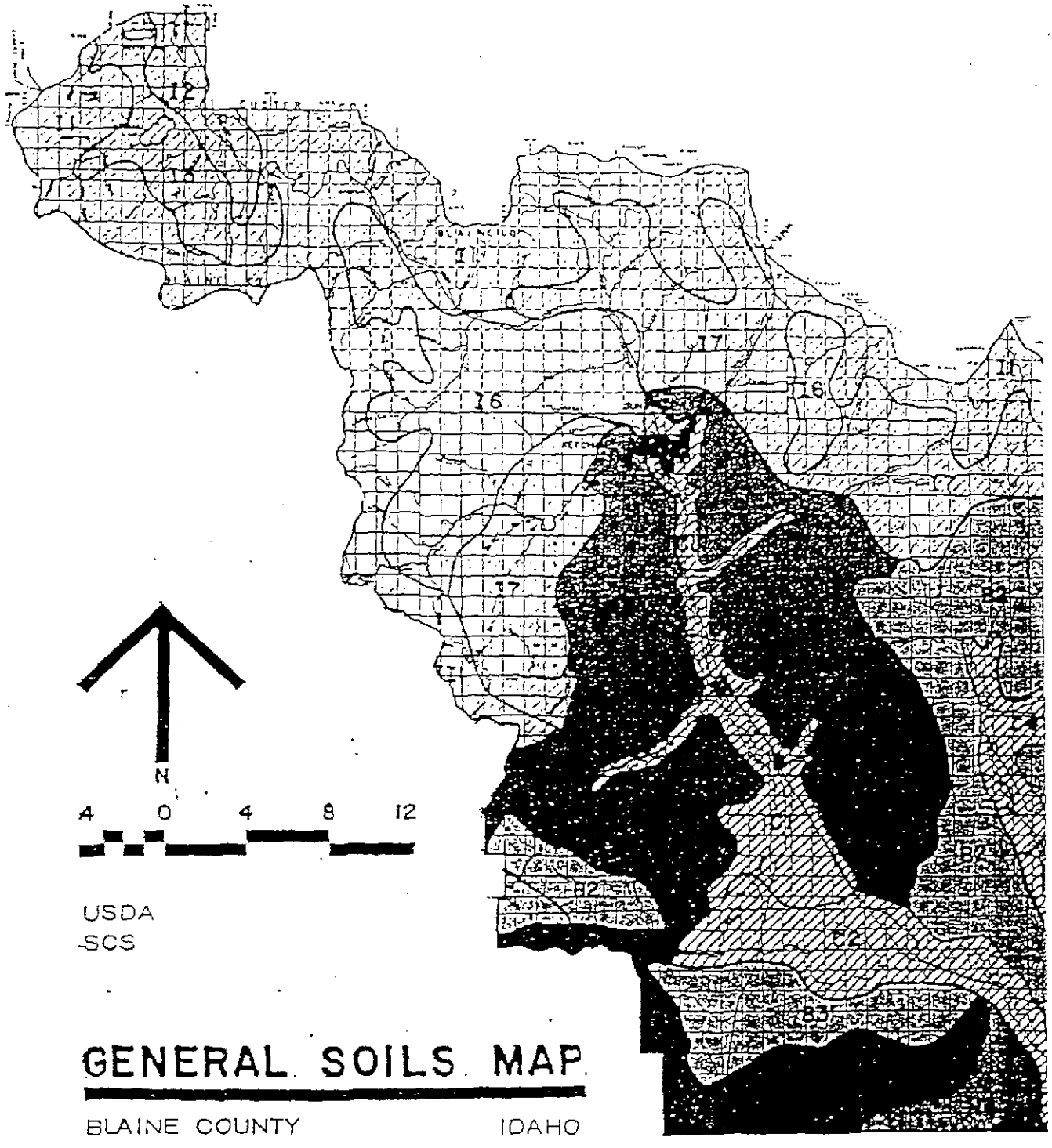
ENGINEERING CONSIDERATION

Soils posses varied characteristics and physical properties. These characteristics identify suitability, hazard and limitations with respect to the use of the land. In anticipation of any land use change, it is vital to identify and detail the soil characteristics. The identification of a soil hazard or limitation does not necessarily represent an obstacle to development. It merely points out the need for engineering design fitted to the limitations of the soil.

In order to maintain quality in the environment through the protection of soil resources and to provide for the general public health, safety and moral well being, it shall be the objective of the land use plan, through a review process, to insure that soil characteristics are accounted for and understood

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LEGEND Also, See Exhibit 2.41B

A1-A5 Areas dominated by well-drained, dark and slightly dark-colored, shallow to deep, sandy to clayey soils, on strongly sloping or steep mountains.

B1-B5 Areas dominated by well-drained, slightly dark-colored, shallow to deep, loamy and clayey soils, on sloping foothills or steep mountains.

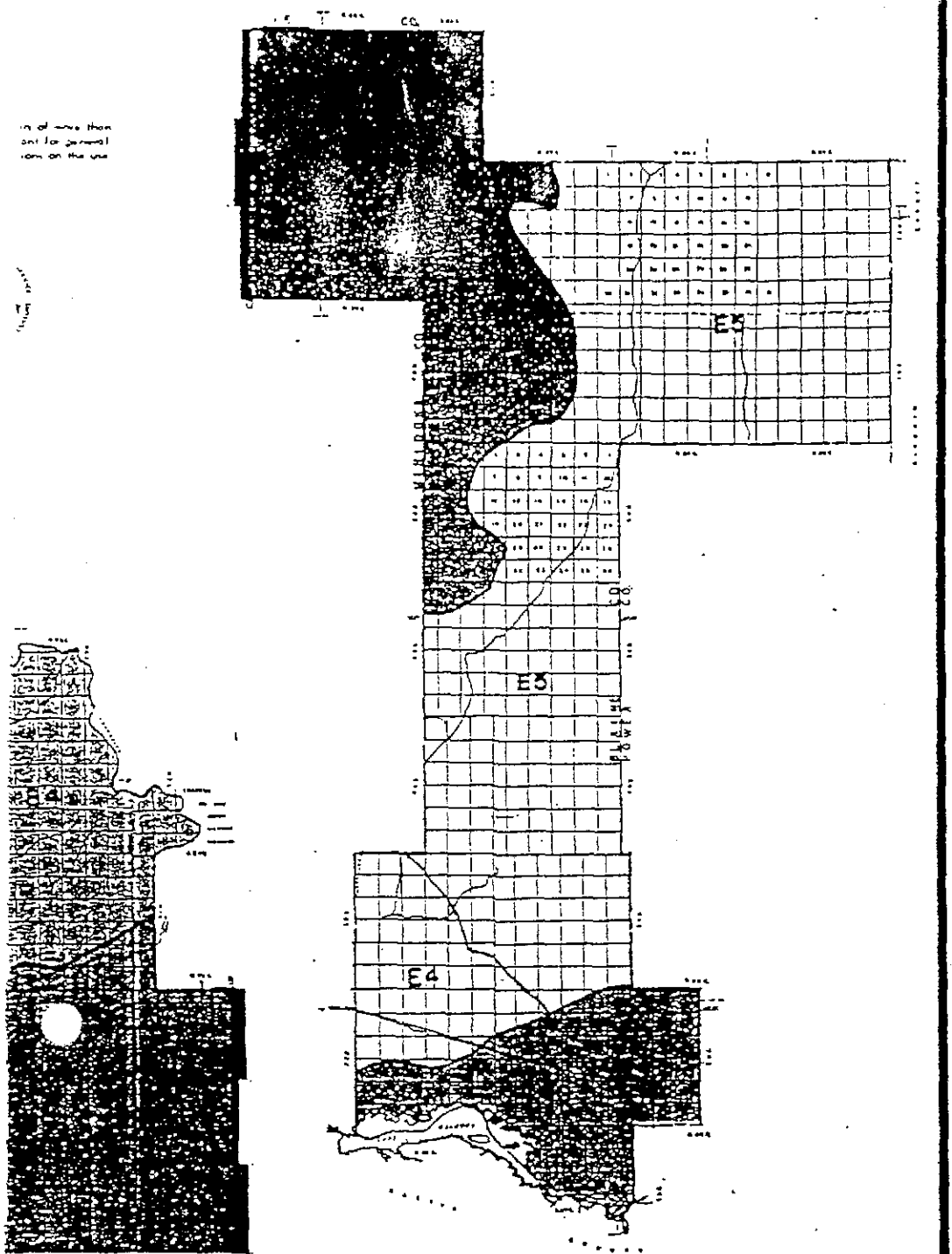
C1-C7 Areas dominated by well- moderately deep or deep, moderately sloping alluvi

D1-D4 Areas dominated by well- loamy soils with clayey s foothills.

E1-E7 Areas dominated by well- soils, on nearly level and to hardpan.)

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G1-G4		Areas dominated by excessively to well-drained, light colored, moderately deep or deep, sandy soils, on gently or moderately sloping plains.
H1-H5		Areas dominated by Rock outcrops, Lava Flows, and shallow soils.
I1-I7		Areas dominated by excessively to well-drained, slightly dark to dark-colored moderately deep to shallow, loamy to sandy soils on rolling hills and very steep mountains. These soils are in a cold climate having cool summers.

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on those sites undergoing land use change.

The following is a list of major soil characteristics which shall be used to review land use change proposals:

Characteristics

1. Slope exposure
2. Depth
3. Texture
4. Structure
5. Drainage (surface/sub-surface)
6. Salinity-Alkalinity/pH
7. Natural fertility
8. Susceptibility to flooding

The following is a list of potential hazards or limitations that may be present, depending upon a given combination of soil characteristics. Whether or not a soil condition represents a potential hazard or an actual hazard will depend upon the intended use for a given site:

Potential Hazard/Limitations

1. Erosion
2. Sedimentation
3. Pollution
4. Vegetation/Revegetation
5. Stabilization
6. Shear Strength
7. Bearing Strength
8. Frost Action
9. Plasticity
10. Shrink-Swell
11. Compressibility
12. Coarse Fragments
13. Available Water-Holding Capacity
14. Corrosivity
15. Flooding
16. Permeability

CLIMATE

Blaine County enjoys a four season year. Summers have mild nights and warm days; winter is typical of mountain areas of this latitude and altitude, with cold temperatures and snow. Spring, with its budding greenery, and fall, with its changing leaf colors, are special seasons for guests and local residents.

TEMPERATURE

In upper valley areas, high surrounding mountains focus mountain winds. Combined with moderate precipitation and cold temperatures, these factors in winter create the nearly ideal Alpine and Nordic skiing conditions for which Sun Valley is famous. These same conditions in summer encourage a wide range of recreational activity to take place in mild temperatures.

At the Ketchum/Sun Valley weather station (elevation 5,870 feet), temperatures have ranged from a high of 96 degrees in August 1961 to a low of -46 degrees in February 1950. Mean temperatures range from 14.7 degrees in January to 59.6 degrees in July.

Hailey, elevation 5,300 feet, has a yearly average temperature of 43.5 degrees. The average is 37.9 degrees for Sun Valley. In the Picabo area, elevation 4,500 feet, the yearly temperature average is 43.2. Although there is an elevation change of 830

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feet between Hailey and Picabo, monthly and yearly average temperatures are almost identical. This is attributed to the degree of wind exposure which exists in lower county areas due to lack of mountain enclosure. Average monthly temperatures for Sun Valley/Ketchum, Hailey and Picabo are presented in the Temperature and Precipitation Table, p.13A.

Average frost free growing days for communities within the county are as follows: 5

Carey	105 days
Picabo	100 days
Bellevue	93 days
Hailey	90 days
Sun Valley/Ketchum	75-80 days

This information may be misleading, as 90% of the time a plant killing freeze is received in the upper Wood River valley by July 4 and again by August 20.

PRECIPITATION

Precipitation levels generally decrease as one moves from the higher mountainous regions to the lower desert regions. Average precipitation information for Sun Valley/Ketchum, Hailey and Picabo is provided on the Temperature and Precipitation Table, p.23. In the Sun Valley/Ketchum area snowfall averages 118.9 inches for the snow season. The greatest monthly mean of 31.7 inches is received in January. The greatest total recorded in any month has been 97.0 inches in December 1964 and the greatest seasonal total, 244.5 inches, recorded in 1951-1952. The greatest snowfall in 24 hours has been 38.0 inches recorded in February 1959.

Fog, low clouds, and low visibilities are observed most frequently in winter and least frequently in the summer months. Sunshine is plentiful. Occasional fog at the Friedman Memorial Airport requires diversion of flights.

During the past few years the Sun Valley Company has engaged in cloud seeding operations during winter months. The effect of this effort on seasonal precipitation is under study.

WIND

In the upper valley areas, winds, in the presence of daytime heating or nighttime cooling, are convective winds of local origin. These winds can be quite variable. Greatest variations are noted when air is heated over nearby mountain slopes. Wind regulating influences combine in most instances so that the result is upvalley, upcanyon, upslope flow in the daytime, especially summer months, and downflow at night.

In lower county areas, the lack of mountain enclosure creates a greater exposure to prevailing westerly winds.

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MEAN TEMPERATURE AND PRECIPITATION
SUN VALLEY/KETCHUM, HAILEY, PICABO

Station	AVERAGE MEAN TEMPERATURE			MEAN TOTAL PRECIPITATION		
	KETCHUM (1940-1969)	HAILEY (1931-1960)	PICABO (1956-1965)	KETCHUM (1940-1969)	HAILEY (1931-1960)	PICABO (1956-1965)
Elev.	5,870	5,330	4,500			
Jan	14.70	18.70	18.90	02.41	02.11	01.15
Feb	19.50	23.40	24.10	1.88	01.88	01.45
Mar	24.60	30.80	29.60	1.22	01.28	00.95
Apr	37.30	43.30	42.50	00.98	01.07	01.06
May	46.0	52.30	51.80	01.59	01.33	01.63
June	51.80	58.80	59.60	01.62	01.04	01.28
July	59.60	68.00	67.20	00.63	00.41	00.15
Aug	58.30	66.00	65.30	00.82	00.42	00.61
Sept	51.10	57.50	56.00	00.88	00.60	00.58
Oct	43.00	47.00	47.40	01.06	00.90	00.52
Nov	29.20	32.20	32.50	01.76	01.31	01.65
Dec	19.40	23.60	23.70	02.50	02.18	01.80
Yearly	37.90	43.50	43.20	17.35	14.53	12.83

U.S. DEPARTMENT OF COMMERCE
ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION
WEATHER BUREAU

ınd are a contributing factor in the avalanches in Blaine County.

y conducted by the Ketchum Community ed strong public opinion in favor of control air quality in the upper Wood nsive research required to define the expensive, but necessary.

can be seen in the Wood River Valley the year. The existing conditions are bod burning stoves, with auto emissions egree.

are subject to established state and gulation.[6] Future planning should nce facilities where fugitive dust and the least impact on population.

the sanitary land fill (Ohio Gulch) e conditions in the valley. On the few the problem can be overcome through ning regulations.

eds is a major consideration in the the county. Design load requirements ow Load Computation Table, p.27 gives ulated precipitation data, equivalent esign requirements for different areas tandards should apply to all habitable including imported pre-fab and mobile

nt the Wood River Valley makes it an for both energy and social benefit. ccess shall be maintained through an e construction of buildings or the use ther natural or man-made device that erty of its right to solar access.

GEOLOGY

n of the formation and characteristics e County is presented in Wildlife

nich underlie most valley floor lands to normal types of development and the identification of geologic e in identifying possible limitations atural systems.

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SNOW LOAD COMPUTATION TABLE

Reference Station	Redfish Snow Course	Sun Valley Station	Hailey Station	Picabo Station
Approximate Station Elevation in feet	7,500	5,870	5,330	4,500
Average Precipitation accumulated October through April in inches	11.5[1]	11.81[2]	10.73[2]	8.58[2]
Maximum precipitation[3] accumulated March or April in inches	17.2	17.6	16.0	12.8
Equivalent weight (lbs./sqft.) "water" / 12 x 62.4 = x (1" = 5.2 lbs.)	89.2	91.0	83.0	66.5
Recommended Design Standards Required Design Load =	100#/sqft.	100#/sqft.	100#/sqft.	75#/sqft.
Recommended Design Load =	125	125		

[1] Snow course reading
[2] From mean precipitation
[3] Maximum precipitation figures were not available, the figures used here are estimated.

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ENGINEERING CHARACTERISTICS

These characteristics can have a bearing on potential development. Evaluation of major projects should include the following engineering characteristics of the geologic units involved:

1. Ease of excavation
2. Foundation suitability
3. Slope stability
4. Seismic stability
5. Drainage
6. Ground Water
7. Special features of unit
8. Potential resource use

GEOTHERMAL RESOURCES

Geothermal activity in the form of natural hot springs is present in various areas of Blaine County. The rate of flow, temperature, and other characteristics of some of these springs has been identified in USGA data.[8]

The extent to which geothermal activity occurs in the area also suggests the possibility of additional geothermal sites as yet undiscovered. Utilization of these sites as an energy source may be of major importance to the area in the future.

Guyer Hot Springs, West of Ketchum, was developed in 1929. Still in use today, this system is utilized to heat homes and domestic water. To a lesser extent the Hailey Hot Springs West of Hailey has been developed for similar use. Clarendon, Easley, and other springs are or have been developed for public and private recreational use. In most cases the full resource potential of these sites has not been realized.

Given the recreational orientation of the area and the potential need for additional energy sources, known and potential geothermal sites constitute a secondary natural resource.

CONCLUSIONS

The evaluation of the natural resource inventory resulted in the following countywide direction:

All too frequently, patterns of land and water use exploit resources with little or no concern for their protection, until they have been damaged beyond repair. The purpose of this inventory is to identify these resources so that they can be protected (or in some cases restored) for the well being of present and future generations.

TOPOGRAPHY:

1. The county shall prevent obstruction of views on hills, ridges, ridgelines, and their natural features which are visible from the valley floor by restricting development on hillsides. Ordinances shall be adopted requiring Design Review for any hillside structures which would be visible

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from designated Scenic Corridors in the county.

The county shall prohibit scarring of hillsides made by cuts and fills and/or made by access roads to slope areas. As part of this restriction, an ordinance shall be drawn that no commercial harvesting of timber from private lands may be undertaken without a Conditional Use Permit.

Mining and other extractions may also have scarring effects that are detrimental to the visual integrity of topography. In order to protect the topography, the county shall designate a "sensitive lands" overlay district. The county shall request that the Federal Agencies involved with land in these areas withdraw the designated areas from the mining inventory.

The county has requested immediate notification by the Federal Agencies of any proposed mining uses in Blaine County. The County shall encourage a re-evaluation of the 1872 Mining Act, with the intention of limiting the present degradation of Natural Resources by mining uses.

2. The county shall enforce technical review criteria and procedures to be used when evaluating topographic suitability of a proposed project.

3. The county shall create criteria for private driveways including the need for emergency vehicle access.

4. An ordinance shall be adopted requiring "Full Disclosure" of Hillside building site and road limitations to all prospective buyers of such property.

5. An ordinance shall be drafted to require a permit for all grading, drainage, and natural vegetation clearing. A landscaping or restoration plan shall be required as part of the application process. The control of noxious weeds shall be a critical component of the restoration plan.

WETLANDS:

1. This county shall maintain the national emphasis on Wetlands. Additionally, the county shall require that there is no loss of inventoried wetlands due to man-made changes without the written approval of the Planning and Zoning Administrator. The Administrator may require the applicant to appear before the Commission.

2. The county will encourage and promote the conducting of seminars for architects and landscape gardeners on the identification and management of wetland areas.

3. The county will work in conjunction with public and private organizations to conduct seminars for educating citizens concerning identification and value of wetlands.

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4. Future development in wetland areas will be subject to a design review step conducted by the county Planning and Zoning prior to the issuance of a building permit.

5. All grading, drainage, and stream alteration work shall require a permit and must submit a re-vegetation and restoration plan.

6. The County shall designate Wetland Overlay Districts in appropriate areas as those areas are identified.

GEOLOGY:

1. The county shall use technical criteria to identify the impact of major development projects on geologic units involved;

2. The county shall support geologic studies which seek to identify ground water, geothermal and mineral resource characteristics; and,

3. The county shall adopt policies which protect geothermal resources, and establish programs to encourage creative and efficient utilization of such resources.

SOILS:

1. The county shall identify unstable soils and apply appropriate soil conservation measures;

2. The county shall identify and protect productive agricultural soils for agricultural use;

3. The county shall protect steep slopes and erosive soils from development; and,

4. The county shall govern development in all areas by the suitability of the soil for such development and establish review criteria and procedure.

CLIMATE:

1. The county shall adopt emission standards and review procedures coordinated with State regulations and agencies and encourage the cities of the county to adopt similar standards.

2. The county shall isolate nuisance uses and facilities where fugitive dust and emissions are unavoidable;

3. The county shall enforce consistent snow load requirements for all habitable structures; and,

4. The county shall encourage building practices which reduce energy consumption. The model for this program shall be the Zone 3 Conservation of Energy program from the Bonneville Power Administration or the equivalent.

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5. The county shall closely monitor Air Quality to measure the effects of industrial emissions, auto emissions, wood stove pollution and other negative intrusions into the present high quality of air in Blaine County.

   Wherever necessary to ensure the maintenance of high air quality standards, ordinances shall be approved to control, restrict, or prohibit such negative intrusions.

WATER:

1. The county shall initiate a waste water management study in cooperation with city jurisdictions to:

   a. Evaluate treatment systems and identify related feasibility cost, and land use ramifications.

   b. Evaluate the impact of individual sewage disposal systems and establish related density limitations; and,

   c. Adopt and implement a waste water management program.

2. The county shall take the lead with related government agencies to establish a consistent ground-water and surface-water monitoring program for the Big Wood River drainage that analyzes concentrations of nitrates and orthophosphates;

3. The county shall encourage consistent standards and regulations for installation of individual water and sewer systems;

4. The county shall coordinate with State Department of Health and Welfare and other state agencies to establish review criteria and procedure relating to water utilization and treatment. No future development should be allowed which deteriorate existing water quality levels;

5. The county shall continue to coordinate future policies and activities with the County Flood Control District, State Water Administrator, Fish and Game and City/County Planning Commissions and other agencies having jurisdiction;

6. The county shall encourage standards for the existing diversion of irrigation water and protection of agricultural land areas.

7. As part of the "sensitive lands" overlay described in conclusion #1 of the Topography section, the district shall include all potential water contamination sources associated with mining.

8. It shall be the policy of Blaine County to discourage and oppose all uses of non-consumptive water from the streams, springs, and rivers of Blaine County unless there is a

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clear demonstration of an overriding public benefit to the general community.

9. If the availability of drinking water in the county becomes threatened, immediate emergency regulations shall be drafted to share the remaining water on an equitable basis.

10. As water is a finite resource, studies shall be conducted to quantify the available resource. Based on the findings of those studies, measures shall be taken to protect the resource from uses that are counter-productive to the general welfare, safety, and health of the county residents.

11. The County shall adopt a policy for protection and maintenance of minimum instream flows as a function of the public trust.

WILDLIFE:

1. The county shall encourage and support policies and actions which preserve and promote wildlife;

2. The county shall enforce review criteria for the evaluation of development which may adversely affect existing wildlife or wildlife habitat;

3. The county shall maintain existing migration corridors;

4. The county shall adopt flood plain management policies which preserve or promote natural fisheries and stream side vegetation.

5. The County shall adopt regulations which restrict development in critical winter range areas.

6. In the event that local private Wildlife and Fisheries groups and the public agencies charged with the management of these resources can coordinate their objectives and develop joint plans relating to the care and management of these resources, the County would encourage and support such cooperation.

VEGETATION:

1. The county shall establish review criteria to evaluate the impact of development on vegetative values; and,

2. The county shall continue to support and encourage any programs or activities which establish and maintain vegetative characteristics.

3. The county shall encourage native riparian vegetation with dense root systems to be planted or maintained along all waterways.

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GENERAL POLICY:

1. In order to protect access to all Federal and State lands, an ordinance shall be created requiring that past and present public access to all Public Lands and Waterways be maintained. As part of this requirement, "Full Disclosure" of all such prior public access shall be provided to prospective buyers of any property so located, and shall become part of the Title Deed.

2. Blaine County shall recommend and encourage that all cities within the county, and all public agencies with jurisdiction in or around Blaine County, coordinate their policies and ordinances regarding access to public lands, utilization of wetlands and floodplain areas, and regulation of hillsides, and other critical areas as they are identified.

Endnotes:

1. Blaine County Zoning Ordinance #77-5, Chapter 21

2. Idaho Department of Health and Welfare and Idaho Department of Environmental and Community Services Potable Water Reports.

3. Wildlife Communities of Sun Valley, K.W. and E.S. Kinncan, 1972

4. Ibid

5. Source Rod McCoy, Agricultural Extension Service, Hailey, Id.

6. Rules and Regulations for the Control of Air Pollution in Idaho. Idaho Dept. of Environmental and Community Services, 1972

7. K.W. and E.S. Kinncan, 1972

8. Great Hot Springs of the West, Bill Kaysing. 1974

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OFFICE OF THE BOARD OF COUNTY COMMISSIONERS
OF BLAINE COUNTY, IDAHO
REGULAR MEETING OF THE JANUARY 1998 SESSION

Fourth Day Monday, January 26, 1997

Pursuant to Statutory Provisions, the Board met this day, at nine o'clock a.m. following a recess taken on Wednesday, January 14, 1997. Present were: Commission Chairman Leonard Harlig; Commissioners Mary Ann Mix and Dennis Wright; Deputy Clerk Lona White; and Assistant to the Commissioners, Pam Smith.

ANIMAL SHELTER-TRANSPORT FEES

Present were: Al Luray, Animal Shelter treasurer; Officer Kevin McMullin, Hailey Police Department; Gloria Maratea, Animal Shelter coordinator; Cindy Ellison, Animal Shelter manager; and Jack Stoneback, Hailey Police Chief.

Commission Chairman Leonard Harlig called the meeting to order.

Officer McMullin made the presentation for the group, saying that he puts approximately 3,000 miles per month on his vehicle picking up animals in the County. He proposed that a $20 transport fee be established, echoing a similar ordinance already passed by the City of Hailey, to help cover costs of vehicle maintenance and replacement.

Mix asked how many impounded dogs are being reclaimed from the animal shelter, and the shelter representatives answered that the number is running approximately 70 percent.

McMullin pointed out that he will be using new color-coded forms to tag the impounded animals. After five days, if the dogs are not claimed, they will be available for adoption.

Following discussion, ***Mix made a motion, seconded by Wright, to create an ordinance allowing for a $20.00 transport fee for all dogs picked up in the County. Motion carried.***

COMMISSIONER DISCUSSION

The following issues were discussed and/or actions were taken:

- Fair Board Appointment Following discussion, ***Mix made a motion, seconded by Wright, to appoint Joe Smith to the unexpired term of Randy Drage, and to write a letter of appreciation to Drage. Motion carried;***
- 1998 Beverage Licenses ***Mix made a motion, seconded by Wright, to approve the following 1998 Beverage Licenses: LA NORTENITA, Bellevue, for Bottled or Canned Beer to be Consumed on the Premises; WOOD RIVER GUN CLUB, Bellevue, for Bottled or Canned Beer to be Consumed on the Premises; and VALLEY CAR WASH, Hailey, for Bottled or Canned Beer Not to be Consumed on the Premises. Motion carried;***
- Judicial Display Case - Safety Glass Following discussion, ***Mix made a motion, seconded by Harlig, pursuant to a recommendation by the State's Risk Manager, to approve an expenditure not to exceed $1,000 for tempered glass to be installed in the display case of the Judicial Building. Motion carried 2-1 with Wright in opposition;***
- Discussion regarding potential disposition of a $180,000 budget surplus;
- Discussion with Treasurer Vicki Dick regarding term limits proposal of the Idaho Association of Counties. The Board voiced their support of the proposal which would allow each county decide the term limits issue for itself;
- Goss-Boise Letter of Disengagement Following discussion, ***Mix made a motion, seconded by Wright, to approve and sign a letter of disengagement with Goss-Boise - effective as of February 1, 1998. Motion carried;***
- Signed letter regarding Deer Creek mitigations project in cooperation with the Flood Control District.

CLAIMS DISCUSSION

Present were: County Clerk Mary Green and Chief Deputy Marsha Riemann.

The chairman inquired whether Judge Varin has begun ordering juvenile fees, and Mary Green answered that she will schedule a visit with Judge Varin and Doug Werth to discuss the matter.

There was further discussion regarding the disposition of a $180,000 budget surplus. Some suggestions were: Pay off the courthouse communications system balance; help fund a new annex building; supplement the Transfer of Development Rights Program; subsidize Blaine Manor; fund flood mitigation projects or an impacts fee study.

Late claims were discussed and approved.

EXECUTIVE SESSION

Mix made a motion, seconded by Wright, to go into an executive session to review medical indigent applications with County Services Director Eileen Rodman. Motion carried.

The following applications were presented and actions taken:

Indigent Case No. 9801013 Following discussion, ***Mix made a motion, seconded by Wright, pursuant to Rodman's recommendation, to deny the application for the following reasons:***

1. Indigence has not been established;

2. Blaine County has not been documented as the obligated county;

3. Blaine County medical indigence program has not been established as the last resource;

4. Applicant failed to cooperate in providing requested information and failed to

S
EXHIBIT

Department of Water Resources
PROTESTANT'S
S
Exhibit
Date Admitted 11/13/02

notice had been inadequate for today's hearing. Motion carried.

Mix then made a motion, seconded by Wright, to remand the appeal back to P&Z for reconsideration pursuant to the corrected information. Motion carried.

DEMOCRAT GULCH RANCH SAP

Present were: Linda Haavik; Keith O'Connell and Keith Waller, Benchmark Associates, representing Nan Crocker, who was not present.

Linda Haavik presented legal notice publishing and posting regarding the application to install a geothermal water transmission line, crossing a geothermal tributary to Democrat Creek and crossing Democrat Creek at the existing location of an abandoned culvert. The project would require removal and disposal of an old culvert and other abandoned debris in the vicinity. The property is located in a portion of Section 18,T.2N,R.18E.,BM, also known as Democrat Gulch Ranch, located west of Hailey out of Croy Canyon.

Mix made a motion, seconded by Wright, to approve adequacy of notice for today's hearing. Motion carried.

Keith O'Connell presented the application.

Mix inquired about the volume of water to be discharged back into the stream after going through the heat exchange unit. O'Connell answered that while he did not know the exact figures, it would be a very low flow.

During the public comment session – none were voiced.

Following discussion, *Mix made a motion, seconded by Wright, to approve the application, with the following standard P&Z conditions: The project shall built to IDWR, Corps of Engineers, Blaine County, and applicant's engineering specifications and standards; preservation of existing vegetation and revegetation and enhancement of fish and wildlife shall be required, as proposed; time that the work shall be done shall be as specified by IDWR, Fish and Game, and Army Corps of Engineers, and shall include any time extensions granted by permitting agencies; the applicant shall be required to monitor and evaluate the success of the work and the planting for three (3) successive years after the initial work is completed. As a result, if additional vegetation is recommended by applicant's technical representative or the County, said vegetation shall be planted at that time. The addition of vegetation shall not require a new stream alteration permit, provided that it is in accordance with the original project hereby approved, and the Administrator is notified prior to the additional work being done; work shall be done by appropriate construction equipment and shall not involve equipment in the water according to conditions placed on the state and federal permits; a bond or letter of credit to guarantee completion of the work or conditions of approval, i.e. restoration of the riparian area, may be required by the Board upon a finding that it is necessary during the evolution of the project; the property owner(s) shall agree to maintain the project so that the flood carrying capacity is not diminished and that erosion potential is not increased; the Administrator shall be notified when follow-up and maintenance work is to be done; no work outside that applied for and approved under this permit shall be done; fence or otherwise control for existing riparian areas to prevent impacts during construction; applicant shall pay incurred County Engineering fees prior to commencement of construction; minor modification to the proposal as a result of field conditions during construction may be presented to the County for administrative approval without further public hearing provided that other agencies with jurisdiction have granted approval and that the modifications made are described in writing and made part of the file. Motion carried.*

PLANNING AND ZONING GENERAL DISCUSSION

The following issues were discussed:

- Picabo Airport Discussion of proposed new Picabo Airport hangars;
- Amendments – Comp Plan Discussion of possible amendments to Title 9, §§26,31 of the Comprehensive Plan.

BOARD'S LOWER RANCH SUBD. – PARAGARY LOT LINE SHIFT

Present were: Tom Bergin, Planning and Zoning, Barbara Perkins, Bruce Paragary, Linda Bullard; Chris Schultz.

Tom Bergin presented legal notice publishing and posting on the application by Board Mill and Sunset Ranch, Inc., proposing to shift the access easement crossing Lot 51 of Board's Lower Ranch Subd five (5) feet towards the northeast so that it abuts the lot line common to Lots 51 and 52; and to relocate the lot line common to Lots 50 and 51 of that subdivision fifteen (15) feet towards the southeast. Lot 51 is proposed to increase and Lot 50 is proposed to decrease by .04 of an acre in size. These lots are located in Sec.15,T4N,R18E,BM.

Mix made a motion, seconded by Wright, to approve adequacy of notice for today's hearing. Motion carried.

Bruce Paragary, owner of Lot 51, requested that the Board approve the application.

Barbara Perkins, owner of Lot 50, explained the original agreement which precipitated the lot line shift request.

Chris Schultz, owner of Lot 52, stated his concern that if the lot line shift were approved and the road was then moved, it might go directly over his well.

Bruce Paragary stated that Schultz' well would not be affected because it would be protected behind Paragary's fence.

Following discussion, *Mix made a motion, seconded by Wright, to approve the lot line shift with the standard conditions of P&Z, and the special condition that the driveway easement is to be angled so as to provide protection for the well serving Lot*

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The following issues were discussed and actions were taken:

- Discussion of ITD transportation corridor enhancement funds;
- Water Protest Hearings Following discussion, ***Mix made a motion, seconded by Wright, to engage the law firm of Givens, Pursley and Huntly to represent the County in upcoming water protest hearings. Motion carried;***
- Discussion - phone call from Bill Castle to Mary Ann Mix in which he proposed text amendments to the recreation district parameters.

At the hour of five forty-five o'clock p.m., the Board finding no more unfinished business before them, adjourned *Sine die*.

Attest: _____
MARY GREEN
County Clerk

Approved: Leonard Harlig
LEONARD HARLIG
Commission Chairman

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IN THE DISTRICT COURT OF THE FOURTH JUDICIAL DISTRICT OF THE STATE OF IDAHO, IN AND FOR THE COUNTY OF BLAINE.

ARTHUR J. WINSLOW,

Plaintiff,

vs.

S. H. CHAPMAN, WATER MASTER,

Defendant.

DECREE.

Protestant's Exhibit T Admitted 12/13/02 AM

This cause coming on to be heard before the Hon. Ralph W. Adair, Judge of the District Court of the Sixth Judicial District of the State of Idaho for the County of Butte, at Chambers, at Arco, Butte County, Idaho, this 22nd day of August, 1923, the said plaintiff being represented in person and by his counsel, W. A. Brodhead, and the said defendant not appearing either in person or by counsel; it appearing that the Hon. H. F. Ensign, Judge of the Fourth Judicial District of the State of Idaho, is absent from the state; and it further appearing that the default of defendant for failure to answer the complaint of plaintiff within the time heretofore allowed by the Court has been duly and regularly entered; and after hearing the testimony of plaintiff tending to support the material allegations of the complaint; and the Court being fully advised;

IT IS HEREBY ORDERED, ADJUDGED, AND DECREED That the plaintiff is, and was upon the date of the filing of the complaint in said action, the owner of, in possession of, and entitled to the possession of the following described land, to-wit:

A tract of land known as H. E. survey # 129, unsurveyed land bounded and described as follows: Beginning at corner # 1 from which U.S.Location monument #123 bears N 25°52' W. 74.59 chains distant; thence S. 30°17' E. 86.27 chains to corner #2; thence N. 54°31' E. 23.81 chains to corner #3; thence N. 36°47' W. 78.43 chains to corner #4; thence S. 82°19' W. 16.03 chains to corner #1, the place of beginning, containing 157.19 acres. Also a tract of land containing 157.31 acres in unsurveyed section 14, Township 5 North, Range 17 East Boise Meridian, known as Homestead entry survey #329, described as follows: Commencing at corner #1 from whence U. S. Location monument #123 bears N. 36°37' W. 80.93 chains distant; thence N. 57°16' E. 74.80 chains to corner #2; thence S. 37°03' E. 9.96 chains to corner #3; thence S. 54°58' W. 29.93 chains to corner #4; thence S. 18°38' W. 54.37 chains to corner #5; thence No. 36°47' W. 45.80 chains to corner #1, the place of beginning, in Blaine County, State of Idaho.

That the said land is dry and arid in character and in its natural condition will not produce profitable crops without the artificial application of water thereto; that on or about the 6th day of October, 1902, the predecessors in interest of plaintiff appropriated, diverted, and used upon said lands 4.6 second feet of the waters of Eagle Creek, a small stream having its source in the mountains lying in a northeasterly direction from the lands of plaintiff, hereinbefore described; that said plaintiff and his predecessors in interest have since the said date, continuously during the irrigation season of each and every year, diverted and used said amount of water for the irrigation of said land; and that said amount of water is necessary for the irrigation of the same; that there are no other users or claimants of the waters of Eagle Creek;

That for many years prior to said appropriation and for many years subsequent thereto, the water flowing in said Eagle Creek did not, when permitted to flow down the natural channel thereof, reach Big Wood River during the irrigation season; and the use of the said amount of water during the said period by this plaintiff, and his predecessors in interest, did not diminish or affect the flow of water in said Big Wood River and the

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Bk of Judgments #9
Pg 501

STATE OF IDAHO }
County of Blaine }
I, Martha Brennen Clerk of the Board of County Commissioners of the State of Idaho, in and for the County of Blaine, do hereby certify that the foregoing is a full, true and correct copy of the original Deed now on file in my office.
Given under my hand and the seal of said Board in my office, at Hailey, this ____ day of May 13 A.D., 20 02
Attest Martha Brennen Clerk
By Deanna Edmundsen Deputy.

STATE OF IDAHO }
COUNTY OF BLAINE } ss

I HEREBY CERTIFY THAT THIS INSTRUMENT WAS FILED FOR RECORD IN MY OFFICE AT THE REQUEST OF Gus McRoberts
AT ____ O'CLOCK ____ M.
____ D ____
____ RECORDER
BY ____ DEPUTY
FEES $ ____

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said plaintiff's use of said waters does not and has not interfered with the use of the said water of said Big Wood River by other appropriators therefrom.

That this plaintiff and his grantors and predecessors in interest have for more than nineteen years immediately preceding the commencement of this action, with the exception of the years 1919, 1920, and 1921, (during which years the said water master or his predecessor in office attempted to regulate the flow of the waters of Eagle Creek) continuously during the irrigation season of each and every year, diverted said 4.6 second feet of the waters of said Eagle Creek, and carried the same through his ditches and appropriated all of the said water to and upon the said lands of plaintiff, and used the same for the irrigation thereof; that during the irrigation season, the said 4.6 second feet is an amount equal to and in excess of the amount of water flowing in said Eagle Creek; and plaintiff has used the same as aforesaid for the irrigation of said land openly, exclusively, notoriously, uninterruptedly, and under a claim of right so to do, and has excluded all of the appropriators of Big Wood River and every other person from the use of any part of the flow of said Eagle Creek during the irrigation season of each and every year, except when there was water in said Eagle Creek in a greater amount than could be beneficially used by plaintiff and his predecessors in interest; and that during all of said time, the other users of Big Wood River had full knowledge of such diversion and use of said water by plaintiff; that by reason thereof, plaintiff has acquired a right to the use of said 4.6 second feet of the water of said Eagle Creek by prescription, adverse use and enjoyment.

That the appropriators of the water of said Big Wood River have for more than nineteen years, with the exception of the years 1919, 1920 and 1921, immediately preceding the commencement of this action, have stood by and acquiesced in the administration of said waters of Eagle Creek as a separate stream, and have at all times, except during the years aforesaid, assented to the use of all of the waters of said stream by this plaintiff and his predecessors in interest; that said plaintiff and his predecessors in interest, by the silence and acquiescence of the users of Big Wood River have been led to believe and do believe that they, the users of said Big Wood River, do not claim any interest in the waters of said Eagle Creek; that relying on all of the foregoing facts, the said plaintiff and his predecessors in interest have made valuable improvement on said land and have cultivated and reclaimed the same, and have brought the same to a high state of productivity.

THAT IT IS FURTHER ORDERED, ADJUDGED, AND DECREE, That the said defendant and his successors in office and his or their agents or attorneys, and all persons acting by, through , or under them, or under their authority, be, and they are, hereby perpetually restrained and enjoined from and in any manner excercising supervision over the waters of Eagle Creek during the irrigation season, and particularly be restrained and enjoined from in any manner interfering with the plaintiff's rights as hereinbefore set forth, to wit, the right of plaintiff to the perpetual use of the waters of Eagle Creek to the extent of 4.6 second feet or in any manner attempting to regulate or regulating the use by plaintiff upon the said land of the said 4.6 second feet of water.

Done at Chambers, at Arco, Ida, this 22nd day of August, 1923.

Ralph W. Adair

District Judge of the Sixth
Judicial District of the
State of Idaho.

Filed and entered this 25th day of August, 1923.
Cassie M. Russell, Clerk of District Court.
By Geo. A. McLeod, Deputy.

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State of Idaho

Department of State

I, PETE T. CENARRUSA, Secretary of State of the State of Idaho and custodian of the Seal of said State, do hereby certify that the annexed is a full, true and complete transcipt of articles of incorporation of EAGLE CREEK IRRIGATION COMPANY, an Idaho corporation, received and filed in this office on the 7th day of March, 1973, as appears of record in this office as of this date.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the Great Seal of the State of Idaho.

Done at Boise, Idaho, this 7th *day of* March *A.D., 19* 73

Pete T. Cenarrusa
Secretary of State

Margaret Lamme
Corporation Clerk

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JUL 15 2004

Department of Water Resources
PROTESTANT'S
Exhibit U
Date Admitted 11/13/02

ARTICLES OF INCORPORATION

OF

EAGLE CREEK IRRIGATION COMPANY

We, the undersigned, full-aged citizens of the United States and all residents of the County of Blaine, State of Idaho, do hereby voluntarily associate ourselves together for the purpose of forming a mutual non-profit irrigation company under the provisions of Chapter 1, Title 30, Idaho Code, and the amendments thereto.

ARTICLE I.

The name of this corporation shall be the EAGLE CREEK IRRIGATION COMPANY.

ARTICLE II.

The nature of the business of the corporation and the objects and purposes for which, or for any of which, this association is formed are:

(a) To associate its stockholders together for their mutual benefit, and to that end to construct, maintain, and operate a private water system for the distribution of water for domestic and irrigation purposes to its shareholders; to engage in any activity related thereto, including, but not limited to, the acquisition of water by appropriation, drilling, pumping or purchase; to buy, sell, hold, own, acquire, control, operate and maintain a distribution system; to purchase, install, operate, and maintain all dams, ditches, canals and all other associated equipment necessary to the construction, maintenance and operation of said irrigation and water distribution system.

(b) To borrow from any source, money, goods or services without limitation as to amount of corporate indebtedness or liability; and to pledge or mortgage any of its property as security therefor in any manner

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PROTESTANT'S
Exhibit
Date Admitted 11/2/02
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permitted by law.

(c) To acquire, and to hold, own and exercise all the rights of ownership in and to, sell, transfer or pledge shares of capital stock or bonds or become a member or a stockholder of any corporation or association engaged in any related activities.

(d) To buy, lease, hold and exercise all privileges of ownership in and to the real or personal property as may be necessary, convenient or incidental in the conduct and operation of the business of the corporation.

(e) To establish reserves and to invest the funds thereof in insured savings accounts insured by an agency of the United States of America or in bills, notes or other securities issued by the United States of America.

(f) To levy assessments in such manner and in such amounts as may be provided by the By-Laws of this corporation. Said assessments, as provided in the By-Laws, shall become a lien on the real property of the members of this association to whom such rights are appurtenant.

(g) To have and exercise all powers, privileges and rights conferred on corporations by the laws of the State of Idaho and all powers and rights incidental in carrying out the purposes for which this corporation is formed.

(h) The foregoing shall be construed both as objects and powers and the enumeration thereof shall not be held to limit or restrict in any manner the general powers conferred on this corporation by the laws of the State of Idaho, all of which are hereby expressly claimed.

ARTICLE III.

The principal place of business of the corporation is Ketchum, Blaine County, State of Idaho, but the corporation may maintain offices and places of business at such other places within the State of Idaho as the Board of Directors may determine.

ARTICLE IV.

The period of existence of this corporation shall be perpetual.

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ARTICLE V.

The private property of the shareholders of this corporation shall not be subject to payment of corporation debts to any extent whatsoever other than as provided in Article II(f) above.

ARTICLE VI.

Section 1. That this corporation shall have one class of capital stock which shall be assessable and have no par value.

Section 2. Under the terms and conditions prescribed in the By-Laws, this corporation shall admit as stockholders only such persons, groups of persons, organizations or corporations who own property in the immediate vicinity of the irrigation system and to which property the corporation can make delivery of water for domestic or irrigation purposes under the contemplated distribution system of the corporation.

Section 3. The authorized capital stock of this corporation shall be Two Hundred Thirty (230) shares, which said stock shall be issued on the basis of one (1) share of stock for every acre of land to which water is to be delivered by the irrigation distribution system of this corporation.

Section 4. The corporation will hold all water rights acquired in Trust, and operate the system for the distribution of water primarily for the benefit of the lands to which said water rights are to be appurtenant. The shareholders of the corporation shall be entitled to the appropriate share of the water annually available by virtue of their proportionate stock interest in this corporation.

Section 5. Persons who meet the provisions of Section

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2 of this Article shall be entitled to subscribe to and purchase shares of stock of the corporation as provided in the corporation's By-Laws.

Section 6. The shares of capital stock of this corporation shall not be transferable except when said transfer is approved by the Board of Directors under such criteria as the By-laws may prescribe.

Section 7. Voting rights in this corporation shall be unequal and each shareholder of this corporation shall be entitled to one vote for every share of stock held by said shareholder.

Section 8. This corporation is organized on a non-profit basis for the mutual benefit of its shareholders and consequently will not have profits from which to pay dividends on its capital stock. After all expenses of the corporation have been paid and reasonable reserves have been set aside as determined by the Board of Directors, any earnings of this corporation shall be accumulated in a surplus fund for the purpose of replacing, enlarging, extending and repairing the system and property of the corporation, and for such other purposes as the Board of Directors may determine to be for the best interest of the corporation. No distribution of any surplus funds shall be made to the shareholders of this corporation except on final dissolution of the corporation.

ARTICLE VII.

These articles may be amended in any manner permitted or authorized by law by a favorable vote of a majority of the stockholders present or represented by proxy at a meeting of the shareholders duly called on notice of the specific purpose there-

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of and containing a statement of the proposed amendment.

ARTICLE VIII.

The amount of capital stock of said corporation which has actually been subscribed is five (5) shares and the following are the names and postoffice addresses of each of the incorporators and the number of shares subscribed by each:

Name of Incorporator	Address	Shares
JOHN S. FELDHUSEN	Twin Falls, Idaho	1
DON A. ASLETT	Sun Valley, Idaho	1
FREDERICK H. BLECHMANN	Sun Valley, Idaho	1
WILLIAM K. BROHAN	Ketchum, Idaho	1
GEORGE K. BROWN	Ketchum, Idaho	1

IN WITNESS WHEREOF, we, the incorporators, and named herein as the first Board of Directors, have set our hands and seals this 28th day of December, 1972.

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STATE OF IDAHO)
) ss.
County of Twin Falls)

On this 28th day of December, 1971, before me, the undersigned, a Notary Public in and for said County and State, personally appeared JOHN S. FELDHUSEN, DON A. ASLETT, FREDERICK H. BLECHMANN, WILLIAM K. BROHAN and GEORGE K. BROWN, known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year in this certificate first above written.

Notary Public for Idaho
Residing at Twin Falls, Idaho

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JUL 15 2004

No. 47022

Articles of Incorporation
of
EAGLE CREEK IRRIGATION COMPANY

Place of business Ketchum, Idaho
Existence Perpetual
Capital Stock 230 shs

STATE OF IDAHO
Department of State
Boise, Idaho

Approved, filed and admitted to the records of articles of incorporation of the State of Idaho and certificate issued this 7th day of March 19 73 at 8:49 o'clock A. M.

FEES PAID

Filing	$ 15.00
Recording	5.00
Cert. Copy	
Certificate	
License Tax	
TOTAL	$ 20.00

Pete T. Cenarrusa
SECRETARY OF STATE

By Margaret Lorang
CORPORATION CLERK

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BY-LAWS

OF

EAGLE CREEK IRRIGATION COMPANY

ARTICLE I.

NAME, LOCATION, SEAL, BUSINESS.

Section 1. NAME. The name of this corporation shall be EAGLE CREEK IRRIGATION COMPANY.

Section 2. LOCATION. The principal office of this corporation shall be as follows: Ketchum, Idaho.

Section 3. SEAL. This corporation shall have a corporate seal which shall be a circular metallic seal containing within the inner circle of the impression the words "Corporate Seal" and between the outside and inside circles of the impression the following words: "EAGLE CREEK IRRIGATION COMPANY - IDAHO".

Section 4. BUSINESS. This corporation shall engage in the business and have all of the powers as prescribed by its Articles of Incorporation.

ARTICLE II.

CORPORATE STOCK.

Section 1. STOCK. The amount of the capital stock of said corporation shall be as follows:

Two Hundred Thirty ~~(230)~~ 207 Shares.

Section 2. RESTRICTION ON SALE OF STOCKS. This corporation shall admit as stockholders only such persons, groups of persons, organizations or corporations who own property in the immediate vicinity of the irrigation system and to which property the corporation can make delivery of water for domestic or irrigation purposes under the contemplated distribution system of the corporation, and the shares of capital stock of this corporation shall not be transferable except to owners of property in the immediate vicinity and which can be serviced by the irrigation system which said transfer must be approved by the Board of Directors.

ARTICLE III.

DIRECTORS.

Section 1. BOARD. The corporate powers, business and property of the corporation shall be exercised, conducted and

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Department of Water Resources
PROTESTANT'S
Exhibit W
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this state or elsewhere, as a majority of the Directors may from time to time appoint.

Section 10. QUORUM. A majority of the Directors shall constitute a quorum of the Board of Directors at all meetings.

ARTICLE IV.

POWERS OF DIRECTORS.

Section 1. GENERAL POWERS. The Board of Directors shall have the power to conduct, manage and control the affairs and the business of the corporation; to make rules and regulations not inconsistent with the laws of the State of Idaho, the Articles of Incorporation, and By-Laws of the corporation for the guidance of its officers and the management of the affairs of the corporation.

Section 2. STOCK. The Board of Directors shall have the power to dispose of the stock of the corporation and issue certificates therefor.

Section 3. OFFICERS. The Board of Directors shall have the power to elect a President and other officers of the corporation and to employ such assistance as from time to time may be deemed necessary; to appoint and remove at pleasure all officers, agents and employees of the corporation, prescribe their duties and fix their compensation and require from them, if advisable, security for faithful service.

Section 4. MEETINGS. The Board of Directors shall have the power to call special meetings of the stockholders whenever it deems it necessary.

Section 5. CONTRACTS. The Board of Directors shall have the power to make and enter into any and all contracts and agreements with any person, firm or corporation that may be necessary or advisable for the benefit or convenience of the corporation and to enforce and carry out any and all such contracts.

Section 6. DEPOSITORY. The Board of Directors shall have the power to select any one or more banks to act as a depository or depositories of the funds of the corporation; and to determine the manner of receiving, depositing and disbursing the funds of the corporation, the form of checks, and the person or persons signing checks of the corporation and form thereof at will.

Section 7. FINANCES. The Board of Directors shall have control over the funds of the corporation and shall have the power to borrow and loan money and to make advances to any of the agents, servants, or employees of the corporation, in case necessity or convenience should require such advances.

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Section 8. PROPERTY. The Board of Directors shall have the power to buy, sell, lease and acquire in any lawful manner and mortgage and otherwise encumber any and all real or personal property which in its judgment may be beneficial or convenient to the purposes of the corporation.

Section 9. INDEBTEDNESS. The Board of Directors shall have the power to issue notes or other evidences of indebtedness of the corporation and to secure the same if it is deemed advisable by mortgaging; or pledging or hypothecating any or all of the real, personal or mixed property of the corporation.

Section 10. ASSESSMENTS. The Board of Directors shall levy assessments in whatever amount that is necessary to properly maintain and operate the system for the distribution of water. Said assessments shall become a lien on the real property of the members of this association to whom such rights are appurtenant.

ARTICLE V.

DUTIES OF DIRECTORS.

Section 1. RECORDS. It shall be the duty of the Board of Directors to keep a complete record of all of its acts and of all the proceedings of its meetings and to present a full statement at the regular meetings of the stockholders, showing in detail, the condition of the affairs of the company.

Section 2. EMPLOYEES. It shall be the duty of the Board of Directors to supervise all officers, agents and employees and see that their duties are properly performed.

Section 3. BONDS. It shall be the duty of the Board of Directors at any time it shall deem it necessary to require of every officer or employee of the corporation, handling funds, that he furnish a good and sufficient surety bond as the Board of Directors may require, in favor of the corporation; the premiums of such bonds to be paid by the corporation.

Section 4. BOOKKEEPING. It shall be the duty of the Board of Directors to install such a system of bookkeeping and auditing as will at all times disclose fully the receipts, disbursements and the financial condition of the corporation.

Section 5. CONTRACTS. It shall be the duty of the Board of Directors to carry out and faithfully perform on behalf of the corporation the terms and conditions of any and all agreements made and entered into by the corporation.

Section 6. STOCK. It shall be the duty of the Board of Directors to cause certificates of stock to be issued to the

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stockholders of the corporation.

Section 7. FUNDS. It shall be the duty of the Board of Directors to cause the moneys of the corporation to be safely kept, directing from time to time, where and how they shall be kept and deposited.

Section 8. PROPERTY. It shall be the duty of the Board of Directors to properly protect, care for and maintain any and all property, real, personal and mixed belonging to the corporation.

ARTICLE VI.

OFFICERS.

Section 1. ENUMERATION. The officers of this corporation shall consist of a President, a Vice President, Secretary and Treasurer, and when the Board of Directors deems it advisable and for the best interests of the corporation, a Water Master, together with any other administrative officers and assistants whom the Board of Directors may see fit in its discretion to provice for, by resolution entered upon its minutes.

Section 2. QUALIFICATIONS. The President and Vice President shall be Directors of the corporation. The Secretary, Treasurer and any other administrative officers need not be Directors of the corporation. The offices of Secretary and Treasurer may be combined in one person.

Section 3. COMPENSATION. The officers of the corporation shall be entitled to such compensation for their services as may be fixed by the Board of Directors and shall be entitled to such actual expenses as may be incurred and paid by them on behalf of the corporation. In the event the Board of Directors shall appoint and employ a Water Master or other administrative officers, the Board shall fix the compensation to be paid to such employees.

ARTICLE VII.

DUTIES OF OFFICERS.

Section 1. PRESIDENT. The President shall preside at all meetings of the Directors or Stockholders. He shall sign as President all stock certificates, all notes and contracts and other instruments in writing which have been fully approved by the Board of Directors. He shall call the Directors together whenever he deems it necessary. He shall sign the minutes of the meetings of the Board of Directors and Stockholders. He shall be the first administrative officer of the corporation and shall have such powers and be subject to such duties as are provided in these By-Laws and such as may be conferred upon him by vote or resolution of the Board of Directors.

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Section 2. VICE PRESIDENT. In the absence of the President, the Vice President shall perform the duties of the President.



Section 3. In the absence of the President and Vice President, any Director may act as President.

Section 4. SECRETARY. The Secretary shall keep a record of the proceedings of the Board of Directors and the meetings of the stockholders and shall enter the same in proper minute books. The minutes shall be signed by the President and Secretary and shall have affixed thereto the seal of the corporation. The Secretary shall have the custody and possession of the corporate seal and the books of blank stock certificates and shall keep proper stock records, and shall discharge such other duties as properly pertain to his office or which may be prescribed by the Board of Directors. He shall serve all notices required by the Board of Directors. In the absence, inability, refusal or neglect of the Secretary to serve such notices, then such notices may be served by any person directed so to do by the President or anyone acting in his place. The Secretary shall fill out and countersign all stock certificates and affix the corporate seal to all papers requiring such seal.

Section 5. TREASURER. It shall be the duty of the Treasurer to keep safely the moneys belonging to the corporation and to keep or cause to be kept an accurate record of the receipts and disbursements of the same. At each annual meeting of the stockholders, he shall submit a complete statement of his accounts for the past year, with proper vouchers, for the information of the stockholders. He shall discharge such other duties pertaining to his office as shall be prescribed by the Board of Directors.

Section 6. WATER MASTER. The Water Master shall be responsible to see that the water is distributed to the stockholders on a pro rata basis based upon the number of shares of stock each owns, and that the water distribution system is functioning properly to make said distribution.

ARTICLE VIII.

MEETINGS OF STOCKHOLDERS.

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Section 1. REGULAR MEETINGS. Regular meetings of the stockholders shall be held at any place within or without the state of Idaho at two o'clock P.M., or such other hour as may be fixed by the Board of Directors of said corporation, on the first Monday of January in each year, for the purpose of electing Directors and transacting such other business as shall come before such meeting.

Section 2. SPECIAL MEETINGS. Special meetings of the Stockholders may be called at any time by the President or by the Board of Directors and may be held at any place.

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Section 3. NOTICE OF MEETINGS. Written notice of the time, place and purposes of meetings, including annual meetings shall be given by the Secretary or other person authorized so to do, to all stockholders entitled to vote at such meeting, at least ten days prior to the day named for the meeting. If such written notice is placed in the United States mail, postage prepaid, and addressed to the shareholder at his last known postoffice address, notice shall be deemed to have been given him.

Section 4. VOTES. At all meetings of the stockholders, each stockholder shall be entitled to one vote for each share of stock standing registered in his name on the books of the corporatic

In all elections for Directors or Water Master, every stockholder shall have the right to vote in person or by proxy for the number of shares of stock owned by him for as many persons as there are Directors or Water Master to be elected or to cumulate said shares and give one candidate as many votes as the number of Directors multiplied by the number of his shares of stock shall equal, or to distribute them on the same principle among as many candidates as he shall think fit; and such Directors shall not be elected in any other manner.

Section 5. QUORUM. A majority in amount of the issued stock entitled to vote shall be necessary to constitute a quorum for the election of Directors or for the transaction of any other business at any stockholders' meeting.

Section 6. PROXIES. At any stockholders' meeting, any stockholder shall be entitled to vote his stock in person or by proxy

ARTICLE IX.

BOOKS AND PAPERS.

Section 1. BOOKS AND PAPERS. The books of the corporation and such papers, instruments and documents as may be placed on file by vote of the stockholders or Directors, the minutes of the Directors' and stockholders' meetings, the stock book and any and all other records of the corporation shall at all times during business hours be subject to inspection of the Board of Directors or any member thereof and of any stockholders of this corporation or his representative duly authorized in writing. All of said books and records shall be kept at the office of the corporation in Ketchum, Idaho, or at the office of the Secretary of this corporatic

ARTICLE X.

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WAIVER OF NOTICE.

Section 1. WAIVER OF NOTICE. Any notice required to be given by these By-Laws to any stockholders, Director or officer of this corporation may be waived by any stockholder, Director or officer entitled to receive the same.

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Section 2. CONSENT MEETINGS. Any meetings of the stockholders or Directors may be held at any time without notice by consent of such stockholders or Directors, provided that all the stockholders or all the Directors are present at such meeting and gave their written consent that such meeting be held.

If any meeting be irregular for want of notice or of such consent, provided a quorum was present at such meeting, the proceedings of said meeting may be ratified and approved and rendered likewise valid and the irregularity of defect therein waived by a writing signed by all parties having the right to vote at such meeting.

ARTICLE XI.

CERTIFICATES AND TRANSFERS OF STOCK

Section 1. CERTIFICATES. Each stockholder shall be entitled to a certificate of stock executed by the President, or in his absence or inability to act, by the Vice President, and Secretary or Assistant Secretary of the corporation, certifying the number of shares owned by him in this corporation. Certificates of stock shall be of such design as the Board of Directors may adopt.

Section 2. TRANSFER OF STOCK. Shares of stock may be transferred by the registered holders thereof or by their attorneys, legally constituted, or by their legal representatives by the surrender and delivery of the said certificate and assignment of said certificate and the shares of stock represented thereby in writing. Old certificates shall be surrendered and cancelled before new certificates in lieu thereof shall be issued.

ARTICLE XII.

BY-LAWS

Section 1. ADOPTION. The assent of stockholders representing a majority of all the allotted stock is necessary to adopt By-laws if they are adopted at a meeting of the stockholders.

The written assent of the holders of two-thirds (2/3rds) of the alloted shares of stock shall be effectual for an adoption of a code of By-laws without any meeting of stockholders.

Section 2. RECORDING. All By-laws adopted must be certified by a majority of the Directors and the Secretary of the corporation and recorded in a book kept in the registered office of the corporation to be known as the book of By-laws and no By-law shall take effect until so recorded.

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ARTICLE XIII.

AMENDMENT OF BY-LAWS

Section 1. AMENDMENT. These By-laws may be changed, amended or revised or may be repealed and new By-laws adopted in their stead at any annual meeting of the stockholders or at any special meeting of the stockholders called for that purpose by a vote representing a majority of the issued and outstanding stock, or by the written consent duly acknowledged in the same manner as conveyances of real estate are required by law to be acknowledged, of the holders of a majority of the issued and outstanding stock, which written consent may be in one or more instrument.

Section 2. AMENDMENT BY DIRECTORS. The Board of Directors shall have the power to repeal and amend the By-laws of the corporation and adopt new By-laws, at any meeting of the Board of Directors by the affirmative vote of a majority of the members of the Board, but the Board of Directors shall not make or alter any By-law fixing their qualifications, classification, term of office, or compensation.

Whenever any amendment to these By-laws or any new By-law is adopted, it shall be recorded in the records of the corporation immediately following these By-laws and shall not take effect until so recorded.

If any By-law be repealed, the fact of repeal, with the date of the meeting at which the repeal was enacted, or if such repeal offer by reason of the filing of written consent of the stockholders, the date when the consent of the necessary number obtained, must be stated in said records and until so stated, the repeal must not take effect, and notation of the repeal or amendment of any such By-law shall be made on the margin where such By-law is copied in the said records, and references to the page of the records where the amendment is found or the fact of repeal stated.

ARTICLE XIV.

CUSTODY OF BY-LAWS

Section 1. CUSTODY OF BY-LAWS. A set of these By-laws after adopting must be certified by a majority of the Board of Directors and the Secretary of the Corporation, recorded in the books and records of the corporation and kept at the corporation's registered office in Ketchum, Idaho.

Dated this 1st day of MARCH, 1973, at Ketchum, Idaho.

000112

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JAN 15 2004

CERTIFICATE

We, the undersigned, being all of the Directors and the Secretary of the corporation, hereby certify that the foregoing By-Laws consisting of fourteen (14) Articles and dated the day of are the By-Laws of the said corporation and that the said By-Laws were adopted by a vote of a majority of the stock of EAGLE CREEK IRRIGATION COMPANY.

WITNESS our hands this _____ day of November, 1972.

Director

Director

Director and Secretary

Director

Director

000113

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JUL 15 2004

CERTIFICATE

I, the undersigned, being one of the Directors of the corporation, hereby certify that the foregoing By-Laws consisting of fourteen (14) Articles and dated the _____ day of _____, 1973, are the By-Laws of said corporation and that the said By-Laws were adopted by a vote of a majority of the stock of EAGLE CREEK IRRIGATION COMPANY.

WITNESS my hand this _____ day of November, 1972.

Director

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MAY 15 2006

RESOLUTION

WHEREAS, the directors of the Eagle Creek Irrigation Company (hereinafter the "Company") have determined that it is in the best interests of the Company to amend the By-laws of the Company to provide for rules pertaining to its water distribution function; and

WHEREAS, Article XII of the By-laws of the Company provide that the By-laws may be changed, amended or revised at a meeting of the directors by the affirmative vote of a majority of the directors of the Company; and

WHEREAS, a majority of the directors of the Company was present at a meeting of the directors on January 7, 1991, at the hour of 4:00 p.m.;

NOW, THEREFORE, BE IT RESOLVED, by the directors of the Eagle Creek Irrigation Company, meeting in a special meeting this 7th day of January, 1991, with the affirmative vote of a majority of the directors of the Company concurring, that it is in the best interest of the Company to amend the By-laws of said Company, and the By-laws are hereby amended, to provide:

That a new section, Section 3 to Article II of the Eagle Creek Irrigation Company By-laws, be added to read as follows:

> Section 3. FORFEITURE OF STOCK. In the event a stockholder shall sell the real property to which property the corporation has been making water delivery, and such stockholder shall fail to apply to transfer his shares of the Company within sixty (60) days of the date of such transfer, the stock held by such shareholder shall be deemed cancelled and shall revert to the Company as treasury stock, which stock may thereafter be resold by the Company for the Company's benefit. In the event the stockholder who sold such real property without transferring the stock provides for an assignment of the stock in a contract or sale agreement with the new purchaser, the Company shall consider such reference as an application to transfer the shares of stock previously held by the selling stockholder. The stock record pertaining to the shares of the selling stockholder shall be marked "Cancelled", and a new certificate issued to the transferee upon approval of the transfer by the Board of Directors.

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JUL 15 2004

BE IT FURTHER RESOLVED that a new article, Article XV of the Eagle Creek Irrigation Company By-laws be added to read as follows:

Section 1. WATER DISTRIBUTION IN TIME OF SHORTAGE. At any time when there is insufficient water to meet the demands of all of the shareholders in the Company, all shareholders shall share pro rata in the water available, according to the number of shares they possess. No priority of right shall obtain to any shareholder for any reason.

Section 2. APPROVAL OF DIVERSION STRUCTURES. Prior to any shareholder's construction of a diversion structure on Eagle Creek, written plans for the same shall be submitted to the Board of Directors for its written approval of the same. The Board shall be entitled to require modifications of the same in order to serve the best interests of the Company. No work shall be undertaken by or on behalf of any shareholder to construct a diversion without procuring the written consent of the Board, unless the Board shall not act on such consent within sixty (60) days of submission of the written plans. In the event the Board takes no action within sixty (60) days of such submission, approval of the proposed diversion structure shall be deemed to have been given by the Board of Directors.

Section 3. PROHIBITION AGAINST CONTAMINATED RETURN FLOWS. No shareholder, or anyone acting by or on behalf of any shareholder, shall knowingly cause any pollutant or contaminant to re-enter the surface waters of Eagle Creek by virtue of return flow once water has been diverted from Eagle Creek. No ponds or pools utilizing chemicals for control of algal growth or any other purpose, including chlorine or bromine, shall be permitted to discharge into the surface waters of Eagle Creek.

Section 4. ADDITIONAL RULES AND REGULATIONS. Consistent with Article IV, Section 1, the Board of Directors is authorized and empowered to make such additional rules and regulations as are deemed necessary, in its opinion, for controlling and distributing water for the Company. Such rules and regulations shall be effective upon a majority vote of the Board of Directors, and a copy of such adopted rules and regulations shall thereafter be distributed to the stockholders of the Company.

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JUL 15 2004

BE IT FURTHER RESOLVED, that this addition to the Company's By-laws be certified by a majority of the directors of the Company, as well as the secretary of the corporation, and that the same be recorded in the book of By-laws of the Company.

BOARD OF DIRECTORS CERTIFICATION

There being an affirmative vote of a majority of the Company's directors to adopt the foregoing, the Board of Directors and Secretary of the Company hereby certify the foregoing as a true and correct copy of the amendment to the By-laws passed by the directors this 7th day of January, 1991.

Frederick Blechmann

Daniel Rickrell

Robert Sadler

William Brohan

Geoffrey Meredyth

Secretary

The foregoing has been recorded in the book of By-laws of the Company, and is effective this 7th day of January, 1991.

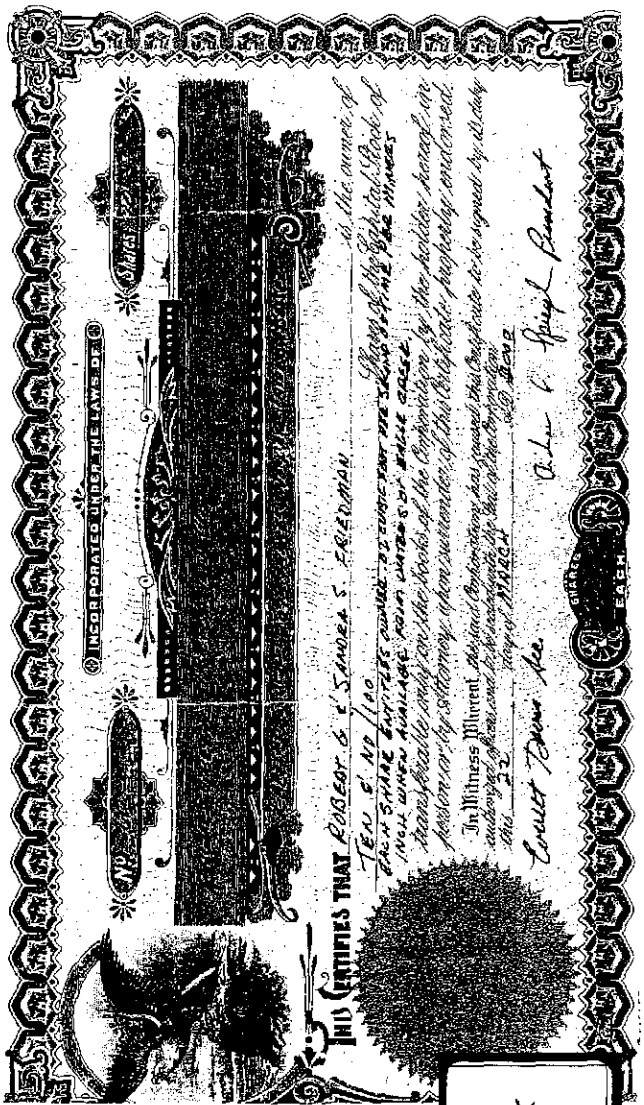
Secretary

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X
EXHIBIT

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Department of Water Resources
PROTESTANT'S
Exhibit X
Date Admitted 11/13/02

COMPILATION OF PRIORITY CUTS ON THE BIG WOOD RIVER ABOVE MAGIC RESERVOIR FOR YEARS 1992 THROUGH 2002 (FROM OFFICIAL RECORDS OF IDWR PURSUANT TO JUDICIAL NOTICE REQUEST)

Department of Water Resources
PROTESTANT'S
Exhibit Y
Date Admitted 11/13/02

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JUL 15 2004

Y
EXHIBIT

1998 PRIORITY CUTS

BIG WOOD RIVER ABOVE MAGIC RESERVOIR
WATER DISTRICT 37

Date of Priority Cut	Date Priority Cut Made	Date Priority Reinstated	Remarks
May 15, 1891	August 6, 1998		
May 1, 1888	August 17, 1998		
July 15, 1885	September 1, 1998		River Seperated All Water in By-Pass Aug 6th

1999 PRIORITY CUTS

BIG WOOD RIVER ABOVE MAGIC RESERVOIR
WATER DISTRICT 37

Date of Priority Cut	Date Priority Cut Made	Remarks
	July 29, 1999	River Seperated
May 1,1888	August 3, 1999	
	August 9, 1999	All Water in By-Pass
Oct 15, 1884	August 12, 1999	

Y
EXHIBIT

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2000 PRIORITY CUTS

BIG WOOD RIVER ABOVE MAGIC RESERVOIR
WATER DISTRICT 37

Date of Priority	Date Priority Cut Made	Remarks
May 15, 1891	June 20, 2000	
	June 21, 2000	River Seperated
	June 29, 2000	All Water In By-Pass
May 10, 1887	July 1, 2000	
May 15, 1885	July 5, 2000	
August 1, 1884	July 12, 2000	
June 3, 1884	July 21, 2000	
May 1, 1883	July 26, 2000	
March 24, 1883	August 2, 2000	Cut 50%

2001 PRIORITY CUTS

BIG WOOD RIVER ABOVE MAGIC RESERVOIR
WATER DISTRICT 37

Date of Priority	Date Priority Cut Made	Remarks
	April 28, 2001	All Water In The Baseline By-Pass
	May 15, 2001	Dam Washed Out At Glendale
	June 5, 2001	All Water In The Baseline By-Pass
November 12, 1936	June 21, 2001	Rockwell by-Pass
June 3, 1884	July 24, 2001	
March 24, 1883	July 30, 2001	Cut 50%
March 10, 1883	August 9, 2001	
	August 28, 2001	River Dammed At Bellevue
	September 16, 2001	Dam Removed At Bellevue

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2002 PRIORITY CUTS

BIG WOOD RIVER ABOVE MAGIC RESERVOIR
WATER DISTRICT 37

Date of Priority	Date Priority Cut Made	Remarks
May 5, 1890	June 29, 2002	
May 15, 1885	July 3, 2002	
October 15, 1884	July 8, 2002	
June 15, 1884	July 11, 2002	
April 3, 1884	July 12, 2002	12:10 PM
June 15, 1883	July 12, 2002	2:02 PM
May 15, 1883	July 30, 2002	
May 1, 1883	July 31, 2002	
April 12, 1883	August 12, 2002	
March 24, 1883	August 15, 2002	50%

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State of Idaho
DEPARTMENT OF WATER RESOURCES
1301 North Orchard Street, P.O. BOX 83720, Boise, Idaho 83720-0098
Phone: (208) 327-7900 FAX: (208) 327-7866

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Department of Water Resources

PHILIP E. BATT
GOVERNOR

KARL J. DREHER
DIRECTOR

December 22, 1997

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To Allen M.	From Norm G.	
Co./Dept.	Co.	
Phone #	Phone #	
Fax #	Fax #	

Board of County Commissioners
Blaine County
P.O. Box 400
Hailey, Idaho 83333

Re: Local Public Interest Water Policy

Dear Commissioners:

I have reviewed the draft "Local Public Interest Water Policy" and have some comments for your consideration.

Page 1, Paragraph 2, could be read as seeking to bind IDWR to the public interest determination made by the County. The paragraph should be reworded to clarify that the County determination is provided to IDWR for consideration in accordance with applicable state law.

Page 1, Paragraph 3, refers to the "Conjunctive Management Rules," 37.03.11. The criteria for determining public interest are fully described in the "Water Appropriation Rules," ADAPA 37.03.08.

Page 1, Paragraph 5, discusses several actions taken by IDWR to limit appropriation of water in the Big Wood River Basin. It would be clearer if the actions were discussed separately. The moratorium on issuance of permits for new consumptive uses from the Big Wood River above Magic Reservoir was issued as a "policy memorandum" in 1980 declaring the surface sources fully appropriated. The 1991 designation of the Upper Big Wood River Basin upstream from Magic Reservoir as a ground water management area and the accompanying management plan restricts the issuance of permits for the consumptive uses of ground water. The management plan allows approval of permits for non-consumptive purposes, municipal uses, stockwater and domestic uses. Consumptive uses will not be approved unless the applicant can demonstrate that no injury will occur or provides acceptable mitigation to prior rights.

The last sentence of the paragraph could be misread to imply that IDWR approves permits for domestic uses without giving the notice required by statute. Uses from ground water that meet the definition of Section 42-111, Idaho Code, are exempt from obtaining a water right

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Exhibit E Z
Date Submitted 11-13-02

permit. An application is not required, but can be filed voluntarily. If an application for domestic or any other use is filed seeking a water right, public notice is always given.

A drilling permit is required for any well, including domestic wells exempt from water right permitting. The approval criteria for drilling permits relate to protecting the ground water resource from waste and contamination by assuring that the appropriate well is properly constructed. The statute does not provide for public notice to be given.

Page 2, Paragraph 1, could be read to infer that IDWR allows increased use of water under existing rights. Section 42-222, Idaho Code, requires that approval be given to an application to transfer an existing right if the approval criteria are met. This statute specifically requires that the change not enlarge the original use of the right or injure the use of another water right. The change must also be consistent with the local public interest and conservation of water resources in Idaho. IDWR uses all available information to evaluate these criteria whether or not the application is protested. Enlargement is considered to occur if the rate of diversion, annual volume diverted or annual volume used consumptively increases. Obviously, a change to year-round use would require that water be used at a reduced rate to prevent an increase in the annual volume diverted.

Page 3, Paragraph 2 of the Policy. For several years, the IDWR has been conditioning new water right permits, licenses and transfer approvals to require that surface water rights be retained and used to the full extent available before supplemental ground water rights are used. The department's policy can be applied if a transfer of a surface right is proposed after the supplemental ground water right is established. It is difficult to apply if the surface rights are transferred before an application is made for a new development using ground water. If IDWR's management plan were changed to refuse processing and approval of a water right for municipal or multiple domestic uses, the development would likely occur anyway using multiple, exempt, domestic wells. Policy changes should be avoided that encourage an individual well per domestic lot rather than a single community well. A change in statute may be needed to provide the management tools needed to address this problem.

Page 3, Paragraph 2(a). Domestic and stockwater uses as described in Section 42-111, Idaho Code, are exempt from measuring and reporting requirements of Section 42-701, Idaho Code.

Page 3, Paragraph 2(b). A change in the law (Sections 42-111 or 42-227, Idaho Code) would be required before IDWR could adjust the 13,000 gpd/0.5 acre exemption for domestic uses.

Page 4, Paragraphs 6(a) and 8. IDWR evaluates surface to ground water transfers under the criteria of Section 42-222, Idaho Code. Review of an application considers the impact of the

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change on the surface water source and the ground water source. An approval must include conditions necessary to protect rights from the surface source taking into account the changes made to stream flow by both the revised diversion from the stream and the change in recharge/discharge of the stream resulting from the pumping of ground water under the changed right. The effect on existing rights to ground water must be considered.

The location and depth at which recharge is accomplished is an important consideration. The original point of diversion may not be the best location for the recharge. A review of a mitigation plan offering recharge must include consideration of the total volume recharged, its location, the percentage of the recharge that is effective to offset the effects of pumping, the quality of the recharge water, the timing of the recharge and the reliability of the recharge source. IDWR does not have a policy that requires water to be available 75% of the time under the surface right. It is the responsibility of the applicant to show that a proposed mitigation plan will be effective. A requirement to have water available at least 75% of the time does not assure that mitigation will be available during the critical drought periods.

As we discussed at a meeting on October 28, 1996 in Hailey, a county water policy as proposed in the draft is a new effort in Idaho. It is not my intention by providing comments on some of the policies in the draft to indicate IDWR endorsement of policies not commented on or to guarantee that IDWR will embrace the policy if revised to respond to these comments. The appropriate role and weight to be given to a county policy in an IDWR administrative proceeding involving a protested water right must be left for determination in that proceeding and for review by the courts. My intention in submitting these comments is only to provide information on the present policies and procedures of IDWR under state law.

Sincerely,

NORMAN C. YOUNG
Administrator
Water Management Division

c. Allen Merritt
Nick Purdy
Sherl Chapman

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WATER RESOURCES OF THE UPPER BIG WOOD RIVER BASIN, IDAHO

U.S. GEOLOGICAL SURVEY

Water-Resources Investigations Report 89-4018

Department of Water Resources
PROTESTANT'S
Exhibit AA
Date Admitted 11-13-02

Ex AA

Prepared in cooperation with

SUN VALLEY WATER AND SEWER DISTRICT

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WATER RESOURCES OF THE UPPER BIG WOOD RIVER BASIN, IDAHO

By S.A. Frenzel

U.S. GEOLOGICAL SURVEY

Water-Resources Investigations Report 89-4018

Prepared in cooperation with

SUN VALLEY WATER AND SEWER DISTRICT

Boise, Idaho

1989

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DEPARTMENT OF THE INTERIOR

MANUEL LUJAN, JR., Secretary

U.S. GEOLOGICAL SURVEY

Dallas L. Peck, Director

For additional information
write to:

District Chief
U.S. Geological Survey, WRD
230 Collins Road
Boise, ID 83702

Copies of this report can
be purchased from:

U.S. Geological Survey
Books and Open-File Reports
Box 25425, Bldg. 810
Federal Center
Denver, CO 80225

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CONVERSION FACTORS

For readers who prefer to use metric (International System) units, conversion factors for inch-pound units used in this report are listed below. Constituent concentrations are given in mg/L (milligrams per liter), or µg/L (micrograms per liter), which are equal to parts per million or parts per billion, respectively. Specific conductance is expressed as µS/cm (microsiemens per centimeter at 25 degrees Celsius.)

Multiply inch-pound unit	By	To obtain SI unit
acre	4,047	square meter
acre-foot (acre-ft)	1,233	cubic meter
cubic foot per second (ft^3/s)	0.028317	cubic meter per second
foot (ft)	0.3048	meter
foot squared per day (ft^2/d)	0.09290	meter squared per day
gallon per minute (gal/min)	0.06308	liter per second
gallon per minute per foot [(gal/min)/ft]	0.2070	liter per second per meter
inch (in.)	25.4	millimeter
mile (mi)	1.609	kilometer
square foot (ft^2)	0.09294	square meter
square mile (mi^2)	2.590	square kilometer

Temperature in °C (degrees Celsius) can be converted to °F (degrees Fahrenheit) as follows:

$$°F = (°C)(1.8) + 32$$

Water temperatures are reported to the nearest 0.5 °C.

Sea level: In this report, "sea level" refers to the National Geodetic Vertical Datum of 1929 (NGVD of 1929), which was derived from a general adjustment of the first-order level nets of both the United States and Canada, and formerly was called "Sea Level Datum of 1929."

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WATER RESOURCES OF THE UPPER BIG WOOD RIVER BASIN, IDAHO

By S.A. Frenzel

ABSTRACT

The upper Big Wood River basin in south-central Idaho has undergone increases in urban development and sewage disposal that may impose stresses on the quantity and quality of the water resources.

Mean annual water yields for a base period from 1940 to 1979 were estimated using the water-budget method. Estimated yields for the upper Big Wood River basin above Glendale Road and for its major tributaries, Trail Creek, Warm Springs Creek, and East Fork Big Wood River, were 410,000, 50,000, 60,000, and 50,000 acre-feet, respectively. Mean annual water yield for the upper Big Wood River basin also was estimated using an empirical method. Results from the empirical method were similar to results from the water-budget method; however, the water-budget method is considered to be more accurate because of the large surface-water component, which is measured rather than estimated. Yields also were estimated for 1986 and 1987 water years when data were collected for comparison with long-term average values. During 1986, yields estimated for upper Big Wood River basin, Trail Creek, Warm Springs Creek, and East Fork Big Wood River were 580,000, 61,000, 83,000, and 60,000 acre-feet, respectively. During 1987, yields estimated for the respective basins were 230,000, 26,000, 32,000, and 28,000 acre-feet. Availability of surface and ground water varies seasonally; the greatest quantity is available during spring snowmelt, and the least is available during mid- to late winter.

Nutrient concentrations in sampled ground and surface water were near or below detection levels throughout the basin, which indicates that water quality has not been impaired by increased urban development and sewage disposal. Fluoride concentrations were elevated in Warm Springs Creek, probaby due to inflow of thermal water.

INTRODUCTION

Purpose and Scope

This report describes results of a study to evaluate water resources in the upper Big Wood River basin. Emphasis of the study was on determining water yield of the basin and some of its major tributaries. The scope of this study included:

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(1) Collection of historical geologic, hydrologic, water-use, and water-quality data to determine average conditions of the water resources.

(2) Measurement of ground-water levels and aquifer thickness near the basin outlet to determine volume of ground-water underflow from the basin.

(3) Evaluation of ground-water and surface-water relations.

(4) Collection of ground- and surface-water quality data to determine whether urban development and sewage disposal have affected water quality.

(5) Estimation of water yield from the upper Big Wood River basin, Trail Creek, Warm Springs Creek, and East Fork Big Wood River.

Data were collected from February 1986 through November 1987.

Physical Setting

The upper Big Wood River basin is in Blaine County, north of Twin Falls, in south-central Idaho (fig. 1). For this study, only the area upstream (generally north) from Glendale Road (fig. 2) was considered. Generally, the upper Big Wood River valley is narrow and has a maximum width of about 2 mi at the southern boundary of the study area. Steep mountains surround the valley to the north, east, and west. Altitudes range from 5,060 ft above sea level at Glendale Road to 11,913 ft in the surrounding mountains, and the basin area above Glendale Road is 752 mi^2. Sun Valley, Ketchum, Hailey, and Bellevue are communities in the basin.

Climate of the upper Big Wood River basin is one of cold, wet winters and warm, dry summers. At Sun Valley, mean minimum temperatures of about -1 °F (-18 °C) are recorded in January, and mean maximum temperatures of about 82 °F (28 °C) are recorded in July. Mean annual precipitation at Sun Valley (1937-73) is 17.6 in. and, at Hailey (1917-82), is 15.0 in. Half the annual precipitation falls from November through February.

Between 1970 and 1980, population in Blaine County increased from 5,749 to 9,841; population in the study area is about 90 percent of the total in Blaine County (Luttrell and Brockway, 1982, p. 8, 9). The 1990 population for the study area was projected to be about 15,000, and maximum population was estimated to be 22,000 (Luttrell and Brockway, 1982, p. 26, 27). In addition to the permanent residents, thousands of people annually visit the area for winter and summer recreation.

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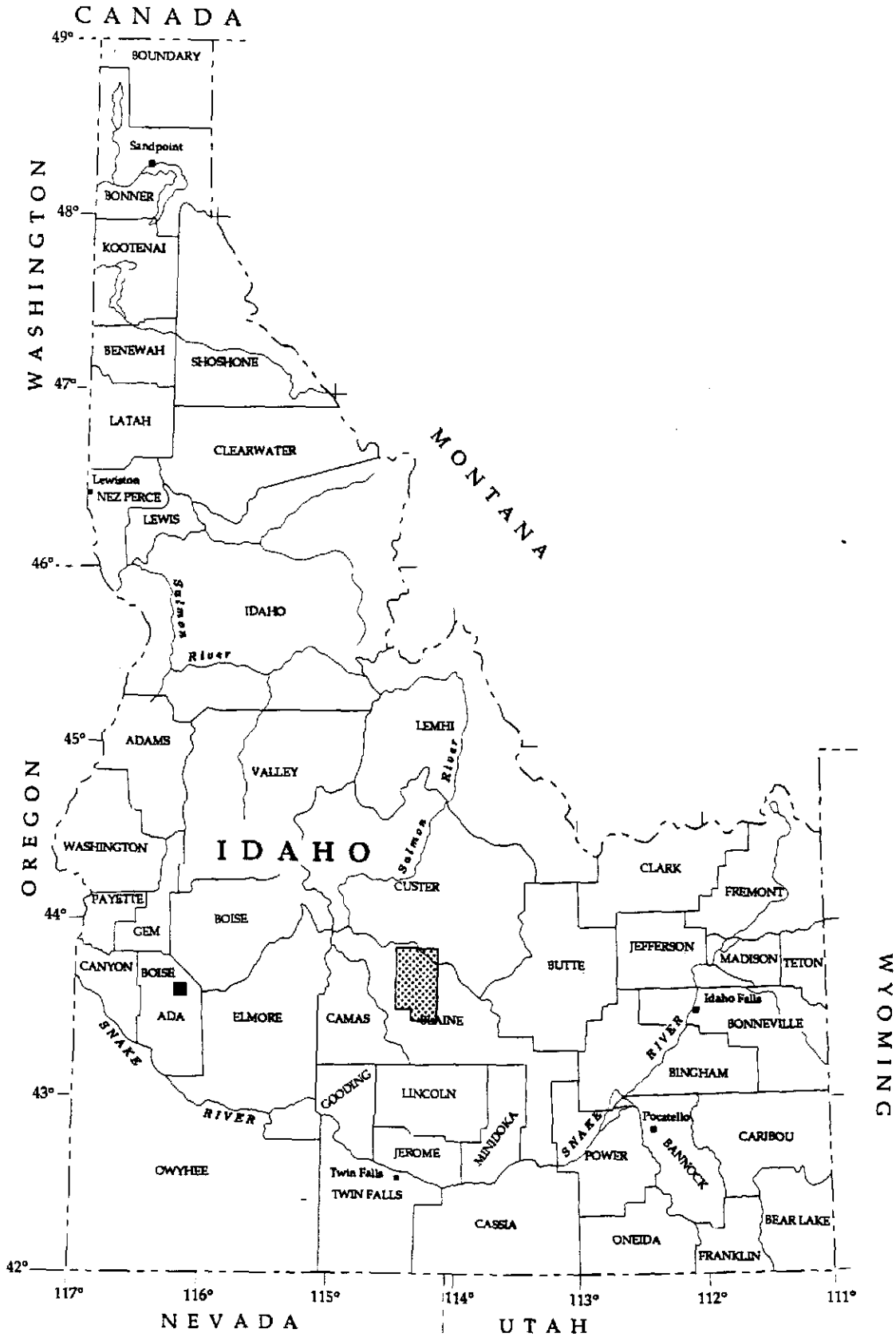
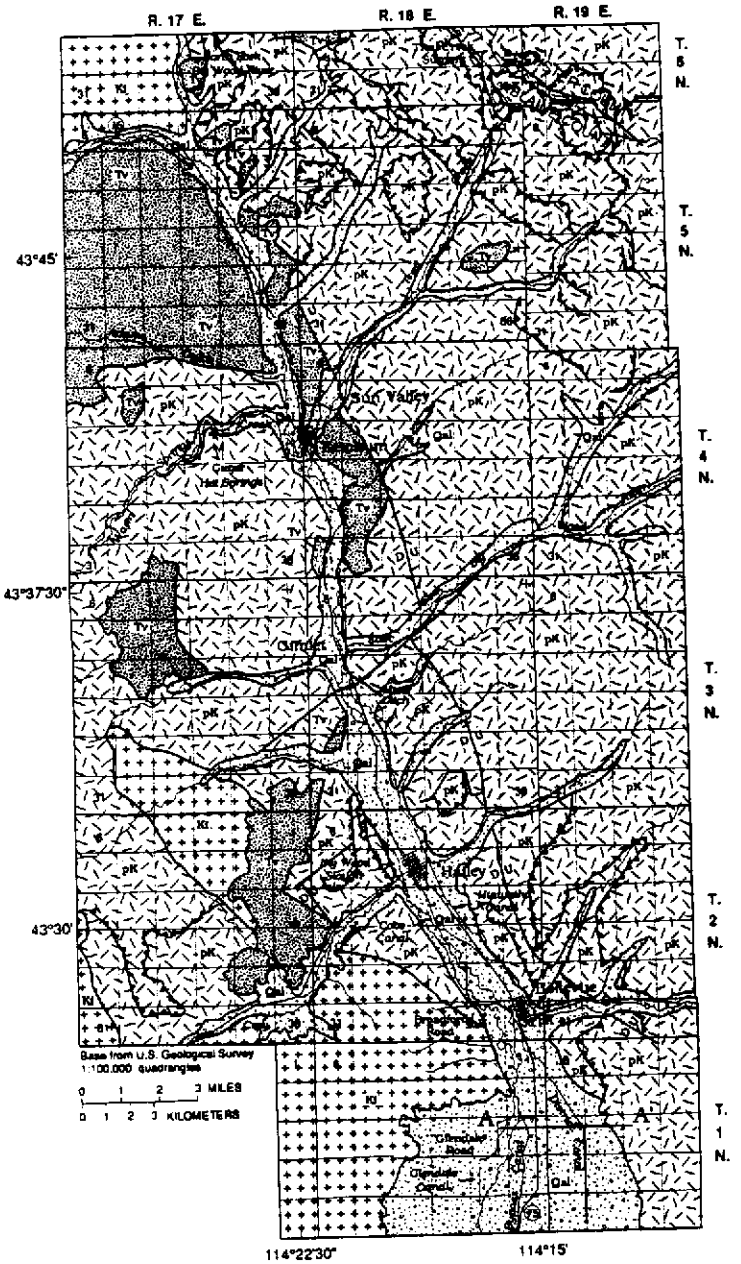


Figure 1.--Location of study area.

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Qal QUATERNARY SEDIMENTARY ROCKS--Chiefly unconsolidated deposits of stream alluvium and terrace gravels, primarily of fluvioglacial origin

Tv TERTIARY VOLCANIC ROCKS--Undifferentiated

Kl CRETACEOUS ROCKS--Chiefly granitic rocks of the Idaho batholith; may include some Tertiary rocks

pK PRE-CRETACEOUS SEDIMENTARY AND METAMORPHIC ROCKS--Undifferentiated

—— GEOLOGIC CONTACT

U/D ···· FAULT--Dashed where inferred, dotted where concealed; U, upthrown side; D, downthrown side

▲▲▲ THRUST FAULT--Teeth on upper plate

A — A' LINE OF GEOLOGIC SECTION

——— BOUNDARY OF STUDY AREA

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Figure 2.--Generalized geology.

Geologic Setting

Geology of the region was described in detail by Umpleby and others (1930) and is shown in figure 2 as modified from Rember and Bennett (1979). The mountains in the area are composed of Pre-Cretaceous sedimentary and metamorphic rocks, Cretaceous granitic rocks, and Tertiary volcanic rocks. Thickness of the sedimentary and igneous rocks totals about 32,000 ft (Umpleby and others, 1930, p. IX). Extensive faulting and folding have resulted in complex structure (Luttrell and Brockway, 1984, p. 10). Valleys are filled with Quaternary glacial and alluvial deposits that constitute the aquifer in the study area (Luttrell and Brockway, 1984, p. 13). Terraces in the study area are composed of alluvial deposits. Most of the valley fill is stream and delta clay, sand, and gravel deposited before the Wisconsin glaciation and is overlain by a thin sheet of fluvioglacial sediments (Smith, 1959, p. 16).

Previous Investigations

Work by Smith (1959) dealt with areas that partly overlap the upper Big Wood River basin. The primary objective of Smith's study was to determine the quantity of water available for additional irrigation in the middle Big Wood River area. Geology and mineral resources of the Hailey-Bellevue mining district and upper Big Wood River basin were studied by Anderson and others (1950). Jones (1952) examined discharge records in the Big Wood River basin with emphasis on identification of all diversions above gaging stations. Smith (1960) evaluated discharge records in the Big Wood River basin to determine whether the gaged discharges adequately represented basin yield.

Castelin and Chapman (1972) studied the water resources of the Big Wood River-Silver Creek area as far north as Hailey. Objectives of their study included: (1) Identification of relations between water-table, artesian, and regional (Snake River Plain) aquifers, (2) development of a water budget for the area, and (3) determination of reaches of gains and losses in Silver Creek. Moreland (1977) included the area around Bellevue in his study of ground-water and surface-water relations in the Silver Creek area.

Castelin and Winner (1975) studied the upper Big Wood River basin to: (1) Determine physical characteristics of local aquifers, (2) determine relations between ground and surface water, (3) describe the level of urbanization in terms of water use, (4) determine quality of ground and surface water, and (5) establish a hydrologic data base. Luttrell and Brockway (1982, 1984) studied impacts of onsite sewage-disposal systems on water quality in the upper Big Wood River basin to: (1) Evaluate water-quality problem areas on the basis of density of sewage-disposal

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sites, (2) establish a ground-water quality monitoring network and data base, (3) evaluate the ground-water flow system, and (4) determine river/aquifer hydraulic relations.

Well-Numbering System

The well-numbering system (fig. 3) used by the U.S. Geological Survey in Idaho indicates the location of wells within the official rectangular subdivision of public lands, with reference to the Boise base line and Meridian. The first two segments of the number designate the township (north or south) and range (east or west). The third segment gives the section number; three letters, which indicate the 1/4 section (160-acre tract), 1/4-1/4 section (40-acre tract), and 1/4-1/4-1/4 section (10-acre tract); and serial number of the well within the tract.

Quarter sections are designated by the letters A, B, C, and D in counterclockwise order from the northeast quarter of each section. Within the quarter sections, 40-acre and 10-acre tracts are lettered in the same manner. For example, well 2N-18E-9BDC1 is in the SW1/4SE1/4NW1/4 sec. 9, T. 2 N., R. 18 E., and is the first well inventoried in that tract.

WATER RESOURCES

Average quantity of water in the upper Big Wood River basin was estimated by using data from 1940 to 1979 water years (October 1 to September 30). This base period was selected because the greatest quantity of pertinent data were available during those years. The type of data, location, and period of record for which data are available include:

(1) Discharge, Big Wood River at Hailey, 1915-88.
(2) Discharge, Warm Springs Creek, 1940-58.
(3) Discharge, Big Wood River near Ketchum, 1948-71.
(4) Precipitation, Hailey, 1917-82.
(5) Precipitation, Sun Valley/Ketchum, 1937-88.
(6) Snowpack, several locations, minimum record, 1961-88.

Precipitation

Precipitation data were collected at Hailey from 1917 to 1982 and at Sun Valley from 1937 to 1973, when the site was moved to its present (1988) location in Ketchum. Mean annual precipitation for the 1940-79 base period was 16.0 in. at Hailey and 17.5 in. at Sun Valley/Ketchum. During 20 of these years, precipitation at Hailey was greater than the mean for the period of record.

Hailey and Sun Valley/Ketchum precipitation sites are at relatively low altitudes in the basin and, because precipitation

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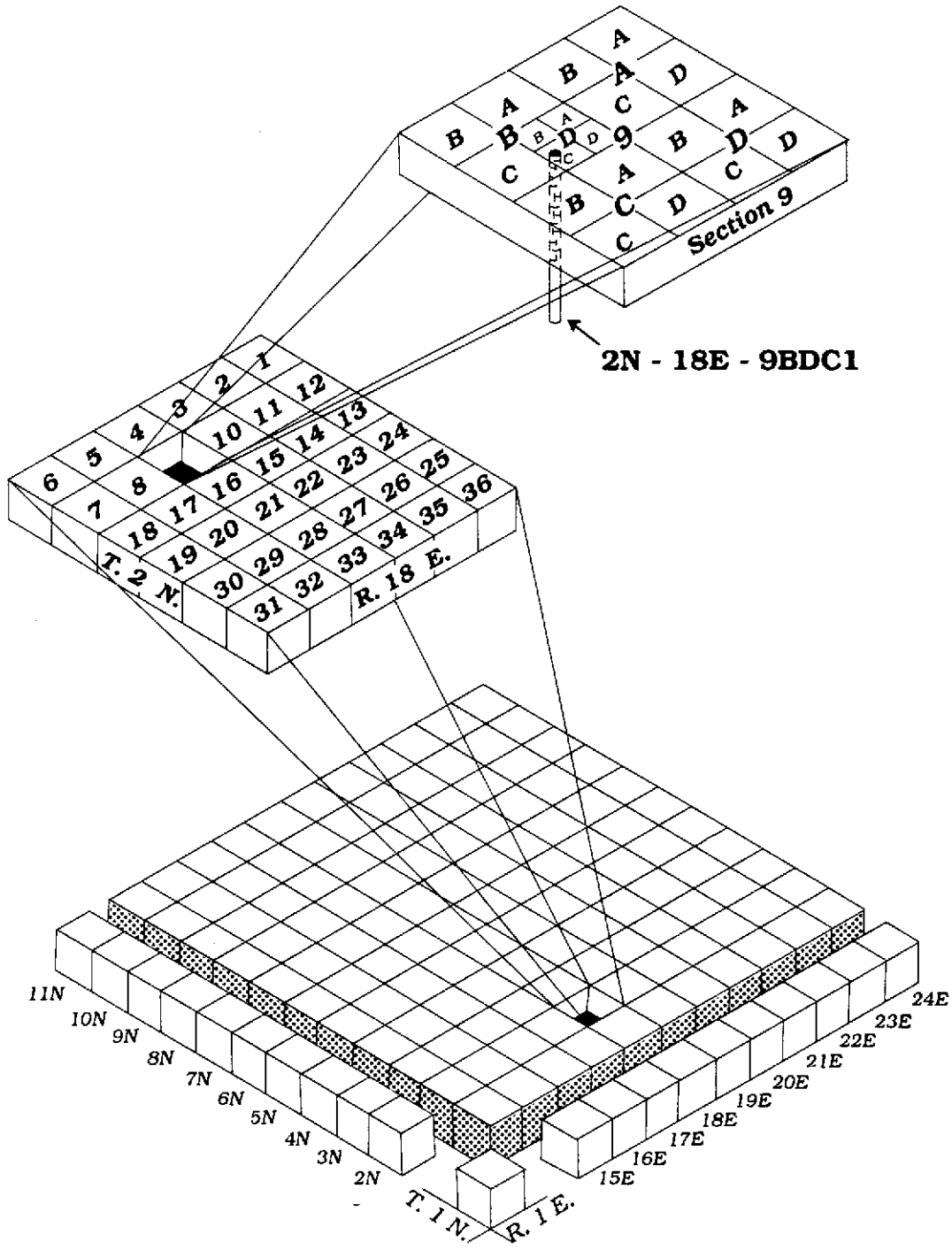


Figure 3.--Well-numbering system.

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varies with altitude (Hanson, 1982, p. 875), it was necessary to estimate precipitation for higher altitudes. Mean annual precipitation at eight snow courses in the area as determined from a regional precipitation map was about 1½ times the mean April 1 water content measured at the snow courses. Four snow courses recently were equipped to measure annual precipitation, and these sites also show annual precipitation to be about 1½ times the April 1 water content. A precipitation-altitude relation (fig. 4) was determined by linear regression using estimated mean annual precipitation at the snow courses (eight sites) and measured annual precipitation (two sites).

The regression equation was used to determine mean annual precipitation for the average altitude of the upper Big Wood River basin. Annual precipitation for individual years from 1940 to 1979 was determined by adjusting mean annual precipitation by the same quantity that the annual precipitation at Hailey differed from the mean at Hailey. For example, the average altitude for Warm Springs Creek is 7,660 ft and the mean annual precipitation is 28 in. If, for a given year, precipitation at Hailey were 19 in. (3 in. greater than the mean), then precipitation for Warm Springs Creek is estimated to be 31 in.

Because precipitation data no longer are collected at Hailey and because data from Ketchum do not correlate well with data from Hailey ($r^2 = 0.42$, using annual data from 1974 to 1982), annual precipitation for the upper Big Wood River basin for the 1986 and 1987 water years was estimated using data from the eight snow courses and the precipitation-altitude relation shown in figure 4.

Surface Water

A continuous record of discharge for the Big Wood River at Hailey has been collected since June 1915. Recording gaging stations also were located on the Big Wood River near Ketchum (0.25 mi above North Fork Big Wood River) from 1948 to 1971 and on Warm Springs Creek at Guyer Hot Springs from 1940 to 1958. Other surface-water data have been collected periodically.

Discharge at Hailey (combined flow of Big Wood River and Big Wood Slough) ranged from 15 to 6,150 ft^3/s and averaged 460 ft^3/s from 1916 to 1987 (U.S. Geological Survey, 1956, p. 234; Harenberg and others, 1988, p. 243). Mean discharge for 7 and 30 consecutive days were as low as 88 and 98 ft^3/s, respectively, at intervals averaging 10 years (fig. 5).

Discharge of the Big Wood River near Ketchum ranged from 8.5 to 1,690 ft^3/s and averaged 167 ft^3/s for the period of record (U.S. Geological Survey, 1972, p. 163). Mean discharge for 7 and 30 consecutive days were as low as 35 and 37 ft^3/s, respectively, at intervals averaging 10 years (fig. 5).

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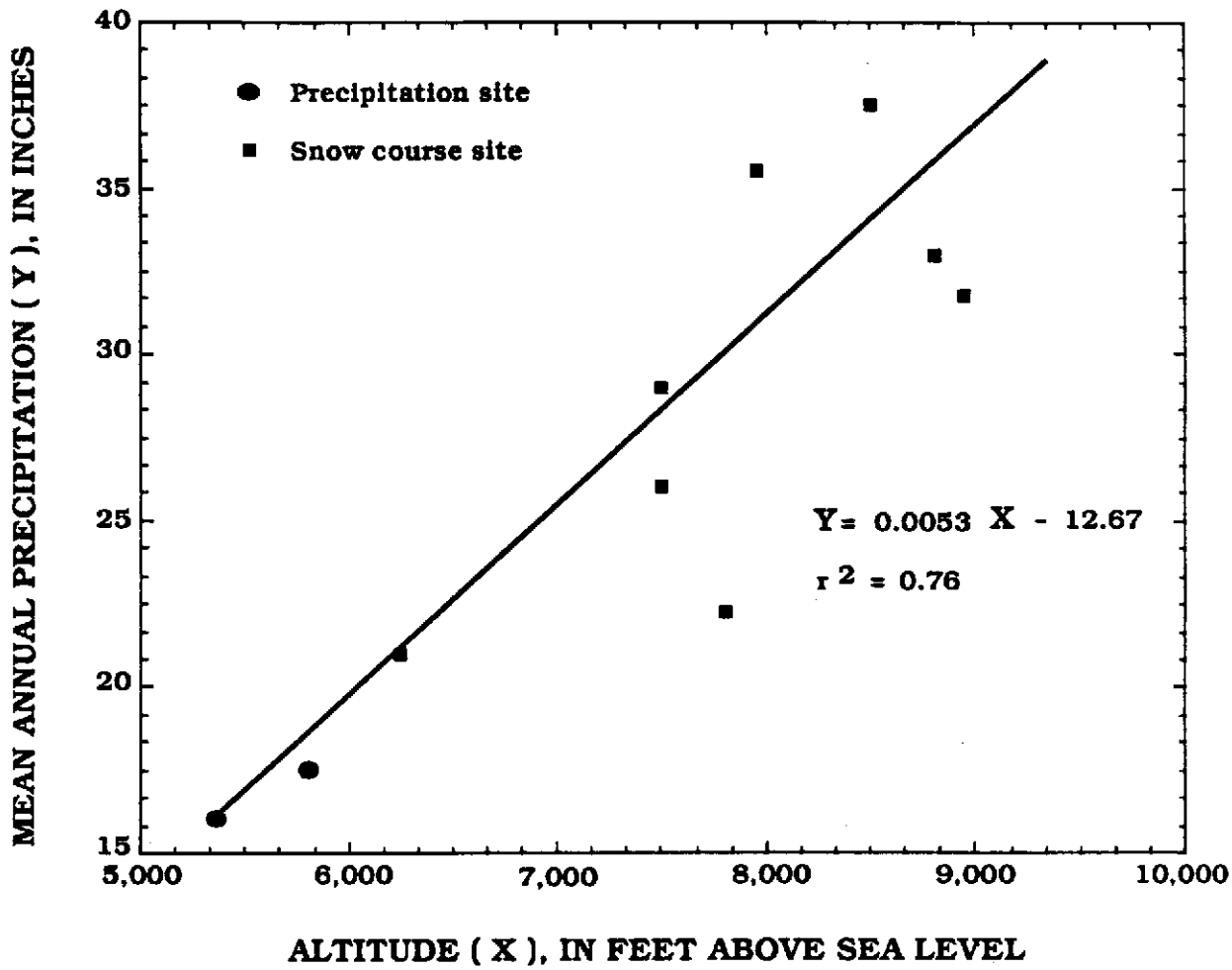


Figure 4.--Relation of mean annual precipitation to altitude.

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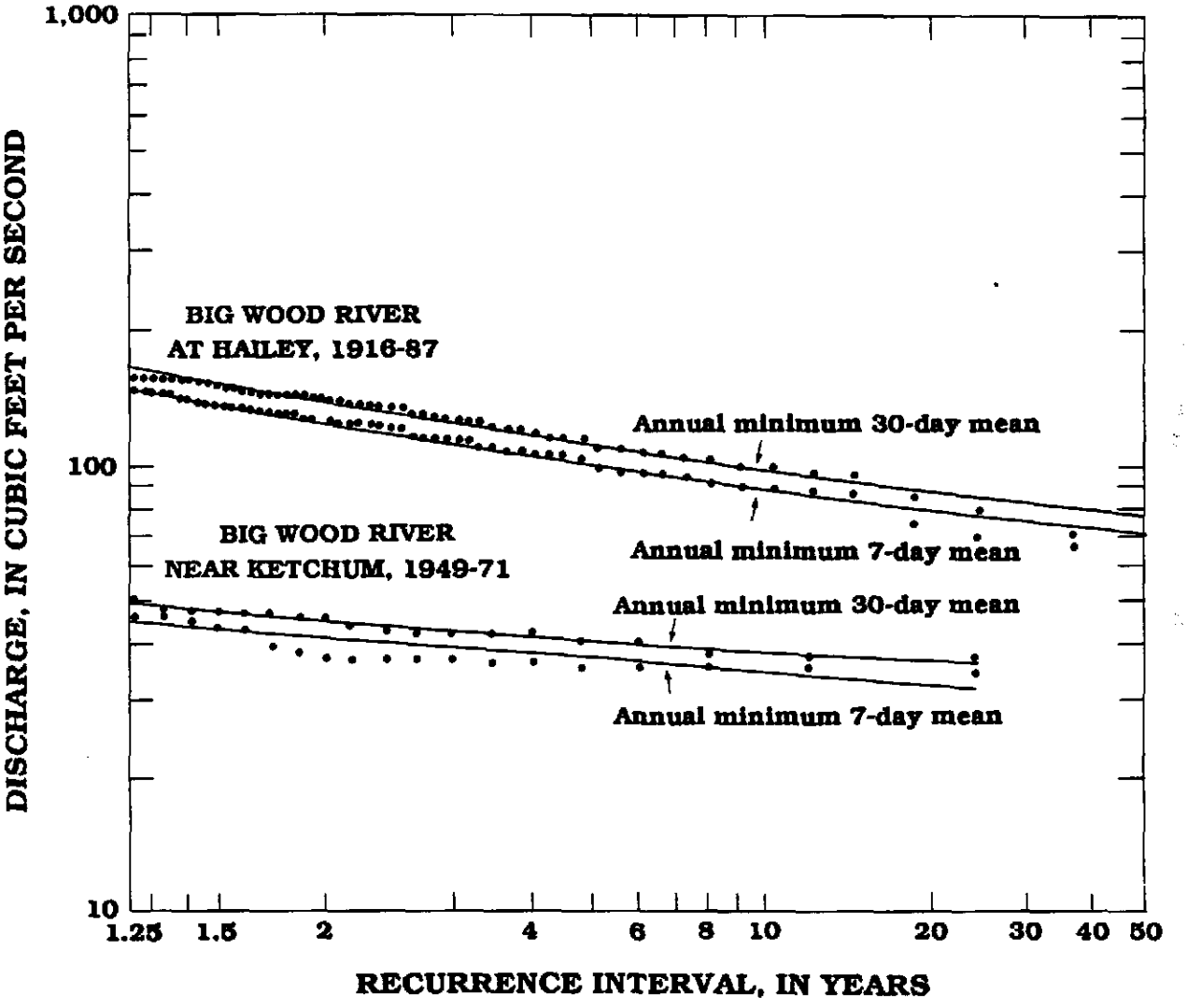


Figure 5.--Frequency curves of annual minimum 7-day and 30-day mean discharge for the Big Wood River at Hailey and near Ketchum.

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Discharge of Warm Springs Creek at Guyer Hot Springs ranged from 6.0 to 961 ft^3/s and averaged 87 ft^3/s for the period of record (U.S. Geological Survey, 1963, p. 115). Typically, discharge in the study area was highest during spring snowmelt and lowest during the winter. Mean monthly discharge of the Big Wood River at Hailey from 1916 to 1987 was highest in June (1,500 ft^3/s) and was lowest in February (154 ft^3/s). More than half the annual discharge was during May and June.

Major tributaries to the Big Wood River include North Fork Big Wood River, Trail Creek, Warm Springs Creek, and East Fork Big Wood River (fig. 2). Discharge of Trail Creek, Warm Springs Creek, and East Fork Big Wood River was measured monthly from February 1986 through November 1987.

Ground Water

Water exists in the alluvial deposits under water-table conditions. Significance and water-bearing capacity of pre-Cretaceous sedimentary and metamorphic rocks were not determined; however, water yield from these rocks is probably low. Recharge to the aquifer is from precipitation and from percolation of surface water from streams, canals, and irrigated fields. The rate of movement and volume of ground water discharged from the basin depends on the hydraulic gradient, hydraulic conductivity, and cross-sectional area of the aquifer.

Storage of ground water in any given location in the study area is largely a function of the areal extent and thickness of the aquifer at that location. The quantity of ground water in storage depends on the volume of aquifer material and specific yield. Specific yield (Sy) is the ratio of (1) the volume of water which saturated rock will yield by gravity to (2) the volume of rock (Lohman and others, 1972, p. 12). The volume of aquifer material was estimated by subdividing the aquifer and representing each part as a half-conical section (fig. 6). Cross-sectional areas of the aquifer at Adams Gulch, Gimlet, and Hailey were estimated on the basis of the basin width and aquifer thickness determined from well-drillers' logs and from data reported by Luttrell and Brockway (1984, p. 14-15). Cross-sectional area of the aquifer at Glendale Road was determined from seismic refraction work during this study. Specific yield was estimated as 0.2, which was about the average for unconsolidated alluvium reported by Johnson (1967, p. D68). The quantity of ground water in storage from Adams Gulch to Glendale Road was estimated to be about 400,000 acre-ft. Storage of ground water also varies seasonally; the greatest quantity is available during spring snowmelt, and the least quantity is available during mid- to late winter.

Withdrawals vary seasonally; the greatest quantities are withdrawn during the summer and winter recreation periods.

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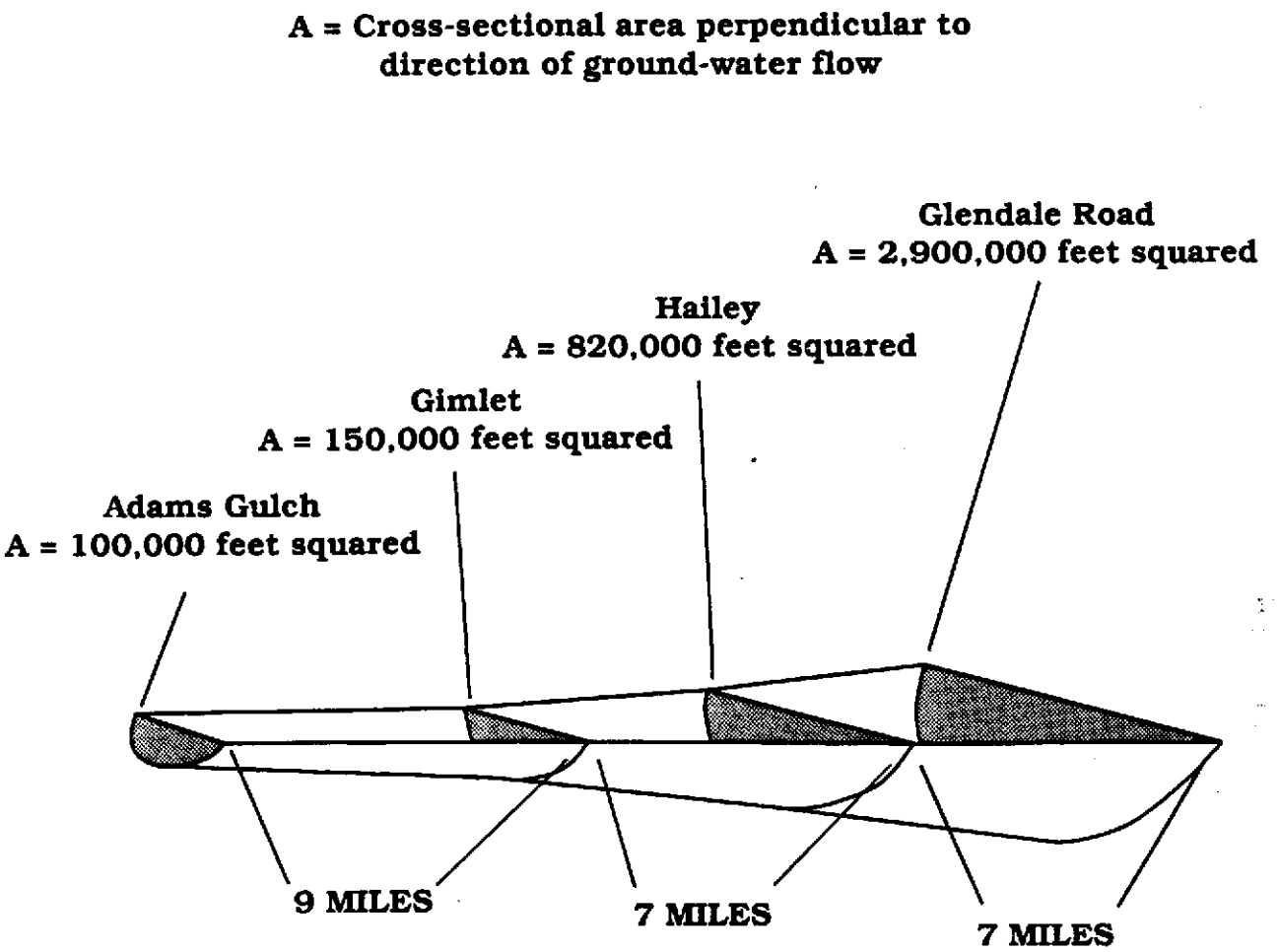


Figure 6.--Conceptual block diagram showing cross-sectional areas of the alluvial aquifer from Adams Gulch to Glendale Road.

Municipal wells normally withdraw 3,500 to 4,500 acre-ft of water annually to supply the Sun Valley/Ketchum area from well fields near Trail Creek and the Big Wood River (J.T. Brown, Sun Valley Water and Sewer District, written commun., 1987; S.A. Hansen, City of Ketchum, written commun., 1988).

Water levels were measured in 84 wells in April 1986 (table 1) to define the water table prior to diversion of surface water into irrigation canals. Water-level data were used to construct a water-table contour map (fig. 7) to show direction of ground-water movement and to determine hydraulic gradients. Direction of ground-water flow is perpendicular to water-table contours and is generally southward, parallel to the long axis of the upper Big Wood River basin. Hydraulic gradients were used to compute ground-water discharge.

Aquifer Characteristics and Estimates of Ground-Water Discharge

Hydraulic conductivity (K) is a measure of the ability of aquifer material to conduct water, is dependent on the nature of the pore space, and is expressed in feet per day (Lohman and others, 1972, p. 4). Transmissivity (T) is a measure of the rate at which water moves through a unit width of the aquifer under a unit hydraulic gradient and is expressed in feet squared per day (Lohman and others, 1972, p. 13). Transmissivity is equal to K multiplied by the saturated thickness (b) of the aquifer. Specific capacity (C) of a well is the rate of discharge, in gallons per minute, divided by the water-level drawdown in the well, in feet.

Specific capacity was determined from driller's logs for six wells that met the arbitrary criteria of a minimum pumping rate of 500 gal/min and a minimum pumping time of 2 hours. Specific capacity was used to estimate T by two empirical methods. The first method (Theis, 1963, p. 335) used the equation:

$$T' = 0.134\ (C)\ (F)\ (1{,}300 - 264\log 5Sy + 264\log t) \qquad (1)$$

where

- T' = estimate of transmissivity, in feet squared per day;
- 0.134 = constant to convert gallons per foot per day to feet squared per day;
- C = specific capacity of pumped well, in gallons per minute per foot of drawdown;
- F = factor to adjust for well radius and degree of well development (1.0 for 6-in. radius, 0.9 for 8-in. radius, and 0.8 for 10-in. radius wells were used);
- Sy = specific yield--0.2 (Johnson, 1967) was used as an average value for coarse alluvial material; and
- t = pumping time, in days,

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Table 1.--*Ground-water levels during April 1986*

Well number	Well location (fig. 7)	Altitude of land surface (feet above sea level)	Day measured	Depth of water below land surface (feet)
1	5N-17E-25BCA1	6,038	9	16.68
2	36DBD1	5,970	9	1.84
3	4N-17E- 1DCD1	5,872	9	2.85
4	11CDA1	5,845	9	24.88
5	12ADB1	5,853	10	10.00
6	12CDD1	5,848	10	51.68
7	13AAB1	5,813	10	12.83
8	13ABA1	5,815	10	10.83
9	13ACA1	5,791	10	12.07
10	4N-18E-18CCB1	5,810	10	45.23
11	19DBB1	5,751	10	25.02
12	19DBB2	5,738	10	16.68
13	19DBD1	5,738	10	15.72
14	19DCD1	5,718	9	8.56
15	19DCD2	5,718	9	11.38
16	30ADB3	5,680	10	7.68
17	31DBD1	5,640	10	12.45
18	3N-18E- 6ABA1	5,630	11	6.36
19	6ADA1	5,605	12	12.62
20	6DDA1	5,590	12	20.55
21	7DAB1	5,570	7	7.72
22	7DBA1	5,600	8	45.48
23	7DDD1	5,556	7	19.38
24	8BBC1	5,582	7	20.33
25	8CBC3	5,573	7	16.17
26	17BCC1	5,520	8	10.81
27	17CCD1	5,545	8	37.29
28	18AAB1	5,558	12	18.65
29	18DAA1	5,515	12	7.79
30	20BDA1	5,520	8	38.85
31	20DCC1	5,475	8	27.58
32	29BDA1	5,438	8	10.38
33	29DCC1	5,415	12	4.15
34	32ABA1	5,416	8	10.08
35	32DBA1	5,388	12	6.58

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Table 1.--*Ground-water levels during April 1986--Continued*

Well number	Well location	Altitude of land surface (feet above sea level)	Day measured	Depth of water below land surface (feet)
36	3N-18E-32DDD1	5,375	8	9.39
37	33CAB1	5,435	12	67.14
38	2N-18E- 4CBB1	5,353	8	15.44
39	4CCB1	5,340	8	9.79
40	5AAA1	5,370	11	16.54
41	9ABA1	5,370	8	48.87
42	9BDC1	5,324	7	16.74
43	9DDA1	5,324	7	37.25
44	10BAC1	5,358	9	54.06
45	10BAC2	5,355	11	51.88
46	10DCB1	5,334	7	47.41
47	15BAB1	5,322	9	34.09
48	15BAC1	5,315	9	34.20
49	15BCB1	5,303	12	25.52
50	15CBA1	5,288	11	17.79
51	15CCA1	5,270	9	17.13
52	15CDB1	5,275	9	20.30
53	15DBC1	5,287	9	31.58
54	22BDB1	5,255	9	8.68
55	22DDB1	5,223	9	5.93
56	23DCC1	5,234	9	34.14
57	23DDB1	5,240	7	40.25
58	23DDC1	5,232	7	45.55
59	26ABA1	5,219	7	36.25
60	26CBB1	5,197	9	4.50
61	35BAB1	5,178	9	4.99
62	35DCD1	5,147	11	6.77
63	36BCB1	5,158	10	4.43
64	36DAC1	5,195	11	62.14
65	36DCA1	5,173	9	42.49
66	2N-19E-31CAB1	5,235	9	90.80
67	31CCD1	5,200	11	75.29
68	1N-18E- 1ABC1	5,153	10	36.54
69	1ACA1	5,250	11	43.03
70	1DAA1	5,137	10	43.54

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Table 1.--*Ground-water levels during April 1986--Continued*

Well number	Well location	Altitude of land surface (feet above sea level)	Day measured	Depth of water below land surface (feet)
71	1N-18E- 1DBB1	5,127	10	24.60
72	12ACA1	5,090	10	17.69
73	12DBD1	5,100	10	44.00
74	12DDC1	5,100	11	46.03
75	13DDB1	5,078	11	75.29
76	1N-19E- 6CBB1	5,137	10	43.58
77	7BAC1	5,115	10	51.19
78	7BCD1	5,115	11	49.11
79	18AAC1	5,078	10	59.77
80	18ADA1	5,070	10	61.85
81	18BBD1	5,095	11	47.34
82	18CAA1	5,082	10	108.73
83	19BAB1	5,065	11	69.18
84	20BAA1	5,041	10	79.35

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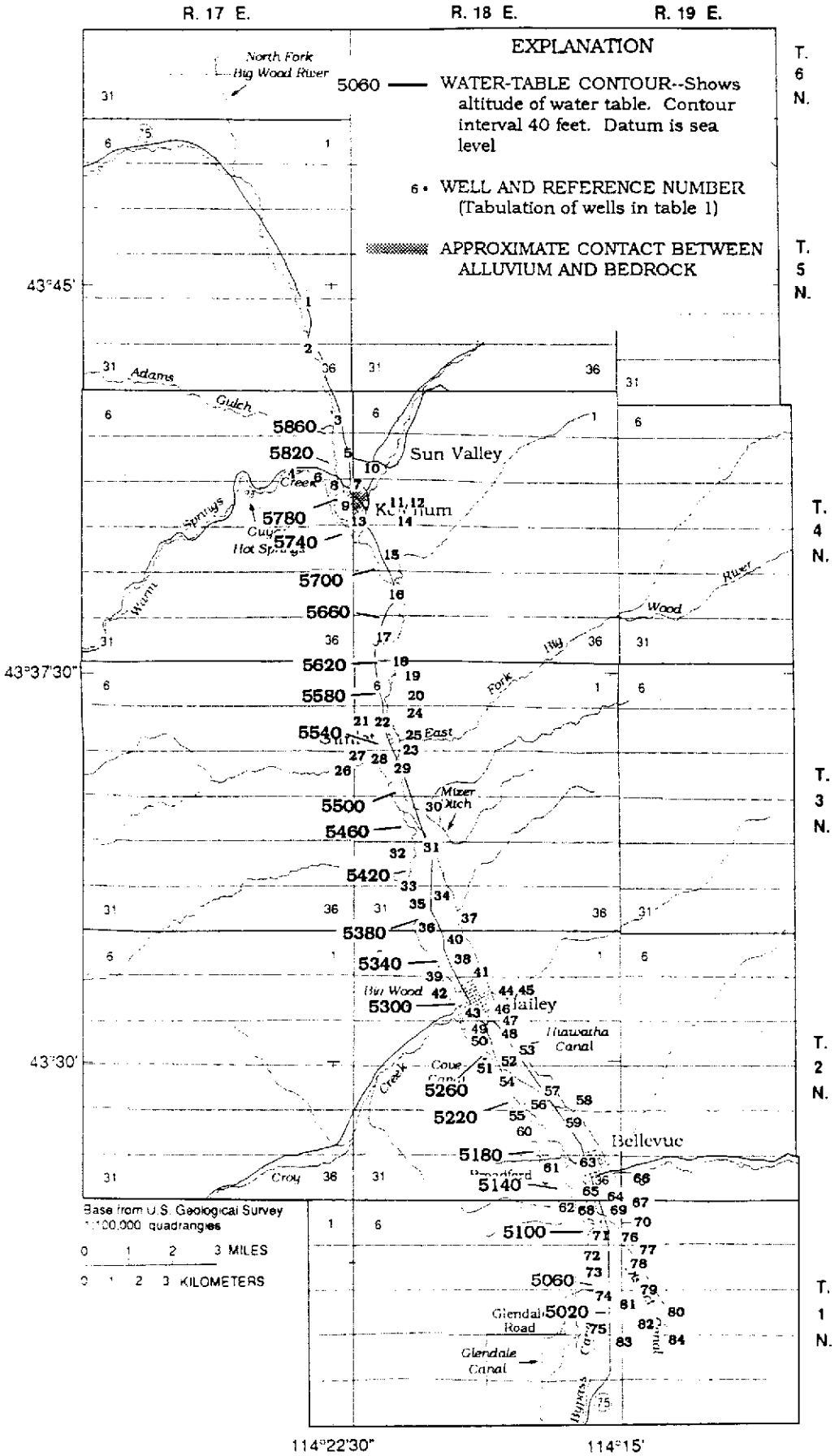


Figure 7.--Water-table contours in April 1986 and well locations

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to estimate T in water-table aquifers of unconsolidated sediments. Theis (1963, p. 334) noted that where calculated T' values were greater than 13,300 ft^2/d, the actual T was greater than the estimated value.

The second empirical method is that of Thomasson and others (1960, p. 222), who noted that transmissivity of valley-fill sediments in California averaged 267 times specific capacity.

Estimates of hydraulic conductivity for the alluvial aquifer were obtained by dividing T by the saturated thickness of the aquifer. In the upper Big Wood River basin, K averaged 150 ft/d by use of Theis' method and 300 ft/d by use of Thomasson and others' method (table 2). Moreland (1977, p. 11) noted that transmissivity near Bellevue ranged from 30,000 to 70,000 ft^2/d (K ranged from 200 to 470 ft/d); his estimates were obtained by multiplying specific capacity by 267.

During this study, two Hailey City wells were pumped by the Idaho Department of Water Resources to determine pump efficiencies, and discharge and water-level drawdown were measured. Data from the pump efficiency tests were used in an image well analysis for an infinite strip aquifer with a recharge boundary and a barrier boundary. Hydraulic conductivity determined with this procedure was 310 ft/d at well 2N-18E-9BDC1 and 490 ft/d at well 2N-18E-9DDA1. Because of the limited quantity of data used to estimate hydraulic conductivity, a range of K values from 150 to 500 ft/d was used. Heath (1983, p. 13) showed that hydraulic conductivity values from 150 to 500 ft/d commonly were associated with coarse sand aquifers.

Ground-water discharge from a basin may be computed from the equation:

$$Q = 365/43,560\ KAh \qquad (2)$$

where

Q	= annual ground-water discharge, in acre-feet per year;
365/43,560	= constant to convert cubic feet per day to acre-feet per year;
K	= hydraulic conductivity, in feet per day;
A	= cross-sectional area of aquifer, in feet squared; and
h	= hydraulic gradient, in feet per mile.

Thickness of alluvial deposits at Glendale Road was estimated using seismic refraction techniques. The cross section (fig. 8) constructed with the seismic data is not perpendicular to the direction of ground-water flow. Estimates of flow through this cross section must be multiplied by the sine of 60 degrees to correct for the flow angle. Total saturated area of the cross

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Table 2.--*Characteristics of wells and estimated hydraulic conductivity* (K)

[Estimated values are rounded]

Well location	Radius (in.)	Saturated thickness (ft)	Discharge (gal/min)	Drawdown (ft)	Pumping time (days)	Specific capacity [(gal/min)/ft]	K (Theis 1963) (ft/d)	K (Thomasson and others, 1960) (ft/d)
4N-18E-19	8	40	1,840	14	0.42	131	480	880
2N-18E- 9	6	150	2,240	32	.21	70	70	120
2N-18E- 9	8	150	2,000	60	.25	33	30	60
1N-18E- 1	10	190	3,300	49	.12	67	40	90
1N-19E- 7	10	190	2,600	8	.17	325	200	460
1N-19E-17	10	190	1,890	13	.25	145	90	200
Mean							150	300

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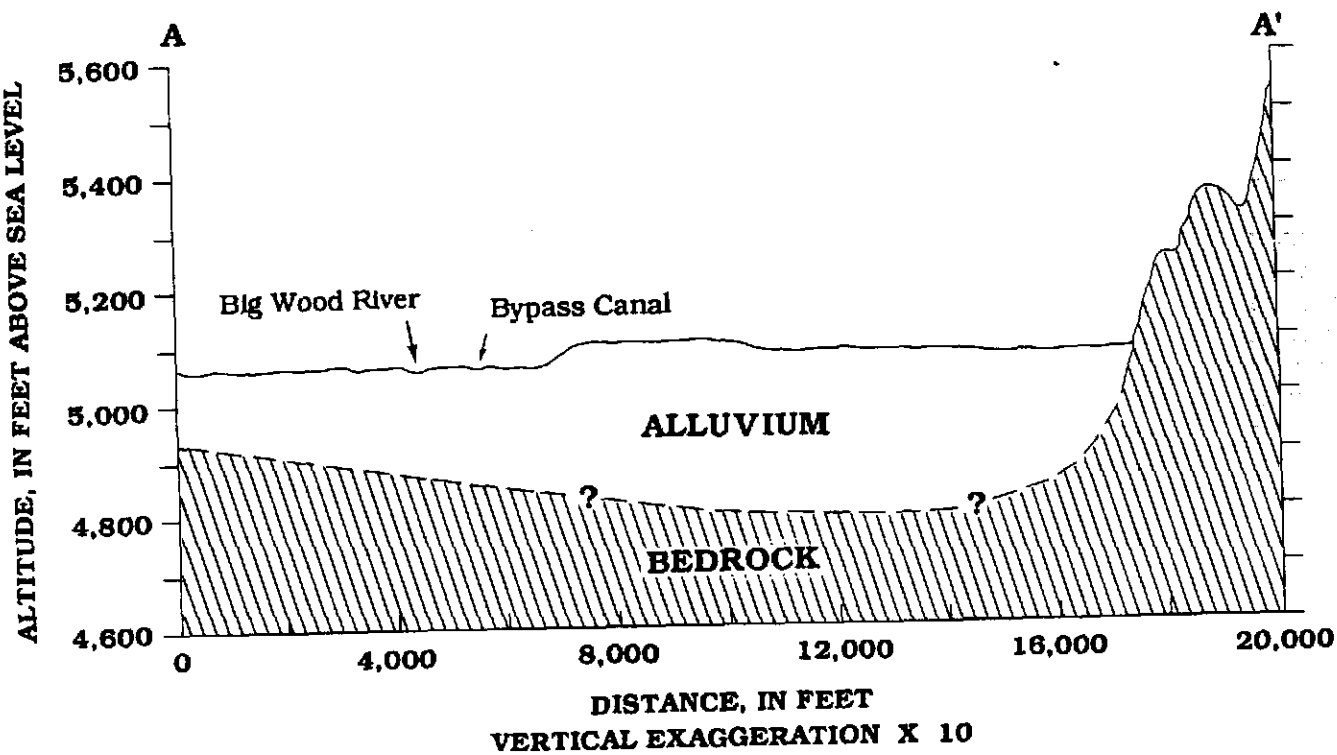


Figure 8.--Geologic section near Glendale Road.
(Location of section on figure 2)

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section, which was estimated using the water-table altitude from April 1986, was 3,300,000 ft^2. Average annual ground-water discharge from the study area estimated by using K = 300 ft/d and h = 43 ft/mi (determined from April 1986 water-level measurements) is 59,000 acre-ft/yr. Ground-water discharge at Hailey was estimated for use in water-budget calculations. Average annual ground-water discharge at Hailey, estimated using K = 300 ft/d, A = 820,000 ft^2, and h = 33 ft/mi, is 13,000 acre-ft/yr. This estimated ground-water discharge is substantially smaller than the 34,000 acre-ft/yr estimated by Smith (1959, p. 21) and the 40,000 acre-ft/yr estimated by Luttrell and Brockway (1984, p. 58). Smith's (1959) analysis did not include effects of recharge from the Big Wood River on results of aquifer tests; therefore, his estimated K value of about 900 ft/d is probably high. Luttrell and Brockway (1984, p. 58) determined underflow by subtracting the average discharge for the Big Wood River at Hailey (not including the Big Wood Slough) from an empirically calculated water yield; therefore, their underflow value includes evapotranspiration from phreatophytes, crops, and rangeland, and surface water that bypasses the gaging station at Hailey.

Surface-Water and Ground-Water Relations

Surface-water and ground-water systems are interconnected in the upper Big Wood River basin. The Big Wood River gains or loses water with respect to the ground-water system, depending on local conditions. Where the altitude of the ground-water surface is higher than the altitude of the stream, some ground water may enter the stream channel, and discharge in the stream will increase. If the altitude of the ground-water surface is below that of the stream channel, discharge in the stream may decrease as a result of seepage losses.

During August 1986, a seepage study was made on the Big Wood River immediately upstream from Ketchum to Glendale Road. Discharge of the Big Wood River was measured below Adams Gulch, above the mouth of the East Fork Big Wood River, at the upper crossing of Broadford Road near Hailey, and at Glendale Road. Inflows to the river and diversions from the river were located and measured during the study. Inflows were measured as close to the mouth as possible, and diversions were measured below any spillback to the river. Gain from or loss to ground water in a given reach was calculated by adding diversions from the reach to the final river discharge and subtracting inflows to the reach and the initial river discharge. A positive result shows that the reach gained flow from ground water. During this seepage study, the river gained water from above Ketchum to between Hailey and Bellevue and lost from that point to Glendale Road (table 3). Hydrographs for four wells measured monthly from April 1986 through November 1987 and for the Big Wood River at Hailey are shown in figure 9; well locations are shown in figure 10. Seasonal variations in ground-water levels are similar to

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Table 3.--*Inflows and diversions of the Big Wood River from above Ketchum to Glendale Road, August 1986*

[Values in cubic feet per second; gain or loss rounded]

Location	Big Wood River	Inflows	Diversions	Gain from ground water	Loss to ground water
Below Adams Gulch	181				
Unnamed tributary, left bank		0.2			
Unnamed tributary, right bank		1.5			
Unnamed tributary, left bank		13.2			
Warm Springs Creek		48.1			
Trail Creek		25.6			
Subtotal for reach		88.6	0		
Above East Fork Big Wood River	309			39	
East Fork Big Wood River		42.6			
Mizer Ditch			.5		
Unnamed tributary, left bank		.6			
Hiawatha Canal			50.5		
Unnamed tributary, right bank		.3			
Unnamed tributary, left bank		.9			
Croy Creek		4.8			
Cove Canal			11.7		
Unnamed diversion, right bank			23.3		
Subtotal for reach		49.2	86		
Upper crossing, Broadford Road	308			36	
Unnamed diversion, left bank			5.7		
District Canal			172		
Bypass Canal			58.6		
Glendale Canal			22.2		
Subtotal for reach		0	258		
Glendale Road	.7				49

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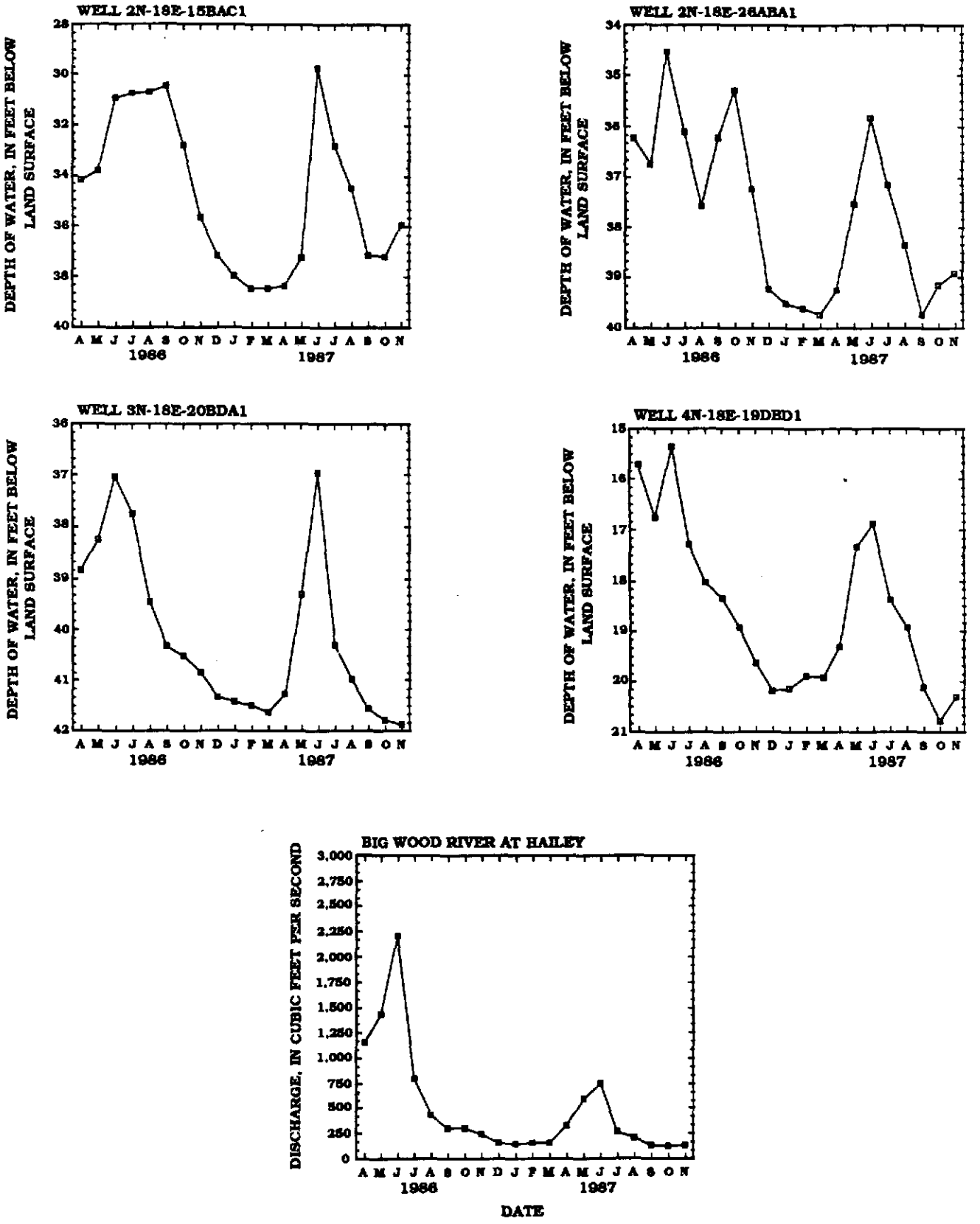


Figure 9.--Water levels for selected observation wells and discharge of the Big Wood River at Hailey. (Locations shown in figure 10)

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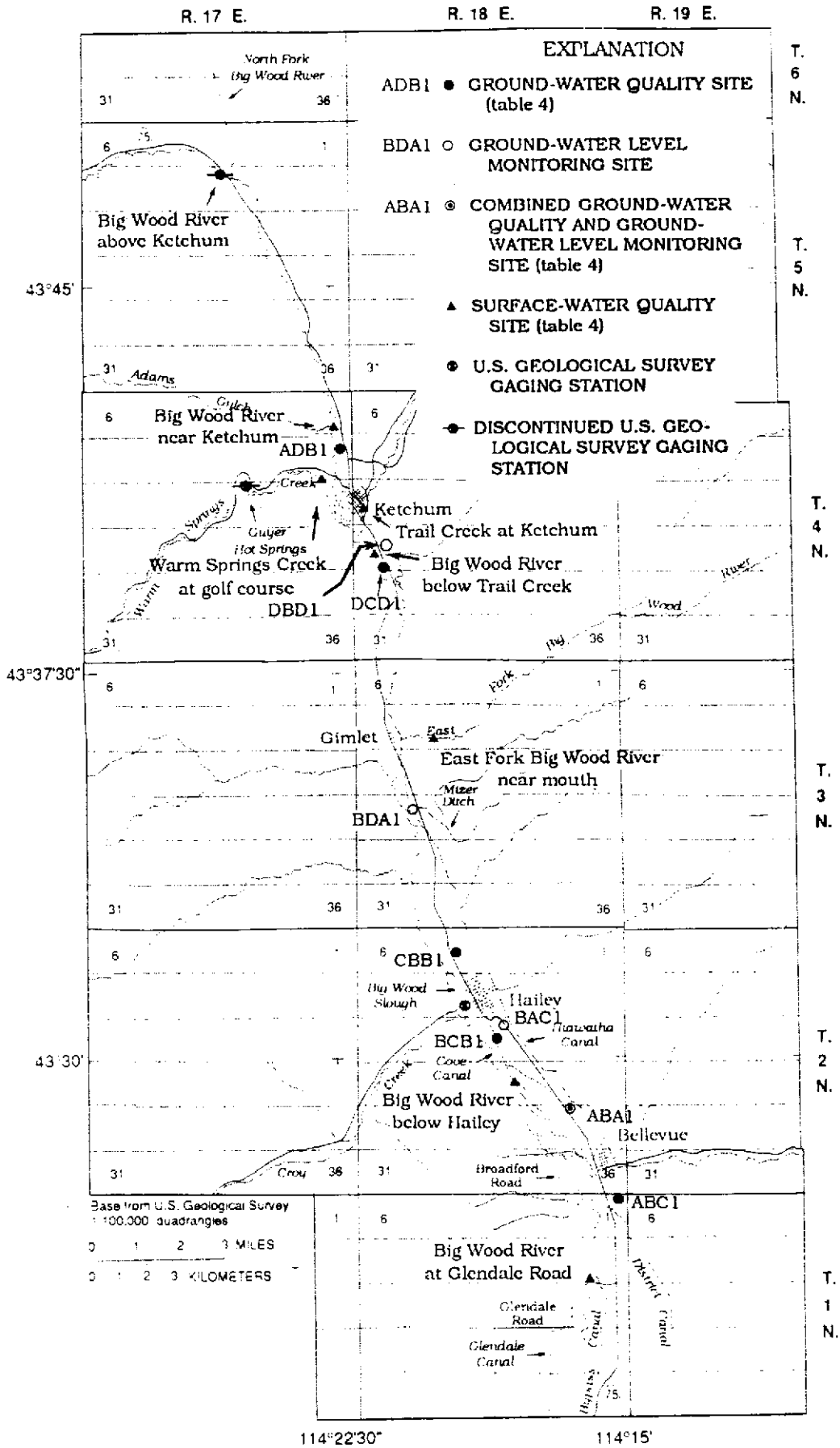


Figure 10.--Locations of water-quality and ground-water level monitoring sites.

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variations in discharge of the Big Wood River and indicate a hydraulic connection between the systems. Ground-water levels are elevated by recharge from water seeping from canals, river channels, and irrigated fields. Water levels in wells 4N-18E-19DBD1 and 3N-18E-20BDA1 and the Big Wood River respond to the spring snowmelt and relatively dry summers. Water levels in well 2N-18E-15BAC1 are affected by surface-water diversions into a lateral from Hiawatha Canal, within 600 ft of the well. The sustained high water level during summer 1986 coincides with the period of diversions into Hiawatha Canal. During 1987, more water was diverted into Hiawatha Canal than during 1986 (Water District #37 and Water District #37M, 1986, p. 31; 1987, p. 41). However, because of below-normal runoff during 1987, most of the water was allocated to downstream users (Water District #37 and Water District #37M, 1986, p. 10; 1987, p. 7), and little water probably was diverted into the lateral near well 2N-18E-15BAC1. Water levels in well 2N-18E-26ABA1 also are affected by surface-water diversions. Cove Canal is within 700 ft of the well, and an adjacent field is surface-water irrigated.

Water Quality

Water-quality data were collected during November 1986, March 1987, and August 1987 at seven surface-water sites and six ground-water sites above and below population centers (fig. 10). Sampling represented times when seasonal population was low, October through November, and when seasonal population was high, January through March. Samples were analyzed for nutrients (NO_2, NO_2+NO_3, and PO_4) and chloride to determine effects of upstream urban development and sewage disposal on ground- and surface-water quality, and for cadmium, lead, and zinc because of historical intensive mining in the region.

Specific conductance, pH, alkalinity, water temperature, and dissolved oxygen (surface water only) were measured onsite. Surface-water samples were collected by using cross-sectional and depth-integrating methods described by Guy and Norman (1970, p. 30-32). Ground-water samples were collected using methods described by Wood (1976, p. 4). Samples for laboratory analysis were filtered onsite through a 0.45-micrometer filter. Filters were rinsed with 250 mL (milliliters) of distilled water and 50 mL of sample water before being used to filter water to be analyzed. Samples for metals analysis were preserved with nitric acid. Samples for nutrient analysis were placed in an opaque bottle, preserved with mercuric chloride, and chilled. Water-quality data are shown in table 4. In general, concentrations of most constituents increased downgradient as a result of dissolution of minerals in soils and the aquifer.

Fluoride concentrations in surface and ground water ranged from 0.10 to 1.5 mg/L (table 4). Hem (1985, p. 120) noted that fluoride concentrations in most natural water are less than 1.0

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Table 4.--*Water-quality data*

[Site locations in figure 10; --, no data available; <, less than]

Site location	Date	Time (24-hour)	Water temperature (°C)		Alkalinity (mg/L as $CaCO_3$) Field	Alkalinity (mg/L as $CaCO_3$) Lab	Dissolved oxygen (mg/L)	Percent saturation	Solids, dissolved (mg/L)
				Surface Water					
Big Wood River above Ketchum	11- 4-86	1545	7.0	8.3	98	98	10.4	106	125
	3- 3-87	1615	3.5	8.4	102	102	10.7	--	120
Warm Springs Creek at golf course	11- 5-86	1300	9.5	8.6	105	105	10.2	111	151
	3- 4-87	1600	9.5	8.8	110	112	9.4	--	147
Trail Creek at Ketchum	11- 6-86	1200	5.0	8.5	188	192	11.2	110	242
	3- 5-87	1130	1.5	8.6	193	192	9.5	--	254
Big Wood River below Trail Creek	11- 3-86	1630	7.0	8.2	114	115	10.1	102	146
	3- 4-87	1300	5.0	8.6	117	116	11.0	--	144
East Fork Big Wood River near mouth	11- 6-86	0800	2.5	8.2	150	151	11.1	101	219
	3- 5-87	1000	.0	8.5	168	165	11.3	--	260
Big Wood River below Hailey	11- 3-86	1400	7.5	8.7	132	129	11.3	114	173
	3- 4-87	1030	3.5	8.5	137	133	11.7	--	171
Big Wood River at Glendale Road	11- 3-86	1130	7.0	8.6	135	135	11.1	110	175
	3- 3-87	1130	4.0	8.7	136	137	11.5	--	175

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Table 4.--*Water-quality data*--Continued

Site location	Date	Time (24-hour)	Specific conductance (µS/cm) Field	Specific conductance (µS/cm) Lab	Nitrite, dissolved (mg/L as N)	Nitrite + nitrate, dissolved (mg/L as N)	Ortho-phosphate, dissolved (mg/L as P)	Fluoride, dissolved (mg/L as F)
			Surface Water--Continued					
Big Wood River above Ketchum	11- 4-86	1545	211	209	<0.010	<0.100	<0.010	0.20
	3- 3-87	1615	209	194	<.010	<.100	<.010	.20
Warm Springs Creek at golf course	11- 5-86	1300	238	236	<.010	<.100	<.010	1.5
	3- 4-87	1600	228	245	<.010	<.100	<.010	1.4
Trail Creek at Ketchum	11- 6-86	1200	409	411	<.010	<.100	<.010	.10
	3- 5-87	1130	418	434	<.010	<.100	<.010	.20
Big Wood River below Trail Creek	11- 3-86	1630	234	246	<.010	<.100	<.010	.40
	3- 4-87	1300	234	253	<.010	<.100	<.010	.60
East Fork Big Wood River near mouth	11- 6-86	0800	354	357	<.010	<.100	<.010	.10
	3- 5-87	1000	403	426	<.010	<.100	<.010	.10
Big Wood River below Hailey	11- 3-86	1400	286	280	<.010	<.100	.010	.40
	3- 4-87	1030	282	299	<.010	.230	.021	.40
Big Wood River at Glendale Road	11- 3-86	1130	294	290	<.010	<.100	<.010	.40
	3- 3-87	1130	290	305	<.010	.190	<.010	.40

Table 4.--*Water-quality data*--Continued

Site location	Date	Time (24-hour)	Chloride, dissolved (mg/L as Cl)	Sulfate, dissolved (mg/L as SO_4)	Cadmium, dissolved (µg/L as Cd)	Lead, dissolved (µg/L as Pb)	Zinc, dissolved (µg/L as Zn)
			Surface Water--Continued				
Big Wood River above Ketchum	11- 4-86	1545	0.80	10	<1	<5	8
	3- 3-87	1615	1.2	13	--	--	--
Warm Springs Creek at golf course	11- 5-86	1300	2.0	12	<1	<5	4
	3- 4-87	1600	2.1	15	--	--	--
Trail Creek at Ketchum	11- 6-86	1200	1.5	46	<1	8	10
	3- 5-87	1130	2.6	52	--	--	--
Big Wood River below Trail Creek	11- 3-86	1630	1.2	14	<1	<5	8
	3- 4-87	1300	1.5	17	--	--	--
East Fork Big Wood River near mouth	11- 6-86	0800	1.5	43	<1	<5	9
	3- 5-87	1000	2.2	68	--	--	--
Big Wood River below Hailey	11- 3-86	1400	1.9	19	<1	5	17
	3- 4-87	1030	2.7	22	--	--	--
Big Wood River at Glendale Road	11- 3-86	1130	1.8	20	<1	<5	6
	3- 3-87	1130	2.9	23	--	--	--

Table 4.--*Water-quality data*--Continued

Site location	Date	Time (24-hour)	Water temperature (°C)	pH	Alkalinity (mg/L as $CaCO_3$) Field	Alkalinity (mg/L as $CaCO_3$) Lab	Solids dissolved (mg/L)
			Ground Water				
4N-17E-12ADB1	11- 5-86	0845	9.0	7.6	122	121	151
	3- 3-87	1545	7.0	7.8	117	117	137
	8- 5-87	1510	9.0	--	--	--	--
4N-18E-19DCD1	11- 5-86	1100	8.5	7.8	153	150	196
	3- 4-87	1520	4.5	7.8	150	149	187
2N-18E- 4CBB1	11- 4-86	1400	12.0	7.6	166	168	205
	3- 3-87	1430	9.5	7.8	165	163	193
	8- 5-87	1420	10.5	--	--	--	--
2N-18E-15BCB1	11- 4-86	1220	11.0	7.6	174	173	219
	3- 4-87	0945	10.0	7.6	184	181	213
	8- 5-87	1150	12.0	--	--	--	--
2N-18E-26ABA1	11- 4-86	0900	10.0	7.6	189	188	230
	3- 4-87	0900	11.0	7.7	184	182	210
	8- 5-87	1130	10.0	--	--	--	--
1N-18E- 1ABC1	11- 4-86	1030	12.5	7.6	140	140	170
	3- 3-87	1300	4.0	7.9	135	134	167
	8- 5-87	1345	12.0	--	--	--	--

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Table 4.--*Water-quality data*--Continued

Site location	Date	Time (24-hour)	Specific conductance (µS/cm) Field	Specific conductance (µS/cm) Lab	Nitrite, dissolved (mg/L as N)	Nitrite + nitrate, dissolved (mg/L as N)	Ortho-phosphate, dissolved (mg/L as P)	Fluoride, dissolved (mg/L as F)
			Ground Water--Continued					
4N-17E-12ADB1	11- 5-86	0845	234	248	<0.010	0.110	<0.010	0.20
	3- 3-87	1545	241	246	<.10	.140	<.010	.20
	8- 5-87	1510	239	--	--	--	--	--
4N-18E-19DCD1	11- 5-86	1100	326	332	<.010	.250	.010	.30
	3- 4-87	1520	325	334	<.010	.240	<.010	.40
2N-18E- 4CBB1	11- 4-87	1400	333	348	<.010	.450	<.010	.30
	3- 3-87	1430	330	348	<.010	.460	<.010	.30
	8- 5-87	1420	341	--	--	--	--	--
2N-18E-15BCB1	11- 4-86	1220	366	365	<.010	.970	.021	.30
	3- 4-87	0945	358	373	<.010	.530	<.010	.30
	8- 5-87	1150	370	--	--	--	--	--
2N-18E-26ABA1	11- 4-86	0900	381	388	<.010	1.40	.021	.20
	3- 4-87	0900	358	374	<.010	.750	.010	.20
	8- 5-87	1130	372	--	--	--	--	--
1N-18E- 1ABC1	11- 4-86	1030	295	300	<.010	.171	.010	.30
	3- 3-87	1300	277	301	<.010	.300	<.010	.30
	8- 5-87	1345	287	--	--	--	--	--

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Table 4.--*Water-quality data*--Continued

Site location	Date	Time (24-hour)	Chloride, dissolved (mg/L as Cl)	Sulfate, dissolved (mg/L as SO_4)	Cadmium, dissolved (µg/L as Cd)	Lead, dissolved (µg/L as Pb)	Zinc, dissolved (µg/L as Zn)
			Ground Water--Continued				
4N-17E-12ADB1	11- 5-86	0845	0.80	10	<1	<5	56
	3- 3-87	1545	1.0	13	--	--	--
	8- 5-87	1510	--	--	--	--	20
4N-18E-19DCD1	11- 5-86	1100	1.6	25	<1	5	5
	3- 4-87	1520	1.9	27	--	--	--
2N-18E- 4CBB1	11- 4-86	1400	1.8	15	<1	<5	26
	3- 3-87	1430	2.5	19	--	--	--
	8- 5-87	1420	--	--	--	--	20
2N-18E-15BCB1	11- 4-86	1220	3.7	17	1	5	219
	3- 4-87	0945	3.1	18	--	--	--
	8- 5-87	1150	--	--	--	--	120
2N-18E-26ABA1	11- 4-86	0900	2.7	15	<1	<5	120
	3- 4-87	0900	2.6	17	--	--	--
	8- 5-87	1130	--	--	--	--	100
1N-18E- 1ABC1	11- 4-86	1030	1.8	17	<1	<5	430
	3- 3-87	1300	2.4	21	--	--	--
	8- 5-87	1345	--	--	--	--	80

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mg/L. Warm Springs Creek was the only site where fluoride concentrations were greater than 0.60 mg/L. Fluoride concentrations as high as 16 mg/L were reported by Young and Mitchell (1973, p. 23) in thermal water from Guyer Hot Springs. Thermal water flowing from Guyer Hot Springs into Warm Springs Creek probably is the source for elevated fluoride concentrations.

Many constituents sampled were in concentrations less than analytical detection levels. Nutrient concentrations in surface water were near or below detection levels (table 4), which indicates insignificant changes in water quality due to upstream urban development and sewage disposal. Cadmium and lead concentrations were generally below detection levels, but zinc concentrations were as high as 430 µg/L (table 4). The drinking water standard for zinc is 5,000 µg/L (U.S. Environmental Protection Agency, 1986). The two highest zinc concentrations were detected in ground water immediately downgradient from Hailey and Bellevue during November 1986. Most ground-water quality sites were resampled in August 1987 to confirm previous analyses of zinc concentrations. The length of time wells were pumped prior to sample collection was approximately tripled from the November sampling. Zinc concentrations were lower in August, possibly because of the increased pumping time, which reduces the chance of contamination of the sample from contact with the well casing or with any galvanized pipe in the discharge line.

Ranges of nutrient data collected during this and previous studies are presented in table 5. Data from these reports and this study show that nutrient levels in the upper Big Wood River basin have not changed substantially during the past 30 years and that water quality is adequate for drinking and agricultural uses.

WATER YIELD

Water is supplied to the study area by precipitation and is discharged from the area by ET (evapotranspiration), by surface water in the Big Wood River and canals, by ground-water underflow, and by consumptive domestic uses. Yield is used in this report to represent the quantity of water leaving the upper Big Wood River basin or tributary and does not include ET from the mountainous areas. Yield was estimated by using the water-budget method as follows:

$$Y = ETR + ETC + ETP + SW + GW + CU \qquad (3)$$

where

ETR = ET from nonirrigated rangeland,
ETC = ET from irrigated crops,
ETP = ET from phreatophytes,
SW = discharge of the Big Wood River and canals,
GW = ground-water discharge (underflow), and
CU = consumptive use by domestic water users.

Table 5.--*Ranges of nutrient concentrations, 1959-87*

[--, no data available; <, less than]

Source	Nitrate as N (mg/L)		Orthophosphate as P (mg/L)	
	Ground water	Surface water	Ground water	Surface water
Smith (1959)	<0.1 - 3.0	0.4 - 0.6	--	--
Castelin and Winner (1975)	.1 - 1.4	<.1 - .2	--	--
Manuel and others (1978)	--	.1 - .4	--	<0.01 - 0.10
Luttrell and Brockway (1984)	.1 - 2.2	.3 - .7	<0.01 - 0.06	<.01 - .06
1986 to 1987	.1 - 1.4	<.1 - .2	<.01 - .02	<.01 - .02

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Water-budget components were calculated for each year from 1940 to 1979; the average annual yield is shown in table 6.

Previous studies were examined to determine appropriate ET rates for the water budget. Smith (1959, p. 22) used the following ET rates in his water budget for the Big Wood River: irrigated crops, 1.8 ft/yr; nonirrigated lands, 1.0 ft/yr; and phreatophytes, 3.5 ft/yr. Meyers (1962, p. 91) estimated that evaporation from small streams in the Snake River basin was about 2.7 to 2.9 ft/yr. Williams and Young (1982, p. 18) estimated ET rates of 1.0 to 1.3 ft/yr for several basins in southern Idaho where mean annual precipitation is similar to that on the Big Wood River basin floor. For this study, the following ET rates were assigned: irrigated crops, 1.8 ft/yr; nonirrigated rangeland, 1.0 ft/yr; and phreatophyptes, 2.5 to 3.5 ft/yr.

An empirical method of estimating yield was developed by Langbein (Nace and others, 1961, p. 36-47). This method is based on relations between (1) altitude and temperature, (2) temperature and potential ET, and (3) the ratio of potential ET to precipitation and the ratio of yield to potential ET. To calibrate this method for the upper Big Wood River basin, the temperature-altitude equation was adjusted to result in the correct mean annual temperature at Hailey. Langbein (Nace and others, 1961, p. 46) noted that yield is not entirely explained by climatic variables and the method needs to be tested by comparing results with local measurements of yield and, if necessary, adjusting the coefficients in the yield equation. For this study, the coefficient by which potential ET was multiplied was determined by comparing calculated average yields with mean annual discharges for the Big Wood River near Ketchum and Warm Springs Creek at Guyer Hot Springs for their respective periods of record. The equations as adapted for conditions in the upper Big Wood River area are:

$$t = -0.0035\ (\text{altitude}) + 62 \qquad (4)$$
$$PET = 0.73\ (t) - 12.25$$
$$Y = 0.75\ (P) - 0.59\ (PET)$$

where

t = mean annual temperature, in degrees Fahrenheit;
PET = potential evapotranspiration, in inches;
Y = annual water yield, in inches; and
P = annual precipitation, in inches.

To convert yield in inches to acre-feet, multiply by the basin area (in acres) and divide by 12.

Basin areas and mean altitudes were determined for North Fork Big Wood River, Warm Springs Creek, Trail Creek, and East Fork Big Wood River basin. Basin area and mean altitude for the Big Wood River near Ketchum were obtained from a report by Kjelstrom and

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Table 6.--*Ranges of water-yield estimates based on water years 1940-79*

[Values, in acre-feet per year, are rounded]

Water-budget component	Hailey			Glendale Road		
	Low	Average	High	Low	Average	High
ETR	18,000	21,000	24,000	24,000	27,000	30,000
ETC	2,800	3,200	3,600	6,700	7,300	7,900
ETP	5,000	6,000	7,000	8,500	10,000	12,000
SW	320,000	360,000	400,000	280,000	310,000	340,000
GW	5,900	13,000	25,000	22,000	59,000	120,000
CU	100	200	400	150	250	450
Total	350,000	400,000	460,000	340,000	410,000	510,000

ETR = ET from nonirrigated rangelands, 16,000 acres (Hailey), 20,000 acres (Glendale Road).

Low estimate: $-1/2$ standard deviation from average estimate.
High estimate: $+1/2$ standard deviation from average estimate.

ETC = ET from irrigated crops, determined by subtracting the quantity of diversions that bypass a reach from total diversions above the reach and multiplying by 0.1 to account for return flows and nonirrigation diversions included in the total.

Low estimate: $-1/2$ standard deviation from average estimate.
High estimate: $+1/2$ standard deviation from average estimate.

ETP = ET from phreatophytes, 2,000 acres (Hailey), 3,400 acres (Glendale Road).

Low estimate: 2.5 acre-ft/acre.
Average estimate: 3.0 acre-ft/acre.
High estimate: 3.5 acre-ft/acre.

SW = Discharge of the Big Wood River (gaged at Hailey) and canals. Average at Glendale Road estimated by adding SW, ETC, ETP, and GW at Hailey and subtracting ETC, ETP, and GW at Glendale Road.

Low estimate: -10 percent of average estimate.
High estimate: +10 percent of average estimate.

GW = Ground-water discharge based on the following characteristics:

	Low	Average	High
Hailey	K = 150 ft/d	300 ft/d	500 ft/d
	A = 820,000 ft^2	820,000 ft^2	820,000 ft^2
	h = 30 ft/mi	33 ft/mi	38 ft/mi
	f = 90 degrees	90 degrees	90 degrees
Glendale Road	K = 150 ft/d	300 ft/d	500 ft/d
	A = 3,300,000 ft^2	3,300,000 ft^2	3,300,000 ft^2
	h = 33 ft/mi	43 ft/mi	51 ft/mi
	f = 60 degrees	60 degrees	60 degrees

K = Hydraulic conductivity,
A = cross-sectional area of the aquifer,
h = hydraulic gradient, and
f = angle of flow through cross section.

CU = Consumptive use by domestic water users. Estimates based on consumptive use of water withdrawn for domestic and commercial use in Idaho (Solley and others, 1988, p. 17).

Moffatt (1981, p. 96). Basin areas and mean altitudes for other areas not listed above were determined but not separated other than to identify them as either above Hailey or between Hailey and Glendale Road. Basin areas, mean altitudes, and mean annual precipitation are shown in table 7.

Yield was calculated for the basin above Hailey and for the basin above Glendale Road. Yields at Hailey estimated by the water-budget method are compared graphically with gaged surface-water discharge at Hailey (fig. 11), which provides a useful measure for examining the reliability of estimated yields. Variations in surface-water discharge and estimated yield are similar because surface-water discharge is much larger than any other component included in yield estimates (fig. 12). Mean annual yield at Hailey, estimated using the water-budget method, was about 400,000 acre-ft and, using the Langbein method, was about 420,000 acre-ft (table 8). Mean annual surface-water discharge at Hailey, including diversions that bypass the gage, for the same period was 360,000 acre-ft. Mean annual yield at Glendale Road, estimated using the water-budget method, was 410,000 acre-ft and, using the Langbein method, was 460,000 acre-ft (table 8).

Average yield for 1940-79, estimated using the Langbein method, was greater than the average value of the water-budget method but was less than the high value shown in table 6. The results verify the Langbein method and indicate that it could be used if data for a water budget were not available. The water-budget method is probably more accurate because a large percentage of the water budget is surface water, which is measured rather than estimated.

The Langbein method is based on average climatic conditions and can be expected to produce reasonable results for years when climatic conditions are near average or over a long time period. When precipitation is extreme (low or high), this method does not produce reasonable results, such as in 1987 when precipitation was about half of average and was reflected by the subsequent low runoff (fig. 13).

During 1986, precipitation in the basin was about 7 in. (26 percent) above average. Yield for the basin above Glendale Road during 1986, estimated using the water-budget method, was 580,000 acre-ft and, using the Langbein method, was 660,000 acre-ft. Yield during 1987, estimated using the water-budget method, was 230,000 acre-ft and, using the Langbein method, was 94,000 acre-ft.

Tributary Yield

Yields were estimated for three major tributary basins in the study area. Few historical discharge data were available for

Table 7.--*Drainage areas, mean altitudes, and mean annual precipitation for various parts of the upper Big Wood River basin*

Drainage	Area (square miles)	Mean altitude (feet above sea level)	Mean annual precipitation (inches)
Big Wood River near Ketchum	137	8,120	31
North Fork Big Wood River	40	8,630	33
Trail Creek	65	8,120	31
Warm Springs Creek	96	7,660	28
East Fork Big Wood River	85	7,870	29
Valley floor	36	5,800	17
Other	177	7,120	25
Total above Hailey	636	7,640	28
Hailey to Glendale Road	105	6,500	22
South valley floor	11	5,100	15
Total above Glendale Road	752	7,440	27

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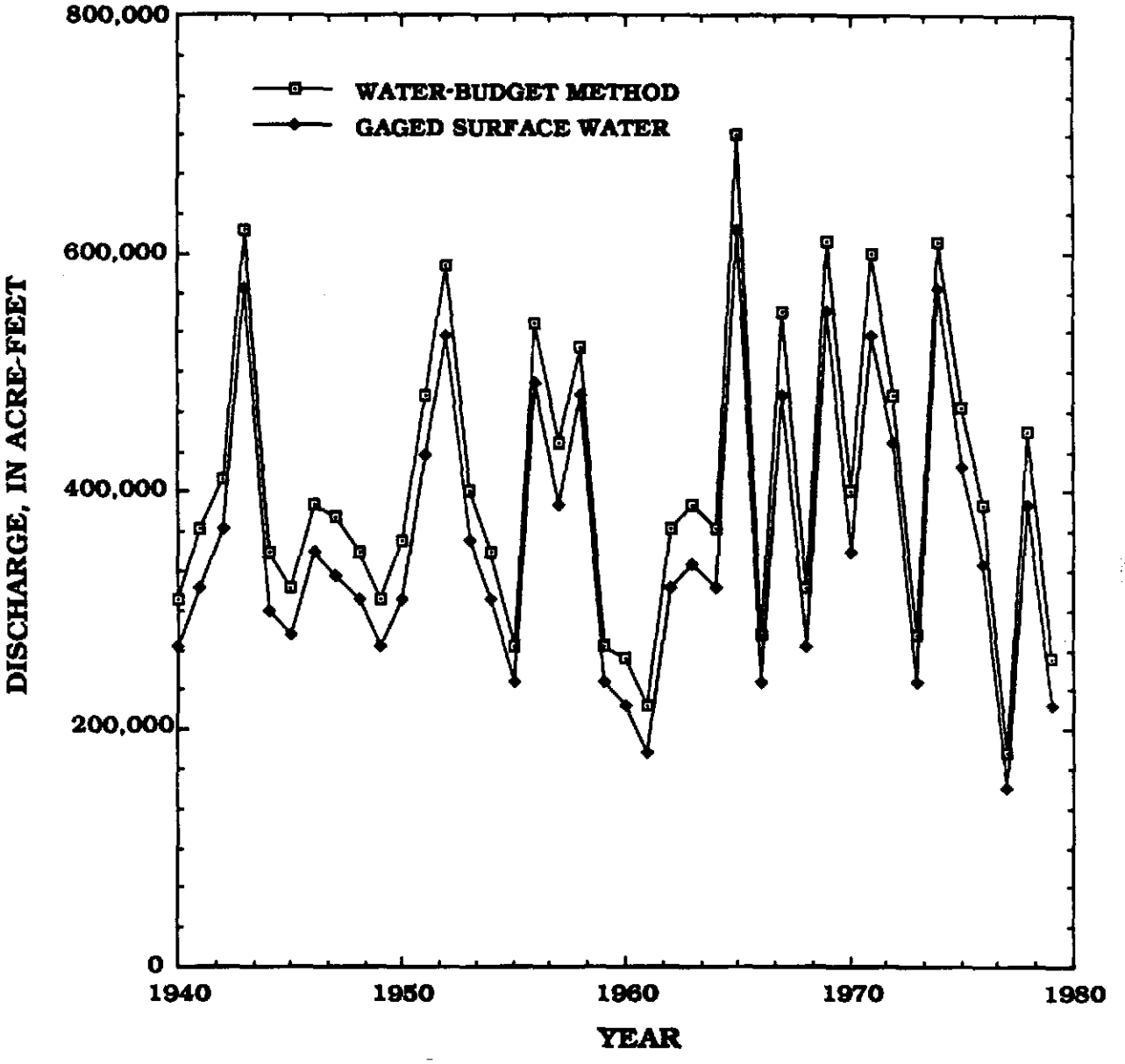


Figure 11.--Yield estimated by water-budget method and gaged surface-water discharge at Hailey, 1940-79.

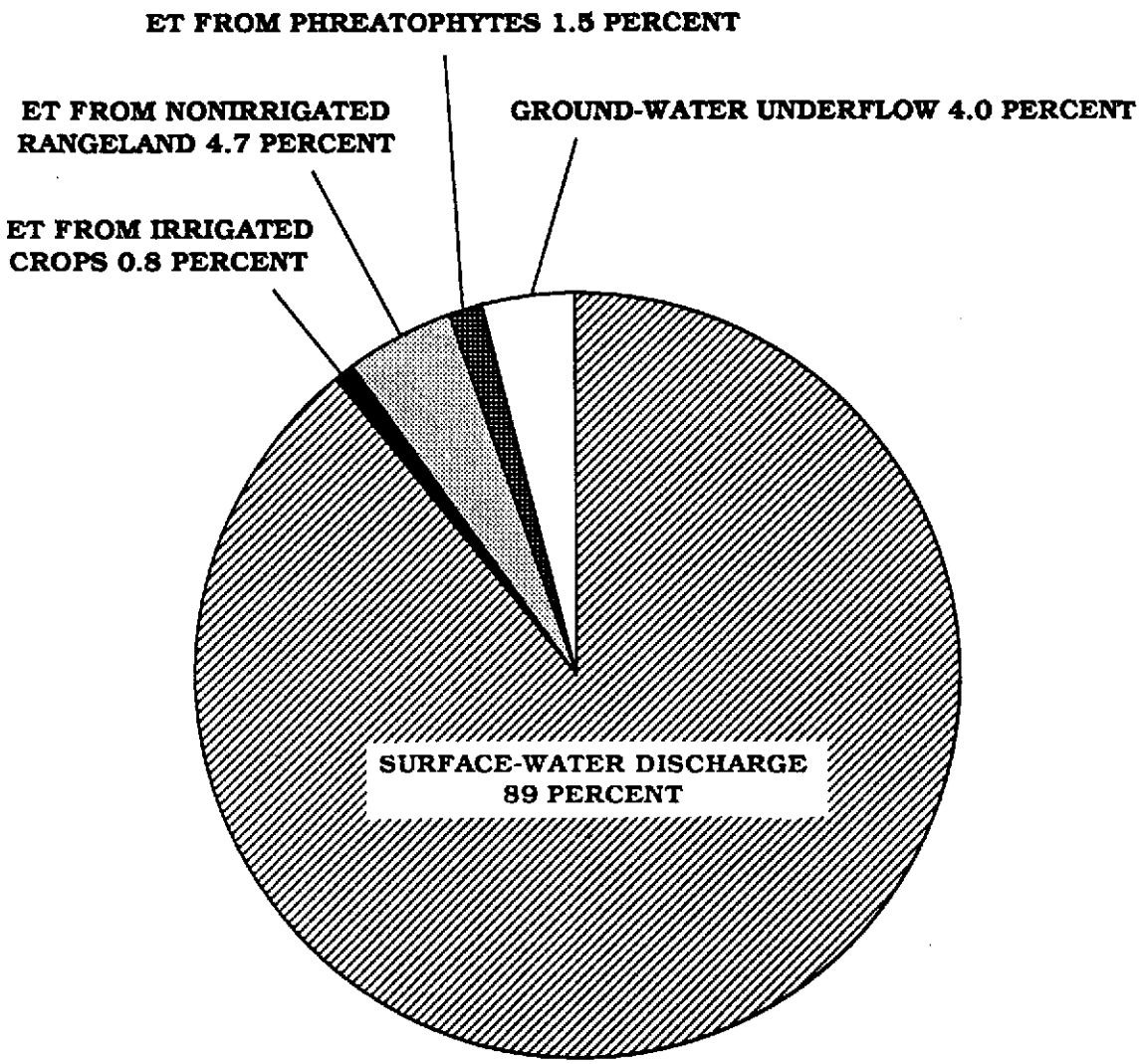


Figure 12.--Relative percentage of water-budget components for yield from basin above Hailey.

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Table 8.--*Estimated water yield and standard deviation of average estimates*

Location and period of estimate	Water-budget method (acre-feet)	Langbein (1961) method (acre-feet)
Above Hailey		
1940-79	400,000	420,000
Standard deviation	120,000	100,000
1986	560,000	590,000
1987	220,000	110,000
Above Glendale Road		
1940-79	410,000	460,000
Standard deviation	120,000	120,000
1986	580,000	660,000
1987	230,000	94,000

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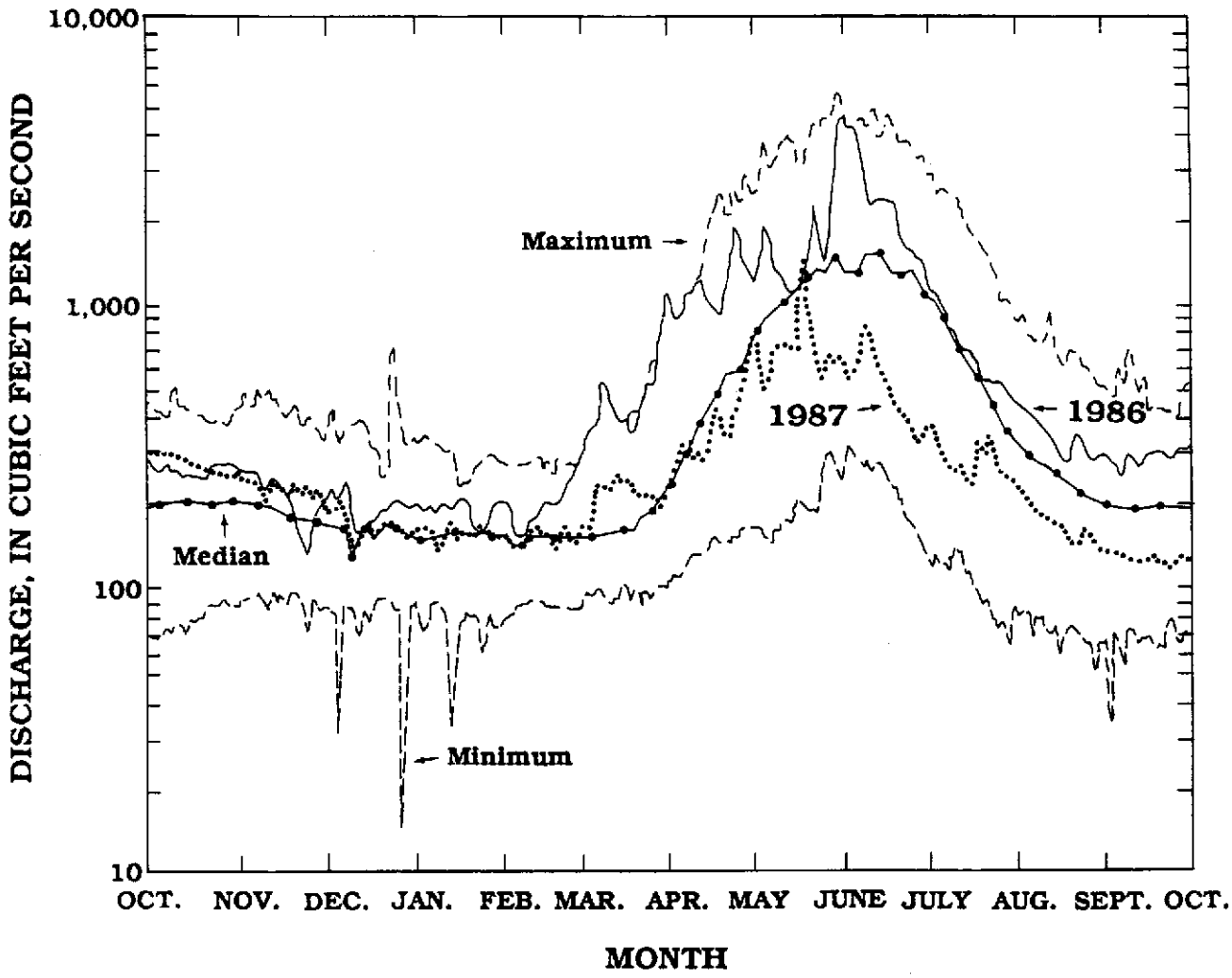


Figure 13.--Maximum, median, and minimum mean daily discharge of the Big Wood River at Hailey, water years 1915-86, compared with mean daily discharge during water years 1986 and 1987.

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Trail Creek and East Fork Big Wood River; a continuous record of discharge for Warm Springs Creek was collected from 1940 to 1958. During 1986 and 1987, tributary basin yields were calculated from monthly discharge measurements. The Riggs (1969) method correlates monthly discharge measurements on ungaged streams to mean daily discharge on gaged streams for the date of the discharge measurement. The ratio of daily discharges on ungaged and gaged streams is used to calculate monthly mean discharge for the ungaged stream from the monthly mean discharge of the gaged stream. Monthly mean discharges are summed for the year and divided by 12 to give the mean annual surface-water discharge. The mean annual surface-water discharge from a basin is equal to the basin yield where ground-water underflow is insignificant. Ground-water underflow from Trail Creek, Warm Springs Creek, and East Fork Big Wood River is probably small. Smith (1960, p. 34) estimated that underflow at the Warm Springs Creek gaging station was less than 1 percent of the yield.

Gaging stations used in the Riggs method of calculating yield for Warm Springs Creek, Trail Creek, and East Fork Big Wood River were Big Wood River at Hailey and North Fork Big Lost River at Wild Horse. Accuracy of the Riggs method depends on the hydrologic similarity of gaged and ungaged basins. The North Fork Big Lost River basin (114 mi^2) is adjacent to the headwaters of Trail Creek and has a mean altitude of 8,540 ft.

Tributary yields were calculated for the 1986 and 1987 water years and are shown in table 9. In 1986, the yields from Trail Creek, Warm Springs Creek, and East Fork Big Wood River were about 61,000, 83,000, and 60,000 acre-ft, respectively. In 1987, the yields were about 26,000, 32,000, and 28,000 acre-ft. The average annual yield from the tributaries was estimated from the 1986 and 1987 yields and the percentage of average precipitation during those water years. The average annual yields (reported to 1 significant figure) from Trail Creek, Warm Springs Creek, and East Fork Big Wood River were about 50,000, 60,000, and 50,000 acre-ft, respectively.

SUMMARY

The water resources of the upper Big Wood River basin were studied to provide water planners and managers with tools to evaluate their present water-use policies and to help make future water-management decisions.

Availability of surface and ground water varies seasonally; the greatest quantity is available during spring snowmelt, and the least is available during mid- to late winter. Results of a seepage study conducted during August 1986 showed that the Big Wood River gained water from the ground-water system from Ketchum to below Hailey and lost water to the ground-water system from below Hailey to Glendale Road

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Table 9.--*Estimated water yield and precipitation for upper Big Wood River basin tributaries during 1986 and 1987*

[Yield in acre-feet per year; precipitation in inches]

	Trail Creek	Warm Springs Creek	East Fork Big Wood River
		1986	
Riggs (1969) method			
(1)	60,000	78,000	56,000
(2)	64,000	88,000	64,000
Average	61,000	83,000	60,000
Precipitation	38	35	36
Percentage of 1940-79[3]	123	125	124
		1987	
Riggs (1969) method			
(1)	25,000	30,000	27,000
(2)	26,000	35,000	28,000
Average	26,000	32,000	28,000
Precipitation	18	15	16
Percentage of 1940-79[3]	58	54	55

[1]Correlated using streamflow data from Big Wood River at Hailey.
[2]Correlated using streamflow data from Big Lost River at Wildhorse.
[3]Estimated from snow course data and precipitation-altitude relation shown in figure 4.

Water-quality data showed that nutrient concentrations in surface and ground water were near or below detection levels, which indicated negligible changes in water quality due to upstream urban development and sewage disposal. Fluoride concentrations were elevated in Warm Springs Creek, probably due to inflow of thermal water from Guyer Hot Springs.

Mean annual water yield for the upper Big Wood River basin above Glendale Road, estimated by using a water-budget method, was 410,000 acre-ft and, by using an empirical method, was 460,000 acre-ft. Yield estimated by using the water-budget method is probably more accurate because a large percentage of the water budget is surface water, which is measured rather than estimated. Yield estimated by using the water-budget method was 580,000 acre-ft during 1986 and 230,000 acre-ft during 1987.

During 1986 and 1987, yields from tributary basins were calculated on the basis of monthly discharge measurements. Yields during 1986 for Trail Creek, Warm Springs Creek, and East Fork Big Wood River were 61,000, 83,000, and 60,000 acre-ft; and during 1987, were 26,000, 32,000, and 28,000 acre-ft for the respective basins. Mean annual yields for Trail Creek, Warm Springs Creek, and East Fork Big Wood River, estimated using 1986 and 1987 yields and the percentage of average precipitation during those water years, were 50,000, 60,000, and 50,000 acre-ft, respectively.

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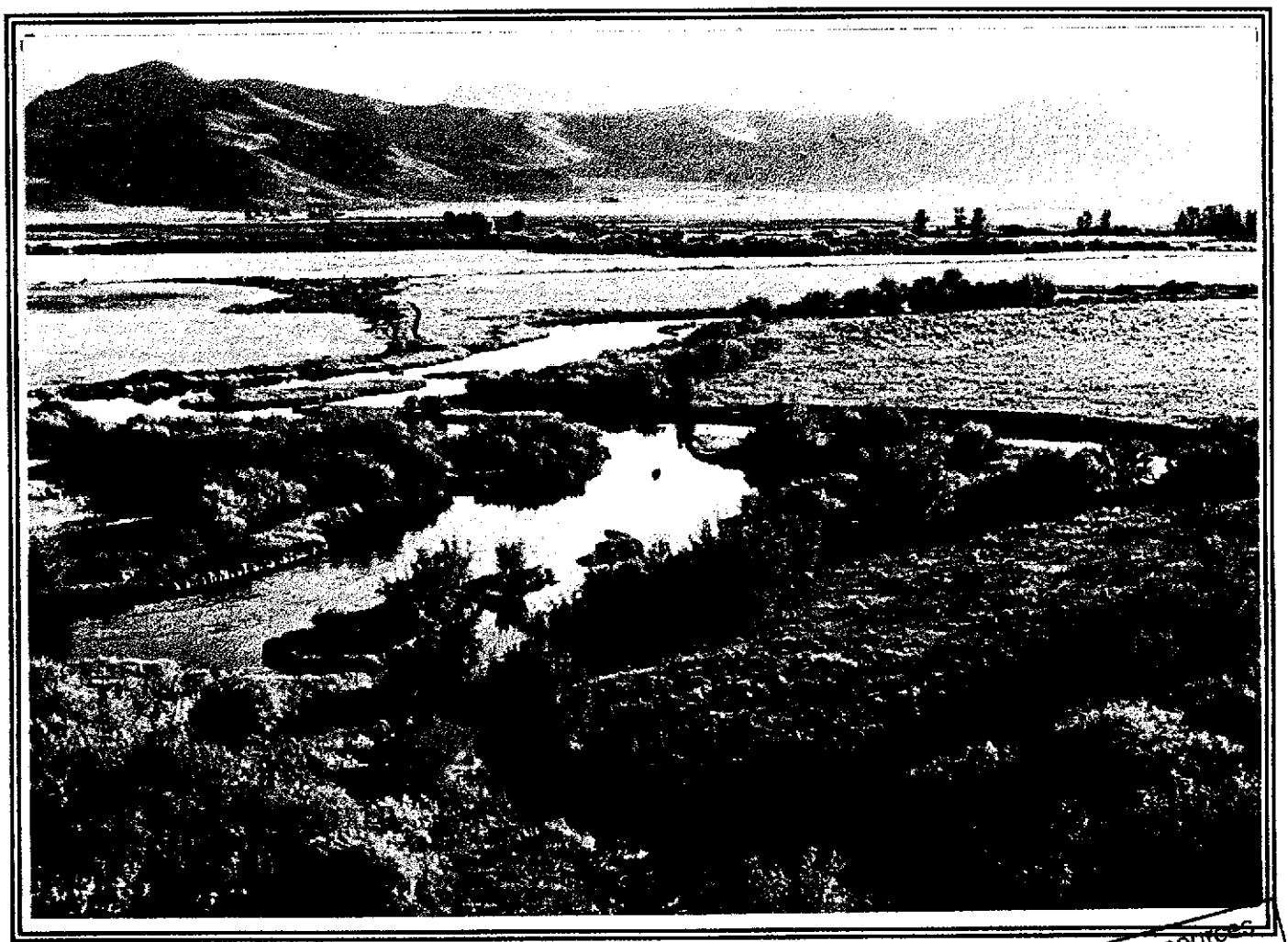
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Hydrologic Evaluation of The Big Wood River and Silver Creek Watersheds

Phase I
Final Report

submitted to

The Nature Conservancy of Idaho



by

C.E. Brockway, Ph.D.

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University of Idaho

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Kimberly Research and Extension Center

Department of Water Resources
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HYDROLOGIC EVALUATION OF THE BIG WOOD RIVER - SILVER CREEK WATERSHEDS

PHASE 1
FINAL REPORT

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ABSTRACT

The complex geologic and hydrologic watersheds of the Big Wood River and Silver Creek in Blaine county have successfully served the needs of the diversified interest groups since 1881. However, continued population expansion and changes in irrigation technology, climate, and in land use have altered the water resource needs and uses. As a result, Idaho's world famous Silver Creek is experiencing decreases in flow and the very existance of the habitat the creek supports is threatened. This study was conducted to collect essential data for the hydrologic evaluation of the Big Wood River-Silver Creek Watershed and to provide a data set for the development of a ground water model. The following data were collected in this phase of the study: 1) ground water levels; 2) surface stream flows; 3) irrigation pumping volumes; 4) irrigation diversions; 5) ground water recharge volumes; 6) precipitation; 7) land use, source, and type of irrigation; 8) historical flow records of the Big Wood River; and 9) historical flow records of Silver Creek. In general, ground water levels rise and fall in response to recharge and discharge from the aquifer. However, water level fluctuation patterns and magnitudes are different at different locations of the aquifer system. Also the irrigation wells exhibit larger fluctuations in water levels than the artesian wells. A 15 foot fluctuation in the water level of the Eakin well, about 3.5 miles south of Bellevue, was observed during the year 1993 compared to a 2.5 foot difference in pressure head in the Punkin Center artesian well near Highway 20. Ground water depth measurements on 18 wells with historical records show a general decrease in water levels of more than one foot during the period from 1975 to 1993. Ground water use in the study area is increasing. Water withdrawals from pumped irrigation wells have almost doubled since 1975. Of the total of 28,500 irrigated acres in the study area, about 47% are irrigated from canals and 53% are ground water irrigated including approximately 1500 acres of

sub-irrigated land. About 74% of the irrigated area is sprinkler irrigated, and 21% receives water by gravity irrigation. Five percent (5%) is currently sub-irrigated. The major crops grown in the study area are irrigated pasture, barley, and alfalfa. Irrigated area has not increased appreciably since 1975. The study areas for the 1975 report included area only as for north of Bellevue. This study includes lands up to and including Hailey. Therefore, irrigated acreage are not directly comparable. The percent of sprinkler irrigated area has increased from 13 percent in 1975 to 74 percent in 1993. Total amount of canal water diverted directly from the Big Wood River to the study area during the irrigation season of 1993 was 92,240 acre feet. Annual precipitation is highly variable with a recorded maximum of 20 inches at Picabo in 1983 and a minimum of 7.8 inches in 1982. The mean annual precipitation at Picabo for the period of record is 13.26 inches. Seasonal and annual flows in the Big Wood River and Silver Creek are highly variable. The average annual flow in the Big Wood River at Hailey has varied from less than 100 cfs in 1931 to more than 800 cfs in 1983. Average annual flow in the Silver Creek below Picabo after 1930 was reasonably constant at about 160 cfs. However, flow in the creek decreased markedly after 1987 and averaged below 120 cfs from 1988 to 1993. A tentative water budget for the aquifer system indicates that approximately 200,000 acre feet of water pass through the aquifer system each year. The USGS MODFLOW ground water model code was selected for use in the second phase of the study. The field data collected in the first phase of the study is adequate to draw initial conclusions about the aquifer system and to provide a core data set for the development of a ground water flow model. The second phase of the study will focus on the development of a three dimensional ground water flow model and evaluation of several "what if" scenerios.

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INTRODUCTION

Problem Statement

The Big Wood River and Silver Creek area, is a complex geologic and hydrologic basin. This watershed in Blaine County has provided water supplies for domestic use and irrigation since 1881 and helped to retain the habitat and quality of life in the Wood River valley for many years.

However, continued population expansion, changes in irrigation technology, climatic variations, environmental and other changes in land use have altered the water resource needs and supplies in this watershed, especially in the last twenty years. Several droughts, including the 1977 single year event and the most recent period from 1987-1992, during which runoff averaged about 60 percent of normal on the Big Wood River have further aggravated the delicate water situation. Consequently, Idaho's world famous Silver Creek, known primarily for its slow-moving, crystal clear water supporting an abundance of life such as blue ribbon and rainbow and brown trout, bald and golden eagles, sandhill cranes, hawks, and deer is experiencing decreases in flow. Recent low flow during hot summer days has caused elevated water temperatures and dissolved oxygen depletion resulting in a fish kill for the first time in history. The Nature Conservancy, managers of the Silver Creek Preserve, and the irrigators of the Big Wood River-Silver Creek watersheds have expressed their concern about the declining flows and water table levels. They have expressed a need for a hydrological study to define the aquifer system interaction and responses to increased demand.

Therefore, a hydrologic evaluation study consisting of three phases was proposed by the University of Idaho under the auspices of the Nature Conservancy

of Idaho and the Idaho Water Resources Research Institute. The purpose of phase 1 of the study was to collect hydrological, geological, meteorological and land use data and evaluate the aquifer system responses to various changes. The second phase of the study was to develop a three dimensional ground water flow model for the multi-layer aquifer system, using the data collected in the first phase of the study. The developed ground water model then will be used to evaluate many "what if" scenarios for the better management of water resources. Another objective of this study was to develop data management routines for the ground water model tailored for the agencies and personnel intended to use the model.

The first phase of the hydrologic study of the Big Wood River-Silver Creek watershed commenced in January 1993 under a cooperative agreement between The Nature Conservancy and the University of Idaho Water Resources Research Institute. Field work on phase 1 of the study began during April 1993 and was completed during the summer of 1994.

Study Objectives

Management of the system to accommodate additional demands along with decreased stream flows requires a precise knowledge of the hydrologic system interactions and responses if these streams and habitats are to retain the quality that has been the standard for so many years. Since the studies conducted by the University of Idaho and US. Geological Survey about twenty years ago, changes in the land and water use and natural recharge have significantly altered the water balance and aquifer-stream relationships. The objectives of this hydrologic study were to develop a basic understanding of the hydrologic interactions of water sources, stream-aquifer systems, and effects of natural system changes and man-induced land use changes. Collection of field data for the development of a ground water flow model constituted a major part of phase 1 study. Preliminary

selection of an operational 3-D ground-water flow model to assist in evaluating response of the system to actual or projected changes in recharge due to man-induced factors or short and long term climatic effects was also an objective. The specific objectives of phase 1 studies were the following:

1) To collect, review, and document the hydrological, geological, meteorological and land use data of previous studies conducted by various entities.

2) To establish surface water and ground water monitoring networks and collect field hydrogeological, meteorological, and land use data for subsequent development of a predictive 3-D ground water model of the basin.

3) To develop a tentative current conditions water budget for the aquifer system of the Big Wood River-Silver Creek area.

4) To make a provisional selection of a ground water flow model including necessary subroutines and structure the collected data in a compatible format for entering into the model.

Scope of Work of Phase 1

The scope of work included the review and collection of long term water resources data from previous studies, particularly those conducted by the University of Idaho and US. Geological Survey. Data on aquifer parameters such as tranmissivity and geologic cross-section were also collected. Ground water and surface water monitoring networks were established to collect essential data on ground water elevations and surface water discharges for the subsequent development of a ground-water flow model. The major components of phase 1 study included: 1) the collection of hydrologic and geologic data, 2) design and

layout of a ground water monitoring network, 3) design and layout of a surface water monitoring network, 4) mass measurements of ground-water levels, 5) stream flow data, 6) measurement of irrigation pumpage volumes, 7) ground water recharge through recharge pits, 8) land use data, 9) precipitation and snow melt data, 10) historical flow records for the Big Wood River at Hailey and Bellevue, 11) historical flow records for the Silver Creek at the old gauging station below Picabo and at Sportsman's Access, 13) development of a tentative current condition water budget for the aquifer system of the Big Wood River-Silver Creek area for the irrigation season of 1993, 14) development of a computer data base for the collected data, 15) selection of a ground water model code, and 16) preparation of a final report for phase 1 of the study.

STUDY AREA

Location

Figure 1 shows the study area, which includes the Big Wood River Valley from Hailey to Stanton Crossing and the Silver Creek drainage south to Priest Road approximately 2.5 miles south of Picabo. The Big Wood River flows along the western edge and exits the study area at the southwest corner. Silver Creek, fed by numerous springs, runs through the study area and exits past Picabo to the southeast. It is bounded by mountains and low hills. The cities of Bellevue and Hailey are located at the north part of the study area, and two small communities, Gannett and Picabo, are located in the southern part of the study area.

The economy of the study area is primarily agricultural. Several small subdivisions have developed near the Big Wood River south of Bellevue. Due to the proximity of the study area to the Sun Valley ski resort and recreational activities in the Silver Creek area, tourism contributes to the economy of the

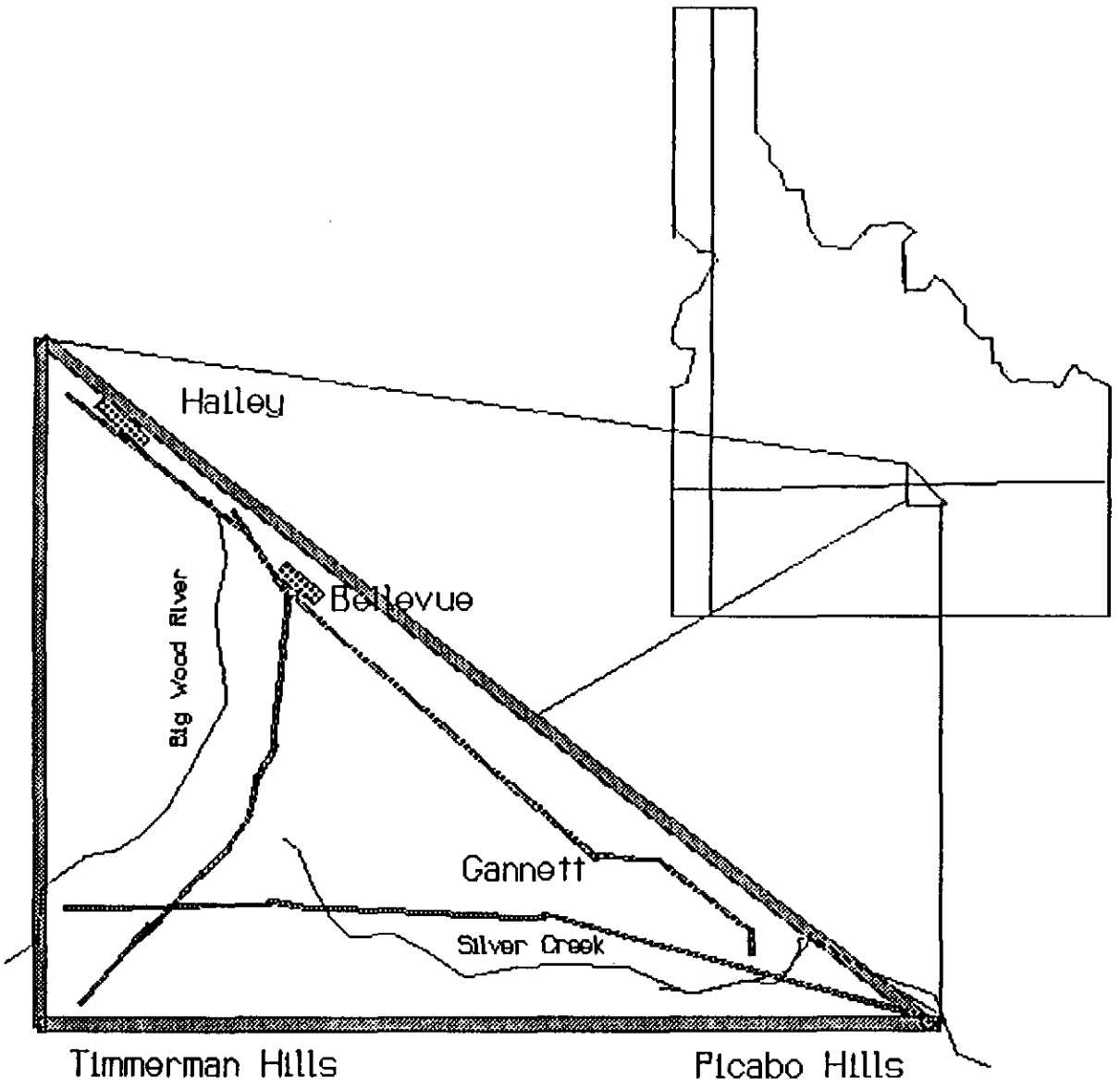


Figure 1. Location Of Study Area

valley. These and other recreational opportunities in the valley have resulted in rapid growth within the study area and significant changes in water resource use in the valley.

Climate

Climate in the study area is characteristic of a semi-arid mountain valley. Precipitation and humidity are relatively low. The evaporation rate is relatively high, and days of sunshine are numerous. Winters can be long and severe, and summers are short and cool. The mean annual temperature is 43.3°F, with the mean monthly maximum of 67°F occurring in July and the mean monthly minimum of 18.7°F occurring in January (Brockway and Grover, 1978).

Precipitation at Hailey, at the northern end of the study area, averages 15.38 inches annually and precipitation at Picabo, near the southern end, averages 13.26 inches. Only 23 percent of annual precipitation occurs during the 131 day frost free growing season.

Crops

The main agricultural activity in the study area is irrigated farming. Irrigation has been practiced in this area since 1880. Currently, about 35,000 acres are under cultivation. The main crops grown include pasture, small grains, and forage. Alfalfa is predominant in the northern part of the study area and wheat, barley, and oats predominate in the south. Irrigated and non-irrigated pasture is found throughout the study area.

The source of irrigation in the valley is water from the Big Wood River and the Silver Creek. Ground water development to supply water to lands that do not have surface supplies or supplement the canal supply is ever increasing. Land

owners have converted and are continuing to convert from flood irrigation to labor efficient sprinkler irrigation.

Cattle are raised on hay and natural pasture in the valley. About half the income of the area is derived from livestock (Smith, 1960).

GEOLOGY

History of Valley-Fill Deposition

The Big Wood River valley is a structural depression that has been filled with sediments. During Pliocene time the Big Wood River flowed through the southeastern gap near the present town of Picabo. Basalt flows of the Challis Volcanics in the Pleistocene epoch blocked the southeast channel forming a lake that resulted in graded deposition of sediments from coarse to fine grained down the valley. Eventually, the increasing lake elevation caused the river to breach at the southwest outlet near Stanton Crossing at the location of the present channel of Big Wood River (Brockway and Grover, 1978).

A second basalt flow dammed the southwest outlet forming a new lake and forcing the Big Wood River to again flow through the southeast outlet. This sequence apparently occurred several times with lakes forming periodically. Periods of alpine glaciation in the headwaters of Big Wood River were concurrent with the formation of lakes and caused deposition of coarse grained, poorly sorted materials over the valley. This sequence of events caused the deposition of alternate layers of coarse and fined grained sediments that comprise the aquifer system (Brockway and Grover, 1978).

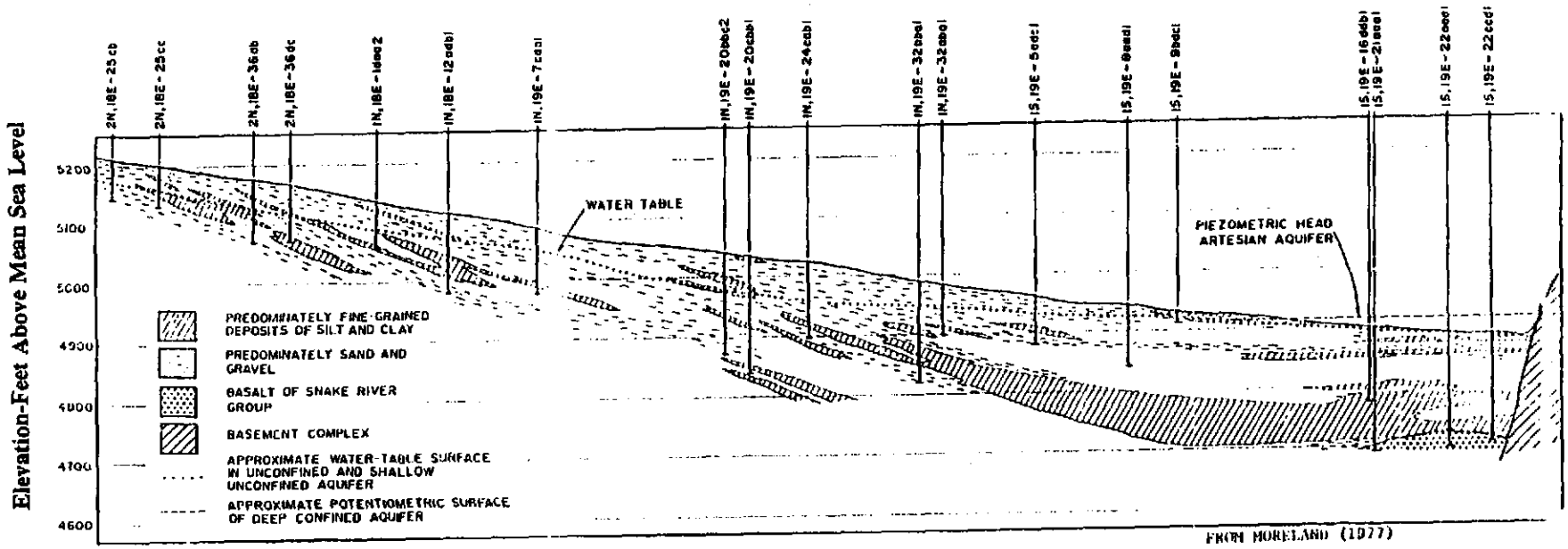
The slope of the valley floor increases from south to north with a low topographic divide between the Big Wood River and Silver Creek drainage. High

ground water levels eventually formed surface springs in the southern part of the area. These spring-fed streams combined to form Silver Creek which now flows southeastward and out of the area.

Lithology

The valley is filled to depths of as much as 500 ft with a sequence of interbeded clay, silt, sand, and gravel of Pleistocene and Holocene age. This valley fill is the primary source of ground water in the area. To understand ground water flow patterns in the valley, an understanding of formation characteristics is essential. To define the lithology of the valley fill, Moreland (1977) collected and analyzed driller's logs of wells within the study area. Additional test holes were machine augured at 10 sites in the southern part of the study area to supplement the available information. On the basis of this data, Moreland concluded that the northern part of the valley is underlain by predominately coarse sand and gravel. However, a few thin and discontinuous deposits of fine-grained materials are present. Due to the limited aerial extent of fine-grained material, confinement of ground water is limited. In the central part of the basin, more fine-grained sediments containing sand and gravel are evident. The fine-grained sediments are extensive enough to provide confinement especially south of Baseline Road. Continuous layers were found below depths of about 150 ft. The amount of fine-grained material increases to the south, and confinement of water below these layers is indicated in all of the southern part of the valley from Hayspur Fish Hatchery to Stanton Crossing. South of Highway 20, sand and gravel forms less than 25 percent of the total thickness of the fill material. Basalts of the Challis volcanics interfinger with sediments along the southern boundary of the area. A detailed cross-section of the valley fills is shown in Figure 2 (Moreland, 1977).

Figure 2. Geologic Cross Section of Big Wood River-Silver Creek Area (north to south)



GROUND WATER

Aquifer Characteristics

Good quality ground water is available in the fluvioglacial sediments and basalt from both the confined and unconfined aquifers. Unconfined or water table conditions exist in most of the study area and confined or artesian conditions exist in the southern part of the study area. Ground water is the major source of water to meet domestic and stock water needs and serves both primary and supplemental irrigation needs. Numerous springs fed by the ground water sustain Silver Creek and its habitat.

Land owners started using the ground water for irrigation in the early 1940's (Castelin and Chapman, 1972). Development of modern wells started in 1947. Moreland (1977) reported that in 1975 there were 60 irrigation pumping wells and 50 flowing artesian wells in the study area. However, in Moreland's determination of ground water use, he reported only 48 pumped irrigation wells and 30 flowing artesian wells. These wells are generally used to supplement the canal irrigation supplies; however, many of these wells serve as the only source of irrigation water. The rapid development of irrigation wells and declining water levels in the study area and throughout the valley has resulted in a moratorium on drilling of new wells.

Aquifer Transmissivity

Information on transmissivity of an aquifer constitutes an integral part of a hydrologic model. Therefore, attempts are always made to provide a reasonably good estimate of transmissivity for the initial runs of the ground water model. Moreland (1977) used the published data of Smith (1959) and Thomason (1960)

and estimated the transmissivities of the water table and artesian aquifers of the study area. Tranmissivity of the water table aquifer in the northern part of the study area near Bellevue ranged from 30,000 to 70,000 ft^2/day. The highest aquifer transmissivity of 300,000 ft^2/day was found in the area northwest of Gannett indicating the presence of coarse sand and gravel. South of Baseline Road, in the artesian area with confining beds of low hydraulic conductivity, transmissivity is generally less than 30,000 ft^2/day. West of the intersection of Baseline Road and Highway 75 in the artesian area, the transmissivity is 70,000 ft^2/day. Transmissivities in the southeastern part are highly variable from location to location, ranging from 7,000 to 30,000 ft^2/day. The estimate of transmissivity in the northwest area was up to 30,000 ft^2/day (Moreland, 1977).

Ground Water Movement

Ground water in the study area moves from areas of higher altitude to areas of lower altitude, with the rate of movement depending upon the slope and transmissivity of the aquifer. By contouring the potentiometric surface, the direction of flow, which is at right angles to contour lines, can be determined. Adequate data on water levels and pressure heads in the study area are available. Four sets of these data were collected as part of this study and will be utlized for flow pattern analysis and model calibration phase of the study. However, the complex aquifer system of the valley presents many problems in defining the ground water flow patterns.

In the northern part of the valley, ground water moves in a southerly direction. In shallow systems, ground water movement follows the surface drainage, moving southwest towards Stanton Crossing or southeast towards Picabo (Moreland, 1977). The deeper ground water that moves toward Silver Creek flows eastward through the confined aquifer toward the basalt aquifer underlying the

southeastern part of the valley. The ground water in the basalt aquifer flows southward and eastward towards Picabo and out of the study area.

Ground Water Fluctuations

Ground water levels in the study area rise and fall in response to recharge and discharge from the aquifer. Hydrographs of selected wells in the study area illustrate the pattern and magnitude of water level fluctuation. Magnitudes of water level fluctuations vary in different parts of study area aquifer. In general, water levels rise in late spring in response to recharge from snow melt and flood flows in the Big Wood River and continue to rise through early summer as the irrigation water recharges the aquifer. From about July on, water levels decline as ground water flows to the south into the aquifer and irrigation recharge declines. Maximum fluctuations in ground water levels take place in the Poverty Flats and Picabo areas (36 and 18 feet, respectively). Minimum fluctuation of 5 to 10 feet in water levels generally occur throughout the southern part of the area.

Recharge

The major sources of recharge to ground water are irrigation, snow melt, and precipitation. A significant contribution to recharge is made by the percolation of excess irrigation water applied to crops, leakage from canals and ditches, and seepage in the northern part of Big Wood River channel and tributary streams. Under-flow through the alluvial fill in the Big Wood canyon upstream from Bellevue is another major source of ground water to the valley (Moreland, 1977 and Brockway and Grover, 1978). Land owners also divert surplus canal water to the designated pits to recharge the aquifer. Most of this recharge water is diverted during the later part of summer when most of the crops have been harvested.

PROCEDURE

Ground Water Level Measurements

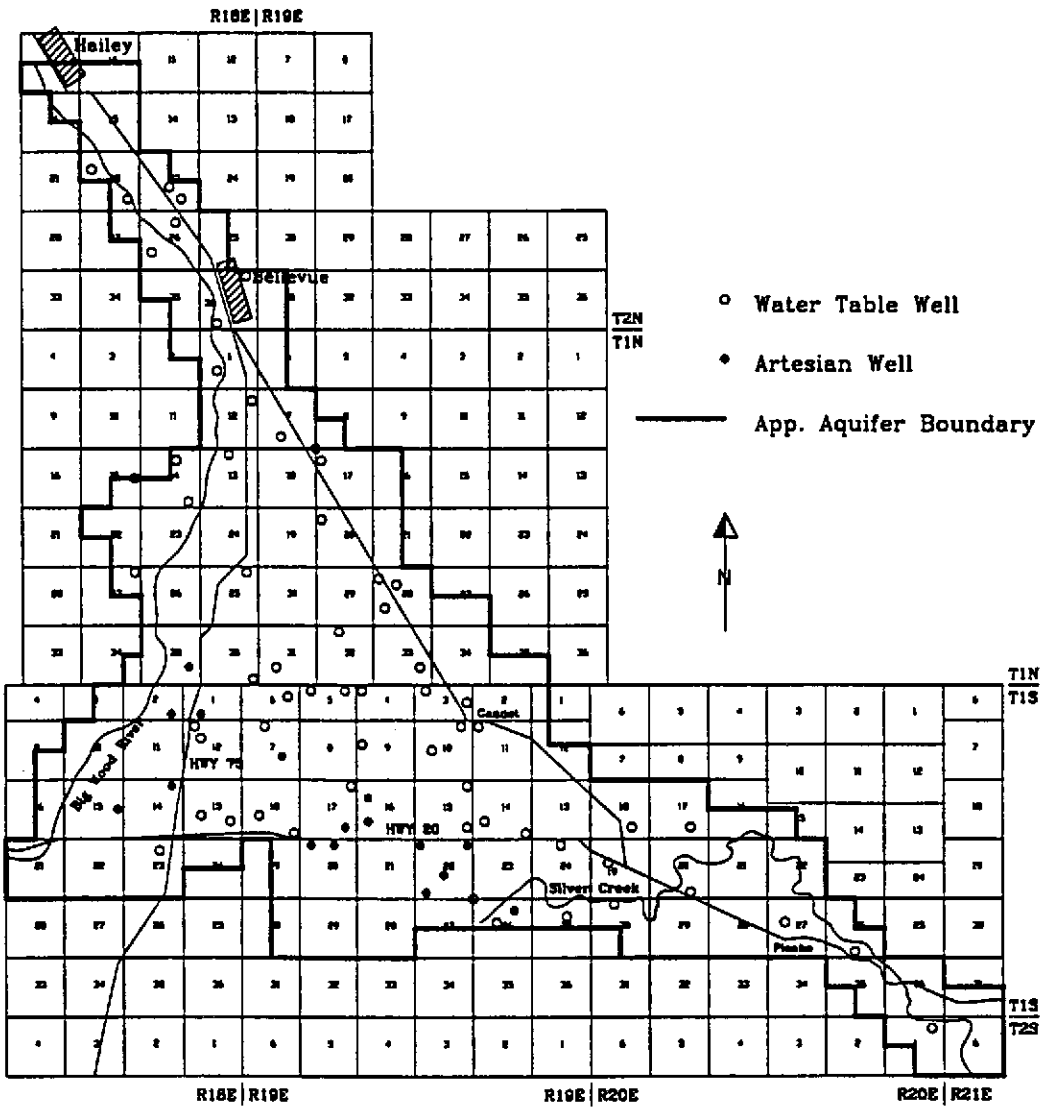
A ground water monitoring network consisting of eighty wells was established in the study area for depth to ground water measurements. Well selection was based on the availability of previous data, geographic and hydrographic distribution, and cooperation of owners. The spatial distribution of wells was relatively uniform, except the southwest corner of the study area (west of Highway 75) where only a few wells were available.

The total sample of 80 wells contained 56 non-artesian and 17 artesian wells. Sixty-seven were irrigation wells, seven domestic wells, and six non-used observation wells. Table 1 is a list of wells in the network. Figure 3 shows the location of wells in the ground water level monitoring network.

Site schedules containing pertinent well and aquifer information, ownership, and location of each selected well were collected from the U. S. Geological Survey office at Boise if the well was previously measured by the USGS. Well owners were contacted to seek their permission to measure ground water levels.

Water levels in the pumping wells were measured using either steel tape or M-Scopes. The artesian wells were usually measured with a mercury manometer; however, in some cases, a small diameter plastic tube was used since it was difficult to measure small pressure heads with a mercury manometer. Depth to ground water measurements were conducted when the wells were not pumping.

Figure 3. Well Monitoring Network
Big Wood River–Silver Creek Area



The first set of water level measurements was completed during April and May 1993, with the second and third sets in August and December 1993. The final set of ground water depth data was collected in April 1994.

Canal Diversions

Water level recorders and gauges were installed on the west, central and east branches of the District 45 canal. In addition to the continuous water level recorders, metallic gauges were installed in these canals and weekly gauge readings were recorded during the irrigation season of 1993. Other canals diverting water from the Big Wood River and Silver Creek were measured by the Water Master of District 37 and 37M located at Shoshone. Daily diversion data was secured from the Water Master's files. Table 2 lists the canal diversion sites in the study area.

Stream Gauging

Automatic water level recorders or staff gauges were installed on fifteen streams within the study area. Weekly gauge readings of these streams began on May 13, 1993 and continued for the duration of the study. Table 3 lists the streams and canals measured for the project.

The discharge of these streams was measured frequently to develop rating curves and hydrographs for making estimates of the volumes of spring and stream flow. The USGS gauge near Sportsman's Access continued to be the primary gauging station on Silver Creek. The two additional gauges were installed for this study on Silver Creek at Swanson's Bridge and Silver Creek at Priest Road. Both stations were also equipped with continuous water level recorders. The floats of the automatic water level recorders in the stilling wells began having ice problems

in January 1994; however, weekly staff gauge readings continued during this period.

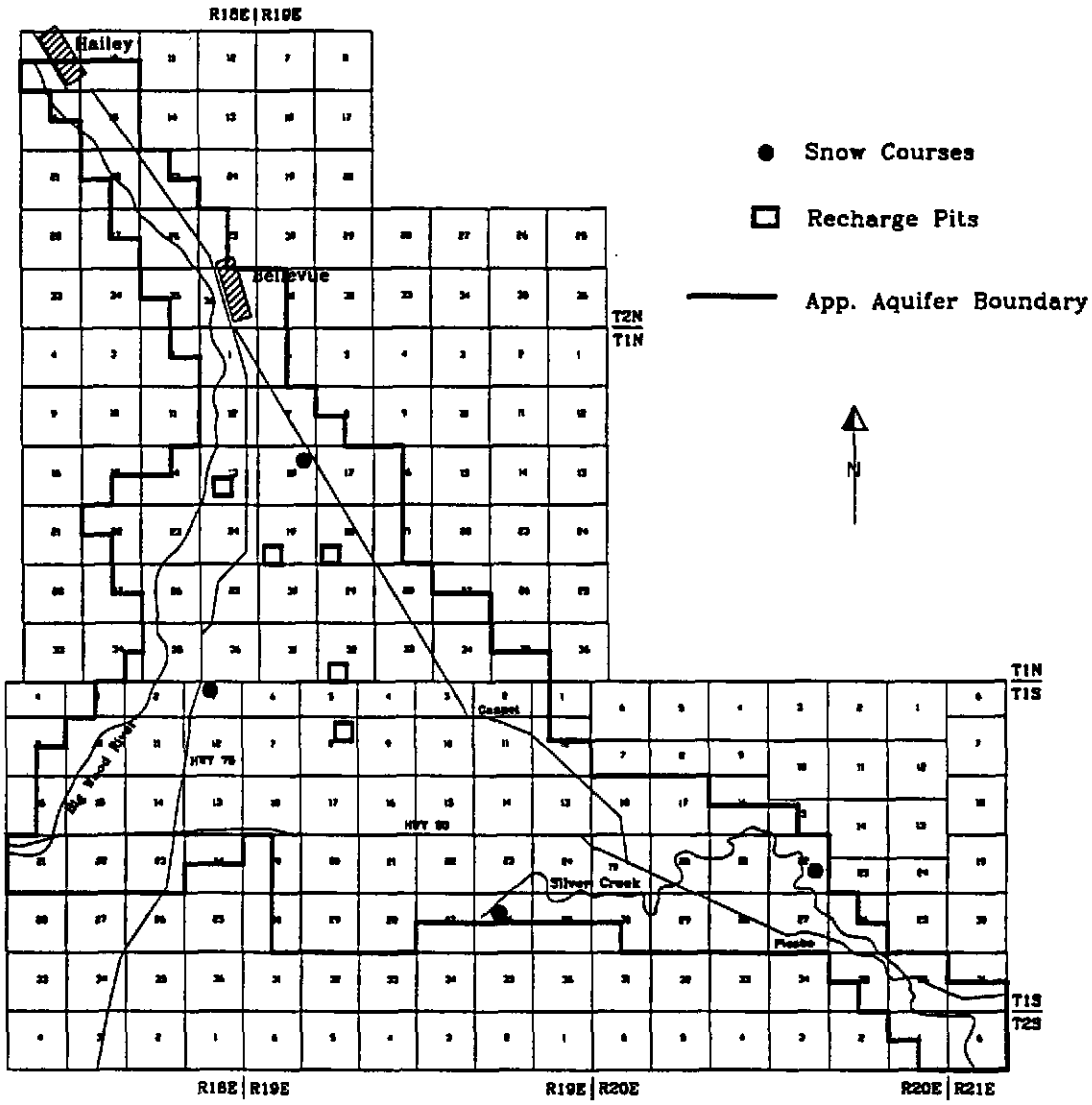
Ground Water Pumpage Data

The discharge of all the water table and artesian wells in the study area was measured or estimated to determine the amount of total ground water pumpage from the aquifer. Most of the discharge measurements were conducted during the months of July and August 1993. Discharge measurements and estimates were made using either an open channel measuring device such as cut throat flume or the coordinate method where flumes could not be installed. In the case of wells discharging directly to the sprinklers, discharge was estimated by measuring the size of sprinkler heads, pressure, and counting the number of sprinklers. The information on the duration of use of each well use was collected from the well owners.

Ground Water Recharge Pit Data

Recharge from application of irrigation water to fields is the primary source of external recharge to the aquifer. However, waste or surplus canal flows are used for recharge through ponds or pits. Data on the amount of canal water diverted to the recharge pits was collected to estimate the recharge volumes to aquifer. The monitored recharge pits are located in Sections 32, 20, 19, 13 and 8. Figure 4 shows the location of recharge pits in the study area. All of these recharge pits are earthen ponds or gravel pits with varying sizes and configuration. It was observed that these ponds were dug at locations where the soil was coarse and gravely with higher permeabilities. The land owners divert water from the District 45 canal to these recharge pits when the water is in excess of their irrigation needs. Data on the duration and amounts of diversions to the recharge

Figure 4. Location of Snow Courses and Recharge Pits



pits were obtained from the land owners and the Chairman of the District 45 Canal.

Meteorological Data

The National Weather Station Observer at Picabo has maintained temperature and precipitation data on a daily basis since 1960. No facility to measure the snow depth or water content in the study was available. A meteorological network consisting of three sites, Tick-Tok ranch, Gardener Ranch, and Molyneux Ranch was established for snow course surveys. A snow-pillow and an Agri-met station were installed near the house of the Silver Creek Preserve Manager. The snow courses and pillows were designed and installed with the help of the Soil Conservation Service at Hailey. Locations of snow courses and the snow pillows are shown on Figure 3. The climatological data from the Agri-met station was collected through the Agri-met network. The data on snow water content were measured bi-monthly by the Nature Conservancy Staff using USDA recommended procedures. Data collected at the meteorological station included maximum and minimum temperature, daily and accumulated precipitation, solar radiation, and snow pillow information.

Land Use Data

Land and water use data are necessary components of the overall water budget of the study area needed to develop a ground water model. Land use data, including the area under cultivation, types of crops grown, source of irrigation water, and methods of irrigation were collected for the entire study area. The land use data was obtained from the land owners of the study area and verified and corrected by field visits. All of the land use data was charted on a base map

prepared by the U. S. Soil Conservation Service from September 15, 1988 aerial photographs.

Ground Water Flow Model Selection

Various ground water flow models were reviewed to select a three dimensional, peer reviewed, user friendly computer code capable of simulating the ground water flow problems in confined and unconfined aquifers under steady-state or transient conditions. While reviewing the models, consideration was given to select a model which would be capable of handling solute transport problems in the future.

RESULTS

A primary product of this phase of study is a comprehensive data base of ground-water and surface water discharge information, ground-water elevation data, land use data including irrigated areas and type and source of irrigation, and meteorological data needed as input for the ground water model.

The other product of this phase of study is the selection of a ground-water model that is a well documented, peer reviewed model code, capable of running on a DOS-based personal computer usable by local planning and research agencies. Graphical input and output routines will be incorporated in the model in the second phase of the study. The ground-water model would simulate historical measured aquifer responses to input variables and predict estimated response to potential climatic changes and changes in water and land use.

Data collected in the first phase show the seasonal and historical responses of stream flow, water levels, and spring discharge to water use changes and

climatic variations. Historical and current data allow the determination of an estimated water budget for the aquifer system.

Ground Water Level Data

Four sets of depth to ground water measurements were conducted for 80 wells in April-May 1993, August 1993, December 1993, and April 1994, respectively. Water level and potentiometric head data are summarized in Table 4. In addition to these field measurements, historical data on two wells, Punkin Center Artesian Well (1S 19E 22AAA1) and a USGS observation well (1N 18E 01DAA1) about one mile south of Bellevue in the water table aquifer, were obtained from the USGS. The averages of monthly depth to water measurements for these two wells for the period 1954 through 1993 are summarized in Tables 5 and 6. Figures 5 and 6 are the hydrographs of these wells showing historical and current (1993) seasonal responses of the water table or peizometric head. The daily depth to water level measurements data for these two wells are summarized in Appendix A.

In general, ground water levels rise and fall in response to recharge and discharge from the aquifer. However, water level fluctuation patterns and magnitudes are different at different locations of the aquifer. Maximum water level elevations generally occur in late June or July depending upon the irrigation diversions. Water table wells in the southern part of the area show a maximum change approximately two weeks later than the northern wells and sustain a level until late October. Recession of the water table occurs through the winter until March or April when recharge from spring irrigation begins.

Figure 5. Historical Ground Water Level Data of Punkin Center Artesian Well (1S 19E22 AAA1)

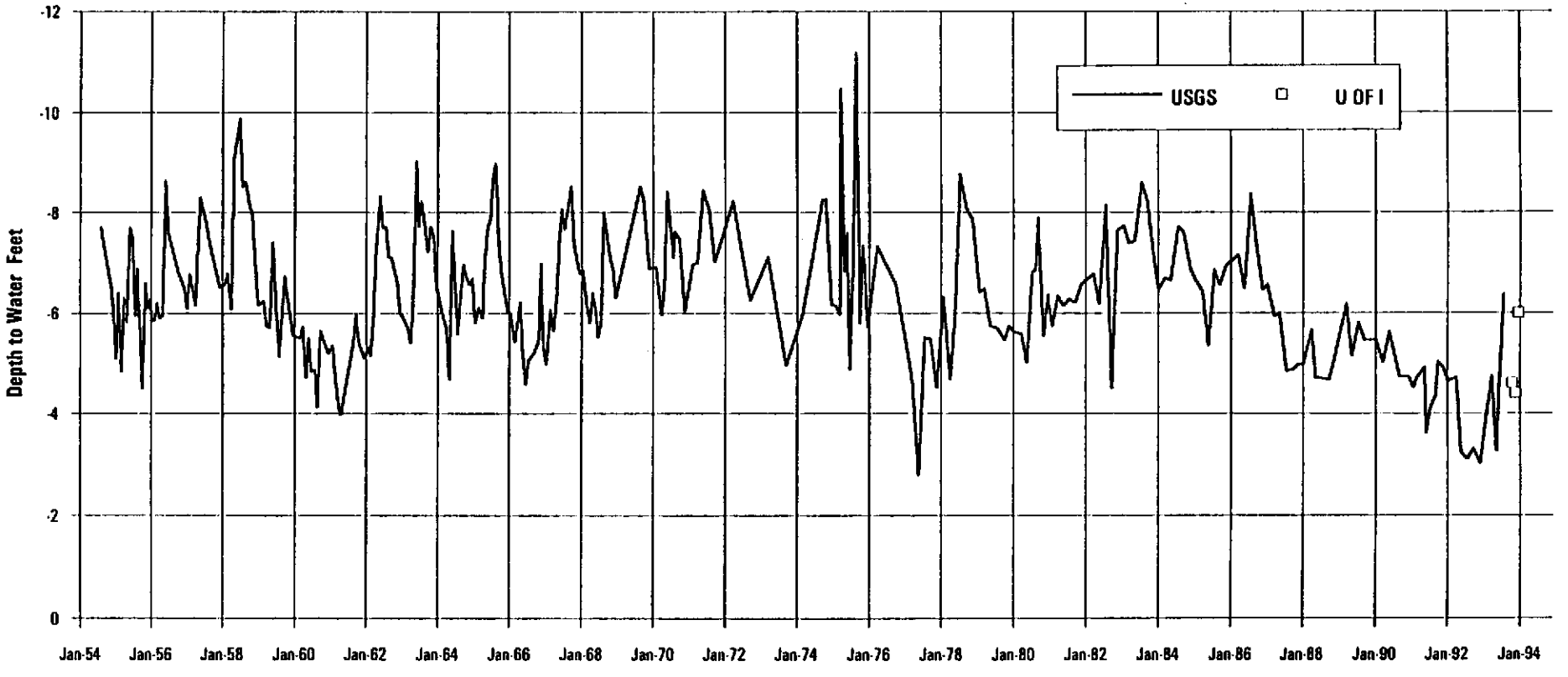
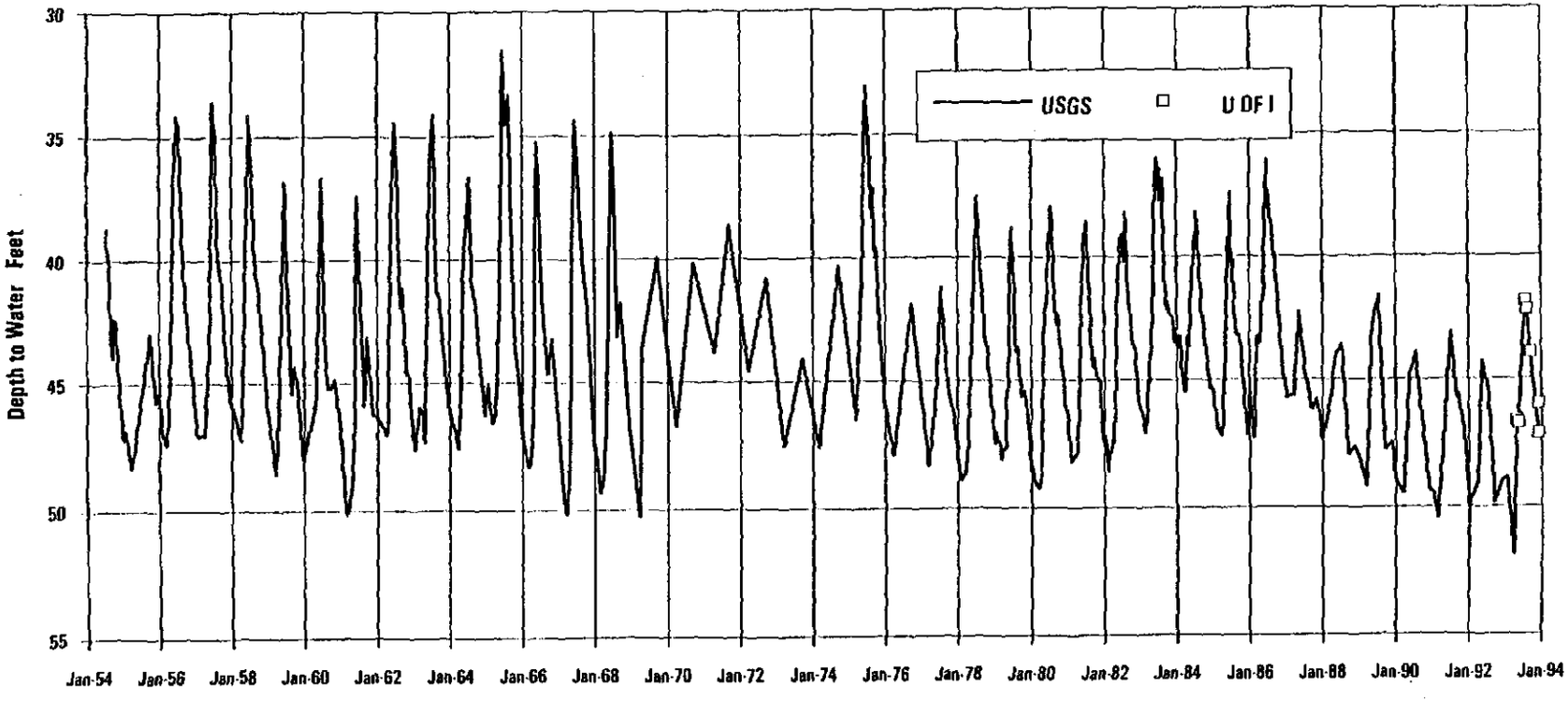


Figure 6. Hydrograph of Historical Data of USGS Well (1N 18E 01DAA1)



Near Bellevue, water levels fluctuated nearly seven feet between April 1993 to April 1994 as shown by wells 2N-18E-36cad1 (Roger well) and 2N-18E-36 adc1 (City of Bellevue well). Moreland measured a change in water level of about 10 feet for well 2N-18E-36cad1 in 1977 which was a drought year. Water level data collected by Moreland (1977) on well 2N-18E-36cad1 show that water levels rise in late spring in response to recharge from snow melt and flood flows in the Big Wood River and continue to rise through early summer as irrigation-return water recharges the aquifer. From about July on, water levels decline as ground water flows to the south into the aquifer underlying the valley and irrigation recharge declines.

Ground water levels in the Poverty Flats area are represented by well 1N-18E-26bbd (Brown well). An annual fluctuation of 24 feet in the ground water level of this well occurred between April 1993 and April 1994, with the maximum rise in April-May and the decline beginning in August. Moreland (1977) found a similar trend in water level fluctuation in well 1N-18E-15daa1 (John Brown well), located in the same area with an annual fluctuation in excess of 40 feet in 1977, which was a drought year. The dramatic rise of the water level in May and June is probably due to spring runoff in the Big Wood River and the beginning of diversions to the Glendale and Bypass Canals. Most of the water in the Big Wood River is diverted to irrigation canals during the irrigation season and the reach of the river becomes dry in August eliminating the recharge to the aquifer, resulting in faster decline in water levels.

Ground water level response east of the Big Wood River in the northern part of the valley is shown by well 1N-19E-20bbc1 (Struthers' well). The well showed a change in ground water level of more than 14 feet in 1993 compared to

30 feet in 1977. This well shows that water levels begin rising in May-June and reach maximums in August with declines in December.

Water level fluctuations in the area toward the southern end of the unconfined aquifer (Gannett) are shown by well 1S-19E-10aab1 (Byington well). A maximum fluctuation of about six feet was observed in 1993. In this area, the water level fluctuation becomes smaller due to proximity of the area to spring discharge areas. The springs effectively reduce variations in water levels by increasing or decreasing discharge of springs due to increase and decrease in water levels. This situation occurs throughout the southern part of the unconfined aquifer near the springs.

It is difficult to generalize the behavior of water level fluctuations in the confined aquifer. Pressure fluctuations near the edge of the confining beds are similar to those in the northern unconfined area. Moreland (1977) explained that fluctuations farther into the artesian system area delayed as the pressure waves move through the system. Therefore, well 1S-19E-16bbc1 (Bickett well) peaks in late July and August (Table 4), whereas wells in the unconfined area and artesian wells near the edge of the confining beds peak in early and mid-July. Even farther into the artesian system, well 1S-19E-22caa1 (Gray well) peaks in August.

In the southeastern part of the study area where the confined aquifer merges with unconfined aquifer, water level fluctuations are smaller, probably due to the hydraulic connection with Silver Creek. Fluctuation in potentiometric levels at well 1S-20E-20abb (Luke well) between April 1993 and April 1994 was about 4 feet.

Fluctuations in ground water levels in the unconfined aquifer near Picabo are relatively greater due to the steep aquifer gradient. Average fluctuation in

water levels in the period between April 1993 to April 1994, in five wells, 2S-20E-1acc2, 1S-20E-26cdc1, 1S-20E-27bda1 and 1S-20E-36bdc1 was about eight feet.

In general, water table wells exhibit more fluctuation in water level than the artesian wells. A fluctuation of about 15 ft. in the water level of the Eakin well south of Bellevue was observed during the year 1993; whereas a potentiometric head fluctuation of about 2.5 ft was observed in the Punkin Center artesian well.

Canal Diversions

The irrigation districts and cooperative ditch groups are responsible for delivering Big Wood River and Silver Creek water to the farms. The largest organized district is the District 45 that supplies water to land owners in the northern and central part of the study area. Irrigation water diversion usually begins in April and continues through October each year. The canal diversions for the season are collected and summarized on a monthly basis, indicating the total amount of water discharged through each diversion. These diversions, including individual and multiple-user canals and laterals, include 90 different sites. Total diversion from the Big Wood River to the study area during the irrigation season of 1993 was 92,240 acre feet. Canal diversions from the Big Wood River (Water District 37) and Silver Creek (Water District 37M) for the 1993 irrigation season are summarized in Appendix B.

Some farms in the study area do not receive water from any external source and rely primarily on subirrigation, artesian wells, or springs.

Ditches in the surface irrigated areas are constructed on gravely and coarse soils with high permeabilities resulting in high seepage loss. Brockway and Grover, 1978, measured the seepage losses in some of the ditches using inflow-outflow methods. Discharge was measured with current meters or other installed

measuring devices. Reach lengths of at least one mile were selected to assure that net losses would be measurable with greater accuracy. The measured seepage loss varied from 0.3 to 7.1 cubic feet per day per square foot. Table 7 is a summary of measured seepage losses.

Stream Flows

Rating Curves and hydrographs showing annual variations in discharges for all the streams in the study area are developed and provided in Appendix C. The average monthly flow data from bi-monthly measurements for 15 streams are summarized in Table 8. Historical data on the Silver Creek flow at Sportsman's Access collected by USGS was obtained for this study. Prior to 1962, the USGS gauging station on Silver Creek was at a site about 1 mile below Picabo. From 1963-1974 there were no continuous discharge measurements on Silver Creek. From 1975 to 1994 the USGS gauging station was at Sportsman's Access, approximately three miles upstream of Picabo. Figures 7 and 8 show the long term average daily flow for the USGS gauge on Silver Creek at Sportsman's Access along with the 1992 and 1993 daily discharges. Similarly, historical flow data of the Big Wood River at Hailey and near Bellevue (Stanton crossing) were obtained from the USGS. Figures 9, 10, and 11 show the hydrographs of historical mean daily discharge of the Big Wood River at Hailey and Bellevue. Figures 12, 13, and 14 are the hydrographs showing the long term trends in average annual flows from Silver creek and Big Wood River at Stanton crossing.

The hydrographs of the project area streams tributary to Silver Creek show distinct flow patterns. The flow generally begins rising in June immediately after irrigation begins and peaks in August-September. The flow in these streams starts declining at the end of September, reaches the minimum in January-February, and remains low until the start of next irrigation season (May). However, the flow

Figure 7. Mean Daily Discharge of Silver Creek at Sportsman's Access

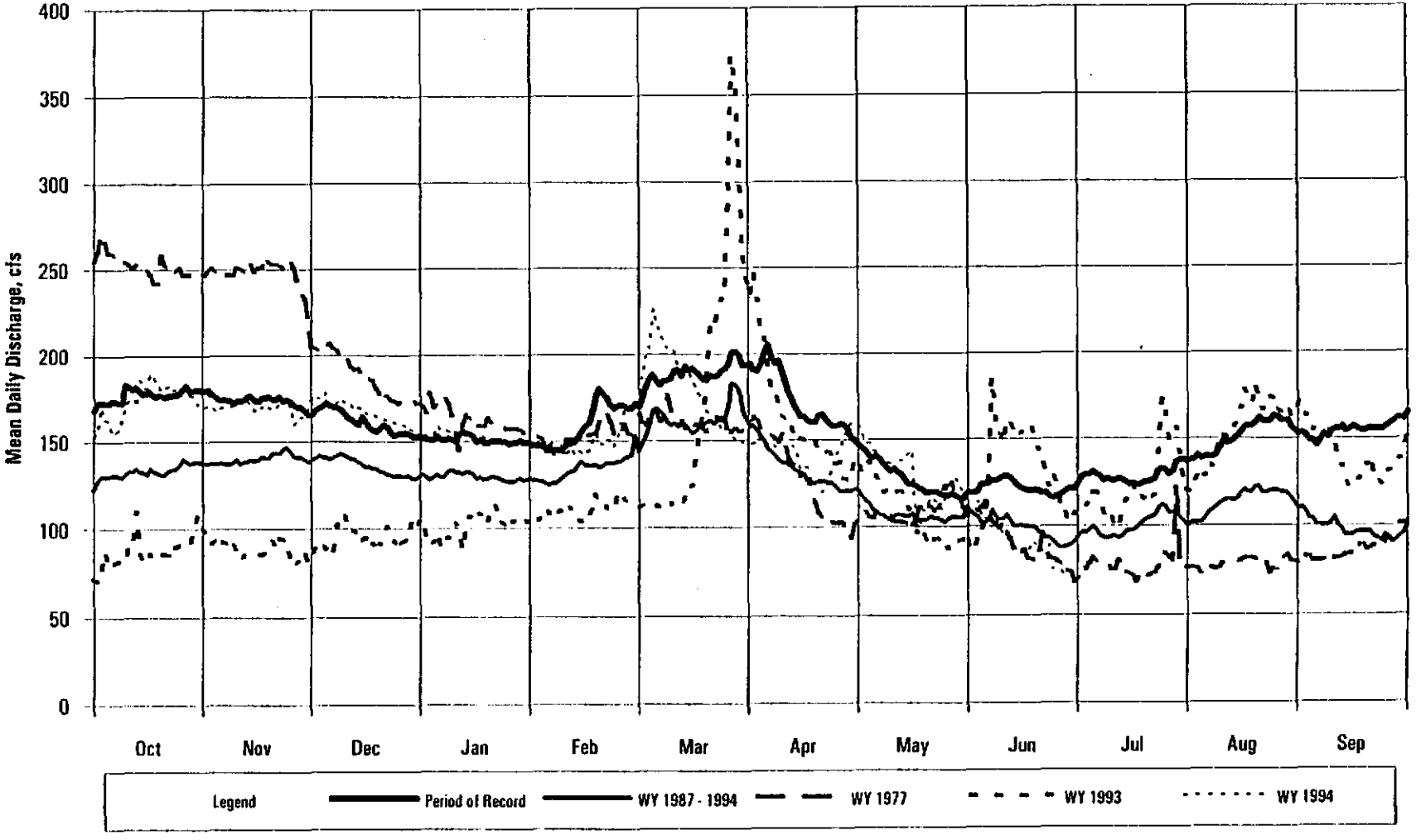


Figure 8. Mean Daily Discharge of Silver Creek at Sportsman's Access-Period of Record



Figur 9. Mean Daily Discharge of Big Wood River at Hailey

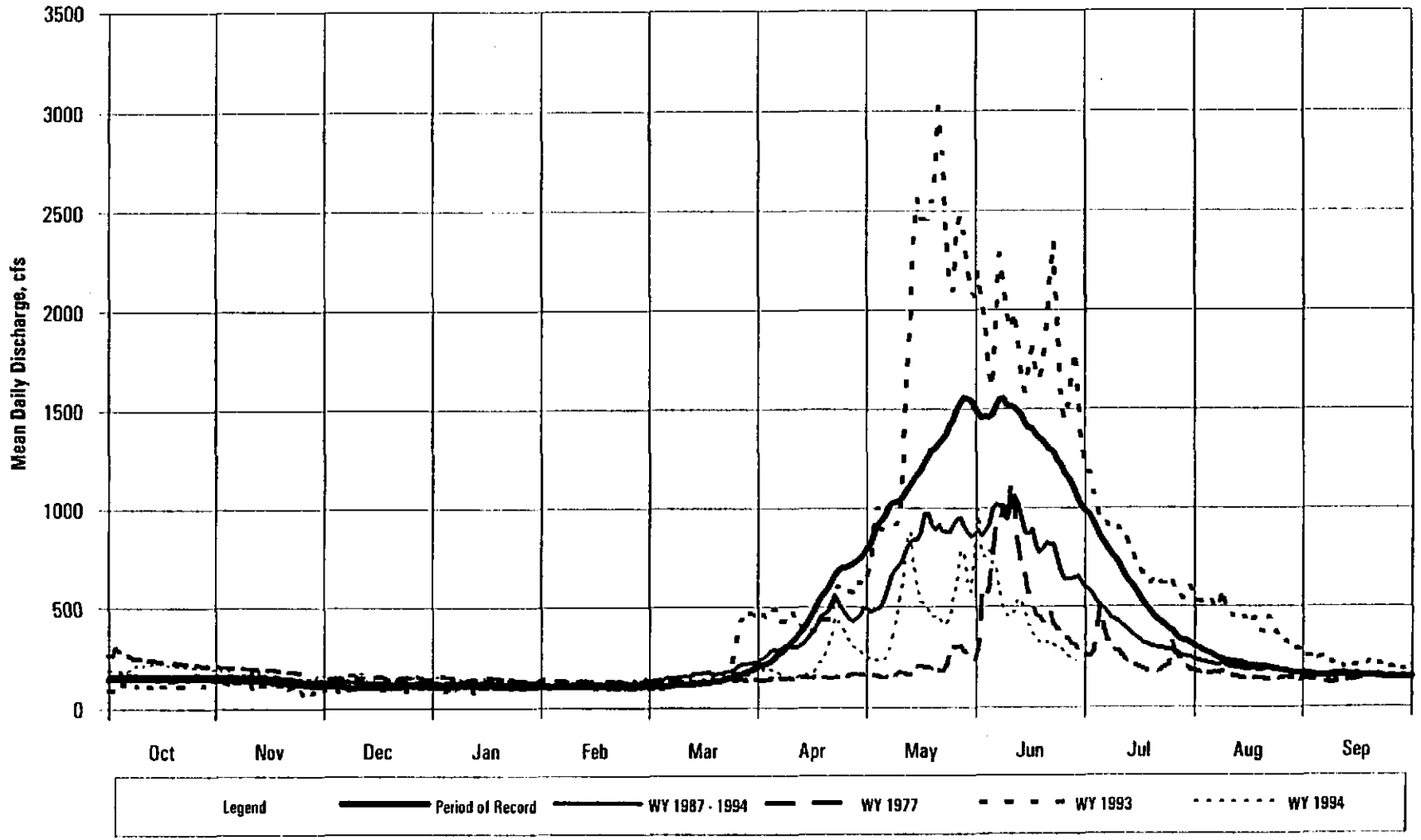


Figure 10. Mean Daily Discharge of Big Wood River near Bellevue

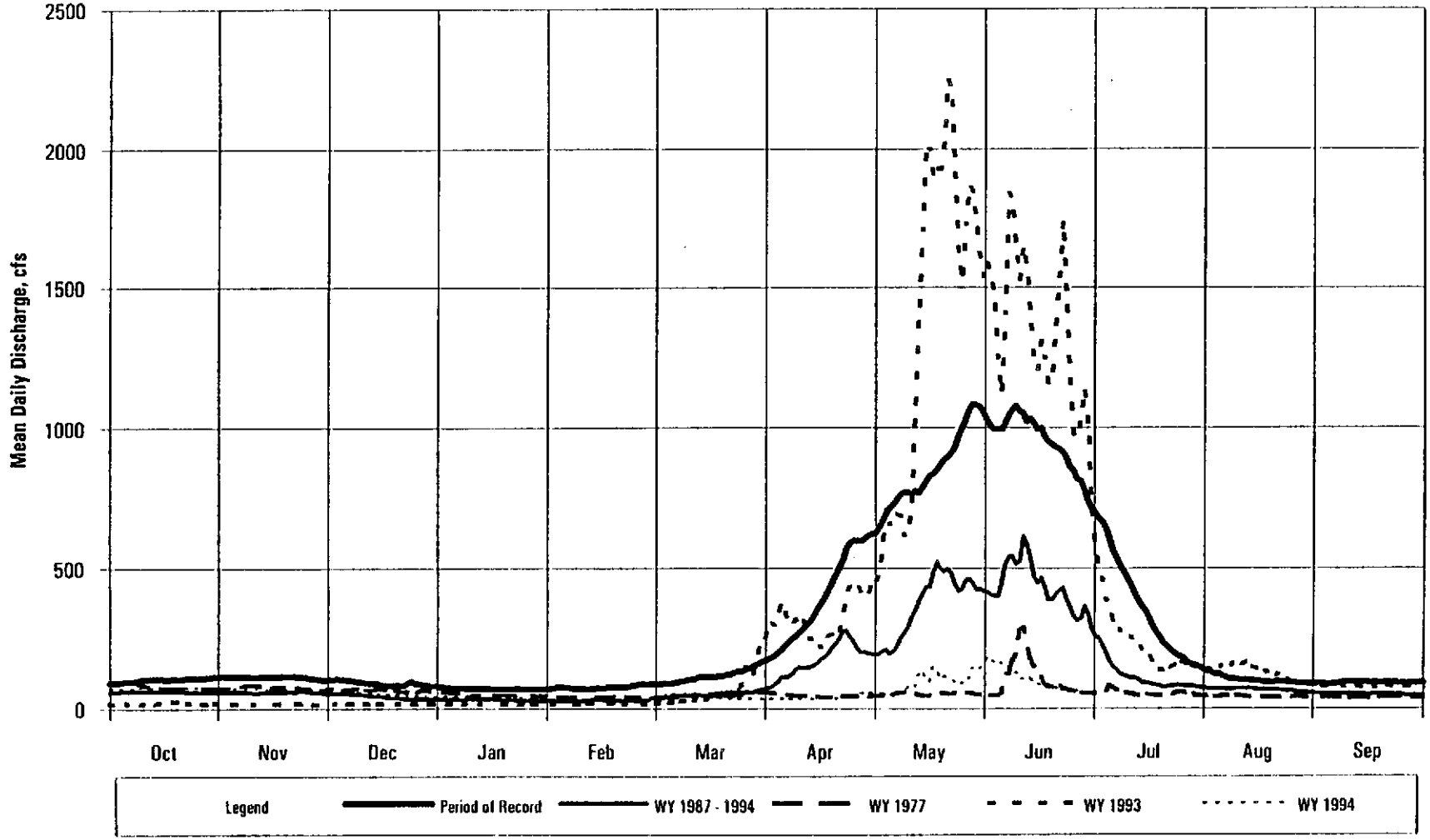


Figure 11. Mean Daily Discharge of Big Wood River -Period of Record

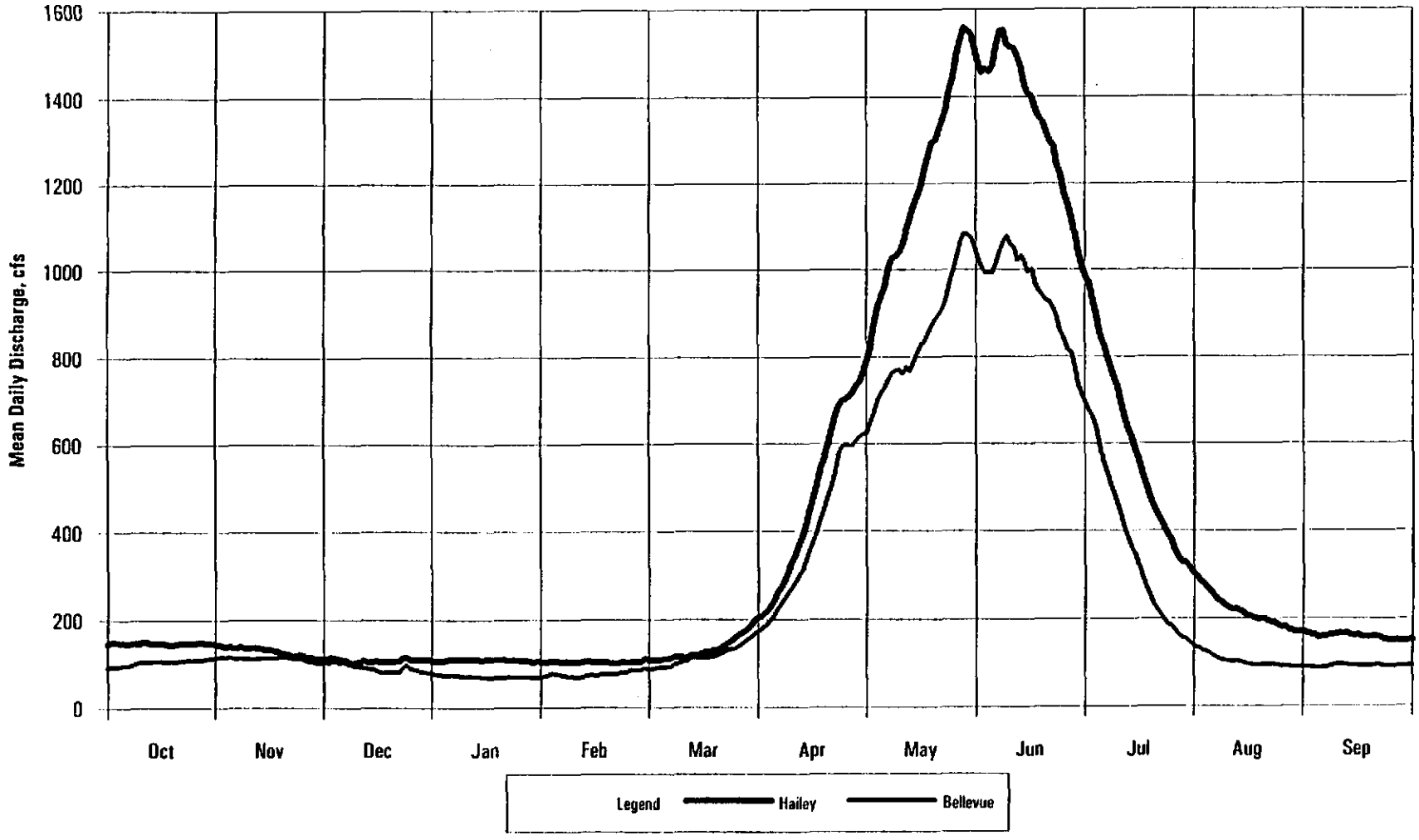


Figure 12. Average Annual Flow of SIlver Creek at Old and New Gauging Stations

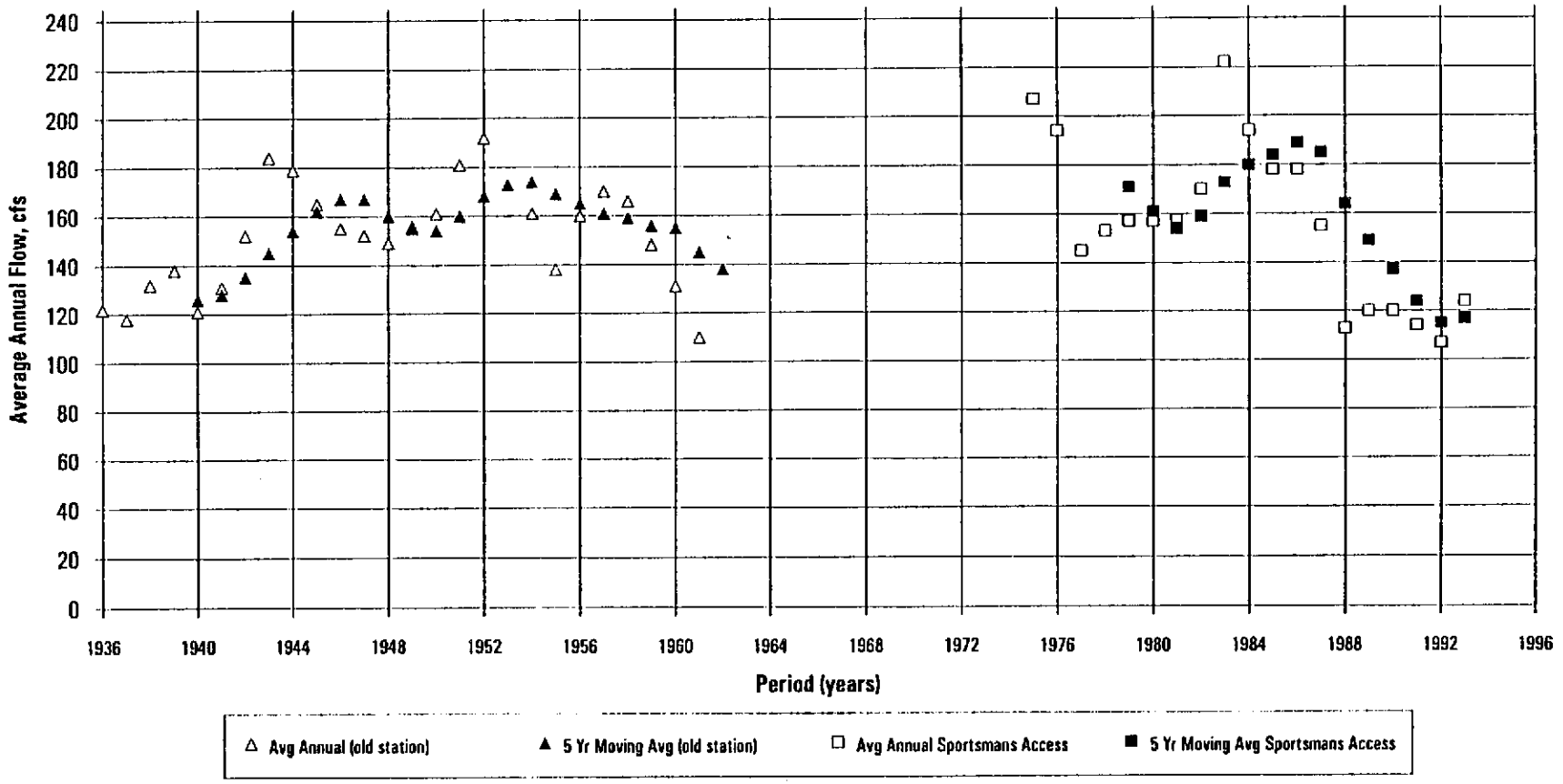


Figure 13. Average Annual Flow of Big Wood River at Hailey

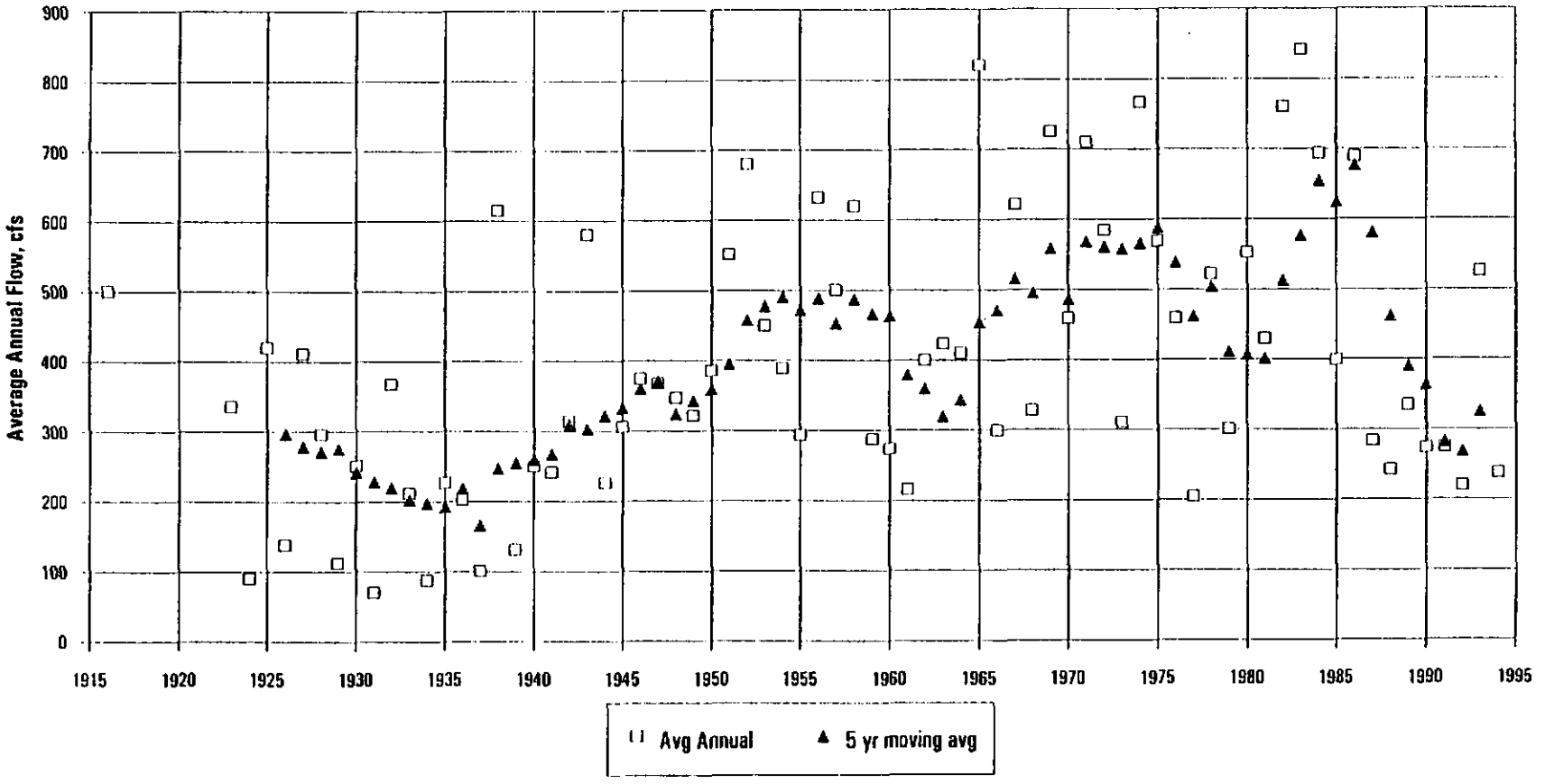
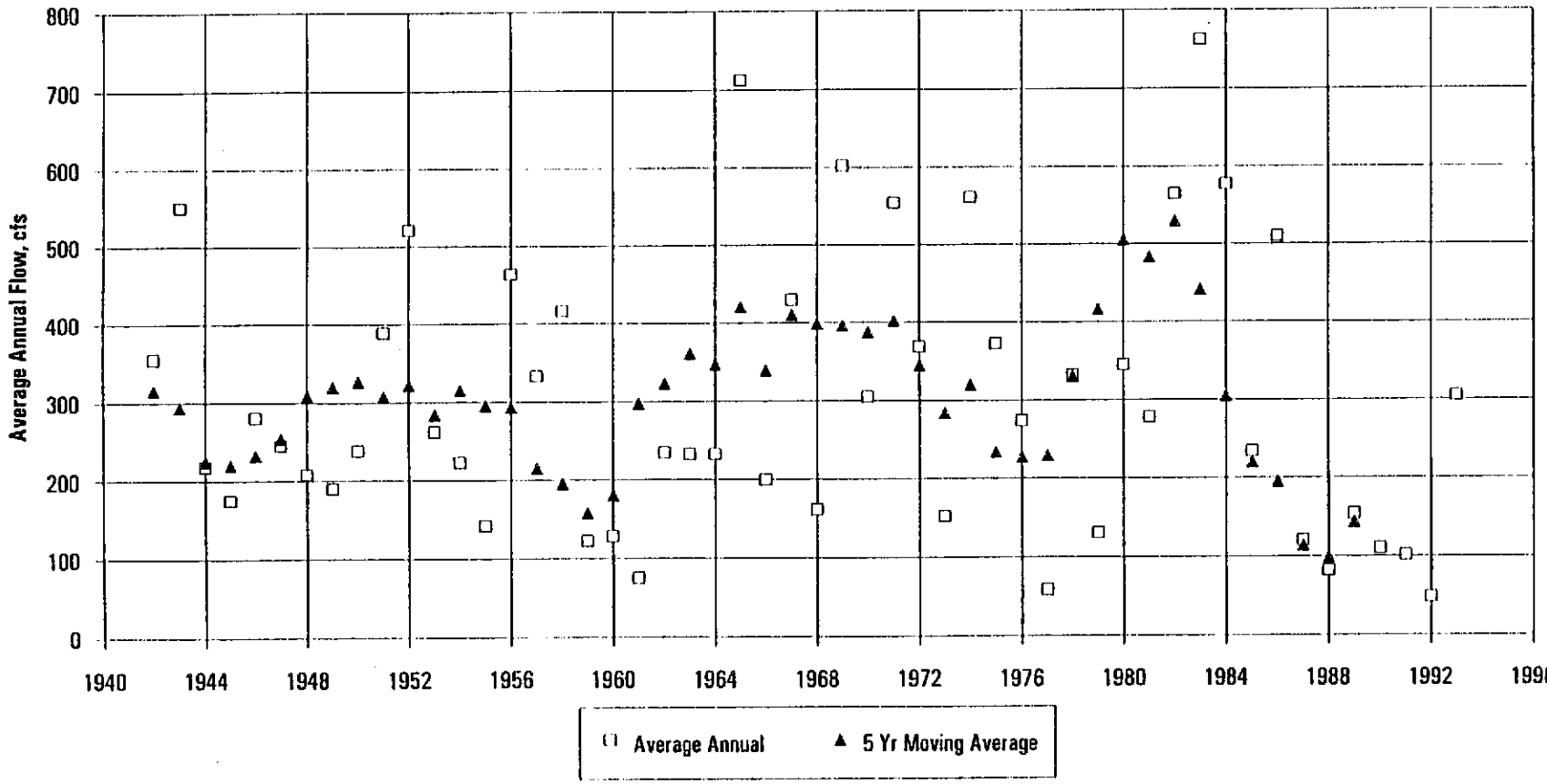


Figure 14. Average Annual Flow of Big Wood River near Bellevue



pattern of Brock Creek west of Big Wood River is different from those streams east of the river. Brock Creek peaks in April-May, starts receding in June, and reaches minimum flows in December.

The historical flow data of the Big Wood River at Hailey show that the river peaks in May-June and flow declines from October through March. The recorded average minimum and maximum annual flows in the Big Wood River at Hailey for the period of record 1923 to 1993 is 70 and 842 cfs respectively, with an average of 397 cfs. The flow records of the Silver Creek at Sportsman's Access show maximum flow in March-April, generally due to local surface runoff from snow melt. The average minimum and maximum annual flows recorded at Sportsman's Access for the period 1975-1993 are 107 and 222 cfs with an average of 156 cfs.

Ground Water Pumpage

The preliminary estimate of total ground water pumpage from the study area aquifer during the irrigation season of 1993 was 51,500 acre-feet of water (Table 9). Out of 51,500 acre-feet, 38,500 acre-feet were pumped through non-artesian wells and 13,000 acre-feet were pumped from artesian wells (Table 10). This pumpage estimate includes only water pumped through irrigation wells. Water pumped by domestic and wells for commercial use was not measured as the total quantity withdrawn is small compared to other components of ground water discharge. Municipal and commercial use by the city of Hailey for 1993 was 2,400 acre feet. Half of 2,400 acre feet was pumped from ground water through the city wells and the ramaining half was utilized from Indian Creek spring. The city of Bellevue has no record of volume pumped, but the estimated diversion is 1,000 acre feet based on population. Stock water is obtained mostly from artesian

wells or diverted surface water. The small amount pumped can be included within the estimate of rural domestic water use (Moreland, 1977).

Discharge from an artesian well is directly related to the potentiometric head and thus varies significantly through the year. There are wells which only flow part of the year. Therefore, the potentiometeric head fluctuations could not be ignored in computing the flows from the artesian wells. A straight line relationship between the head and the discharge is assumed for these flow calculations. A similar procedure was adopted by Moreland (1977) for discharge calculations from the artesian wells.

Ground Water Recharge

Recharge from deep percolation of applied irrigation water and precipitation is calculated in the ground water model as a component of the total water budget. However, water diverted from the Big Wood River to the recharge pits during the irrigation season of 1993 was estimated. Total estimated amount of river water diverted to recharge pits was about 1400 acre-feet. The details of the amount of water diverted to individual recharge pits are summarized in Table 11. In 1993, relatively more water was diverted to the recharge pits due to an extended irrigation season and less demand of water for irrigation purposes. Maximum diversion of canal water into the recharge pits took place during the month of September.

Meteorological Data

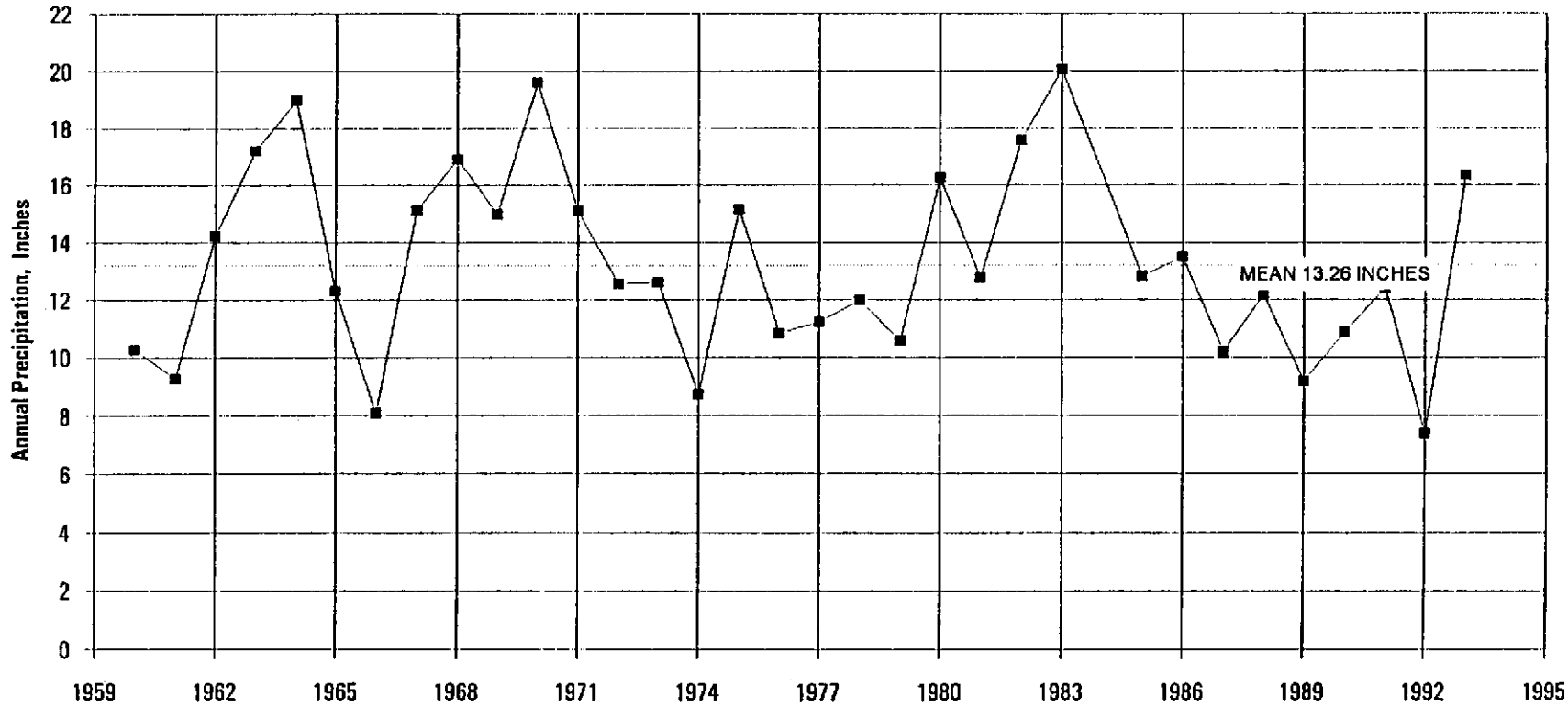
The snow course data collected from four stations established in the study are summarized in Table 12. The snow water content at the snow courses was minimal and amounts were highly variable with location of the measuring station

in the study area during the winter of 1993. Precipitation data for Big Wood River-Silver Creek watershed for the period of record from 1960 to 1993 was collected from the National Weather Service Observer at Picabo and is summarized in Table 13. Annual precipitation in the study area is highly variable with maximum of 20 inches in 1983 and minimum of 7.8 inches in 1992. Three years -- 1964, 1970, and 1983 -- were good years with annual precipitation of 19, 19.8, and 20 inches, respectively; whereas, years 1966, 1974, and 1992 were years with minimal precipitation of 8.0, 8.3, and 7.8 inches, respectively. The mean annual precipitation for the period of record for the study area is 13.26 inches. Figure 15 is the hydrograph showing the annual and mean precipitation in inches in the study area for the period of record at Picabo. Meteorological data collected from the Agri-met Station, including maximum and minimum temperature, humidity, and solar radiation, are summarized in Appendix D.

Land Use Data

To evaluate the net recharge to aquifer systems from irrigation applications, the acreage and evapotranspiration from each type of crop or vegetation is needed. Land use data, including crops grown, cropped area, type and source of irrigation collected for the study area for the 1993 irrigation season, are summarized in Table 14. Details of the land use data are provided in Appendix E. Several large holdings exist; however, the majority of the farms are small. Land ownership is changing in the area, generally leading to larger, single ownership. The major crops grown in the study area are irrigated pasture (43%), barley (31%), alfalfa (19%), potatoes (4%), oats (1%), wheat (1%), and canola (1%). The comparison of acreage of crops grown in the study area between 1975 and 1993 shows 9% and 3% increase in acreage of barley and potatoes respectively. There was about 12% decrease in the acreage of alfalfa.

Figure 15. Annual Precipitation at Picabo Weather Station



Surface water irrigated acreage is considered to be those lands receiving water from canals and streams. Ground water irrigated acreage is the land served from pumped wells, artesian wells or sub-irrigated lands. Some lands receive surface water along with supplemental supplies from wells.

A total of 34,980 acres of cultivated area were recorded, out of which 28,450 acres (81%) receive irrigation either from canals or ground water. About 47% of the total irrigated area is canal irrigated, and 53% is ground water irrigated.

Sprinkler irrigation is widely practiced. Seventy three percent (73%) of the irrigated area is sprinkler irrigated, and 22% is gravity irrigated. The remaining 5% of the irrigated area is sub irrigated. The percent of sprinkler irrigated area has increased from 13% in 1975 to 74% in 1993.

Ground Water Flow Model

The USGS MODFLOW ground water flow model has been provisionally selected for the modeling phase of the study. MODFLOW is a three dimensional, finite-difference ground water flow model. It is a peer reviewed, well documented, widely used ground water flow model capable of representing flow in two and three dimensions in confined and unconfined aquifers under steady-state or transient conditions. Both pre-processor and post processor are available to prepare input data files and process output data. Other interfaces available with the MODFLOW model, such as Lotus and Surfer and compatible graphics packages, are convenient to import head and draw down files into these packages for further processing. The latest version of MODFLOW uses virtual memory which permits those with small computers to use large grids to simulate the ground

water flow systems. The next upgrade of MODFLOW will be capable of simulating solute transport systems.

Water Budget

The components of the water budget for the Big Wood River-Silver Creek aquifer system are recharge to and discharge from the aquifer and seasonal changes in aquifer storage. The recharge components include ground water under flow from the area above Hailey, seepage from the Big Wood River, deep percolation from irrigation diversions from the Big Wood River, and precipitation. The discharge from the watershed is comprised of ground water outflow near Picabo, spring outflows (Silver Creek), evapotranspiration from crops and phreatophytes, and spring flows into the Big Wood River from west side near Stanton Crossing.

Ground water under flow entering the aquifer system above Hailey constitutes the major part of recharge. Ground water under flow above Hailey was estimated by Smith (1959), Luttrell and Brockway (1984), and Frenzel (1989) as 34,000, 40,000, and 13,000 acre-feet per year, respectively. The variation in these estimates is mainly due to the methodology of analysis and the values of hydraulic conductivity used, which range from 150 to 500 feet per day. However, an estimate of under flow of 40,000 acre-feet determined by Luttrell and Brockway (1984) has been used for this report. This estimate was determined by subtracting the average discharge for the Big Wood River at Hailey from an empirically calculated water yield and was verified by the Darcy's Law. Similarly calculated, an estimate of 11,800 acre-feet ground water outflow from the aquifer system below Picabo has been used for this water budget. Ground water underflow to the west is considered negligible due to geologic boundaries (Brockway and Grover 1978). Seepage loss from the Big wood River is another

major source of recharge. A seepage loss estimate of 22,360 acre-feet, determined by Luttrell and Brockway (1984) during the hydraulic relationship studies of the Big Wood River, has been used. Data on other components of the water budget, such as precipitation, irrigation diversions, recharge through pits, spring outflows and evapotranspiration, were measured as part of this hydrological study of the Big Wood River-Silver Creek watershed. These water budget components and their estimated values are shown in Figure 16. Total inflow and outflow from the aquifer system is approximately 198,000 and 216,000 acre feet, respectively. The 18,000 acre feet difference is partly accounted for by changes in storage, which is depicted by the falling ground water levels in the study area, and variations in other components used in the water budget due to time differences in measurements.

Evaluation of land and water use data for 1993 for the study area suggest that the percentage of area irrigated by ground water is nearly the same as in 1975 (Table 14). However, there is an increase in the area under sprinkler irrigation from about 13% to 74%. The question arises: if more area has been brought under sprinkler irrigation and only a small increase in the irrigated acreage has occurred, then why has the ground water pumpage in the study area apparently increased (from 28,000 to 51,500 acre feet)? The increase in ground water use in the study area can be attributed to reduction in canal diversions. In 1975, about 142,600 acre feet of canal water was diverted to the study area compared to 92,240 acre feet during 1993. This decrease of 50,000 acre feet in canal diversion is likely being compensated by expanding the sprinkler irrigated area and pumping more water from the aquifer. Figure 17 shows the annual diversions from Big Wood River above Magic Reservoir from 1931 through 1993 as compiled by IDWR. This shows a decrease in total diversions of 37,000 acre feet between 1975 and 1993.

Figure 16. Water Budget for Aquifer System
Big Wood River -- Silver Creek Area
for 1993

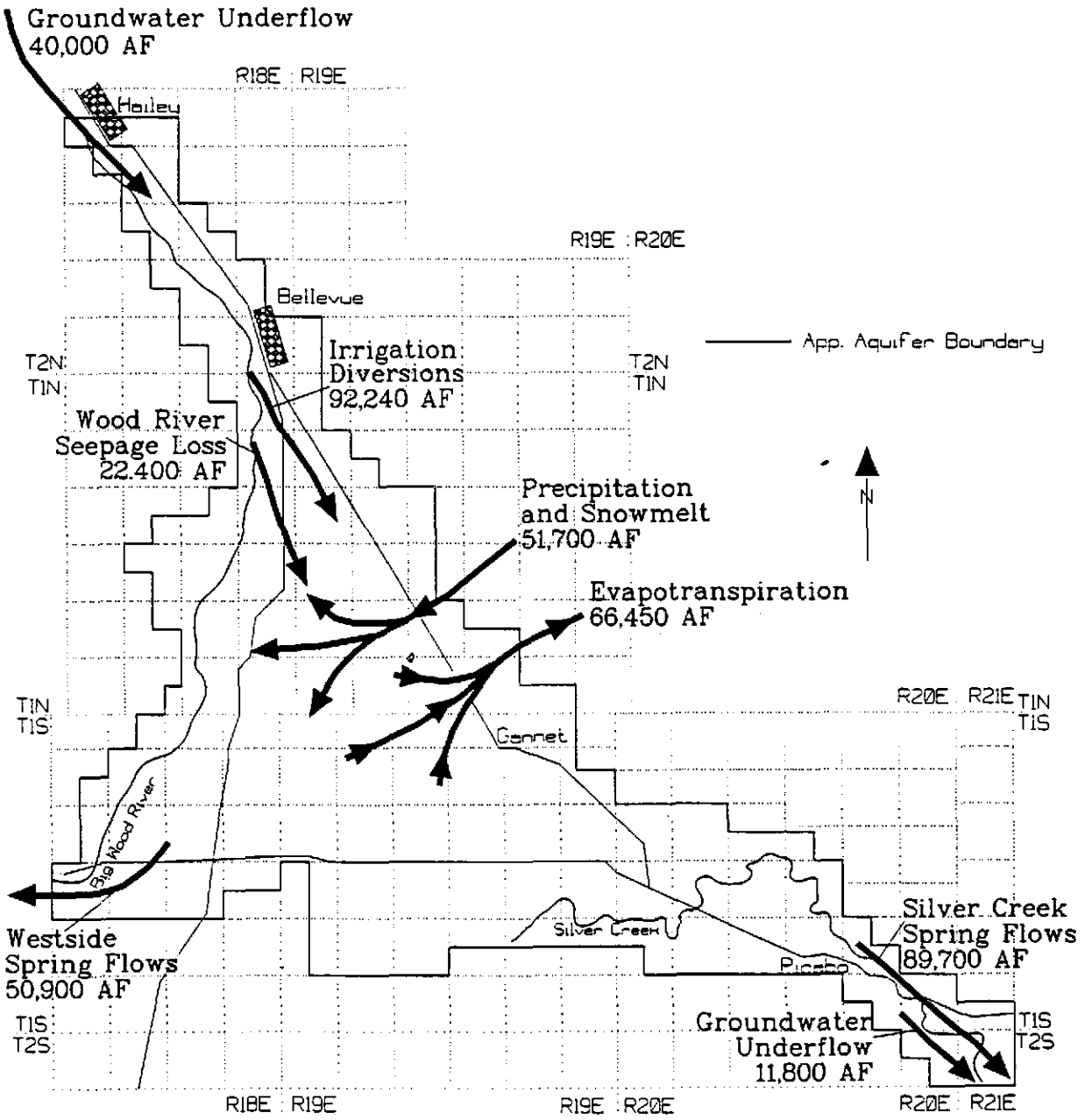
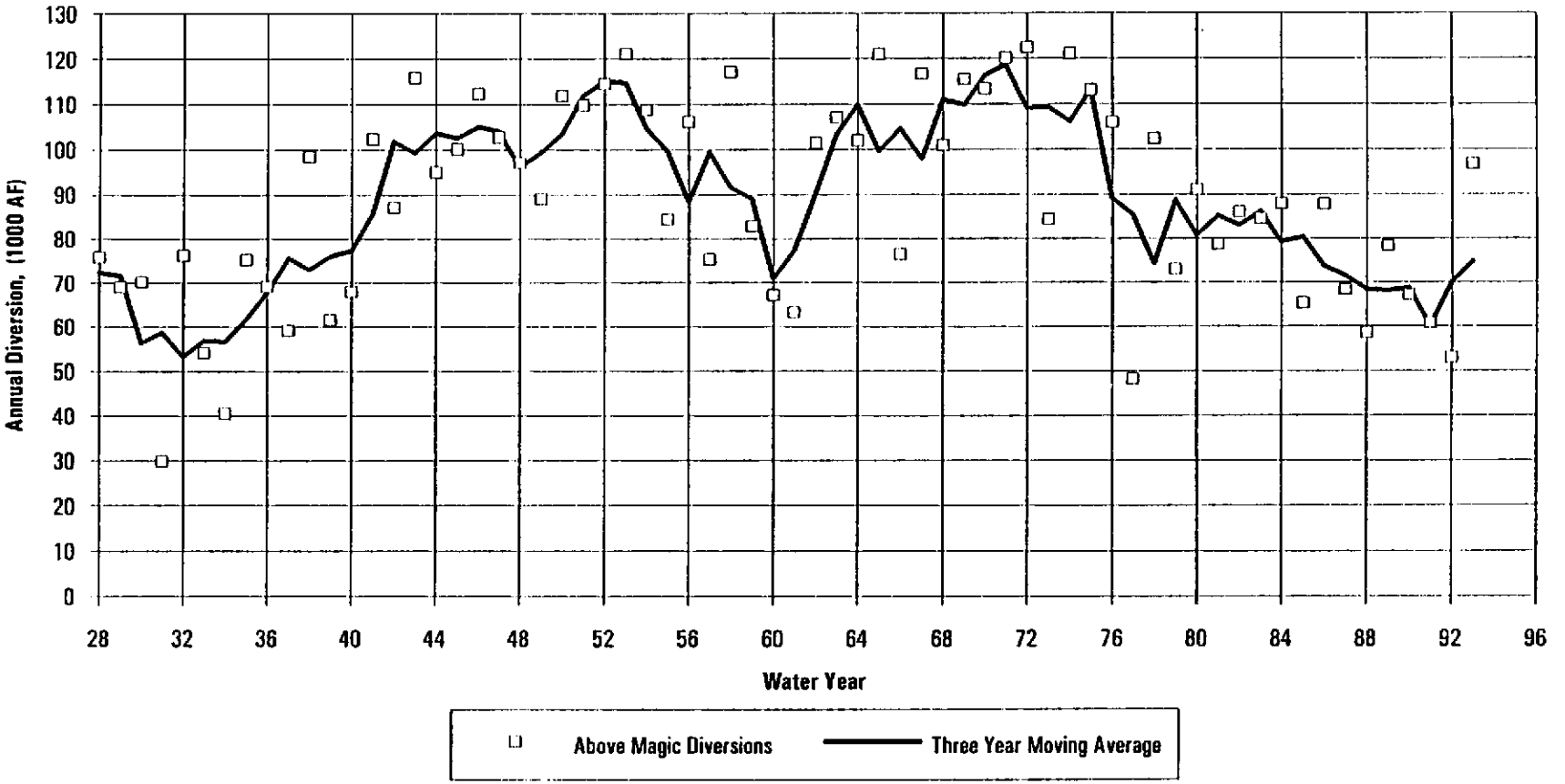


Figure 17. Big Wood River Irrigation Diversions above Magic Reservoir



GENERAL TRENDS

Ground water use in the study area is increasing. Water withdrawals from pumped irrigation wells have almost doubled since 1975. However, small increases in pumpage from artesian wells have occurred. Moreland in 1975 estimated 60 irrigation wells in the study area. However, he used 48 irrigation wells for calculating the ground water pumpage for his "ground water-surface water interactions" study in 1975 compared to 80 irrigation wells in 1993 (Table 14). In any event, it appears that more than 20 irrigation wells may have been added in the study area since 1975. No increase in the number of artesian wells was observed.

Average annual flow in the Silver Creek below Picabo after 1930 is reasonably constant at about 170 cfs. Average annual flow in the creek decreased markedly after 1987 to below 120 cfs in 1992 and 1993 (Figure 10). Seasonal variation in mean daily discharge in Silver Creek at Sportsman's Access is shown in Figure 7. Maximum seasonal variation in flow takes place in March-April, followed by August-October (Fig. 7); whereas, the maximum seasonal variation in the Big Wood River at Hailey and Bellevue takes place from April-July (Figure 9).

A comparison of depth to ground water measurements on wells located in different parts of the aquifer system show different magnitudes of variation in water level depths. Depth to water on 18 wells with historical records were compared with 1993 measured depth locations. A general declining trend in water levels was observed. During the period from 1970 to 1993, declines of more than one foot in water levels have occurred on most of the pumping wells selected for this comparison. On the Eakin well, located about 3.5 miles south of Bellevue, a decline of five feet in the water level was observed. However, an average drop of about three feet in potentiometric head on the artesian wells occurred (Table 15).

To draw long term conclusions about the precipitation pattern and magnitude, precipitation data from 1960 to 1993 was collected and evaluated. A maximum precipitation of 20 inches in 1983 and minimum of 7.8 inches in 1992, with an average of 13.26 inches for the period of record, was measured by the National Weather Service at Picabo. The precipitation during the eight year period from 1985 to 1992 was below normal, with an average of 11 inches (Figure 15).

In 1975, about 143,000 acre feet of canal water was diverted to the study area compared to 92,000 acre feet during 1993. This decrease of 51,000 acre feet in canal diversion is partly due to low flows in the Big Wood River and less demand for water in the study area. Data on annual canal diversions from the Big Wood River above Magic reservoir, compiled by the Idaho Department of Water Resources (IDWR) from 1931 through 1993, show the decreasing trend in canal diversions (Figure 17). The annual canal diversion data show a decrease in total diversions of 37,000 acre feet between 1975 and 1993.

SUMMARY AND CONCLUSIONS

The Big Wood River and Silver Creek watersheds in Blaine county have met the domestic water supply and irrigation needs for over a century. Population growth, changes in irrigation technology, land use, and climate coupled with the frequent drought events in southern Idaho have altered the water availability and demand. This has affected the ground water levels in the area and flows in the creeks. Decreased flow in the world famous Silver Creek has caused elevated stream water temperature and depletion of dissolved oxygen threatening the rare habitat the creek supports.

The study of the Big Wood River-Silver Creek hydrologic system to provide a data base and understanding of the hydrologic relationships commenced

in January 1993 under a cooperative agreement between The Nature Conservancy and the University of Idaho Water Resources Research Institute. Field work began on the design and installation of surface water, ground water, and meteorological monitoring networks during April 1993. Data collection from these networks continued for the entire irrigation season of 1993. The surface water monitoring network consisted of 15 spring fed streams and three major canals of the District 45 system diverting from the Big Wood River. The ground water monitoring network comprised 80 wells. The meteorological network consisted of three snow course survey sites, one snow pillow site and an Agri-met station. The total sample of 80 ground water wells contained 56 non-artesian and 17 artesian wells. Sixty seven were irrigation wells, seven domestic wells, and six non-used observation wells. Rating curves and hydrographs for the surface streams were developed to estimate the amount of surface water discharged from the aquifer system. Data on irrigation diversions from the Big Wood River for individual and multiple-user canal and laterals were collected for the irrigation season of 1993. Four sets of ground water level measurements were conducted during April-May 1993, August 1993, December 1993, and in April 1994. Data on ground water pumpage and ground water recharge volumes were collected during the irrigation season of 1993. Meteorological data included, snow depth, density, snow water content, rainfall, temperature, humidity, and wind speed. Land use data, including the area under cultivation, types of crops, source of irrigation water, and method of irrigation, were collected. Data on aquifer characteristics such as hydraulic conductivity, transmissivity, and storage coefficient were collected from field studies conducted by the USGS and the University of Idaho.

Ground water levels in the study area, rise and fall in response to recharge and discharge from the aquifer. However, water level fluctuation patterns and magnitudes are different at different locations of the aquifer. Maximum water

level elevations generally occur in late June or July depending upon the irrigation diversions. Water table wells in the southern part of the area show a maximum change approximately two weeks later than the northern wells and sustain a level until late October. The recession of the water table occurs through the winter until March or April when recharge from spring irrigation begins. Pumping wells exhibits more fluctuation in water level than the artesian wells. A 15 ft. fluctuation in the water level of the Eakin well, 3.5 miles south of Bellevue, was observed during the year 1993, whereas a potentiometric head fluctuation of about 2.5 ft was observed in the Punkin Center artesian well near Highway 20. Comparison of ground water levels on eighteen wells with historical records show a general decrease from 1975 to 1993 (Table 15). During the period from 1975 to 1993, difference in water levels of more than one foot has occurred on most of the pumping wells selected for this comparison. An average decline of about three feet in pressure head on the artesian wells was measured.

Ground water use in the study area is increasing. Water withdrawals from pumped irrigation wells have almost doubled since 1975. However, small increases in pumpage from artesian wells have occurred. There were about 48 irrigation wells pumping in the study area in 1975 (Moreland 1977) compared to 80 irrigation wells pumping in 1993. The number of artesian wells remained constant. The volume of water pumped by wells for domestic and commercial purposes is generally insignificant compared to the volumes pumped by the irrigation wells and was not documented for this phase of the study. The recharge to the aquifer through the gravel pits in the study area was estimated as 1,400 acre feet during the 1993 irrigation season.

The canal irrigation water diversion usually begins in April and continues through October each year. Total amount of canal water diverted to the study area

from the Big Wood River during the irrigation season of 1993 was 92,240 acre feet. Ditches in the study area carrying canal water to fields significantly contribute to recharge to the aquifer. The measured seepage loss varied from 0.3 to 7.1 cubic feet per day.

Of the 28,500 irrigated acres in the study area south of Hailey, about 47% are irrigated from canals and 53% are ground water irrigated. About 74% of the irrigated area is sprinkler irrigated and 20% receives water by gravity irrigation. The remaining 5% of the irrigated area is sub irrigated. The major crops grown in the study area are irrigated pasture (42%), barley (31%), alfalfa (19%), potatoes (4%), oats (2%), wheat (1%), and canola (1%). The irrigated area has not increased appreciably since 1978; however, the percent of sprinkler irrigated area has increased from 13 percent in 1975 to 73 percent 1993.

The Big Wood River at Hailey has a historical base flow during winter and early spring of about 150 cfs with average peaks during May or June of 1500 cfs. The average annual flow has varied from less than 100 cfs in 1931 to more than 800 cfs in 1983. During the six years from 1987 through 1992, the average annual flow was about 275 cfs, which approaches the 200 cfs average annual flow in the early 1930s. Water year 1977 was the worst single year in recent times with an average annual flow of 204 cfs, followed by 1992 at 210 cfs. Water year 1993 was a somewhat better year with an average annual flow of 270 cfs.

Maximum flow in Silver Creek generally takes place in March or April due to local runoff. Spring flows increase in August through November and then decrease through January or February. This contrasts with the maximum seasonal flow in the Big Wood River which takes place from April-July. Average annual flow in Silver Creek below Picabo after the 1930s was reasonably constant at

about 160 cfs. Flow in the creek decreased markedly after 1987 and averaged below 120 cfs from 1988 through 1993.

Annual precipitation in the study area is highly variable. Precipitation data from 1960 to 1993 shows a maximum precipitation of 20 inches and minimum of 7.8 inches in 1992, with an average of 13.26 inches for the period of record as measured by the National Weather Service at Picabo. The precipitation during the eight year period from 1985 to 1992 was 11 inches which is significantly below average.

A tentative water budget for the aquifer system of the study area has been prepared. The major components of the water budget are: 1) ground water underflow above Hailey; 2) irrigation diversions from the Big Wood River; 3) seepage from the Big Wood River to the study area; 4) precipitation and snow melt; 5) outflow through the Silver Creek; 6) ground water outflow near Picabo; 7) spring outflows from west side of the study area; and 8) evapotranspiration. The estimated total inflow to the aquifer system and outflow from the aquifer system amounts to 198,000 and 216,000 acre feet respectively (Figure 16).

A three dimensional ground water model code (MODFLOW) has been selected for use in the second phase of the study. MODFOW is a three dimensional, finite-difference code. It is a peer reviewed, well documented, widely used ground water model code capable of simulating the flow in two and three dimensions in confined and unconfined aquifer systems under steady-state or transient conditions.

Field data collected during the first phase of the study is adequate for development of a three dimensional ground water flow model. In phase two of the study, the collected data will be tailored to meet the model input data requirements

and a ground water flow model will be developed. The model then can be used to evaluate the several "what if" scenarios for guiding the future planning process.

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Table 1. Wells in Ground Water Monitoring Network

S.No	Local Name	Site ID	Owner
1	2S-20E-1ACC2	4316421140130	SIMPLOT
2	1S-20E-26CDC1	4318101140259	CEMETRY
3	1S-20E-27BDA1	4318361140401	USGS
4	1S-20E-36BDC1	4317431140145	MILLIGTON
5	1S-20E-30BAA1	4318581140731	PURDY
6	1S-20E-20DCD1	4319041140602	PURDY
7	1S-20E-16CAD1	4320051140516	GARDNER
8	1S-20E-17DBC1	4320071140619	AMARAL
9	1S-20E-19BDA1	4319381140734	MOLYNEUX
10	1S-20E-18DCB1	4320001140728	CASTLE
11	1S-19E-25ACC1	4318361140840	MOLYNEUX
12	1S-19E-3BAA1	4322001141030	GARDNER
13	1S-19E-24BAA1	4319521140840	HUBSMAN
14	1S-19E-26BDD1	4318371140954	W.GRAY
15	1S-19E-26AAC1	4318521140935	UPRR
16	1S-19E-14DDD1	4319531140918	HIGHWAY
17	1S-19E-14CBB1	4320171141028	LARKIN
18	1S-19E-11ADA1	4321211140924	BEESHAW
19	1S-19E-11BBB1	4321361141029	BYINGTON
20	1S-19E-22CCD1	4319011141122	GRAY
21	1S-19E-22AAA1	4319511141029	HIGHWAY
22	1S-19E-22AAB	4319511141100	STINSONS
23	1S-19E-22BBB1	4319511141139	LOVELAND
24	1S-19E-22CAA1	4319251141105	GRAY
25	1S-19E-15DDD2	4319521141031	HIGHWAY
26	1S-19E-10AAB1	4321331141048	BYINGTON
27	1S-19E-10BDA1	4321241141107	RHEA
28	1S-19E-2CBC1	4321541141029	BEESHAW
29	1S-19E-3DAB1	4321591141047	GARDNER
30	1S-19E-16BCC1	4320221141253	BICKETT

31	1S-19E-16CCD2	4319551141235	BICKETT
32	1S-19E-20ABB1	4319501141321	LUCKE
33	1S-19E-20BAB1	4319431141343	STEVENSON
34	1S-19E-17AAA1	4320421141254	HIGHWAY
35	1S-19E-17DAC2	4320041141307	BICKETT
36	1S-19E-5ACD1	4322071141307	NORTH STAR
37	1S-19E-6ADD1	4322071141408	PETERSON
38	1S-19E-7BAA1	4321331141443	SCHOESSLER
39	1S-19E-7DBB1	4321071141433	ROGERS
40	1S-19E-18CAB1	4320161141455	WURST
41	1S-19E-18DDD1	4319521141407	HIGHWAY
42	1S-19E-24ACA1	4319381140830	WORINGTON
43	1N-19E-28BBB1	4323461141223	KNORP
44	1N-19E-28DAA1	4323211141115	HAWAIAN TRUST
45	1N-19E-28BDC1	4323251141207	HAWAIAN TRUST
46	1N-19E-33DBB1	4322331141146	GARDNER
47	1N-19E-20BAA1	4324421141305	HELLYER
48	1N-19E-20BBC1	4324321141333	STRUTHERS
49	IN-19E-7CDB1	4325471141424	HENDRIX
50	1N-19E-18ADA1	4325211141336	MARTIN
51	1N-19E-31CAA1	4322281141419	NEGREPONTE
52	1N-19E-28BDC1	4323251141202	BROSSI
53	1S-18E-13CCC1	4319551141629	FREDRICKSON
54	1S-18E-13CAA1	4320141141558	WURST
55	1S-18E-13DDB1	4370001141529	GRAY
56	1S-18E-2DDA1	4321461141623	LEE
57	1S-18E-14AAB1	4320401141630	STEWART
58	1S-18E-12BBB1	4321341141627	STUART
59	1S-18E-23BAB	4319301141630	DAVIS
60	1N-18E-25AAB2	4323491141506	EAKIN
61	1N-18E-13ACA1	4325181141509	KNIGHT
62	1N-18E-1DAA1	4326571411448	CANAL CO.
63	IN-18E-1BAA1	4327171141526	STEWART

64	IN-18E-1BCB1	4327051141555	HURST
65	1N-18E-14ABA1	4325301141620	CLOUGHTON
66	1N-18E-15DAA1	4325021141712	JOHN BROWN
67	1N-18E-27AAA1	4323481141715	FARRINGTON
68	1N-18E-26BBD	4323451141700	FRED BROWN
69	1N-18E-14DDB1	4324571141613	NURSERY
70	1N-18E-36DDD1	4322071141457	MONTGOMERY
71	2N-18E-36CDA1	4327291141530	ROGER
72	2N-18E-36ADC1	4327451141455	BELLEVUE CITY
73	2N-18E-26ABD1	4328551141620	HAILEY CITY
74	2N-18E-26CBB1	4328321141710	FORSTMAN
75	2N-18E-23DCC1	4329071141632	ECCLES
76	2N-18E-23DDB1	4329101141615	HAILEY CITY
77	2N-18E-22DDB1	4329141141726	YOUNG
78	2N-18E-22BAA1	4329531141755	ECCLES
79	2N-18E-15BAC1	4327371141219	HAILEY CITY
80	2N-18E-15DBC1	4330031141727	GAUGE

Table 2. Irrigation Diversions from Big Wood River and Silver Creek-1993

Site No.	Canal Name	Owner	Diversion from Big Wood River (af	Diversion from Silver Creek (af)
33	Cove	Various	2256	
35-A	Drager	Gregory Moore	7	
37	Kline (Slough)	Leroy Lewis	183	
38-P	Werry	Jack Parker	21	
39	Wrencher	John Borton	0	
39-A	Wrencher	Ron Hansen	287	
41	Peck	Thomas Peck	81	
42-P1	Cal-Pac	Cal-Pacifco	84	
42-P2	Pac	Cal-Pacifco	120	
42-P3	Scofield	Michael Schweitzer	29	
42-A	Haugh	Chris Haugh	363	
43	Bramon	Frank Bramon	60	
44	Kohler	Ted Devine	596	
45	District Canal	Various	44498	
49	Bannon	Various	1369	
50	Glendale	Various	7126	
55-C	Baseline Canal	Various	17169	
56-D	Dittoe	A.W. Molyneux	2646	
57-F	Brown	Wood River Ranches	89	
57-F	Brown	Mike MC Gonigal	1005	
61	Black's Ditch	Hadley Stuart	5488	
62	Graff	Wood River Ranches	3098	
63	Uhrig	Y-3 Ranch	954	
64	Flood	Y-3 Ranches	879	
71	Hice	Davis Investment	1416	
71-A	Hice	Bob Davis	935	
72	Martin	M.Weston & J. Scott	674	
74	Cloud	Edith Fredrickson	91	
75	Pugel	Ellyn Sue Ragone	142	
75	Pugel	Edith Fredrickson	49	
75-P	Pugel	Gertrude Peet	97	
76-P	Brandon		0	
77-P	Davis	Spring Creek Ranch	429	
000-0P	Roger	Rogers		43
000-0P1	Buhler Drain	Rogers		0
00-P5	Teeter Canyon	John Stevenson		191
00P6	Prinz Well	Nature Conservancy		450
00P7	Stalker Creek Pump	Robert Gardner		81
00P8	CSV Pump	Nature Conservancy		10
0001	Willis	John Stevenson		947
00-0P	Steve Well	John Stevenson		135

00-P1	Bickett Well	John Flood	0
00P2-P4	Lucke Well	Stevenson and Flood	1397
00P3	Patten Creek Pump	John Stevenson	71
9	Bill	Bill McMahan	70
10	Heath	Fred Judd	36
10-P	Heath	Fred Judd	0
11	Gillihan	Lee Amaral	1315
11	Gillihan	Fish & Game	1290
11	Gillihan	Gary Castle	42
11	Gillihan	Picabo Livestock	1290
11	Gillihan	Ward Woods	56
11	Gillihan	Kenneth Worthington	116
12	Max	A. W. Molyneux	360
39-P	Molly Pump	A.W.Molyneux	117
12A	Loving	Gerald Bashaw	1723
12B	Loving	Gerald Bashaw	1025
13	Stanfield	Robert Gardner	646
14-P	Mantey	Robert Gardner	147
15	Patterson	A. W. Molyneux	438
15-A	Patterson	Fish & Game	4559
16-P	Mill	Pat Millington	1392
16-P1	Tick Tock	Tick Tock	898
17	Albertson	Picabo Livestock	509
18	Kilpatrick	Picabo Livestock	6585
18	O Drain	Picabo Livestock	3846
18-P	Rinkel Well	Harry Rinker	255
19	Iden	Idaho Fish & Game	2050
19-P	Iden	Picabo Livestock	24
19-P1	Man	Tick-Tock	165
21	Swan	Bill Swanson	45
22-P	Chaumell	Pat Millington	0
22-P1	Chaumell	Pat Millington	135
22-P2	Chaumell	Pat Millington	27
22-P3	Chaumell	Pat Millington	103
22-P4	Chaumell	Pat Millington	499
23	Brodie	Moj Brodie	551
23-P	Neider	C&Y Ranch	217
23-P1	Brodie	Moj Brodie	650
24-P	Lawson	John Flood	350
24-P1	Lawson	John Flood	200
24-P2	Hunter	John Flood	91
26	Brett	Warren Nisson	211
28	Brett	Warren Nisson	194
29-P	Clark	Lawrence Schoen	45
29-P1	Clark	Jack Young	0

29-P2	Clark	Jack Young		128
29-P3	Clark	Walter Hofstetter		84
31	Osterhouse	Harry Rinker		697
		Total	92241	36506

Table 3. Streams in Surface Water Monitoring Network

Sr.No	Site ID	Name Of Stream
1	1S-18E-16d	Brock Creek
2	1S-18E-22a	Spring Creek
3	1S-18E-21b	Willow Creek at Mouth
4	1S-18E-14b	Crystal Creek
5	1S-18E-14d	Willow Creek at Rest Area
6	1S-18E-17c	Buhler Drain
7	1S-19E-20b	Patton Creek
8	1S-19E-21b	Cain Creek
9	1S-19E-21a	Chaney Creek
10	1S-19E-22a	Mud Creek
11	1S-19E-23b	Wilson Creek
12	1S-19E-14d	Grove Creek
13	1S-19E-13c	Loving Creek
14	1S-20E-26c	Silver Creek at Swanson Bridge
15	1S-20E-31d	Silver Creek at Priest Road

Table 4. Ground Water Level Measurements

Site ID	Local Name	Owner	Depth to Water below Ground Surface			
			Apr/May 93	Aug-93	Dec-93	Apr-94
4316421140130	2S-20E-1ACC2	Simplot	143.38	145.50	148.00	150.80
4318101140259	1S-20E-26CDC1	Cemetery	124.55	120.80	125.90	129.60
4318361140401	1S-20E-27BDA1	USGS	64.09	69.10	64.10	67.80
4317431140145	1S-20E-36BDC1	Millington	155.45	151.45	155.00	157.45
4318581140731	1S-20E-30BAA1	Purdy	6.10	8.40	6.30	7.70
4319041140602	1S-20E-20DCD1	Purdy	15.34	19.35	16.10	17.05
4320051140516	1S-20E-16CAD1	Gardner	5.10	6.60	3.75	6.30
4320071140619	1S-20E-17DBC1	Amaral	14.70		0.00	
4319381140734	1S-20E-19BDA1	Molyneux	48.88	57.80	48.00	49.75
4320001140728	1S-20E-18DCB1	Castle	39.60	44.00	38.40	40.70
4318361140840	1S-19E-25ACC1	Molyneux	31.00	31.15	30.15	30.65
4322001141030	1S-19E-3BAA1	Gardner	32.18	24.40	27.50	
4319521140840	1S-19E-24BAA1	Hubsman	9.49	14.90	9.90	10.75
4318371140954	1S-19E-26BDD1	W.Gray	37.40	58.10	36.40	36.10
4318521140935	1S-19E-26AAC1	Uprr	1.05	1.20	0.25	0.90
4319531140918	1S-19E-14DDD1	Highway	3.55	6.25	6.15	6.00
4320171141028	1S-19E-14CBB1	Larkin	4.37	3.35	3.70	3.80
4321211140924	1S-19E-11ADA1	Beeshaw	5.13	2.60	3.00	4.35
4321361141029	1S-19E-11BBB1	Byington	11.85	7.90	9.20	10.20
4319011141122	1S-19E-22CCD1	Gray	-8.40	-11.10	-12.00	-12.40
4319511141029	1S-19E-22AAA1	Highway	-4.60	-3.40	-6.00	-2.25
4319511141100	1S-19E-22AAB	Stinson	-8.78	-10.70	-9.70	-9.20
4319511141139	1S-19E-22BBB1	Loveland	-3.90	-7.00	-8.50	-7.50
4319251141105	1S-19E-22CAA1	Gray	-6.60	-13.40	-7.60	-6.00
4319521141031	1S-19E-15DDD2	Highway	4.74	4.55	4.35	4.00
4321331141048	1S-19E-10AAB1	Byington	15.65	9.85	13.00	14.75
4321241141107	1S-19E-10BDA1	Rhea	11.84	6.60	9.00	10.25
4321541141029	1S-19E-2CBC1	Beeshaw	18.45	11.40	14.70	16.30
4321591141047	1S-19E-3DAB1	Gardner	26.98	19.70	22.60	24.60
4320221141253	1S-19E-16BCC1	Bickett	-5.50	-15.80	-7.50	-6.50
4319551141235	1S-19E-16CCD2	Bickett	-12.10	13.90	-12.30	-6.80
4319501141321	1S-19E-20ABB1	Lucke	-13.58	-11.90	-12.60	-16.21

4319431141343	1S-19E-20BAB1	Stevenson	-17.10	-15.80	-13.20	-17.50
4320421141254	1S-19E-17AAA1	Highway	6.00	5.25	6.50	
4320041141307	1S-19E-17DAC2	Bickett	-8.57	-10.60	-10.47	-8.17
4322071141307	1S-19E-5ACD1	North Star	26.00	22.30	23.70	38.20
4322071141408	1S-19E-6ADD1	Peterson	35.90	20.80	30.50	31.70
4321331141443	1S-19E-7BAA1	Scholssler	16.20	5.40	5.02	13.12
4321071141433	1S-19E-7DBB1	Rogers	2.50	0.15	0.05	1.25
4320161141455	1S-19E-18CAB1	Wurst	-12.10	-14.80	-12.20	-10.90
4319521141407	1S-19E-18DDD1	Highway	2.50	0.25	0.05	-0.10
4319381140830	1S-19E-24ACA1	Worington	13.10	14.80	12.90	13.25
4323461141223	1N-19E-28BBB1	Knorp	70.49	54.90	63.90	70.70
4323211141115	1N-19E-28DAA1	Hawaian Trust	70.00	55.85	52.75	73.75
4323251141207	1N-19E-28BDC1	Hawaian Trust	64.84	52.10	52.00	
4322331141146	1N-19E-33DBB1	Gardner	45.75	31.25	40.25	48.05
4324421141305	1N-19E-20BAA1	Hellyer	88.00	69.75	84.55	89.35
4324321141333	1N-19E-20BBC1	Struthers	79.80	70.15	84.50	83.00
4325471141424	IN-19E-7CDB1	Hendrex	56.25	48.76	47.50	48.50
4325211141336	1N-19E-18ADA1	Martin	67.27	53.25	50.05	67.40
4322281141419	1N-19E-31CAA1	Negrapoit	38.80	29.50	48.20	48.80
4323251141202	1N-19E-28BDC1	Brossi	64.84	52.10	52.90	53.00
4319551141629	1S-18E-13CCC1	Eidth	-28.66	-30.80	-28.80	26.10
4320141141558	1S-18E-13CAA1	Wurst	-17.31	-14.40	-12.75	-10.50
4370001141529	1S-18E-13DDB1	Gray	-24.71	-25.30	-22.00	-21.50
4321461141623	1S-18E-2DDA1	Lee	-5.50	-4.70		-5.00
4320401141630	1S-18E-14AAB1	Stewart	-21.35	-24.70	-22.00	-16.00
4321341141627	1S-18E-12BBB1	Stuart	-4.50	-15.75	-8.50	-6.80
4319301141630	1S-18E-23BAB	Davis	-38.00	-33.20	-29.50	-24.50
4323491141506	1N-18E-25AAB2	Eakin	83.03	67.50	79.40	81.95
4325181141509	1N-18E-13ACA1	Knight	40.75	36.80	40.50	42.80
4326571411448	1N-18E-1DAA1	Canal Co.	46.64	42.20	46.00	49.00
4327171141526	IN-18E-1BAA1	Stewart	34.50	35.90	39.50	38.50
4327051141555	IN-18E-1BCB1	Hurst	2.60	3.20	4.40	4.20
4325301141620	1N-18E-14ABA1	Cloughton	71.60	85.00	83.30	75.50
4325021141712	1N-18E-15DAA1	John Brown	Dry @ 85'			
4323481141715	1N-18E-27AAA1	Farrington	46.10	34.00	36.00	42.00
4323451141700	1N-18E-26BBD	Fred Brown	46.80	23.50	35.50	41.50
4324571141613	1N-18E-14DDB1	Nursery	53.60	47.00	44.50	76.70

4322071141457	1N-18E-36DDD1	Montgomery	14.80	12.60	10.00	9.30
4327291141530	2N-18E-36CDA1	Roger	32.74	35.25	40.20	38.00
4327451141455	2N-18E-36ADC1	Bellevue City	78.20	85.00	84.80	85.60
4328551141620	2N-18E-26ABD1	Hailey City	37.95	40.20	42.40	39.00
4328321141710	2N-18E-26CBB1	Forstman	5.20	4.70	3.50	4.50
4329071141632	2N-18E-23DCC1	Eccles	35.73	37.40	38.20	47.30
4329101141615	2N-18E-23DDB1	Hailey City	40.87	42.90	44.50	43.20
4329141141726	2N-18E-22DDB1	Young		5.20	3.80	4.00
4329531141755	2N-18E-22BAA1	Eccles	18.22	19.20	21.30	21.50
4327371141219	2N-18E-15BAC1	Hailey City	36.80	34.45	38.00	38.75
4330031141727	2N-18E-15DBC1	Gauge	34.01	45.13	36.28	37.33

NOTE: Minus sign indicates the artesian wells

Table 5. Historical Ground Water Level Data-Observation Well

Average of Monthly Depth to Water Measurements

Year	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1955	47.10	47.20	47.80	48.28						42.95	45.29	
1956	45.35	46.99	47.44	44.90	36.23	34.16	34.64	40.42	41.92	42.81	44.05	45.28
1957	46.93	47.09	47.04	47.08	44.22	33.59	35.04	39.97	40.66	43.44		45.53
1958				46.22	38.99	34.12	36.59	40.05	41.07	42.77	43.93	46.03
1959	46.87	47.80	48.55	45.97	40.95	36.84	41.62	45.38	44.34	44.95	46.65	48.00
1960				45.79	41.61	36.68	43.87	45.18	45.20	44.84		46.31
1961		50.12	49.76	49.08	46.18	37.39	39.78	45.87	43.14	44.74	46.29	46.27
1962				47.06	36.98	34.44	36.44	41.93	41.14	44.44	44.72	46.45
1963	47.60		46.04	47.34	40.70	35.32	34.12	41.26	41.48	43.09	44.54	45.75
1964	46.59		47.24	45.12	39.85	38.22	36.70	41.08	41.81	43.68	45.18	46.30
1965	45.07	46.62		45.37	40.29	31.51	34.51	33.30	39.55	43.54	44.79	46.60
1966	47.41	48.30	48.11	46.22	35.23	36.70	41.30		44.66	43.23	44.29	
1967	47.57	49.46	50.15	48.40	37.78	34.33	36.34	38.34	40.78	41.90	45.36	47.26
1968	48.11		49.05	46.46	40.11	34.90	37.53	43.14	41.76	43.31	45.29	46.92
1969			50.23	43.53					39.95			
1970			46.75						40.20			
1971				43.79					38.60			
1972			44.52						40.80			
1973			47.55						44.07			
1974		47.59							40.35			
1975			46.50		40.09	33.20	35.50	37.62	38.92	40.92	42.97	45.54
1976			47.92						41.89			
1977			48.35		45.61		41.22		45.09		46.31	
1978	48.90		48.49		43.20		37.57	40.87	42.40	43.61	44.69	46.45
1979	47.22	47.51	47.90	47.31	44.29	39.53	41.03	43.76		45.51	45.93	47.36
1980	48.56	48.92	49.15	47.64	42.75	40.70	38.65	40.56	42.45	43.20	44.41	46.26
1981	47.65	48.15	47.91	45.61	42.33	38.95	38.29	42.37	44.24	44.60	45.14	46.92
1982	47.59	48.29	47.82	46.46	41.85	39.44	39.49	39.28	42.12	43.29	44.12	45.59
1983	46.28	46.95	45.80	43.84	39.94	36.41	37.20	37.62	41.63	42.14	42.51	43.26
1984	43.37	43.84	45.34	43.81	43.02		38.22		42.45		45.20	45.34
1985	45.90	46.70	47.15	45.54	41.74	38.52	40.87	42.65	43.25	44.28	46.06	46.52
1986	46.01	46.76	43.60	43.30	41.38	37.18	37.65		40.24		44.18	
1987	45.72		45.57		42.23		44.76		46.18		45.80	
1988	47.35		45.74		43.98		43.60		47.95		47.63	
1989	48.30		49.19		42.80		41.62		47.76		47.47	
1990	49.01		49.46		44.92		43.92		45.78			49.30
1991	49.46	50.42			45.40		43.08		45.74		47.16	
1992	49.93			48.96	44.27		45.34		49.83		49.00	
1993	48.85		51.87	46.64	46.74		41.86	42.20	43.95		46.59	

Table 6. Historical Ground Water Level Data-Punkin Center Well

Average of Monthly Depth to Water Measurements

Year	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1954								-7.70			-6.50	-6.10
1955	-5.10	-6.40	-4.85	-6.30	-5.74	-5.82	-7.60	-5.95		-6.88	-5.50	
1956	-6.19	-5.85	-5.85	-6.05	-5.96	-8.63				-7.60		-6.80
1957	-6.50	-6.10	-6.77	-6.49	-6.76		-8.30	-7.80	-7.50			-7.20
1958	-6.51	-6.58		-6.43		-9.07	-9.87	-8.52	-8.62	-8.19	-7.94	-7.04
1959		-6.16	-6.24	-5.75	-5.71	-7.40	-6.35	-5.15	-5.87	-6.73	-6.33	-5.88
1960		-5.54	-5.50	-5.72	-4.72	-5.50	-4.83	-4.87	-4.13	-5.64		-5.45
1961	-5.20	-5.35	-4.74	-4.15				-3.98	-5.40	-5.95	-5.40	-5.25
1962	-5.10	-5.33	-5.15	-5.80	-7.33	-8.33	-7.71	-7.72	-7.13		-7.12	-6.62
1963	-6.01		-5.81	-5.41	-6.23	-9.03	-7.73	-8.23	-7.78	-7.23	-7.72	-7.52
1964	-6.55		-6.00	-5.72	-4.68	-7.63	-6.73	-5.58	-6.25	-6.97	-6.71	-6.57
1965	-6.68	-5.81		-6.00	-7.06	-7.73	-7.86	-8.73	-8.99	-7.40		-6.73
1966	-6.05	-6.00		-5.43	-6.22	-5.15	-4.59		-5.05	-5.22	-5.47	-6.98
1967	-5.29	-4.99	-6.07	-5.65	-6.21	-7.75	-8.07	-7.67	-8.03	-8.53		-7.35
1968	-6.79		-6.45	-5.81	-6.40	-6.05	-5.52	-5.84	-8.00	-7.52	-7.12	-6.87
1969			-6.31					-7.21	-8.52		-8.30	
1970		-6.88	-6.92	-5.96	-6.51		-8.42	-7.11	-7.62	-7.47		
1971		-6.05	-6.96		-7.01		-8.45		-8.04			
1972			-7.02						-8.24			
1973			-6.26						-7.12			
1974		-4.96							-5.95	-8.27		-8.27
1975	-6.15		-6.05	-10.47	-6.83	-7.60	-4.88	-6.88	-11.18	6.65	-7.35	-6.92
1976			-5.72						-7.33			
1977			-6.58		-4.69		-2.80		-5.51		-5.48	
1978	-4.51		-6.31		-4.70		-5.94		-8.77		-8.04	
1979	-7.87		-6.42		-6.48		-5.74			-5.69	-5.46	
1980	-5.74		-5.61		-5.58		-5.01	-6.81	-6.86		-7.89	-5.54
1981	-6.35		-5.74		-6.34		-6.15		-6.28		-6.21	
1982			-6.58		-6.79		-6.20		-8.14		-4.50	
1983	-7.64		-7.74		-7.39		-7.44		-8.60		-8.27	
1984	-7.15		-6.48		-6.70		-6.65		-7.72		-7.61	
1985	-6.87		-6.68		-6.43		-5.36		-6.86		-6.57	
1986			-6.94		-7.17		-6.49		-8.37		-7.42	
1987	-6.47		-6.57		-5.93		-6.01		-4.84		-4.87	
1988	-4.98		-4.97		-5.66				-4.72		-4.67	
1989			-5.10		-6.17		-5.15		-5.80			
1990	-5.47		-5.45		-5.02				-5.62			-4.73
1991	-4.73	-4.52			-4.80		-3.63		-4.21		-5.02	
1992	-4.92			-4.64	-4.72		-3.25		-3.10		-3.31	
1993	-3.02		-3.92		-4.75		-3.27		-6.36	-4.60	-4.40	-6.00

Table 7. Canal Seepage Losses in Big Wood River-Silver Creek Area

Canal Reach (Miles)	Length of Reach (miles)	Loss (CFD)*
Dist. 45 canal from head gates to Hwy. 93	1.20	3.35
East leg of Dist. 45 canal	1.60	2.88
Central leg of Dist. 45 -upper reach	2.90	4.03
Central leg of Dist. 45 -lower reach	1.80	0.78
West leg of Dist. 45	3.40	1.18
Baseline Canal	0.50	4.22
Bypass Canal-headgates to Baseline canal division	2.90	3.89
Glendale canal-lower reach	0.50	0.68
Iden canal	0.80	5.41

D)*= Cubic feet per square foot of canal area per day

(From Brockway and Grover 1978)

Table 8. Summary of Stream Flow Data in Big Wood River-Silver Creek Area

Stream	Average Monthly Discharge (cfs) for Year 1993-94											
	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April
Brock Creek	8.50	7.55	5.10	3.56	1.38	2.24	1.80	0.30	0.20	0.20	0.20	0.10
Spring Creek	7.35	7.90	8.00	8.70	8.20	7.60	7.65	6.90	6.50	5.87	5.66	5.80
Willow Creek at Mout	33.01	38.38	38.72	45.75	43.29	47.54	42.22	36.54	24.88	24.11	30.25	28.25
Crystal Creek	13.50	16.54	15.40	20.80	14.50	21.60	17.25	16.15	12.50	11.90	11.50	13.00
Willow Creek at Rest	2.20	3.99	5.85	7.30	6.90	8.22	8.22	6.70	5.15	5.04	3.17	4.45
Buhler Drain	1.37	3.80	5.46	6.50	6.82	6.75	6.40	4.90	3.35	3.20	3.80	3.18
Patton Creek	2.80	6.30	10.94	12.43	11.84	11.10	10.45	8.40	5.40	5.08	6.10	5.50
Cain Creek	2.85	3.50	5.25	6.20	6.65	6.65	5.80	4.50	3.25	3.29	3.78	3.50
Channey Creek	12.95	14.25	14.85	15.50	15.70	16.00	16.21	15.50	14.80	14.29	14.29	14.29
Mud Creek	5.07	5.15	5.10	5.20	5.25	5.30	5.28	5.31	5.10	5.36	5.45	5.21
Wilson Creek	10.68	11.63	11.75	11.70	11.55	11.90	11.72	11.45	10.60	10.53	10.75	10.50
Grove Creek	43.21	52.11	60.20	56.64	56.12	56.12	53.40	45.25	47.22	48.40	45.57	42.40
Loving Creek	36.25	48.75	51.18	58.00	54.98	53.26	46.88	37.46	31.25	31.27	32.00	32.15
Silver Creek At Swans	94.26	133.83	117.84	146.09	164.43	186.81	166.25	157.80	138.00	159.60	160.15	123.34
Silver Creek at Priest	67.54	118.90	94.20	110.75	117.20	165.15	165.18	152.00	132.45	145.65	158.11	86.90

Table 9. Pumpage from Irrigation Wells for 1993

Range	L. Name	Owner	Discharge (cfs)	Period (Days)	Volume Pumped (af)
20E	9ADA	B Bar B	7.00	50.00	694.40
20E	9AAD	B Bar B	1.75	60.00	208.32
20E	20BBC	Purdy	9.00	35.00	624.96
20E	20DCD1	Purdy	5.50	40.00	436.48
20E	30BAA	Purdy	7.50	10.00	148.80
20E	30BAB	Purdy	2.75	40.00	218.24
20E	30BAC	Purdy	6.50	35.00	451.36
19E	26BDD2	Gardner	1.75	60.00	208.32
19E	26BDD1	Gardner	3.00	60.00	357.12
19E	22CCD1	Gardner	2.00	60.00	238.08
19E	26AAC1	Gardner	0.75	60.00	89.28
19E	33DBB1	Gardner	3.00	60.00	357.12
19E	28CCB1	Gardner	5.50	60.00	654.72
19E	3AAA	Gardner	5.00	60.00	595.20
19E	16CAD2	Gardner	3.00	60.00	357.12
19E	25ACC1	Molyneux	3.00	80.00	476.16
19E	19BDA1	Molyneux	3.50	80.00	555.52
19E	19BBB	Molyneux	0.50	90.00	89.28
19E	12BAC1	Molyneux	3.00	90.00	535.68
19E	12ABA	Molyneux	1.00	90.00	178.56
19E	36BAC	Molyneux	5.50	75.00	818.40
19E	18DCB1	Castle	1.00	90.00	178.56
19E	24BAA1	Larry	3.00	100.00	595.20
19E	13CAA	McMahan	6.00	90.00	1071.36
19E	14BCC	McMahan	4.00	90.00	714.24
19E	11BBB1	Byington	0.50	90.00	89.28
19E	10AAB1	Byington	4.00	90.00	714.24
19E	2CCA1	Bashaw	3.50	90.00	624.96
19E	2CBC1	Bashaw	3.50	90.00	624.96
19E	3DAB1	Bashaw	4.00	90.00	714.24
19E	3CAA	Bashaw	3.50	90.00	624.96
19E	14CBB1	Larkin	4.00	30.00	238.08
19E	14ABD	Delissar	4.00	3.00	23.81
19E	3BAA1	Delissar	1.25	90.00	223.20
19E	10BDA	Rhea	4.00	90.00	714.24
19E	3CCB2	Rhea	3.50	90.00	624.96
19E	3DDC	Rhea	4.00	90.00	714.24
19E	4BCC1	Walton	4.00	90.00	714.24
19E	4BCC2	Walton	8.00	90.00	1428.48
19E	CAD2	Sherbine	5.50	10.00	109.12
19E	6AAC	Sherbine	4.00	90.00	714.24
19E	5ADC1	Sherbine	5.00	20.00	198.40
19E	4BBA	Nisson	3.00	90.00	535.68
19E	33AAA	Nisson	2.00	90.00	357.12
19E	8ABA	Schoessler	4.00	90.00	714.24
19E	8CDC	Schoessler	3.00	90.00	535.68

19E	8CDC1	Schoessler	3.00	90.00	535.68
19E	6ADD1	Drussel	2.00	100.00	396.80
19E	8CCC	Chaumell	0.75	100.00	148.80
19E	20BBC1	Struthers	7.00	45.00	624.96
19E	20BBC2	Struthers	7.00	45.00	624.96
19E	20BBC3	Struthers	7.00	45.00	624.96
19E	32CBA1	Stevenson	5.00	75.00	744.00
19E	32CBA2	Stevenson	5.50	75.00	818.40
19E	29BAA	Stevenson	4.00	90.00	714.24
19E	30AAB	Stevenson	2.00	90.00	357.12
19E	19CCB	Stevenson	4.50	75.00	669.60
18E	10BBC1	Sheldon	2.00	60.00	238.08
18E	10BBC2	Sheldon	1.00	60.00	119.04
18E	27AAA1	Farrington	1.75	0.00	0.00
18E	25AAB2	Eakin	2.50	90.00	446.40
18E	24CCC	Walker	1.75	90.00	312.48
18E	24CBC	Walker	1.75	180.00	624.96
18E	14DDB1	Web Nursery	1.50	150.00	446.40
18E	13ABB1	Lee	1.50	90.00	267.84
18E	12DBD1	Lee	1.25	90.00	223.20
18E	35DBD1	Lee	4.00	90.00	714.24
18E	2DAB1	Lee	2.00	90.00	357.12
18E	34ADA	Lee	0.75	90.00	133.92
18E	2DDA2	Lee	2.00	90.00	357.12
18E	6BBA	Lee	2.00	90.00	357.12
18E	36ADC1	Bellevue City	1.50	80.00	238.08
18E	26CBB1	Forstman	1.00	75.00	148.80
18E	22DDB1	Eccles	1.00	90.00	178.56
18E	23DCC1	Eccles	1.50	90.00	267.84
19E	7CDB1	Polo Club	4.50	90.00	803.52
19E	18ADA1	Cove Ranch	6.50	90.00	1160.64
19E	20BAA1	Cove Ranch	6.50	90.00	1160.64
19E	28BCD	Cove Ranch	5.50	90.00	982.08
19E	01DAA	W.R Irrig		0.00	0.00
19E	28BBB1	Dudley	4.18	75.00	621.98
				Total	38510.43

Preliminary data, subject to revision

Table10. Pumpage form Artesian Wells for 1993

TN	RN	L.Name	Owner	Discharge (cfs)	Period (days)	Volume Pumped (af)
1S	19E	16CCD2	Bickett	2.46	21	102
1S	19E	16BCC1	Bickett	1.76	21	73
1S	19E	17DAC1	Bickett	2.85	21	119
1S	19E	16CAD	Bickett	2.50	21	104
1S	19E	17DAA	Bickett	2.46	21	102
1S	19E	22AAB	Stinson	2.24	21	93
1S	19E	22BBB1	Stinson	4.00	21	167
1S	19E	22CAA1	Stinson	1.06	21	44
1S	19E	13ACB	H.Fishery	0.06	365	43
1S	19E	13ACB2	H.Fishery	2.67	365	1934
1S	19E	13ACB3	H.Fishery	1.78	365	1289
1S	19E	13ABC4	H.Fishery	1.00	365	724
1S	19E	20ABB1	H.Fishery	0.90	365	652
1S	19E	20BAB1	H.Fishery	4.50	365	3259
1S	19E	18BAC	Kray	0.50	10	10
1S	18E	18CAB1	Smith	1.00	35	69
1S	18E	13AAA	Smith	2.00	35	139
1S	18E	13DAA	Smith	2.00	35	139
1S	18E	13CCC1	Eidth	1.50	100	298
1S	18E	23BAB1	Davis	0.25	90	45
1S	18E	14AAB1	Sturat	2.75	180	982
1S	18E	13CAA1	Sturat	0.18	180	64
1S	18E	13BAA1	Sturat	0.50	180	179
1S	18E	12BBB1	Sturat	0.20	180	71
1S	18E	2DDA2	Lee	1.50	75	223
1S	18E	2DAB1	Lee	2.00	75	298
1S	18E	34CAA	Lee	8.00	75	1190
1S	18E	15DDD	Akeyson	1.10	25	55
1S	18E	13ACA	Akeyson	0.75	250	372
1S	18E	13DDB1	Ivie	0.65	130	168
				Total		13007

Table 11. Ground Water Recharge Pit Data for Year 1993

it No	Location	Owner	Flow (cfs)	uration (days)	Period	Recharge (af)
1	1N-19E-19CCD	Stevenson	5.00	63.00	from 20 th September	625.00
2	1N-19E-20CCD	Struthers	5.00	49.00	from 20 th September	486.00
3	1N-19E-13CAC	Stevenson	6.00	14.00	1st to 15th September	167.00
4	1N-19E-32CCD	Stevenson	9.00	7.00	from 30th September	125.00
5	1N-19E-30CDB .	S. Foundatio	0.00	0.00	None	0.00
					Total	1400.00

Table 12. Snow Course Data for Big Wood River- Silver Creek Area for 1993

Site	Date	Aveg. Snow Depth (Inches)	Water Content (Inches)	Snow Density (%)
Baseline RD.	12/21/93	5.90	0.92	16.00
	1/15/94	8.50	1.60	19.00
	1/31/94	8.50	1.80	21.00
	2/15/94	13.80	2.70	20.00
	3/3/94	7.90	2.80	36.00
Gannett RD.	12/21/93	6.60	1.70	26.00
	1/15/94	9.30	2.00	21.00
	1/31/94	8.90	2.30	26.00
	2/15/94	14.30	3.50	25.00
	3/3/94	7.30	1.90	26.00
Manager's House	12/21/93	2.40	0.20	9.00
	1/15/94	5.10	1.00	20.00
	1/31/94	3.90	0.80	21.00
	2/15/94	9.40	1.40	14.00
	3/3/94	0.00	0.00	0.00
Picabo	12/21/93	0.00	0.00	0.00
	1/15/94	2.00	0.20	11.00
	1/31/94	0.00	0.00	0.00
	2/15/94	2.80	0.50	18.00
	3/3/94	0.00	0.00	0.00
	Total		0.70	

Table 13. Monthly Precipitation Data for Big Wood River-Silver Creek Area

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	nnual
1958	-	-	-	-	2.09	0.82	0.00	0.00	0.12	0.00	1.35	0.61	-
1959	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-
1960	1.22	1.82	1.66	0.90	0.07	0.34	0.00	0.73	0.00	0.90	2.36	0.27	10.27
1961	0.34	0.90	0.62	0.63	0.80	0.63	0.33	0.19	2.00	1.08	0.70	1.06	9.28
1962	1.00	2.75	1.71	0.61	3.83	0.66	0.54	0.47	0.35	0.66	0.81	0.83	14.22
1963	0.78	3.05	0.53	2.56	1.53	3.45	0.00	0.58	1.11	0.45	2.53	0.66	17.23
1964	1.96	0.00	1.88	0.87	1.28	1.99	0.09	0.12	0.03	0.56	2.24	7.96	18.98
1965	1.62	0.18	0.25	1.87	1.83	1.07	0.10	2.16	0.44	0.00	1.58	1.21	12.31
1966	1.38	0.17	1.11	0.59	0.59	0.11	0.11	0.00	0.22	0.54	1.36	1.90	8.08
1967	4.07	0.23	1.06	0.79	0.36	4.20	0.22	0.00	0.08	1.20	2.02	0.90	15.13
1968	1.00	1.01	0.68	0.26	1.47	3.59	0.00	3.48	0.43	0.22	1.52	3.25	16.91
1969	6.63	1.68	0.19	0.29	0.11	1.77	0.22	0.00	1.43	0.16	0.45	2.04	14.97
1970	3.32	0.55	1.46	0.86	0.89	2.35	0.26	0.30	1.24	1.10	3.26	4.03	19.62
1971	3.31	0.57	1.75	1.05	0.62	1.52	0.21	0.31	0.56	0.90	1.68	2.62	15.10
1972	2.35	0.75	0.93	0.80	0.84	0.90	0.00	0.38	1.53	1.11	1.53	1.46	12.58
1973	1.57	1.01	1.03	0.49	0.46	0.28	0.71	0.51	0.34	0.43	3.78	2.00	12.61
1974	2.14	0.58	2.32	0.31	0.11	0.00	0.21	0.08	0.00	1.31	0.41	1.28	8.75
1975	1.34	3.17	2.87	1.69	1.07	0.67	0.25	0.41	0.03	1.73	0.95	0.98	15.16
1976	1.69	2.06	1.13	1.77	0.62	0.48	0.05	1.19	1.21	0.55	0.00	0.10	10.85
1977	1.10	0.52	0.48	0.10	2.09	0.64	0.80	0.14	0.57	0.35	1.33	3.11	11.23
1978	2.10	1.86	0.88	2.15	0.65	0.55	0.35	0.30	1.82	0.01	0.72	0.60	11.99
1979	1.32	1.38	1.05	0.50	1.15	0.59	0.35	1.03	0.14	1.51	0.82	0.73	10.57
1980	3.57	1.55	0.45	0.72	3.15	0.76	0.61	0.65	1.62	0.35	0.83	2.01	16.27
1981	0.85	0.88	1.08	1.76	0.83	0.59	0.06	0.05	0.00	1.52	2.55	2.60	12.77
1982	1.72	1.54	1.21	1.29	1.18	0.85	1.38	0.10	1.70	1.17	1.95	3.50	17.59
1983	0.41	2.62	2.79	0.75	0.89	1.78	0.65	1.44	0.83	0.77	3.98	3.15	20.06
1985	0.60	2.38	0.92	0.10	0.96	0.10	2.32	0.00	1.80	0.75	0.93	1.97	12.83
1986	1.62	4.55	1.36	0.67	1.75	0.75	0.25	0.33	1.42	0.44	0.15	0.22	13.51
1987	1.08	0.50	1.12	0.00	2.69	0.71	1.42	0.15	0.00	0.20	1.32	1.02	10.21
1988	0.91	0.25	0.50	1.11	1.65	0.05	0.00	0.00	0.30	0.00	5.61	1.80	12.18
1989	1.40	0.50	1.56	0.21	1.22	0.15	0.15	0.53	0.80	2.09	0.58	0.00	9.19
1990	1.85	1.40	0.56	1.62	1.62	1.25	0.05	0.53	0.15	0.30	0.80	0.75	10.88
1991	0.00	0.09	2.63	1.25	2.57	0.70	0.33	0.22	1.41	1.80	1.28	0.12	12.40
1992	0.20	1.14	0.17	0.52	0.00	1.12	0.00	0.05	0.73	1.20	0.60	1.67	7.40
1993	2.11	1.58	2.00	1.10	0.95	2.70	2.65	0.42	0.65	1.75	0.05	0.40	16.36
1994	0.65	-	-	-	-	-	-	-	-	-	-	-	-
avg	1.71	1.31	1.21	0.91	1.21	1.13	0.44	0.51	0.76	0.82	1.54	1.70	13.26

Table 14. Crop and Irrigation Distribution in Big Wood River-Silver Creek Area

Crop	Acreage	Percent of Total Area in 1993	Percent of Total Area in 1975
Surface Irrigated	13269	47	44
Ground water Irrigated	15178	53	56
Sprinkler Irrigated	21223	74	13
Gravity Irrigated	5865	21	80
Sub-irrigated	1446	5	7
Wheat	413	1	3
Barley	10571	30	22
Oats	559	2	2
Alfalfa	6824	20	31
Pasture	15006	42	41
Canola	248	1	
Potatoes	1372	4	1

Table 15. Comparison of Ground Water Levels

Well	Measurement Date	Depth to Water (ft)	Rise/Fall (ft)
2N-18E-22BAA1	5/23/75	18.40	
	5/21/93	18.22	0.18
2N-18E-23DCC1	4/9/86	34.14	
	4/14/93	35.73	-0.54
2N-18E-36CDA1	4/28/75	36.27	
	4/21/94	38.00	-1.73
1N-18E-25AAB2	4/28/75	78.05	
	4/22/93	83.03	-4.98
1N-18E-13ACA1	8/11/70	38.66	
	8/16/93	36.80	1.86
1N-19E-28DAA1	5/19/70	74.85	
	4/27/94	73.75	1.10
1S-19E-11ADA1	5/13/91	5.26	
	4/13/93	5.13	0.13
1S-19E-14CBB1	4/27/76	3.10	
	4/13/93	4.37	-1.27
1S-19E-14DDD1	4/27/76	4.48	
	4/20/94	6.00	-1.52
1S-19E-15DDD2	4/27/76	3.86	
	4/20/94	4.50	-0.64
1S-19E-24BAA1	4/24/78	10.90	
	4/20/94	10.75	0.15
1S-19E-25ACC	4/27/76	29.13	
	4/29/93	31.00	-1.87
1S-19E-26BDD1	5/5/70	36.18	
	5/5/93	37.40	-1.22
1S-19E-16BCC*	6/20/76	-18.62	
	8/19/93	-15.80	-2.82
1S-19E-20ABB1*	5/26/76	-22.47	
	4/21/94	-16.21	-6.26
1S-19E-20BAB*	4/27/70	-20.60	
	4/18/94	-17.50	-3.10
1S-19E-22BBB1*	5/26/76	-9.30	
	5/28/93	-3.90	-5.40
1S-19E-22CCD1*	4/27/76	-22.48	
	4/18/94	-21.40	-1.08

* Artesian Wells

Appendix A

Daily Depth to Water Measurements for Punkin Center Artesian Well and USGS Observation Well

Daily Depth to Water Measurements of Punkin Center and USGS Wells					
Site ID	1S 19E 22AAA1	Latitude	431950	Longitude	1140000000
Year	Month	Day	DATE	Depth	Status Code
1954	8	11	Aug-54	-7.70	M
1954	11	26	Nov-54	-6.50	M
1954	12	13	Dec-54	-6.10	M
1955	1	10	Jan-55	-5.10	M
1955	2	7	Feb-55	-6.40	M
1955	3	8	Mar-55	-4.85	M
1955	4	4	Apr-55	-6.30	M
1955	5	2		-5.74	S
1955	6	1	May-55	-5.82	S
1955	7	1	Jun-55	-7.70	S
1955	7	25	Jul-55	-7.50	S
1955	8	17	Jul-55	-5.95	S
1955	10	4	Aug-55	-6.88	M
1955	11	10	Oct-55	-4.50	M
1955	11	30	Nov-55	-6.60	S
1956	1	3	Nov-55	-6.10	S
1956	1	9	Jan-56	-6.28	S
1956	2	6	Jan-56	-5.85	S
1956	3	9	Feb-56	-5.85	S
1956	4	2	Mar-56	-6.20	S
1956	4	30	Apr-56	-5.90	S
1956	5	30	Apr-56	-5.96	S
1956	6	28	May-56	-8.63	S
1956	10	16	Jun-56	-7.60	M
1956	12	12	Oct-56	-6.80	S
1957	1	11	Dec-56	-6.50	S
1957	2	9	Jan-57	-6.10	S
1957	3	4	Feb-57	-6.77	S
1957	4	7	Mar-57	-6.49	S
1957	5	1	Apr-57	-6.16	S
1957	5	23	May-57	-7.36	S
1957	7	20	May-57	-8.30	M
1957	8	15	Jul-57	-7.80	S
1957	9	19	Aug-57	-7.50	S
1957	12	11	Sep-57	-7.20	M
1958	1	29	Dec-57	-6.51	S
1958	2	27	Jan-58	-6.58	S
1958	4	7	Feb-58	-6.79	S
1958	4	25	Apr-58	-6.08	S
1958	6	27	Apr-58	-9.07	M
1958	7	25	Jun-58	-9.87	M

Daily Depth to Water Measurements of Punkin Center Well and USGS Well					
Year	Month	Day	DATE	Depth	Status Code
1958	8	28	Jul-58	-8.52	S
1958	9	27	Aug-58	-8.62	S
1958	10	30	Sep-58	-8.19	S
1958	11	26	Oct-58	-7.94	S
1958	12	30	Nov-58	-7.04	S
1959	2	26	Dec-58	-6.16	S
1959	3	26	Feb-59	-6.24	S
1959	4	25	Mar-59	-5.75	S
1959	5	28	Apr-59	-5.71	S
1959	6	25	May-59	-7.40	S
1959	7	28	Jun-59	-6.35	S
1959	8	27	Jul-59	-5.15	S
1959	9	25	Aug-59	-5.87	S
1959	10	26	Sep-59	-6.73	S
1959	11	24	Oct-59	-6.33	S
1959	12	18	Nov-59	-5.88	S
1960	2	1	Dec-59	-5.56	S
1960	2	26	Feb-60	-5.52	S
1960	3	24	Feb-60	-5.50	S
1960	4	28	Mar-60	-5.72	S
1960	5	27	Apr-60	-4.72	S
1960	6	23	May-60	-5.50	S
1960	7	29	Jun-60	-4.83	S
1960	8	23	Jul-60	-4.87	S
1960	9	23	Aug-60	-4.13	S
1960	10	27	Sep-60	-5.64	S
1960	12	16	Oct-60	-5.45	S
1961	1	29	Dec-60	-5.20	S
1961	2	25	Jan-61	-5.35	S
1961	3	27	Feb-61	-4.74	S
1961	4	22	Mar-61	-4.15	S
1961	8	25	Apr-61	-3.98	S
1961	9	23	Aug-61	-5.40	S
1961	10	22	Sep-61	-5.95	S
1961	11	19	Oct-61	-5.40	S
1961	12	19	Nov-61	-5.25	S
1962	1	24	Dec-61	-5.10	S
1962	2	19	Jan-62	-5.33	S
1962	3	17	Feb-62	-5.15	S
1962	4	17	Mar-62	-5.80	S
1962	5	29	Apr-62	-7.33	S
1962	6	24	May-62	-8.33	M
1962	7	24	Jun-62	-7.71	M
1962	8	26	Jul-62	-7.72	M
1962	9	19	Aug-62	-7.13	M
1962	11	20	Sep-62	-7.12	M
1962	12	16	Nov-62	-6.62	M

Daily Depth to Water Measurements of Punkin Center Well and USGS Well					
Year	Month	Day	DATE	Depth	Status Code
1963	1	15	Dec-62	-6.01	M
1963	3	3	Jan-63	-5.92	M
1963	3	30	Mar-63	-5.71	M
1963	4	28	Mar-63	-5.41	M
1963	5	28	Apr-63	-6.23	M
1963	6	23	May-63	-9.03	M
1963	7	21	Jun-63	-7.73	M
1963	8	20	Jul-63	-8.23	M
1963	9	20	Aug-63	-7.78	M
1963	10	21	Sep-63	-7.23	M
1963	11	20	Oct-63	-7.72	M
1963	12	22	Nov-63	-7.52	M
1964	1	24	Dec-63	-6.55	S
1964	3	1	Jan-64	-6.25	S
1964	3	27	Mar-64	-5.90	S
1964	4	27	Mar-64	-5.72	M
1964	5	26	Apr-64	-4.68	M
1964	6	21	May-64	-7.63	M
1964	7	19	Jun-64	-6.73	M
1964	8	16	Jul-64	-5.58	M
1964	9	19	Aug-64	-6.25	S
1964	10	23	Sep-64	-6.97	S
1964	11	24	Oct-64	-6.71	M
1964	12	20	Nov-64	-6.57	S
1965	1	19	Dec-64	-6.68	S
1965	2	28	Jan-65	-5.81	M
1965	4	3	Feb-65	-6.11	M
1965	4	26	Apr-65	-5.90	M
1965	5	25	Apr-65	-7.06	M
1965	6	19	May-65	-7.73	M
1965	7	19	Jun-65	-7.86	M
1965	8	14	Jul-65	-8.73	M
1965	9	18	Aug-65	-8.99	M
1965	10	23	Sep-65	-7.40	M
1965	12	18	Oct-65	-6.73	M
1966	1	18	Dec-65	-6.05	S
1966	2	28	Jan-66	-6.00	S
1966	4	23	Feb-66	-5.43	M
1966	5	24	Apr-66	-6.22	S
1966	6	18	May-66	-5.15	S
1966	7	18	Jun-66	-4.59	S
1966	9	17	Jul-66	-5.05	S
1966	10	27	Sep-66	-5.22	S
1966	11	20	Oct-66	-5.47	S
1966	12	17	Nov-66	-6.98	S
1967	1	16	Dec-66	-5.29	S
1967	2	24	Jan-67	-4.99	S

Daily Depth to Water Measurements of Punkin Center Well and USGS Well					
Year	Month	Day	DATE	Depth	Status Code
1967	3	25	Feb-67	-6.07	S
1967	4	22	Mar-67	-5.65	S
1967	5	31	Apr-67	-6.21	S
1967	6	19	May-67	-7.75	M
1967	7	15	Jun-67	-8.07	M
1967	8	11	Jul-67	-7.67	M
1967	9	21	Aug-67	-8.03	M
1967	10	20	Sep-67	-8.53	M
1967	12	17	Oct-67	-7.35	S
1968	1	16	Dec-67	-6.79	S
1968	3	1	Jan-68	-6.85	S
1968	3	29	Mar-68	-6.12	S
1968	4	26	Mar-68	-5.81	S
1968	5	27	Apr-68	-6.40	S
1968	6	21	May-68	-6.05	S
1968	7	20	Jun-68	-5.52	S
1968	8	15	Jul-68	-5.84	S
1968	9	19	Aug-68	-8.00	S
1968	10	17	Sep-68	-7.52	M
1968	11	19	Oct-68	-7.12	M
1968	12	17	Nov-68	-6.87	M
1969	3	27	Dec-68	-6.31	S
1969	8	21	Mar-69	-7.21	S
1969	9	26	Aug-69	-8.52	M
1969	11	21	Sep-69	-8.30	M
1970	2	6	Nov-69	-6.88	M
1970	3	28	Feb-70	-6.92	M
1970	4	28	Mar-70	-5.96	M
1970	5	26	Apr-70	-6.51	M
1970	7	29	May-70	-8.42	M
1970	8	12	Jul-70	-7.11	M
1970	9	26	Aug-70	-7.62	M
1970	11	20	Sep-70	-7.47	M
1971	2	5	Nov-70	-6.05	M
1971	3	27	Feb-71	-6.96	M
1971	5	24	Mar-71	-7.01	M
1971	7	26	May-71	-8.45	M
1971	9	21	Jul-71	-8.04	M
1972	3	24	Sep-71	-7.02	M
1972	9	19	Mar-72	-8.24	M
1973	3	15	Sep-72	-6.26	M
1973	9	17	Mar-73	-7.12	M
1974	2	28	Sep-73	-4.96	M
1974	9	18	Feb-74	-5.95	M
1974	10	23	Sep-74	-8.27	M
1974	12	20	Oct-74	-8.27	M
1975	1	22	Dec-74	-6.15	M

Daily Depth to Water Measurements of Punkin Center Well and USGS Well					
Year	Month	Day	DATE	Depth	Status Code
1975	3	13	Jan-75	-6.16	M
1975	3	24	Mar-75	-5.97	M
1975	4	28	Mar-75	-10.47	M
1975	5	22	Apr-75	-6.83	M
1975	6	19	May-75	-7.60	M
1975	7	22	Jun-75	-4.88	M
1975	8	25	Jul-75	-6.88	M
1975	9	22	Aug-75	-11.18	M
1975	10	1	Sep-75	-7.52	M
1975	10	29	Oct-75	-5.79	M
1975	11	20	Oct-75	-7.35	M
1975	12	18	Nov-75	-6.92	M
1976	3	25	Dec-75	-5.72	EM
1976	9	27	Mar-76	-7.33	M
1977	3	12	Sep-76	-6.58	EM
1977	5	20	Mar-77	-4.69	EM
1977	7	17	May-77	-2.80	S
1977	9	18	Jul-77	-5.51	M
1977	11	18	Sep-77	-5.48	EM
1978	1	28	Nov-77	-4.51	EM
1978	3	30	Jan-78	-6.31	EM
1978	5	21	Mar-78	-4.70	M
1978	7	13	May-78	-5.94	EM
1978	9	21	Jul-78	-8.77	M
1978	11	14	Sep-78	-8.04	M
1979	1	24	Nov-78	-7.87	EM
1979	3	15	Jan-79	-6.42	M
1979	5	15	Mar-79	-6.48	EM
1979	7	24	May-79	-5.74	EM
1979	10	2	Jul-79	-5.69	M
1979	11	19	Oct-79	-5.46	M
1980	1	16	Nov-79	-5.74	ES
1980	3	25	Jan-80	-5.61	EM
1980	5	17	Mar-80	-5.58	ES
1980	7	9	May-80	-5.01	EM
1980	8	10	Jul-80	-6.81	EM
1980	9	11	Aug-80	-6.86	EM
1980	11	1	Sep-80	-7.89	EM
1980	12	16	Nov-80	-5.54	EM
1981	1	28	Dec-80	-6.35	EM
1981	3	25	Jan-81	-5.74	EM
1981	5	19	Mar-81	-6.34	EM
1981	7	20	May-81	-6.15	ES
1981	9	16	Jul-81	-6.28	ES
1981	11	17	Sep-81	-6.21	EM
1982	3	23	Nov-81	-6.58	ES
1982	5	18	Mar-82	-6.79	ES

Daily Depth to Water Measurements of Punkin Center Well and USGS Well					
Year	Month	Day	DATE	Depth	Status Code
1982	7	20	May-82	-6.20	ES
1982	9	21	Jul-82	-8.14	EM
1982	11	16	Sep-82	-4.50	EM
1983	1	18	Nov-82	-7.64	EM
1983	3	14	Jan-83	-7.74	EM
1983	5	11	Mar-83	-7.39	EM
1983	7	19	May-83	-7.44	EM
1983	9	13	Jul-83	-8.60	EM
1983	11	18	Sep-83	-8.27	EM
1984	1	10	Nov-83	-7.15	ES
1984	3	13	Jan-84	-6.48	ES
1984	5	8	Mar-84	-6.70	ES
1984	7	24	May-84	-6.65	ES
1984	9	17	Jul-84	-7.72	ES
1984	11	27	Sep-84	-7.61	ES
1985	1	9	Nov-84	-6.87	ES
1985	3	26	Jan-85	-6.68	EM
1985	5	20	Mar-85	-6.43	S
1985	7	22	May-85	-5.36	S
1985	9	16	Jul-85	-6.86	EM
1985	11	15	Sep-85	-6.57	ES
1986	3	19	Nov-85	-6.94	ES
1986	5	16	Mar-86	-7.17	ES
1986	7	22	May-86	-6.49	EM
1986	9	16	Jul-86	-8.37	ES
1986	11	20	Sep-86	-7.42	ES
1987	1	12	Nov-86	-6.47	ES
1987	3	25	Jan-87	-6.57	ES
1987	5	12	Mar-87	-5.93	ES
1987	7	22	May-87	-6.01	S
1987	9	24	Jul-87	-4.84	S
1987	11	18	Sep-87	-4.87	ES
1988	1	5	Nov-87	-4.98	ES
1988	3	31	Jan-88	-4.97	ES
1988	5	12	Mar-88	-5.66	S
1988	9	20	May-88	-4.72	S
1988	11	18	Sep-88	-4.67	EM
1989	3	17	Nov-88	-5.10	ES
1989	5	12	Mar-89	-6.17	S
1989	7	18	May-89	-5.15	ES
1989	9	14	Jul-89	-5.80	S
1990	1	10	Sep-89	-5.47	ES
1990	3	23	Jan-90	-5.45	ES
1990	5	22	Mar-90	-5.02	S
1990	9	6	May-90	-5.62	S
1990	12	12	Sep-90	-4.73	ES
1991	1	22	Dec-90	-4.73	ES

Daily Depth to Water Measurements of Punkin Center Well and USGS Well					
Year	Month	Day	DATE	Depth	Status Code
1991	2	27	Jan-91	-4.52	ES
1991	5	17	Feb-91	-4.72	EZ
1991	5	30	May-91	-4.92	S
1991	7	11	May-91	-3.63	S
1991	9	4	Jul-91	-4.11	S
1991	9	26	Sep-91	-4.37	S
1991	11	20	Sep-91	-5.02	S
1992	1	7	Nov-91	-4.92	S
1992	4	2	Jan-92	-4.64	S
1992	5	14	Apr-92	-4.72	S
1992	7	15	May-92	-3.25	S
1992	9	16	Jul-92	-3.10	S
1992	11	23	Sep-92	-3.31	S
1993	1	21	Nov-92	-3.02	S
1993	3	23	Jan-93	-3.92	S
1993	5	10	Mar-93	-4.75	S
1993	7	20	May-93	-3.27	SS
1993	9	14	Jul-93	-6.36	S
1993	9	15	Sep-93		N
1993	2	4	Sep-93	-4.60	U OF I
1993	8	3	Oct-93	-4.40	U OF I
1993	12	16	Nov-93	-6.00	U OF I
			Dec-93		
USGS Observation Well (1N 18E 1daa1) South of Bellevue					
Latitude	432657	Longitude	114144801	Altitude	5136.59
				Depth to	S. Code
Year	Month	Day	Date	Water	
1954	7	22	Jul-54	38.74	
1954	7	25	Jul-54	39.28	
1954	7	31	Jul-54	39.69	
1954	8	5	Aug-54	39.97	
1954	8	10	Aug-54	39.72	
1954	8	15	Aug-54	40.17	
1954	8	20	Aug-54	41.10	
1954	8	25	Aug-54	41.87	
1954	8	31	Aug-54	42.60	
1954	9	5	Sep-54	43.10	
1954	9	10	Sep-54	43.68	
1954	9	15	Sep-54	43.93	
1954	9	20	Sep-54	43.35	
1954	9	25	Sep-54	43.32	
1954	9	30	Sep-54	42.37	
1954	10	5	Oct-54	42.78	
1954	10	10	Oct-54	42.94	

Daily Depth to Water Measurements of Punkin Center Well and USGS Well					
Year	Month	Day	DATE	Depth	Status Code
1954	10	15	Oct-54	43.08	
1954	10	20	Oct-54	42.43	
1954	10	25	Oct-54	42.79	
1954	10	28	Oct-54	43.00	
1954	11	10	Nov-54	44.01	
1954	11	15	Nov-54	44.22	
1954	11	17	Nov-54	44.36	
1954	11	23	Nov-54	44.62	
1954	12	5	Dec-54	45.59	
1954	12	10	Dec-54	45.90	
1954	12	15	Dec-54	46.22	
1954	12	17	Dec-54	46.37	
1955	1	10	Jan-55	47.23	
1955	1	12	Jan-55	47.15	
1955	1	28	Jan-55	46.87	
1955	1	31	Jan-55	46.91	
1955	2	5	Feb-55	47.05	
1955	2	10	Feb-55	47.30	
1955	2	15	Feb-55	47.43	
1955	2	20	Feb-55	47.56	
1955	3	8	Mar-55	47.92	
1955	3	10	Mar-55	47.94	
1955	3	15	Mar-55	47.93	
1955	3	20	Mar-55	48.06	
1955	3	25	Mar-55	48.21	
1955	3	31	Mar-55	48.31	
1955	4	4	Apr-55	48.28	
1955	10	4	Oct-55	42.95	
1955	11	10	Nov-55	44.87	
1955	11	30	Nov-55	45.71	
1956	1	3	Jan-56	45.30	
1956	1	9	Jan-56	45.48	
1956	2	6	Feb-56	46.99	
1956	3	9	Mar-56	47.44	
1956	4	2	Apr-56	46.67	
1956	4	30	Apr-56	43.14	
1956	5	30	May-56	36.23	
1956	6	28	Jun-56	34.16	
1956	7	19	Jul-56	34.64	
1956	8	31	Aug-56	40.42	
1956	9	28	Sep-56	41.92	
1956	10	16	Oct-56	42.81	
1956	11	12	Nov-56	44.05	
1956	12	12	Dec-56	45.28	
1957	1	11	Jan-57	46.93	
1957	2	9	Feb-57	47.09	
1957	3	4	Mar-57	47.04	

Daily Depth to Water Measurements of Punkin Center Well and USGS Well					
Year	Month	Day	DATE	Depth	Status Code
1957	4	7	Apr-57	47.08	
1957	5	1	May-57	44.84	
1957	5	23	May-57	43.60	
1957	6	24	Jun-57	33.59	
1957	7	20	Jul-57	35.04	
1957	8	15	Aug-57	39.97	
1957	9	19	Sep-57	40.66	
1957	10	25	Oct-57	43.44	
1957	12	12	Dec-57	45.53	
1958	4	7	Apr-58	47.25	
1958	4	25	Apr-58	45.19	
1958	5	26	May-58	38.99	
1958	6	27	Jun-58	34.12	
1958	7	25	Jul-58	36.59	S
1958	8	27	Aug-58	40.05	S
1958	9	27	Sep-58	41.07	
1958	10	30	Oct-58	42.77	
1958	11	26	Nov-58	43.93	
1958	12	30	Dec-58	46.03	
1959	1	29	Jan-59	46.87	
1959	2	26	Feb-59	47.80	
1959	3	26	Mar-59	48.55	
1959	4	25	Apr-59	45.97	
1959	5	28	May-59	40.95	
1959	6	25	Jun-59	36.84	
1959	7	28	Jul-59	41.62	S
1959	8	27	Aug-59	45.38	S
1959	9	25	Sep-59	44.34	
1959	10	26	Oct-59	44.95	
1959	11	24	Nov-59	46.65	
1959	12	18	Dec-59	48.00	
1960	4	28	Apr-60	45.79	
1960	5	27	May-60	41.61	
1960	6	23	Jun-60	36.68	
1960	7	29	Jul-60	43.87	S
1960	8	23	Aug-60	45.18	
1960	9	23	Sep-60	45.20	
1960	10	27	Oct-60	44.84	
1960	12	16	Dec-60	46.31	
1961	2	25	Feb-61	50.12	
1961	3	27	Mar-61	49.76	
1961	4	22	Apr-61	49.08	
1961	5	20	May-61	46.18	S
1961	6	16	Jun-61	37.39	
1961	7	8	Jul-61	39.78	
1961	8	26	Aug-61	45.87	
1961	9	23	Sep-61	43.14	

Daily Depth to Water Measurements of Punkin Center Well and USGS Well					
Year	Month	Day	DATE	Depth	Status Code
1961	10	22	Oct-61	44.74	
1961	11	19	Nov-61	46.29	
1961	12	19	Dec-61	46.27	
1962	4	17	Apr-62	47.06	
1962	5	29	May-62	36.98	
1962	6	24	Jun-62	34.44	
1962	7	24	Jul-62	36.44	
1962	8	26	Aug-62	41.93	S
1962	9	19	Sep-62	41.14	
1962	10	23	Oct-62	44.44	
1962	11	20	Nov-62	44.72	
1962	12	16	Dec-62	46.45	
1963	1	15	Jan-63	47.60	
1963	3	3	Mar-63	45.93	
1963	3	30	Mar-63	46.15	
1963	4	28	Apr-63	47.34	
1963	5	28	May-63	40.70	
1963	6	23	Jun-63	35.32	
1963	7	21	Jul-63	34.12	
1963	8	20	Aug-63	41.26	S
1963	9	20	Sep-63	41.48	
1963	10	21	Oct-63	43.09	
1963	11	20	Nov-63	44.54	
1963	12	22	Dec-63	45.75	
1964	1	24	Jan-64	46.59	
1964	3	1	Mar-64	46.92	
1964	3	27	Mar-64	47.56	
1964	4	27	Apr-64	45.12	
1964	5	26	May-64	39.85	
1964	6	21	Jun-64	38.22	
1964	7	19	Jul-64	36.70	S
1964	8	16	Aug-64	41.08	S
1964	9	19	Sep-64	41.81	
1964	10	23	Oct-64	43.68	
1964	11	24	Nov-64	45.18	
1964	12	20	Dec-64	46.30	
1965	1	19	Jan-65	45.07	
1965	2	28	Feb-65	46.62	
1965	4	3	Apr-65	46.24	
1965	4	26	Apr-65	44.51	
1965	5	25	May-65	40.29	
1965	6	19	Jun-65	31.51	
1965	7	19	Jul-65	34.51	
1965	8	14	Aug-65	33.30	
1965	9	18	Sep-65	39.55	
1965	10	23	Oct-65	43.54	
1965	11	23	Nov-65	44.79	

Daily Depth to Water Measurements of Punkin Center Well and USGS Well					
Year	Month	Day	DATE	Depth	Status Code
1965	12	18	Dec-65	46.60	
1966	1	18	Jan-66	47.41	
1966	2	28	Feb-66	48.30	
1966	3	25	Mar-66	48.11	
1966	4	23	Apr-66	46.22	
1966	5	24	May-66	35.23	
1966	6	18	Jun-66	36.70	
1966	7	18	Jul-66	41.30	S
1966	9	17	Sep-66	44.66	
1966	10	27	Oct-66	43.23	
1966	11	20	Nov-66	44.29	
1967	1	16	Jan-67	47.57	
1967	2	24	Feb-67	49.46	
1967	3	25	Mar-67	50.15	
1967	4	22	Apr-67	48.40	
1967	5	31	May-67	37.78	
1967	6	19	Jun-67	34.33	
1967	7	15	Jul-67	36.34	
1967	8	11	Aug-67	38.34	S
1967	9	21	Sep-67	40.78	
1967	10	20	Oct-67	41.90	
1967	11	30	Nov-67	45.36	
1967	12	17	Dec-67	47.26	
1968	1	31	Jan-68	48.11	
1968	3	1	Mar-68	49.32	
1968	3	29	Mar-68	48.77	
1968	4	26	Apr-68	46.46	
1968	5	27	May-68	40.11	
1968	6	21	Jun-68	34.90	
1968	7	20	Jul-68	37.53	
1968	8	15	Aug-68	43.14	S
1968	9	19	Sep-68	41.76	
1968	10	17	Oct-68	43.31	
1968	11	19	Nov-68	45.29	
1968	12	17	Dec-68	46.92	
1969	3	27	Mar-69	50.23	
1969	4	24	Apr-69	43.53	
1969	9	26	Sep-69	39.95	
1970	3	28	Mar-70	46.75	
1970	9	26	Sep-70	40.20	
1971	4	21	Apr-71	43.79	
1971	9	20	Sep-71	38.60	
1972	3	24	Mar-72	44.52	
1972	9	19	Sep-72	40.80	
1973	3	16	Mar-73	47.55	
1973	9	19	Sep-73	44.07	S
1974	2	28	Feb-74	47.59	

Daily Depth to Water Measurements of Punkin Center Well and USGS Well					
Year	Month	Day	DATE	Depth	Status Code
1974	9	18	Sep-74	40.35	
1975	3	12	Mar-75	46.50	
1975	5	21	May-75	39.62	
1975	5	25	May-75	38.14	
1975	5	31	May-75	36.13	
1975	6	5	Jun-75	35.23	
1975	6	10	Jun-75	33.68	
1975	6	15	Jun-75	33.62	
1975	6	20	Jun-75	33.51	
1975	6	25	Jun-75	33.21	
1975	6	26	Jun-75	33.05	
1975	7	16	Jul-75	35.13	
1975	7	20	Jul-75	35.75	
1975	7	25	Jul-75	36.13	
1975	7	31	Jul-75	35.13	
1975	8	5	Aug-75	36.56	S
1975	8	10	Aug-75	37.92	S
1975	8	15	Aug-75	38.00	S
1975	8	20	Aug-75	37.12	S
1975	8	25	Aug-75	38.35	S
1975	8	31	Aug-75	37.74	
1975	9	3	Sep-75	37.22	
1975	9	5	Sep-75	37.25	
1975	9	10	Sep-75	38.37	
1975	9	15	Sep-75	39.17	
1975	9	19	Sep-75	39.87	
1975	9	20	Sep-75	39.84	
1975	9	22	Sep-75	39.81	
1975	9	25	Sep-75	39.79	
1975	9	29	Sep-75	39.87	
1975	10	5	Oct-75	39.73	
1975	10	10	Oct-75	39.58	
1975	10	15	Oct-75	40.37	
1975	10	20	Oct-75	41.13	
1975	10	25	Oct-75	41.99	
1975	10	31	Oct-75	42.67	
1975	11	5	Nov-75	42.90	
1975	11	10	Nov-75	42.08	
1975	11	15	Nov-75	43.36	
1975	11	20	Nov-75	43.55	
1975	12	17	Dec-75	45.21	
1975	12	20	Dec-75	45.37	
1975	12	25	Dec-75	45.64	
1975	12	31	Dec-75	45.93	
1976	3	25	Mar-76	47.92	
1976	9	27	Sep-76	41.89	
1977	3	12	Mar-77	48.35	

Daily Depth to Water Measurements of Punkin Center Well and USGS Well					
Year	Month	Day	DATE	Depth	Status Code
1977	5	20	May-77	45.61	
1977	7	17	Jul-77	41.22	
1977	9	18	Sep-77	45.09	
1977	11	18	Nov-77	46.31	
1978	1	28	Jan-78	48.90	
1978	3	30	Mar-78	48.49	
1978	5	22	May-78	43.20	
1978	7	13	Jul-78	37.57	
1978	8	24	Aug-78	40.74	
1978	8	25	Aug-78	40.79	
1978	8	31	Aug-78	41.09	
1978	9	5	Sep-78	41.50	
1978	9	10	Sep-78	41.69	
1978	9	15	Sep-78	42.60	
1978	9	20	Sep-78	42.50	
1978	9	21	Sep-78	42.59	
1978	9	25	Sep-78	42.86	
1978	9	30	Sep-78	43.09	
1978	10	5	Oct-78	43.34	
1978	10	10	Oct-78	43.48	
1978	10	15	Oct-78	43.53	
1978	10	20	Oct-78	43.48	
1978	10	25	Oct-78	43.73	
1978	10	31	Oct-78	44.15	
1978	11	5	Nov-78	44.40	
1978	11	10	Nov-78	44.69	
1978	11	15	Nov-78	44.93	
1978	11	20	Nov-78	45.23	
1978	11	25	Nov-78	45.46	
1978	11	30	Nov-78	45.74	
1978	12	5	Dec-78	45.88	
1978	12	10	Dec-78	46.16	
1978	12	15	Dec-78	46.32	
1978	12	20	Dec-78	46.54	
1978	12	25	Dec-78	46.73	
1978	12	31	Dec-78	47.11	
1979	1	5	Jan-79	47.50	
1979	1	10	Jan-79	47.35	
1979	1	15	Jan-79	47.10	
1979	1	20	Jan-79	47.06	
1979	1	24	Jan-79	47.10	
1979	1	25	Jan-79	47.12	
1979	1	31	Jan-79	47.32	
1979	2	5	Feb-79	47.50	
1979	2	10	Feb-79	47.41	
1979	2	15	Feb-79	47.42	
1979	2	20	Feb-79	47.46	

Daily Depth to Water Measurements of Punkin Center Well and USGS Well					
Year	Month	Day	DATE	Depth	Status Code
1979	2	25	Feb-79	47.59	
1979	2	28	Feb-79	47.68	
1979	3	5	Mar-79	47.86	
1979	3	10	Mar-79	48.03	
1979	3	15	Mar-79	48.12	
1979	3	20	Mar-79	47.90	
1979	3	25	Mar-79	47.81	
1979	3	31	Mar-79	47.68	
1979	4	5	Apr-79	47.67	
1979	4	10	Apr-79	47.69	
1979	4	15	Apr-79	47.65	
1979	4	20	Apr-79	47.60	
1979	4	25	Apr-79	47.56	
1979	4	30	Apr-79	45.72	
1979	5	5	May-79	45.64	
1979	5	10	May-79	45.50	
1979	5	15	May-79	45.33	
1979	5	20	May-79	44.88	
1979	5	25	May-79	43.46	
1979	5	31	May-79	40.95	
1979	6	5	Jun-79	40.54	
1979	6	10	Jun-79	40.25	
1979	6	15	Jun-79	39.40	
1979	6	20	Jun-79	39.05	
1979	6	25	Jun-79	38.80	
1979	6	30	Jun-79	39.16	
1979	7	5	Jul-79	39.64	
1979	7	10	Jul-79	39.71	
1979	7	16	Jul-79	40.39	
1979	7	20	Jul-79	40.87	
1979	7	25	Jul-79	41.76	
1979	7	31	Jul-79	43.85	S
1979	8	5	Aug-79	43.84	T
1979	8	10	Aug-79	43.86	
1979	8	15	Aug-79	43.83	
1979	8	20	Aug-79	43.68	
1979	8	25	Aug-79	43.62	
1979	10	2	Oct-79	45.64	
1979	10	5	Oct-79	45.64	
1979	10	10	Oct-79	45.54	
1979	10	15	Oct-79	45.54	
1979	10	20	Oct-79	45.46	
1979	10	25	Oct-79	45.46	
1979	10	29	Oct-79	45.41	
1979	10	31	Oct-79	45.43	
1979	11	5	Nov-79	45.45	
1979	11	10	Nov-79	45.54	

Daily Depth to Water Measurements of Punkin Center Well and USGS Well					
Year	Month	Day	DATE	Depth	Status Code
1979	11	15	Nov-79	45.79	
1979	11	19	Nov-79	45.92	
1979	11	20	Nov-79	45.96	
1979	11	25	Nov-79	46.33	
1979	11	30	Nov-79	46.53	
1979	12	5	Dec-79	46.61	
1979	12	10	Dec-79	46.79	
1979	12	15	Dec-79	47.18	
1979	12	20	Dec-79	47.54	
1979	12	25	Dec-79	47.85	
1979	12	31	Dec-79	48.20	
1980	1	5	Jan-80	48.34	
1980	1	10	Jan-80	48.55	
1980	1	14	Jan-80	48.67	
1980	1	15	Jan-80	48.57	
1980	1	20	Jan-80	48.40	
1980	1	25	Jan-80	48.60	
1980	1	31	Jan-80	48.79	
1980	2	4	Feb-80	48.92	
1980	3	26	Mar-80	49.25	
1980	3	31	Mar-80	49.09	
1980	4	5	Apr-80	49.03	
1980	4	10	Apr-80	48.83	
1980	4	15	Apr-80	48.55	
1980	4	20	Apr-80	48.01	
1980	4	25	Apr-80	46.34	
1980	4	30	Apr-80	45.08	
1980	5	5	May-80	43.95	
1980	5	10	May-80	43.29	
1980	5	15	May-80	42.83	
1980	5	20	May-80	42.39	
1980	5	25	May-80	42.05	
1980	5	31	May-80	42.04	
1980	6	5	Jun-80	42.03	
1980	6	10	Jun-80	41.79	
1980	6	15	Jun-80	41.11	
1980	6	20	Jun-80	40.37	
1980	6	25	Jun-80	39.80	
1980	6	30	Jun-80	39.12	
1980	7	3	Jul-80	39.09	
1980	7	5	Jul-80	39.26	
1980	7	10	Jul-80	39.43	
1980	7	15	Jul-80	38.83	
1980	7	20	Jul-80	38.11	
1980	7	23	Jul-80	37.99	
1980	7	25	Jul-80	38.08	
1980	7	31	Jul-80	38.41	

Daily Depth to Water Measurements of Punkin Center Well and USGSWell					
Year	Month	Day	DATE	Depth	Status Code
1980	8	5	Aug-80	38.88	
1980	8	10	Aug-80	39.51	
1980	8	15	Aug-80	40.43	
1980	8	20	Aug-80	41.03	
1980	8	25	Aug-80	41.54	
1980	8	30	Aug-80	42.00	
1980	9	5	Sep-80	42.39	
1980	9	8	Sep-80	42.73	
1980	9	15	Sep-80	42.50	
1980	9	20	Sep-80	42.27	
1980	9	25	Sep-80	42.34	
1980	9	30	Sep-80	42.47	
1980	10	5	Oct-80	42.59	
1980	10	10	Oct-80	42.86	
1980	10	15	Oct-80	43.18	
1980	10	20	Oct-80	43.52	
1980	10	25	Oct-80	43.85	
1980	11	5	Nov-80	44.33	
1980	11	10	Nov-80	44.44	
1980	11	13	Nov-80	44.46	
1980	12	16	Dec-80	46.17	
1980	12	20	Dec-80	46.21	
1980	12	25	Dec-80	46.31	
1980	12	30	Dec-80	46.36	
1981	1	20	Jan-81	47.48	
1981	1	25	Jan-81	47.63	
1981	1	31	Jan-81	47.86	
1981	2	5	Feb-81	48.06	
1981	2	8	Feb-81	48.21	
1981	3	30	Mar-81	47.91	
1981	4	25	Apr-81	46.06	
1981	4	30	Apr-81	45.17	
1981	5	5	May-81	44.49	
1981	5	10	May-81	43.37	
1981	5	19	May-81	41.31	
1981	5	20	May-81	41.33	
1981	5	25	May-81	41.18	
1981	6	24	Jun-81	38.74	
1981	6	25	Jun-81	39.02	
1981	6	30	Jun-81	39.09	
1981	7	5	Jul-81	38.54	
1981	7	10	Jul-81	38.74	
1981	7	15	Jul-81	39.17	
1981	7	20	Jul-81	39.11	
1981	7	25	Jul-81	39.81	
1981	7	31	Jul-81	40.35	
1981	8	5	Aug-81	40.90	

Daily Depth to Water Measurements of Punkin Center Well and USGS Well					
Year	Month	Day	DATE	Depth	Status Code
1981	8	10	Aug-81	41.70	
1981	8	15	Aug-81	41.73	
1981	8	20	Aug-81	42.60	
1981	8	25	Aug-81	43.39	
1981	8	31	Aug-81	43.91	
1981	9	5	Sep-81	44.04	
1981	9	10	Sep-81	44.20	
1981	9	15	Sep-81	44.23	
1981	9	20	Sep-81	44.51	
1981	9	25	Sep-81	44.36	
1981	9	30	Sep-81	44.15	
1981	10	5	Oct-81	44.13	
1981	10	10	Oct-81	44.35	
1981	10	15	Oct-81	44.53	
1981	10	20	Oct-81	44.73	
1981	10	25	Oct-81	44.90	
1981	10	31	Oct-81	45.01	
1981	11	5	Nov-81	44.96	
1981	11	10	Nov-81	44.94	
1981	11	15	Nov-81	45.07	
1981	11	20	Nov-81	45.04	
1981	11	25	Nov-81	45.16	
1981	11	30	Nov-81	45.67	
1981	12	5	Dec-81	46.08	
1981	12	10	Dec-81	46.45	
1981	12	15	Dec-81	46.84	
1981	12	20	Dec-81	47.31	
1981	12	25	Dec-81	47.33	
1981	12	31	Dec-81	47.54	
1982	1	5	Jan-82	47.75	
1982	1	10	Jan-82	47.85	
1982	1	15	Jan-82	47.55	
1982	1	20	Jan-82	47.22	
1982	1	25	Jan-82	47.42	
1982	1	31	Jan-82	47.80	
1982	2	5	Feb-82	48.12	
1982	2	10	Feb-82	48.38	
1982	2	15	Feb-82	48.52	
1982	2	17	Feb-82	48.55	
1982	2	20	Feb-82	48.48	
1982	2	25	Feb-82	48.06	
1982	2	28	Feb-82	47.93	
1982	3	5	Mar-82	47.82	
1982	3	10	Mar-82	47.82	
1982	3	15	Mar-82	47.56	
1982	3	20	Mar-82	47.44	
1982	3	25	Mar-82	47.51	

Daily Depth to Water Measurements of Punkin Center Well and USGSWell					
Year	Month	Day	DATE	Depth	Status Code
1982	3	31	Mar-82	47.44	
1982	4	5	Apr-82	47.34	
1982	4	10	Apr-82	47.38	
1982	4	15	Apr-82	46.92	
1982	4	20	Apr-82	46.41	
1982	4	25	Apr-82	46.16	
1982	4	30	Apr-82	44.58	
1982	5	5	May-82	43.52	
1982	5	10	May-82	42.87	
1982	5	15	May-82	42.36	
1982	5	20	May-82	41.16	
1982	5	25	May-82	40.68	
1982	5	31	May-82	40.56	
1982	6	5	Jun-82	39.92	
1982	6	10	Jun-82	39.26	
1982	6	15	Jun-82	39.19	
1982	6	20	Jun-82	39.43	
1982	6	25	Jun-82	39.44	
1982	6	30	Jun-82	39.42	
1982	7	3	Jul-82	39.08	
1982	7	5	Jul-82	39.35	
1982	7	10	Jul-82	39.81	
1982	7	15	Jul-82	40.24	
1982	7	20	Jul-82	39.96	
1982	7	25	Jul-82	39.20	
1982	7	31	Jul-82	38.79	
1982	8	5	Aug-82	38.43	
1982	8	6	Aug-82	38.25	
1982	8	10	Aug-82	38.64	
1982	8	15	Aug-82	39.34	
1982	8	20	Aug-82	39.38	
1982	8	25	Aug-82	39.65	
1982	8	31	Aug-82	41.28	
1982	9	5	Sep-82	41.62	
1982	9	10	Sep-82	41.68	
1982	9	15	Sep-82	41.95	
1982	9	20	Sep-82	42.05	
1982	9	25	Sep-82	42.71	
1982	9	30	Sep-82	42.72	
1982	10	5	Oct-82	42.81	
1982	10	10	Oct-82	43.01	
1982	10	15	Oct-82	43.21	
1982	10	20	Oct-82	43.43	
1982	10	25	Oct-82	43.60	
1982	10	31	Oct-82	43.68	
1982	11	5	Nov-82	43.66	
1982	11	10	Nov-82	43.66	

Daily Depth to Water Measurements of Punkin Center Well and USGS Well					
Year	Month	Day	DATE	Depth	Status Code
1982	11	15	Nov-82	43.92	
1982	11	17	Nov-82	44.02	
1982	11	20	Nov-82	44.22	
1982	11	25	Nov-82	44.53	
1982	11	30	Nov-82	44.80	
1982	12	5	Dec-82	45.09	
1982	12	10	Dec-82	45.33	
1982	12	15	Dec-82	45.55	
1982	12	20	Dec-82	45.71	
1982	12	25	Dec-82	45.85	
1982	12	31	Dec-82	46.02	
1983	1	5	Jan-83	46.13	
1983	1	10	Jan-83	46.14	
1983	1	15	Jan-83	46.20	
1983	1	20	Jan-83	46.28	
1983	1	25	Jan-83	46.40	
1983	1	31	Jan-83	46.53	
1983	2	5	Feb-83	46.69	
1983	2	10	Feb-83	46.87	
1983	2	15	Feb-83	46.94	
1983	2	20	Feb-83	46.99	
1983	2	25	Feb-83	47.09	
1983	2	28	Feb-83	47.11	
1983	3	5	Mar-83	46.95	
1983	3	10	Mar-83	46.60	
1983	3	15	Mar-83	45.91	
1983	3	20	Mar-83	45.19	
1983	3	25	Mar-83	45.07	
1983	3	31	Mar-83	45.08	
1983	4	5	Apr-83	44.57	
1983	4	10	Apr-83	44.22	
1983	4	15	Apr-83	43.96	
1983	4	20	Apr-83	43.84	
1983	4	25	Apr-83	43.50	
1983	4	30	Apr-83	43.00	
1983	5	5	May-83	42.42	
1983	5	10	May-83	40.79	
1983	5	11	May-83	40.58	
1983	5	15	May-83	40.38	
1983	5	20	May-83	39.96	
1983	5	25	May-83	38.58	
1983	5	31	May-83	36.88	
1983	6	5	Jun-83	36.69	
1983	6	10	Jun-83	36.06	
1983	6	15	Jun-83	36.66	
1983	6	20	Jun-83	36.16	
1983	6	25	Jun-83	36.33	

Daily Depth to Water Measurements of Punkin Center Well and USGS Well					
Year	Month	Day	DATE	Depth	Status Code
1983	6	30	Jun-83	36.56	
1983	7	5	Jul-83	37.06	
1983	7	10	Jul-83	37.62	
1983	7	15	Jul-83	37.76	
1983	7	20	Jul-83	37.12	
1983	7	25	Jul-83	36.49	
1983	7	31	Jul-83	37.17	
1983	8	5	Aug-83	36.95	
1983	8	10	Aug-83	36.98	
1983	8	15	Aug-83	37.22	
1983	8	20	Aug-83	36.87	
1983	8	25	Aug-83	37.81	
1983	8	31	Aug-83	39.86	
1983	9	5	Sep-83	40.75	
1983	9	10	Sep-83	41.20	
1983	9	15	Sep-83	41.68	
1983	9	20	Sep-83	41.94	
1983	9	25	Sep-83	42.07	
1983	9	30	Sep-83	42.16	
1983	10	5	Oct-83	41.85	
1983	10	10	Oct-83	41.85	
1983	10	15	Oct-83	41.97	
1983	10	20	Oct-83	42.11	
1983	10	25	Oct-83	42.28	
1983	10	27	Oct-83	42.35	
1983	10	28	Oct-83	42.34	
1983	10	31	Oct-83	42.39	
1983	11	5	Nov-83	42.38	
1983	11	10	Nov-83	42.40	
1983	11	15	Nov-83	42.41	
1983	11	20	Nov-83	42.42	
1983	11	25	Nov-83	42.63	
1983	11	30	Nov-83	42.84	
1983	12	5	Dec-83	43.03	
1983	12	10	Dec-83	43.14	
1983	12	15	Dec-83	43.24	
1983	12	20	Dec-83	43.47	
1983	12	25	Dec-83	43.32	
1983	12	31	Dec-83	43.41	
1984	1	5	Jan-84	43.37	
1984	1	10	Jan-84	43.23	
1984	1	15	Jan-84	43.32	
1984	1	20	Jan-84	43.72	
1984	1	25	Jan-84	43.22	
1984	1	31	Jan-84	43.36	
1984	2	5	Feb-84	43.50	
1984	2	10	Feb-84	43.39	

Daily Depth to Water Measurements of Punkin Center Well and USGS Well					
Year	Month	Day	DATE	Depth	Status Code
1984	2	15	Feb-84	43.23	
1984	2	20	Feb-84	43.74	
1984	2	25	Feb-84	44.37	
1984	2	29	Feb-84	44.79	
1984	3	5	Mar-84	45.05	
1984	3	10	Mar-84	45.29	
1984	3	15	Mar-84	45.38	
1984	3	20	Mar-84	45.44	
1984	3	21	Mar-84	45.46	
1984	3	25	Mar-84	45.41	
1984	3	31	Mar-84	45.40	
1984	4	5	Apr-84	45.17	
1984	4	10	Apr-84	44.24	
1984	4	15	Apr-84	43.53	
1984	4	20	Apr-84	43.28	
1984	4	25	Apr-84	43.25	
1984	4	30	Apr-84	43.36	
1984	5	5	May-84	43.51	
1984	5	10	May-84	43.63	
1984	5	15	May-84	41.92	
1984	7	24	Jul-84	38.22	
1984	9	16	Sep-84	42.53	S
1984	9	20	Sep-84	42.36	
1984	11	27	Nov-84	45.11	
1984	11	30	Nov-84	45.32	
1984	12	2	Dec-84	45.28	
1984	12	12	Dec-84	45.28	
1984	12	15	Dec-84	45.32	
1984	12	20	Dec-84	45.36	
1984	12	25	Dec-84	45.39	
1984	12	31	Dec-84	45.41	
1985	1	9	Jan-85	45.59	
1985	1	10	Jan-85	45.60	
1985	1	15	Jan-85	45.78	
1985	1	20	Jan-85	45.99	
1985	1	25	Jan-85	46.11	
1985	1	31	Jan-85	46.31	
1985	2	5	Feb-85	46.62	
1985	2	8	Feb-85	46.86	
1985	3	26	Mar-85	47.12	
1985	3	30	Mar-85	47.19	
1985	3	31	Mar-85	47.19	
1985	4	5	Apr-85	46.65	
1985	4	10	Apr-85	46.26	
1985	4	15	Apr-85	45.57	
1985	4	20	Apr-85	45.05	
1985	4	25	Apr-85	44.87	

Daily Depth to Water Measurements of Punkin Center Well and USGS Well					
Year	Month	Day	DATE	Depth	Status Code
1985	4	30	Apr-85	44.84	
1985	5	5	May-85	44.30	
1985	5	10	May-85	42.82	
1985	5	15	May-85	41.93	
1985	5	20	May-85	40.88	
1985	5	25	May-85	40.78	
1985	5	31	May-85	39.75	
1985	6	5	Jun-85	39.41	
1985	6	10	Jun-85	39.01	
1985	6	15	Jun-85	38.28	
1985	6	20	Jun-85	37.39	
1985	6	21	Jun-85	38.33	
1985	6	25	Jun-85	37.92	
1985	6	30	Jun-85	39.28	
1985	7	5	Jul-85	40.02	
1985	7	10	Jul-85	40.41	
1985	7	15	Jul-85	40.28	
1985	7	20	Jul-85	40.11	
1985	7	25	Jul-85	41.99	
1985	7	31	Jul-85	42.45	
1985	8	5	Aug-85	42.10	
1985	8	10	Aug-85	42.81	
1985	8	12	Aug-85	43.06	
1985	9	17	Sep-85	43.24	
1985	9	20	Sep-85	43.20	
1985	9	25	Sep-85	43.18	
1985	9	30	Sep-85	43.38	
1985	10	5	Oct-85	43.58	
1985	10	10	Oct-85	43.82	
1985	10	16	Oct-85	44.18	
1985	10	20	Oct-85	44.37	
1985	10	25	Oct-85	44.74	
1985	10	31	Oct-85	45.01	
1985	11	5	Nov-85	45.29	
1985	11	10	Nov-85	45.55	
1985	11	15	Nov-85	45.85	
1985	11	20	Nov-85	46.21	
1985	11	25	Nov-85	46.66	
1985	11	30	Nov-85	46.82	
1985	12	5	Dec-85	46.87	
1985	12	10	Dec-85	46.89	
1985	12	15	Dec-85	47.17	
1985	12	20	Dec-85	47.02	
1985	12	25	Dec-85	45.66	
1985	12	31	Dec-85	45.51	
1986	1	5	Jan-86	45.52	
1986	1	10	Jan-86	45.54	

Daily Depth to Water Measurements of Punkin Center Well and USGS Well					
Year	Month	Day	DATE	Depth	Status Code
1986	1	15	Jan-86	45.83	
1986	1	20	Jan-86	46.09	
1986	1	25	Jan-86	46.41	
1986	1	31	Jan-86	46.70	
1986	2	5	Feb-86	46.78	
1986	2	10	Feb-86	47.14	
1986	2	15	Feb-86	47.26	
1986	2	20	Feb-86	46.83	
1986	2	25	Feb-86	46.61	
1986	2	28	Feb-86	45.96	
1986	3	5	Mar-86	44.46	
1986	3	10	Mar-86	43.91	
1986	3	15	Mar-86	43.38	
1986	3	20	Mar-86	43.30	
1986	3	25	Mar-86	43.22	
1986	3	31	Mar-86	43.32	
1986	4	5	Apr-86	43.49	
1986	4	10	Apr-86	43.54	
1986	4	15	Apr-86	43.38	
1986	4	20	Apr-86	43.47	
1986	4	25	Apr-86	43.21	
1986	4	30	Apr-86	42.68	
1986	5	5	May-86	42.09	
1986	5	10	May-86	41.61	
1986	5	15	May-86	41.67	
1986	5	20	May-86	41.52	
1986	5	25	May-86	41.10	
1986	5	31	May-86	40.34	
1986	6	5	Jun-86	38.90	
1986	6	10	Jun-86	37.87	
1986	6	15	Jun-86	37.67	
1986	6	20	Jun-86	36.39	
1986	6	22	Jun-86	36.09	
1986	6	25	Jun-86	36.47	
1986	6	30	Jun-86	36.86	
1986	7	5	Jul-86	37.15	
1986	7	10	Jul-86	37.64	
1986	7	15	Jul-86	38.07	
1986	7	20	Jul-86	37.59	
1986	7	22	Jul-86	37.79	
1986	9	16	Sep-86	40.24	
1986	11	21	Nov-86	44.18	
1987	1	13	Jan-87	45.72	
1987	3	25	Mar-87	45.57	
1987	5	13	May-87	42.23	
1987	7	22	Jul-87	44.76	S
1987	9	24	Sep-87	46.18	

Daily Depth to Water Measurements of Punkin Center Well and USGS Well					
Year	Month	Day	DATE	Depth	Status Code
1987	11	19	Nov-87	45.80	
1988	1	5	Jan-88	47.35	
1988	3	30	Mar-88	45.74	
1988	5	12	May-88	43.98	
1988	7	20	Jul-88	43.60	
1988	9	20	Sep-88	47.95	
1988	11	18	Nov-88	47.63	
1989	1	25	Jan-89	48.30	
1989	3	17	Mar-89	49.19	
1989	5	12	May-89	42.80	
1989	7	18	Jul-89	41.62	
1989	9	14	Sep-89	47.76	S
1989	11	28	Nov-89	47.47	
1990	1	10	Jan-90	49.01	
1990	3	23	Mar-90	49.46	
1990	5	22	May-90	44.92	
1990	7	24	Jul-90	43.92	S
1990	9	7	Sep-90	45.78	S
1990	12	5	Dec-90	49.30	
1991	1	22	Jan-91	49.46	
1991	2	27	Feb-91	50.42	
1991	5	23	May-91	45.71	
1991	5	30	May-91	45.09	
1991	7	11	Jul-91	43.08	
1991	9	4	Sep-91	45.74	
1991	9	24	Sep-91	45.59	
1991	11	19	Nov-91	47.16	
1992	1	7	Jan-92	49.93	
1992	4	2	Apr-92	48.96	
1992	5	15	May-92	44.27	
1992	7	15	Jul-92	45.34	
1992	9	15	Sep-92	49.83	
1992	11	23	Nov-92	49.00	
1993	1	21	Jan-93	48.85	
1993	3	23	Mar-93	51.87	
1993	4	22	22-Apr-93	46.64	U OF I
1993	5	10	May-93	46.74	
1993	7	20	20-Jul-93	41.86	
1993	8	6	6-Aug-93	42.20	U OF I
1993	9	14	Sep-93	43.95	
1993	12	1	1-Dec-93	47.18	
1993	12	6	6-Dec-93	46.00	U OF I

Appendix B

Canal Diversions from Big Wood River District 45 Canal and Silver Creek

Canal Diversions from Big Wood River and Silver Creek-1993

WATER DISTRICT #37 & 37-M

CANAL NAME: HIAWATHA STATION NUMBER 22 YEAR 1993

DAILY DISCHARGE IN SECOND FEET

DATE	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	DATE
1			57.00	43.00	51.00	28.00	1.00
2			48.00	52.00	43.00	30.00	2.00
3			45.00	43.00	30.00	30.00	3.00
4			41.00	37.00	30.00	30.00	4.00
5			38.00	37.00	30.00	30.00	5.00
6			47.00	38.00	30.00	30.00	6.00
7			45.00	40.00	29.00	31.00	7.00
8			43.00	39.00	30.00	31.00	8.00
9			38.00	38.00	30.00	30.00	9.00
10		15.00	47.00	39.00	30.00	31.00	10.00
11		22.00	50.00	38.00	30.00	31.00	11.00
12		23.00	43.00	34.00	31.00	31.00	12.00
13		27.00	41.00	30.00	30.00	32.00	13.00
14		34.00	37.00	38.00	31.00	32.00	14.00
15		30.00	47.00	43.00	30.00	33.00	15.00
16		28.00	52.00	37.00	31.00	32.00	16.00
17		33.00	47.00	30.00	31.00	32.00	17.00
18		31.00	47.00	21.00	30.00	33.00	18.00
19		36.00	50.00	20.00	30.00	34.00	19.00
20		38.00	57.00	22.00	32.00	32.00	20.00
21		39.00	59.00	23.00	31.00	33.00	21.00
22		43.00	59.00	19.00	30.00	33.00	22.00
23		42.00	47.00	36.00	30.00	32.00	23.00
24		44.00	45.00	55.00	30.00	31.00	24.00
25		48.00	52.00	54.00	30.00	31.00	25.00
26		56.00	55.00	54.00	30.00	30.00	26.00
27		57.00	62.00	53.00	30.00	30.00	27.00
28		55.00	57.00	53.00	30.00	30.00	28.00
29		51.00	45.00	54.00	30.00	30.00	29.00
30		51.00	37.00	54.00	29.00	30.00	30.00
31		51.00		53.00	29.00		31.00
TOTAL							
MEAN	0.00	854.00	1438.00	1227.00	968.00	933.00	
A.F.		41.00	48.00	40.00	31.00	31.00	
	0.00	1691.00	2847.00	2429.00	1917.00	1847.00	

YEARLY C.F.S.	5420.00
YEARLY ACRE FEET	10731.60
TOTAL NUMBER OF DAYS	144.00
YEARLY MEAN	38.00

WATER DISTRICT #37 & 37-M							
CANAL NAME		DRAGER	CANAL NUMBER 35-A				
OWNER		GREGORY MOORE					1993.00
DATE							
1	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	DATE
2			0.04	0.04	0.40		1.00
3			0.04	0.04	0.40		2.00
4			0.04	0.04			3.00
5		0.04	0.04	0.04			4.00
6		0.04	0.04	0.04			5.00
7		0.04	0.04	0.04			6.00
8		0.04	0.04	0.04			7.00
9		0.04	0.04	0.04			8.00
10		0.04	0.04	0.04			9.00
11		0.04	0.04	0.04			10.00
12		0.04	0.04	0.04			11.00
13		0.04	0.04	0.04			12.00
14		0.04	0.04	0.04			13.00
15		0.04	0.04	0.04			14.00
16		0.04	0.04	0.04			15.00
17		0.04	0.04	0.04			16.00
18		0.04	0.04	0.04			17.00
19		0.04	0.04	0.04			18.00
20		0.04	0.04	0.04			19.00
21		0.04	0.04	0.04			20.00
22		0.04	0.04	0.04			21.00
23		0.04	0.04	0.04			22.00
24		0.04	0.04	0.04			23.00
25		0.04	0.04	0.04			24.00
26		0.04	0.04	0.04			25.00
27		0.04	0.04	0.04			26.00
28		0.04	0.04	0.04			27.00
29		0.04	0.04	0.04			28.00
30		0.04	0.04	0.04			29.00
31		0.04	0.04	0.04			30.00
		0.04		0.04			31.00
TOTAL							
	0.00	1.12	1.20	1.24	0.80	0.00	
YEARLY C.F.S.			4.36				
YEARLY ACRE FEET			8.63				
TOTAL NO. OF DAYS			91.00				
YEARLY MEAN			0.05				
YEARLY MEAN			0.20				

	WATER DISTRICT #37 & 37-M						
CANAL NAME	WRENCHER		CANAL NUMBER 39-A				
OWNER	RON HANSEN						1993.00
DATE							
1	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	DATE
2		1.00		1.00	1.00	1.00	1.00
3		1.00		1.00	1.00	1.00	2.00
4		1.00		1.00	1.00	1.00	3.00
5		1.00		1.00	1.00	1.00	4.00
6		1.00		1.00	1.00	1.00	5.00
7		1.00		1.00	1.00	1.00	6.00
8		1.00		1.00	1.00	1.00	7.00
9		1.00		1.00	1.00	1.00	8.00
10		1.00		1.00	1.00	1.00	9.00
11		1.00		1.00	1.00	1.00	10.00
12		1.00		1.00	1.00	1.00	11.00
13		1.00	1.00	1.00	1.00	1.00	12.00
14		1.00	1.00	1.00	1.00	1.00	13.00
15		1.00	1.00	1.00	1.00	1.00	14.00
16	1.00	1.00	1.00	1.00	1.00	1.00	15.00
17	1.00	1.00	1.00	1.00	1.00	1.00	16.00
18	1.00	1.00	1.00	1.00	1.00	1.00	17.00
19	1.00	1.00	1.00	1.00	1.00	1.00	18.00
20	1.00	1.00	1.00	1.00	1.00	1.00	19.00
21	1.00	1.00	1.00	1.00	1.00	1.00	20.00
22	1.00	1.00	1.00	1.00	1.00	1.00	21.00
23	1.00	1.00	1.00	1.00	1.00	1.00	22.00
24	1.00	1.00	1.00	1.00	1.00	1.00	23.00
25	1.00	1.00	1.00	1.00	1.00	1.00	24.00
26	1.00	1.00	1.00	1.00	1.00	1.00	25.00
27	1.00	1.00	1.00	1.00	1.00	1.00	26.00
28	1.00		1.00	1.00	1.00	1.00	27.00
29	1.00		1.00	1.00	1.00	1.00	28.00
30	1.00		1.00	1.00	1.00	1.00	29.00
31			1.00	1.00	1.00	1.00	30.00
				1.00	1.00		31.00
TOTAL							
	18.00	31.00	23.00	30.00	22.00	21.00	
	YEARLY C.F.S.		145.00				
	YEARLY ACRE FEET		287.00				
	TOTAL NO. OF DAYS		152.00				
	YEARLY MEAN		1.00				
	YEARLY MEAN		0.56				

	WATER DISTRICT #37 & 37-M						
CANAL NAME		CAL-PAC	CANAL NUMBER 42-P1				
OWNER		CAL-PACIFCO					1993.00
DATE							
1	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	DATE
2			0.58	0.60	0.60		1.00
3			0.58	0.60	0.60		2.00
4			0.58	0.60	0.60		3.00
5			0.58	0.60	0.60		4.00
6				0.60	0.60		5.00
7				0.60	0.60		6.00
8				0.60	0.60		7.00
9				0.60	0.60		8.00
10				0.60	0.60		9.00
11			0.58		0.60		10.00
12			0.58		0.60		11.00
13					0.60		12.00
14					0.60		13.00
15					0.60		14.00
16			0.58		0.60		15.00
17			0.58		0.60		16.00
18			0.58		0.60		17.00
19			0.58		0.60		18.00
20			0.58		0.60		19.00
21			0.58		0.60		20.00
22			0.58		0.60		21.00
23			0.66	0.58	0.60		22.00
24			0.66	0.58	0.60		23.00
25			0.60	0.58	0.60		24.00
26			0.60	0.58	0.60		25.00
27			0.60	0.58			26.00
28			0.60	0.56			27.00
29			0.60	0.56	0.60		28.00
30		0.58	0.60	0.60	0.60		29.00
31		0.58	0.60	0.60			30.00
		0.58		0.60			31.00
TOTAL							
	0.00	1.74	13.06	11.22	16.20	0.00	
YEARLY C.F.S.			42.22				
YEARLY ACRE FEET			83.60				
TOTAL NO. OF DAYS			71.00				
YEARLY MEAN			0.59				

WATER DISTRICT #37 & 37-M							
CANAL NAME		PAC	CANAL NUMBER 42-P2				1993.00
OWNER		CAL-PACIFICO					
DATE							
1	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	DATE
2			0.60	0.70	0.73		1.00
3			0.60	0.70	0.73		2.00
4			0.60	0.70	0.73		3.00
5			0.60	0.70	0.73		4.00
6				0.70	0.73		5.00
7				0.70	0.73		6.00
8				0.70			7.00
9							8.00
10							9.00
11			0.24		0.73		10.00
12			0.24		0.73		11.00
13					0.73		12.00
14		0.60			0.73		13.00
15		0.60			0.73		14.00
16		0.60	1.00		0.73		15.00
17		0.60	1.00		0.73		16.00
18		0.60	1.00		0.73		17.00
19		0.60	1.00		0.73		18.00
20		0.60	1.00		0.73		19.00
21		0.60	1.00		0.73		20.00
22		0.60	1.00		0.73		21.00
23		0.60	1.00	0.67	0.73		22.00
24		0.60	1.00	0.67	0.73		23.00
25		0.60	1.00	0.67	0.73		24.00
26		0.60	1.00	0.67	0.73		25.00
27		0.60	1.00	0.67	0.73		26.00
28		0.60	1.00	0.67	0.73		27.00
29		0.60	1.00	0.67	0.73		28.00
30		0.60	0.70	0.67	0.73		29.00
31		0.60	0.70	0.67			30.00
		0.60		0.73			31.00
TOTAL							
	0.00	11.40	18.28	11.66	18.98	0.00	
YEARLY C.F.S.			60.32				
YEARLY ACRE FEET			119.43				
TOTAL NO. OF DAYS			84.00				
YEARLY MEAN			0.72				
TOTAL NO. OF DAYS			14.00				
YEARLY MEAN			2.54				

	WATER DISTRICT #37 & 37-M						
CANAL NAME	BLACK'S DITCH		STATION NUMBER 61				1993.00
HADLEY STUART							
	DAILY DISCHARGE IN SECOND FEET						
DATE							
	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	DATE
1							
2		14.00	39.00	4.00	18.00	7.00	1.00
3		15.00	41.00	7.00	29.00	7.00	2.00
4		15.00	21.00	9.00	48.00	9.00	3.00
5		21.00	8.00	9.00	48.00	10.00	4.00
6		15.00	7.00	7.00	34.00	11.00	5.00
7		21.00	8.00	26.00	24.00	9.00	6.00
8		21.00	8.00	40.00	22.00	9.00	7.00
9		21.00	7.00	42.00	27.00	9.00	8.00
10		15.00	7.00	40.00	17.00	10.00	9.00
11		19.00	6.00	39.00	12.00	10.00	10.00
12		33.00	5.00	34.00	18.00	11.00	11.00
13		48.00	5.00	33.00	12.00	11.00	12.00
14	7.00	48.00	5.00	25.00	5.00	11.00	13.00
15	7.00	37.00	20.00	21.00	5.00	11.00	14.00
16	7.00	32.00	22.00	16.00	5.00	11.00	15.00
17	7.00	30.00	25.00	12.00	5.00	12.00	16.00
18	7.00	28.00	23.00	9.00	5.00	12.00	17.00
19	7.00	29.00	22.00	6.00	4.00	13.00	18.00
20	7.00	30.00	23.00	13.00	4.00	12.00	19.00
21	6.00	35.00	28.00	18.00	4.00	12.00	20.00
22	6.00	42.00	32.00	18.00	6.00	12.00	21.00
23	7.00	25.00	6.00	16.00	6.00	12.00	22.00
24	7.00	4.00	6.00	20.00	6.00	12.00	23.00
25	6.00	4.00	5.00	21.00	6.00	12.00	24.00
26	6.00	5.00	4.00	20.00	8.00	12.00	25.00
27	8.00	24.00	4.00	16.00	8.00	11.00	26.00
28	15.00	45.00	4.00	14.00	18.00	11.00	27.00
29	14.00	43.00	5.00	19.00	12.00	10.00	28.00
30	14.00	42.00	4.00	21.00	11.00	10.00	29.00
31	14.00	38.00	4.00	21.00	10.00	10.00	30.00
TOTAL		37.00		19.00	9.00		31.00
MEAN	152.00	836.00	404.00	615.00	446.00	319.00	
A.F.	8.00	27.00	13.00	20.00	14.00	11.00	
	300.96	1655.28	799.92	1217.70	883.08	631.62	
YEARLY C.F.S			2772.00				
YEARLY ACRE FEET			5488.56				
TOTAL NUMBER O	R OF DAYS			171.00			
YEARLY MEAN			16.21				

	WATER DISTRICT #37 & 37-M						
CANAL NAME		BRETT	CANAL NUMBER 26				1993.00
OWNER		WARREN NISSON					
DATE							
1	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	DATE
2				0.75	0.75	0.75	1.00
3				0.75	0.75	0.75	2.00
4				0.75	0.75	0.75	3.00
5				0.75	0.75	0.75	4.00
6				0.75	0.75	0.75	5.00
7				0.75	0.75	0.75	6.00
8				0.75	0.75	0.75	7.00
9			1.67	0.75	0.75	0.75	8.00
10			1.67	0.75	0.75	0.75	9.00
11			1.67	0.75	0.75	0.75	10.00
12			1.67	0.75	0.75	0.75	11.00
13			1.67	0.75	0.75	0.75	12.00
14			1.67	0.75	0.75	0.75	13.00
15			1.67	0.75	0.75	0.75	14.00
16			1.67	0.75	0.75	0.75	15.00
17			1.67	0.75	0.75	0.75	16.00
18			1.67	0.75	0.75	0.75	17.00
19			1.67	0.75	0.75	0.75	18.00
20			1.67	0.75	0.75	0.75	19.00
21			1.67	0.75	0.75	0.75	20.00
22			1.67	0.75	0.75	0.75	21.00
23			1.67	0.75	0.75	0.75	22.00
24			1.67	0.75	0.75	0.75	23.00
25			1.67	0.75	0.75	0.75	24.00
26			1.67	0.75	0.75	0.75	25.00
27			1.67	0.75	0.75	0.75	26.00
28			1.67	0.75	0.75	0.75	27.00
29			1.67	0.75	0.75	0.75	28.00
30			1.67	0.75	0.75	0.75	29.00
31			0.75	0.75	0.75	0.75	30.00
TOTAL				0.75	0.75		31.00
	0.00	0.00	37.49	23.25	23.25	22.50	
YEARLY C.F.S.			106.49				
YEARLY ACRE FEET			210.85				
TOTAL NO. OF DAYS			115.00				
YEARLY MEAN			0.93				

	WATER DISTRICT #37 & 37-M						
CANAL NAME		BRETT	CANAL NUMBER 28				1993.00
OWNER		WARREN NISSON					
DATE							
1	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	DATE
2				0.85	0.85	0.85	1.00
3				0.85	0.85	0.85	2.00
4				0.85	0.85	0.85	3.00
5				0.85	0.85	0.85	4.00
6				0.85	0.85	0.85	5.00
7				0.85	0.85	0.85	6.00
8				0.85	0.85	0.85	7.00
9				0.85	0.85	0.85	8.00
10				0.85	0.85	0.85	9.00
11				0.85	0.85	0.85	10.00
12				0.85	0.85	0.85	11.00
13				0.85	0.85	0.85	12.00
14				0.85	0.85	0.85	13.00
15				0.85	0.85	0.85	14.00
16				0.85	0.85	0.85	15.00
17				0.85	0.85	0.85	16.00
18				0.85	0.85	0.85	17.00
19			1.56	0.85	0.85	0.85	18.00
20			1.56	0.85	0.85	0.85	19.00
21			1.56	0.85	0.85	0.85	20.00
22			1.56	0.85	0.85	0.85	21.00
23			1.56	0.85	0.85	0.85	22.00
24			1.56	0.85	0.85	0.85	23.00
25			1.56	0.85	0.85	0.85	24.00
26			1.56	0.85	0.85	0.85	25.00
27			1.56	0.85	0.85	0.85	26.00
28			1.56	0.85	0.85	0.85	27.00
29			1.56	0.85	0.85	0.85	28.00
30			1.56	0.85	0.85	0.85	29.00
31			0.85	0.85	0.85	0.85	30.00
TOTAL				0.85	0.85		31.00
	0.00	0.00	19.57	26.35	26.35	25.50	
	YEARLY C.F.S.		97.77				
	YEARLY ACRE FEET		193.58				
	TOTAL NO. OF DAYS		105.00				
	YEARLY MEAN		0.93				

WATER DISTRICT #37 & 37-M							
CANAL NAME		BRODIE	CANAL NUMBER 23-P1				1993.00
OWNER	OJ BRODIE						
DATE							
1	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	DATE
2			2.40	3.10	5.00	5.10	1.00
3			5.00	3.60	5.40	5.10	2.00
4			5.00	3.60	5.40	5.50	3.00
5				3.60	5.40	5.50	4.00
6				5.00	5.40	5.50	5.00
7				5.00	5.40	5.10	6.00
8				4.60	5.40	5.10	7.00
9				4.60	5.40	5.50	8.00
10				5.00	5.00	5.50	9.00
11				5.00	5.00	5.10	10.00
12				5.00	5.00	5.10	11.00
13				4.60	5.00	5.10	12.00
14				4.60		4.85	13.00
15				4.50		4.85	14.00
16				4.50		5.00	15.00
17				3.65		5.00	16.00
18				3.65			17.00
19				3.65			18.00
20				3.80			19.00
21				3.80			20.00
22		3.40	1.75	4.50			21.00
23		3.40	1.75	4.50			22.00
24		3.40	1.50				23.00
25		5.00	1.50				24.00
26		5.00	1.50				25.00
27		5.00	1.50				26.00
28		5.00	1.50				27.00
29		4.80	2.75				28.00
30		4.80	2.75				29.00
31		4.80	3.10	5.00			30.00
		2.40			5.10		31.00
TOTAL							
	0.00	47.00	32.00	98.85	67.90	82.90	
YEARLY C.F.S.			328.65				
YEARLY ACRE FEET			650.73				
TOTAL NO. OF DAYS			76.00				
YEARLY MEAN			4.32				

	WATER DISTRICT #37 & 37-M						
CANAL NAME		BRODIE	CANAL NUMBER 23				1993.00
OWNER	OJ BRODIE						
DATE							
1	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	DATE
2			2.37	1.32	1.28	2.81	1.00
3			2.37	1.27	1.28	2.81	2.00
4			2.37	1.27	1.28	2.81	3.00
5			4.04	1.27	1.28	2.81	4.00
6			4.04	1.27	1.28	2.81	5.00
7			4.04	1.27	1.28	2.81	6.00
8			4.04	1.28	1.28	2.81	7.00
9			4.04	1.28	1.28	2.81	8.00
10					1.28	2.81	9.00
11					1.28	2.81	10.00
12					1.28	2.81	11.00
13				1.28	1.28	2.81	12.00
14				1.28	1.28	2.81	13.00
15			7.73	1.28	1.28	2.81	14.00
16			7.73	1.28	1.28	2.81	15.00
17			7.73	1.28	1.28	2.81	16.00
18			7.73	1.28	1.28	2.81	17.00
19			4.85	1.28	1.28	2.81	18.00
20		3.50	4.85	1.28	1.28	2.81	19.00
21		3.50	3.95	1.28	1.28		20.00
22		3.50	3.95	1.28	1.28		21.00
23		3.50	3.95	1.28	1.28		22.00
24		3.50	2.97	1.28	1.28		23.00
25		3.00	2.97	1.28	1.28		24.00
26		3.00	3.24	1.28	2.02		25.00
27		2.37	3.24	1.28	2.02		26.00
28		2.37	3.24	1.28	2.81		27.00
29		2.37	2.81	1.28	2.81		28.00
30		2.37	2.81	1.28	2.81		29.00
31		2.37	1.32	1.28	2.81		30.00
		2.37		1.28	2.81		31.00
TOTAL							
	0.00	37.72	102.38	35.83	48.81	53.39	
YEARLY C.F.S.			278.13				
YEARLY ACRE FEET			550.70				
TOTAL NO. OF DAYS			116.00				
YEARLY MEAN			2.40				

	WATER DISTRICT #37 & 37-M						
CANAL NAME		BROWN	CANAL NUMBER 57-F				1993.00
OWNER	SPRING OF GLADNESS RANCH			MIKE MC GONIGAL			
DATE							
1	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	DATE
2			2.00	4.00	4.50	4.28	1.00
3			2.00	4.00	4.50	4.02	2.00
4			4.02	4.50	4.50	4.02	3.00
5			4.02	4.50	4.50	4.02	4.00
6			4.02	4.50	4.50	4.02	5.00
7			4.02	4.28	4.50	4.02	6.00
8			4.02	4.28	4.92	4.02	7.00
9			4.02	4.28	4.92	4.02	8.00
10			4.02	4.28	4.92	3.76	9.00
11			4.02	4.28	4.92	3.76	10.00
12			4.02	4.28	4.92	3.76	11.00
13			4.02	4.28	4.50	3.76	12.00
14			4.02	4.28	4.50	3.76	13.00
15			4.02	4.28	4.50	3.40	14.00
16			4.02	4.28	4.50	3.40	15.00
17			4.02	4.28	4.50	3.40	16.00
18			2.00	4.28	4.50	3.40	17.00
19			2.00	4.28	4.50	3.40	18.00
20			2.00	4.28	4.50	3.40	19.00
21			2.00	4.28	4.50	3.40	20.00
22			2.00	4.28	4.50	3.40	21.00
23			4.50	2.84	4.50	3.40	22.00
24			4.50	2.84	4.50	3.20	23.00
25			4.50	4.50	4.02	3.20	24.00
26			4.50	4.50	4.02	3.20	25.00
27			4.50	4.50	4.28	3.20	26.00
28		4.00	4.50	4.50	4.28	3.20	27.00
29		4.00	4.50	4.50	4.28	3.20	28.00
30		4.00	4.00	4.50	4.28	3.20	29.00
31		4.00	4.00	4.50	4.28	2.84	30.00
		4.00		4.50	4.28		31.00
TOTAL							
	0.00	20.00	109.78	131.66	139.32	107.06	
YEARLY C.F.S.			507.82				
YEARLY ACRE FEET			1005.48				
TOTAL NO. OF DAYS			127.00				
YEARLY MEAN			4.00				

	WATER DISTRICT #37 & 37-M						
CANAL NAME		CHAUMELL	CANAL NUMBER 22-P1				1993.00
OWNER	PAT MILLINGTON						
DATE							
1	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	DATE
2			0.56	0.54	0.60	0.60	1.00
3			0.56	0.54	0.60	0.60	2.00
4			0.56	0.54	0.60	0.60	3.00
5			0.40	0.54	0.60	0.60	4.00
6			0.40	0.54	0.60	0.60	5.00
7				0.54	0.60	0.60	6.00
8				0.54	0.60	0.60	7.00
9				0.54	0.60	0.60	8.00
10				0.54	0.60	0.60	9.00
11				0.54	0.60		10.00
12				0.54	0.60		11.00
13				0.54	0.60		12.00
14				0.54	0.44		13.00
15				0.56	0.44		14.00
16				0.56	0.44		15.00
17			0.56	0.56	0.60		16.00
18		0.44	0.56	0.56	0.60		17.00
19		0.44	0.56	0.56	0.60		18.00
20		0.44	0.56	0.56	0.60		19.00
21		0.44	0.56	0.56	0.60	1.06	20.00
22		0.50	0.56	0.60	0.60	1.06	21.00
23		0.50	0.56	0.60	0.60	1.06	22.00
24		0.50	0.60	0.60	0.60	1.06	23.00
25		0.32	0.60	0.60	0.60	0.60	24.00
26		0.32	0.60	0.60	0.60	0.60	25.00
27		0.32	0.60	0.60	0.60	0.60	26.00
28		0.32	0.60	0.60	0.60	0.60	27.00
29		0.56	0.60	0.60	0.60	0.60	28.00
30		0.56	0.60	0.60	0.60	1.06	29.00
31		0.56	0.54	0.60	0.60	1.06	30.00
		0.56		0.60	0.60		31.00
TOTAL							
	0.00	6.78	11.14	17.54	18.12	14.76	
YEARLY C.F.S.			68.34				
YEARLY ACRE FEET			135.31				
TOTAL NO. OF DAYS			117.00				
YEARLY MEAN			0.58				

WATER DISTRICT #37 & 37-M							
CANAL NAME		CLARK	CANAL NUMBER 29-P				1993.00
OWNER	LAWRENCE SCHOEN						
DATE							
1	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	DATE
2			0.20	0.18	0.30	0.20	1.00
3			0.20	0.18		0.20	2.00
4			0.20	0.18		0.20	3.00
5				0.18		0.20	4.00
6				0.20		0.20	5.00
7				0.20		0.20	6.00
8				0.20		0.20	7.00
9				0.20		0.20	8.00
10				0.20		0.20	9.00
11				0.20		0.20	10.00
12			0.20	0.20	0.20	0.20	11.00
13			0.20	0.20	0.20	0.20	12.00
14			0.20	0.20	0.20	0.20	13.00
15			0.20	0.20	0.20	0.20	14.00
16			0.20	0.20	0.20	0.20	15.00
17			0.20	0.30	0.20	0.20	16.00
18			0.20	0.30	0.20	0.20	17.00
19			0.20	0.30		0.20	18.00
20			0.20	0.20		0.20	19.00
21			0.20	0.20	0.20	0.20	20.00
22		0.20	0.20	0.20	0.20	0.20	21.00
23		0.20	0.20	0.20	0.20	0.20	22.00
24		0.20	0.20		0.20	0.20	23.00
25		0.20	0.20		0.20	0.20	24.00
26		0.20	0.20		0.20	0.20	25.00
27		0.20	0.20	0.30	0.20	0.20	26.00
28		0.20	0.20	0.30	0.20		27.00
29		0.20	0.18	0.30	0.20		28.00
30		0.20	0.18	0.30	0.20		29.00
31		0.20	0.18	0.30	0.20		30.00
		0.20		0.30	0.20		31.00
TOTAL							
	0.00	2.20	4.54	6.42	4.10	5.20	
YEARLY C.F.S.			22.46				
YEARLY ACRE FEET			44.47				
TOTAL NO. OF DAYS			108.00				
YEARLY MEAN			0.21				

	WATER DISTRICT #37 & 37-M						
CANAL NAME		CLOUD	CANAL NUMBER 74				1992.00
OWNER	EDITH FREDERICKSON						
DATE							
1	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	DATE
2							1.00
3							2.00
4					1.00		3.00
5					1.28		4.00
6					1.28		5.00
7			2.68		1.28		6.00
8			2.68		1.28		7.00
9			2.68		1.28		8.00
10			2.68		1.28		9.00
11			2.68		1.28		10.00
12			2.68		1.28		11.00
13			2.68				12.00
14			2.68				13.00
15			2.68				14.00
16			2.68				15.00
17			2.68				16.00
18			2.68				17.00
19			2.68				18.00
20							19.00
21							20.00
22							21.00
23							22.00
24							23.00
25							24.00
26							25.00
27							26.00
28							27.00
29							28.00
30							29.00
31							30.00
							31.00
TOTAL							
	0.00	0.00	34.84	0.00	11.24	0.00	
YEARLY C.F.S.			46.08				
YEARLY ACRE FEET			91.24				
TOTAL NO. OF DAYS			22.00				
YEARLY MEAN			2.09				

WATER DISTRICT #37 & 37-M							
CANAL NAME		CLARK	CANAL NUMBER 29-P2				1993.00
OWNER		JACK YOUNG					
DATE							
2	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	DATE
3			0.80		0.84	0.84	2.00
4			0.80		0.84	0.84	3.00
5					0.66	0.84	4.00
6				0.40	0.66	0.84	5.00
7				0.40	0.66	0.84	6.00
8				0.40	0.66	0.84	7.00
9				0.40	0.66	0.84	8.00
10				0.40		0.84	9.00
11				0.40			10.00
12				0.40			11.00
13				0.40			12.00
14				0.40		0.84	13.00
15		0.80		0.40		0.84	14.00
16		0.80		0.40		0.84	15.00
17		0.80		0.40	0.84	0.84	16.00
18		0.80		0.40	0.84	0.84	17.00
19		0.80		0.40	0.84	0.84	18.00
20		0.80		0.40	0.84	0.84	19.00
21		0.80			0.84	0.84	20.00
22		0.80		0.84	0.84	0.84	21.00
23		0.80		0.84	0.84		22.00
24		0.80		0.84	0.84		23.00
25		0.80		0.84	0.84		24.00
26		0.80		0.84	0.84		25.00
27				0.48	0.84		26.00
28				0.48	0.84		27.00
29		0.80	0.40	0.84	0.84		28.00
30		0.80	0.40	0.84	0.84		29.00
31		0.80		0.76	0.84		30.00
		0.80		0.76	0.84		31.00
TOTAL							
	0.00	12.80	2.40	14.36	18.42	14.28	
YEARLY C.F.S.			62.26				
YEARLY ACRE FEET			123.27				
TOTAL NO. OF DAYS			86.00				
YEARLY MEAN			0.72				

	WATER DISTRICT #37 & 37-M						
CANAL NAME		CLARK	CANAL NUMBER 29-P3				
OWNER	WALTER HOFSTETTER						1993.00
DATE							
1	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	DATE
2							1.00
3				0.72	0.72		2.00
4				0.72	0.72		3.00
5				0.72	0.72		4.00
6				0.72	0.72		5.00
7				0.72	0.72		6.00
8					0.72		7.00
9					0.72	0.72	8.00
10				0.72		0.72	9.00
11				0.72		0.72	10.00
12				0.72		0.72	11.00
13						0.72	12.00
14					0.72		13.00
15				0.72	0.72		14.00
16				0.72	0.72		15.00
17					0.72		16.00
18					0.72		17.00
19			0.72		0.72		18.00
20		0.75	0.72				19.00
21		0.75	0.72			0.72	20.00
22		0.75	0.72	0.72		0.72	21.00
23		0.75	0.72	0.72			22.00
24		0.75	0.72	0.72			23.00
25		0.75	0.72	0.72		0.72	24.00
26		0.75	0.72	0.72		0.72	25.00
27		0.75	0.72				26.00
28		0.75	0.72		0.72		27.00
29		0.75			0.72		28.00
30							29.00
31							30.00
							31.00
TOTAL							
	0.00	7.50	7.20	10.80	10.80	6.48	
YEARLY C.F.S.			42.78				
YEARLY ACRE FEET			84.70				
TOTAL NO. OF DAYS			59.00				
YEARLY MEAN			0.73				

	WATER DISTRICT #37 & 37-M						
CANAL NAME		DAVIS	CANAL NUMBER 77-P				
OWNER	SPRING CREEK RANCH						1993.00
DATE							
1	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	DATE
2			1.56	1.78	4.00		1.00
3			1.56	1.78	4.00	2.22	2.00
4			0.44	2.11	4.67	2.22	3.00
5			0.44	2.11	4.67	2.44	4.00
6				2.11	4.67	2.44	5.00
7				9.11	4.67	2.44	6.00
8				9.11	5.33	2.44	7.00
9				4.44	5.33	2.44	8.00
10				4.44	5.33	4.44	9.00
11				6.67	5.33	4.44	10.00
12				6.67	5.33	3.56	11.00
13				6.67		3.56	12.00
14				6.67		3.56	13.00
15				6.67			14.00
16				1.33			15.00
17				1.33			16.00
18				1.33			17.00
19				1.33			18.00
20				1.33			19.00
21				1.33			20.00
22				1.33			21.00
23				2.67			22.00
24				2.67			23.00
25				2.67			24.00
26				2.67			25.00
27				2.67			26.00
28		4.22		1.33			27.00
29		4.22		1.33			28.00
30		4.22		1.33			29.00
31		4.22		1.33			30.00
		4.22		4.00			31.00
TOTAL							
	0.00	21.10	4.00	102.32	53.33	36.20	
YEARLY C.F.S.			216.95				
YEARLY ACRE FEET			429.56				
TOTAL NO. OF DAYS			63.00				
YEARLY MEAN			3.44				

	WATER DISTRICT #37 & 37-M					
CANAL NAME	DISTRICT CANAL STATION NUMBER 45					1993.00
DATE	AILY DISCHARGE IN SECOND FEET					
1	APRIL	MAY	JUNE	JULY	AUG.	SEPT.
2			240.00	234.00	153.00	64.00
3			234.00	234.00	153.00	94.00
4			213.00	221.00	149.00	91.00
5			188.00	211.00	115.00	92.00
6			186.00	201.00	113.00	99.00
7			160.00	208.00	162.00	92.00
8			132.00	211.00	198.00	85.00
9			124.00	196.00	221.00	81.00
10			118.00	193.00	162.00	79.00
11			117.00	211.00	165.00	79.00
12			126.00	224.00	158.00	76.00
13		37.00	114.00	221.00	172.00	79.00
14		38.00	102.00	213.00	158.00	86.00
15		37.00	145.00	215.00	150.00	73.00
16		77.00	240.00	201.00	112.00	71.00
17		142.00	245.00	191.00	153.00	71.00
18		174.00	241.00	192.00	147.00	72.00
19		169.00	128.00	201.00	128.00	83.00
20		201.00	245.00	202.00	118.00	81.00
21	47.00	240.00	262.00	203.00	120.00	77.00
22	47.00	208.00	276.00	211.00	160.00	78.00
23	44.00	250.00	282.00	212.00	138.00	75.00
24	40.00	240.00	256.00	215.00	118.00	73.00
25	37.00	259.00	240.00	216.00	109.00	69.00
26		273.00	128.00	203.00	102.00	68.00
27		279.00	128.00	185.00	98.00	66.00
28		224.00	245.00	167.00	89.00	66.00
29		213.00	250.00	165.00	83.00	63.00
30		196.00	264.00	181.00	84.00	63.00
31		186.00	245.00	183.00	80.00	62.00
TOTAL		206.00		167.00	72.00	
MEAN	215.00	3649.00	5874.00	6288.00	4140.00	2308.00
A.F.	43.00	192.00	196.00	203.00	136.00	77.00
	425.70	7225.02	11630.52	12450.24	8197.20	4569.84
YEARLY C.F.S.			22474.00			
YEARLY ACRE FEET			44498.52			
TOTAL NUMBER OF DAYS				147.00		
YEARLY MEAN			153.00			

WATER DISTRICT #37 & 37-M							
CANAL NAME		DITTOE	CANAL NUMBER 56-D				
OWNER	W. MOLYNEUX						1993.00
DATE							
1	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	DATE
2			14.00	6.96	12.70	6.96	1.00
3			14.00	6.96	12.70	6.96	2.00
4			14.00	10.00	12.70	6.96	3.00
5			14.00	10.00	12.70	6.96	4.00
6			14.00	10.00	12.70	6.96	5.00
7			14.00	9.84	12.70	6.96	6.00
8			14.00	9.84	12.70	6.96	7.00
9			14.00	9.00	12.70	6.96	8.00
10			14.00	9.00	12.70	6.96	9.00
11			12.00	9.00	12.70	6.96	10.00
12			12.00	9.00	12.70	6.96	11.00
13			12.00	9.00	12.70	6.96	12.00
14			12.00	8.56	12.70	6.96	13.00
15			12.00	8.56	12.70	6.96	14.00
16			10.60	8.56	12.70	6.96	15.00
17			10.60	8.56	12.70	6.96	16.00
18			10.60	10.60	11.40	6.96	17.00
19			10.60	10.60	11.40	6.96	18.00
20			10.60	10.60	12.00	6.96	19.00
21		4.00	10.60	10.60	12.00	6.96	20.00
22		4.00	10.60	10.60	12.00	5.68	21.00
23		8.04	12.00	11.40	12.00	5.68	22.00
24		8.04	12.00	11.40	12.00	5.68	23.00
25		8.04	12.00	12.00	6.40	5.68	24.00
26		15.00	12.00	12.00	6.40	5.68	25.00
27		15.00	12.00	12.00	6.40	5.68	26.00
28		14.00	12.00	8.04	6.40	5.68	27.00
29		14.00	12.00	8.04	6.40	5.68	28.00
30		14.00	8.00	12.70	6.40	5.68	29.00
31		14.00	8.00	12.70	7.52	5.68	30.00
		14.00		12.70	7.52		31.00
TOTAL							
	0.00	132.12	360.20	308.82	339.44	196.00	
YEARLY C.F.S.			1336.58				
YEARLY ACRE FEET			2646.43				
TOTAL NO. OF DAYS			134.00				
YEARLY MEAN			9.97				

	WATER DISTRICT #37 & 37-M						
CANAL NAME		FLOOD	CANAL NUMBER 64				1992.00
OWNER	Y-3 RANCH						
DATE							
1	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	DATE
2		6.40	6.98				1.00
3	8.00	6.40	6.98				2.00
4	8.00	6.40	6.98				3.00
5	8.00	6.40	6.98				4.00
6	8.00	7.00	6.98				5.00
7	8.00	7.00	6.68				6.00
8	5.68	7.80	6.68				7.00
9	5.68	7.80	6.68				8.00
10	5.68	8.04					9.00
11	5.68	8.04					10.00
12	5.68	8.04					11.00
13	5.68	7.52					12.00
14	5.68	7.52					13.00
15	5.68	6.96					14.00
16	5.68	6.96					15.00
17	5.68	6.69					16.00
18	5.68	6.69					17.00
19	5.68	6.69					18.00
20	5.68	6.69					19.00
21	5.68	6.69					20.00
22	5.68	6.69					21.00
23	5.68	6.69					22.00
24	5.68	6.69					23.00
25	5.68	6.69					24.00
26	4.00	6.69					25.00
27	4.00	6.69					26.00
28	4.00	6.69					27.00
29	6.40	6.69					28.00
30	6.40	6.69					29.00
31	6.40	6.98					30.00
		6.98					31.00
TOTAL							
	173.44	215.90	54.94	0.00	0.00	0.00	
YEARLY C.F.S.			444.28				
YEARLY ACRE FEET			879.67				
TOTAL NO. OF DAYS			68.00				
YEARLY MEAN			6.53				

	WATER DISTRICT #37 & 37-M						
CANAL NAME		GILLIHAN	CANAL NUMBER 11				1993.00
OWNER	EE AMARAL						
DATE							
1	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	DATE
2			8.60	1.00	1.00	4.30	1.00
3			8.60	1.00	1.00	4.30	2.00
4			8.60	1.00	1.00	4.30	3.00
5			8.60	1.00	1.00	4.30	4.00
6			8.60	1.00	1.00	4.30	5.00
7			8.60	1.00	1.00	4.30	6.00
8		5.60	8.60	1.00	1.00	4.30	7.00
9		5.60	8.60	1.00	1.00	4.30	8.00
10		5.60	8.60	1.00	1.00	4.30	9.00
11		8.60	8.60	1.00	1.00	4.30	10.00
12		8.60	8.60	1.00	1.00	4.30	11.00
13		8.60	8.60	1.00	1.00	4.30	12.00
14		8.60	8.60	1.00	1.00	4.30	13.00
15		8.60	8.60	1.00	1.00	4.30	14.00
16		8.60	8.60	1.00	1.00	4.30	15.00
17		8.60	8.60	1.00	1.00	4.30	16.00
18		8.60	8.60	1.00	1.00	4.30	17.00
19		8.60	8.60	1.00	1.00	4.30	18.00
20		8.60	8.60	1.00	1.00	4.30	19.00
21		8.60	8.60	1.00	1.00	4.30	20.00
22		8.60	8.60	1.00	1.00	4.30	21.00
23		8.60	8.60	1.00	1.00	4.30	22.00
24		8.60	8.60	1.00	1.00	4.30	23.00
25		8.60	8.60	1.00	1.00	4.30	24.00
26		8.60	8.60	1.00	2.30	4.30	25.00
27		8.60	8.60	1.00	2.30	4.30	26.00
28		8.60	8.60	1.00	4.30	4.30	27.00
29		8.60	7.60	1.00	4.30	4.30	28.00
30		8.60	7.60	1.00	4.30	4.30	29.00
31		8.60	1.00	1.00	4.30	4.30	30.00
		8.60		1.00	4.30		31.00
TOTAL							
	0.00	206.00	248.40	31.00	50.10	129.00	
	YEARLY C.F.S.		664.50				
	YEARLY ACRE FEET		1315.71				
	TOTAL NO. OF DAYS		147.00				
	YEARLY MEAN		4.52				

		WATER DISTRICT #37 & 37-M					
CANAL NAME		GILLIHAN	CANAL NUMBER 11				1993.00
OWNER		FISH & GAME	USER:PICABO LIVESTOCK				
DATE							
1	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	DATE
2			4.14	3.00	5.50	6.00	1.00
3			4.14	3.00	5.50	6.00	2.00
4			4.14	3.00	5.50	6.00	3.00
5			4.14	3.00		6.00	4.00
6			4.14	7.00		6.00	5.00
7				7.00		6.00	6.00
8				10.00		6.00	7.00
9				10.00		6.00	8.00
10				10.00		6.00	9.00
11				10.00		6.00	10.00
12			3.00	10.00		6.00	11.00
13		4.14	3.00	10.00		6.00	12.00
14		4.14	3.00	10.00		6.00	13.00
15		4.14		8.02		6.00	14.00
16		4.14		8.02		6.00	15.00
17		4.14		8.02	6.00	6.00	16.00
18		4.14		8.02	6.00	6.00	17.00
19		4.14		8.02	6.00	6.00	18.00
20		4.14		9.28	6.00	6.00	19.00
21		4.14		9.28	6.00	6.00	20.00
22		4.14	3.00	7.35	6.00	6.00	21.00
23		4.14	3.00	7.35	6.00	6.00	22.00
24		4.14	3.00	7.35	6.00	6.00	23.00
25		4.14	3.00	7.35	6.00	6.00	24.00
26		4.14	3.00	7.35	6.00	6.00	25.00
27		4.14	3.00	7.35	6.00	6.00	26.00
28		4.14	3.00	7.35	6.00	2.20	27.00
29		4.14	3.00	7.35	6.00	2.20	28.00
30		4.14	3.00	7.35	6.00	2.20	29.00
31		4.14	3.00	5.50	6.00	2.20	30.00
		4.14		5.50	6.00		31.00
TOTAL							
	0.00	82.80	59.70	231.81	112.50	164.80	
YEARLY C.F.S.			651.61				
YEARLY ACRE FEET			1290.19				
TOTAL NO. OF DAYS			118.00				
YEARLY MEAN			5.52				

	WATER DISTRICT #37 & 37-M						
CANAL NAME		GLENDALE	CANAL NUMBER 50				1993.00
OWNER	VARIOUS						
DATE							
1	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	DATE
2			20.32	35.28	46.40	20.32	1.00
3			20.32	35.28	46.40	20.32	2.00
4			16.40	38.60	37.76	20.32	3.00
5			16.40	38.60	37.76	17.04	4.00
6			13.36	38.60	37.76	17.04	5.00
7			13.36	35.28	37.76	17.04	6.00
8			13.36	35.28	35.28	13.96	7.00
9			20.32	35.28	35.28	13.96	8.00
10			20.32	35.28	35.28	12.76	9.00
11			19.00	35.28	35.28	12.76	10.00
12			19.00	35.28	35.28	11.08	11.00
13			19.00	35.28	35.28	11.08	12.00
14		24.02	19.00	33.68	35.28	11.08	13.00
15		24.02	19.00	33.68	35.28	8.40	14.00
16		28.96	19.00	36.92	35.28	8.40	15.00
17		28.96	19.00	36.92	35.28	8.40	16.00
18		28.96	19.00	32.88	32.88	8.40	17.00
19		28.96	19.00	32.88	32.88	9.84	18.00
20		28.96	32.72	32.88	31.25	9.84	19.00
21		20.32	32.72	27.48	31.25	9.84	20.00
22		20.32	32.72	27.48	35.28	9.84	21.00
23		16.40	41.16	21.00	35.28	9.84	22.00
24		16.40	41.16	21.00	31.25	8.40	23.00
25		16.40	39.44	24.48	31.25	8.40	24.00
26		16.40	39.44	24.48	31.25	8.40	25.00
27		16.40	39.44	24.48	28.96	8.40	26.00
28		18.32	39.44	15.92	28.96	8.40	27.00
29		18.32	39.44	15.92	26.00	7.92	28.00
30		20.32	37.76	46.40	26.00	7.92	29.00
31		20.32	37.76	46.40	23.80	6.96	30.00
		20.32		46.40	23.80		31.00
TOTAL							
	0.00	413.08	778.36	1014.60	1046.73	346.36	
YEARLY C.F.S.			3599.13				
YEARLY ACRE FEET			7126.28				
TOTAL NO. OF DAYS			141.00				
YEARLY MEAN			25.53				

WATER DISTRICT #37 & 37-M							
CANAL NAME		GRAFF	CANAL NUMBER 62			1993.00	
OWNER	WOODRIVER RANCHES						
DATE							
1	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	DATE
2			14.00	14.00	14.00	12.00	1.00
3			14.00	14.00	14.00	4.00	2.00
4			14.00	12.70	14.00	4.00	3.00
5			14.00	12.70	14.00	4.00	4.00
6			14.00	12.70	14.00	4.00	5.00
7			14.00	12.70	14.00	4.00	6.00
8			14.00	12.70	12.70	4.00	7.00
9			14.00	12.70	12.70	4.00	8.00
10			14.00	12.70	12.70	4.00	9.00
11			14.00	12.70	12.70	4.00	10.00
12			14.00	12.70	12.70	4.00	11.00
13			14.00	12.70	12.70	4.00	12.00
14		12.70	14.00	12.70	12.70	4.00	13.00
15		12.70	14.00	12.70	12.70	4.00	14.00
16		16.00	14.00	12.70	12.70	4.00	15.00
17		16.00	14.00	12.70	12.70	4.00	16.00
18		16.00	14.00	14.00	12.00	4.00	17.00
19		16.00	14.00	14.00	12.00	4.00	18.00
20		16.00	14.00	14.00	12.70	4.00	19.00
21		14.00	14.00	14.00	12.70	4.00	20.00
22		14.00	14.00	14.00		4.00	21.00
23		14.00	14.00	14.00		4.00	22.00
24		14.00	14.00	14.00		3.48	23.00
25		14.00	14.00	14.00		3.48	24.00
26		14.00	14.00	14.00		3.48	25.00
27		14.00	14.00	14.00	12.70	3.48	26.00
28		14.00	14.00	14.00	12.70	3.48	27.00
29		14.00	14.00	14.00	12.00		28.00
30		14.00	14.00	14.00	12.00		29.00
31		14.00	14.00	14.00	12.00	8.04	30.00
		14.00		14.00	12.00		31.00
TOTAL							
	0.00	273.40	420.00	415.80	333.80	121.44	
YEARLY C.F.S.			1564.44				
YEARLY ACRE FEET			3097.59				
TOTAL NO. OF DAYS			134.00				
YEARLY MEAN			11.67				

	WATER DISTRICT #37 & 37-M						
CANAL NAME		MAN	CANAL NUMBER 19-P1				1993.00
OWNER	TICK-TOCK						
DATE							
1	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	DATE
2							1.00
3					2.60		2.00
4					2.60		3.00
5					2.60		4.00
6							5.00
7							6.00
8							7.00
9						1.50	8.00
10						1.50	9.00
11						1.50	10.00
12						1.50	11.00
13						1.50	12.00
14						4.00	13.00
15						4.00	14.00
16						4.00	15.00
17				2.40	2.70	4.00	16.00
18				2.40	2.70		17.00
19				2.40	4.30		18.00
20				2.50	4.30		19.00
21				2.50			20.00
22							21.00
23							22.00
24				2.50	4.10		23.00
25				2.50	4.10		24.00
26							25.00
27							26.00
28					1.50		27.00
29					1.50		28.00
30					1.50		29.00
31					4.00		30.00
					4.00		31.00
TOTAL							
	0.00	0.00	0.00	17.20	42.50	23.50	
YEARLY C.F.S.			83.20				
YEARLY ACRE FEET			164.74				
TOTAL NO. OF DAYS			30.00				
YEARLY MEAN			2.77				

WATER DISTRICT #37 & 37-M							
CANAL NAME		MANTEY		CANAL NUMBER 14-P			1993.00
OWNER		ROBERT GARDNER					
DATE							
1	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	DATE
2					1.08	1.46	1.00
3					1.40	1.46	2.00
4					1.40	1.48	3.00
5					1.40	1.48	4.00
6					1.40	1.48	5.00
7					1.64	1.48	6.00
8					1.64	1.48	7.00
9					1.64		8.00
10					1.42		9.00
11					1.42		10.00
12					1.42		11.00
13				0.88	1.42		12.00
14				0.88	1.48		13.00
15				1.22	1.48		14.00
16				1.22	1.48		15.00
17				0.86			16.00
18				0.86			17.00
19				0.86			18.00
20				1.28			19.00
21				1.28	1.42		20.00
22		1.64			1.42		21.00
23		1.64			1.42		22.00
24		1.64			1.42		23.00
25		1.64			1.42		24.00
26		1.64			1.46		25.00
27					1.46		26.00
28					1.40		27.00
29		0.60		1.44	1.40		28.00
30		0.60		1.44	1.40	1.48	29.00
31		0.60		1.08		1.48	30.00
		0.60		1.08			31.00
TOTAL							
	0.00	10.60	0.00	14.38	35.94	13.28	
YEARLY C.F.S.			74.20				
YEARLY ACRE FEET			146.92				
TOTAL NO. OF DAYS			56.00				
YEARLY MEAN			1.33				

	WATER DISTRICT #37 & 37-M						
CANAL NAME		MARTIN	CANAL NUMBER 72				1993.00
OWNER	M. WESTON & J. SCOTT						
DATE							
1	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	DATE
2			4.50	1.00	1.00	1.00	1.00
3			4.50	1.00	1.00	1.00	2.00
4			4.50	5.02	5.63	1.00	3.00
5			4.50	5.02	5.63	1.00	4.00
6			4.50	5.02	6.58	1.00	5.00
7			4.50	5.02	6.58	1.00	6.00
8			4.50	5.02	1.00	1.00	7.00
9			4.50	5.02	1.00	1.00	8.00
10			1.00	5.02	1.00	1.00	9.00
11			1.00	1.00	5.63	1.00	10.00
12			1.00	1.00	5.63	1.00	11.00
13			1.00	5.02	5.63	1.00	12.00
14		1.00	1.00	5.02	5.63	1.00	13.00
15		1.00	1.00	5.02	5.63	1.00	14.00
16		1.00	1.00	5.02	5.63	1.00	15.00
17		1.00	1.00	5.02	5.63	1.00	16.00
18		1.00	1.00	5.02	1.00	1.00	17.00
19		1.00	1.00	5.02	1.00	1.00	18.00
20		1.00	1.00	5.02	1.00	1.00	19.00
21		1.00	1.00	1.00	1.00	1.00	20.00
22		1.00	1.00	1.00	5.02	5.04	21.00
23		1.00	1.00	1.00	5.02	5.04	22.00
24		1.00	1.00	1.00	5.02	5.04	23.00
25		1.00	1.00	5.63	5.02	5.04	24.00
26		1.00	1.00	5.63	5.02	1.00	25.00
27		1.00	1.00	5.63	1.00	1.00	26.00
28		1.00	1.00	5.63	1.00	1.00	27.00
29		1.00	1.00	5.63	1.00	1.00	28.00
30		1.00	1.00	1.00	1.00	1.00	29.00
31		1.00	1.00	1.00	1.00		30.00
		1.00		1.00	1.00		31.00
TOTAL							
	0.00	19.00	58.00	114.45	103.93	45.16	
YEARLY C.F.S.			340.54				
YEARLY ACRE FEET			674.27				
TOTAL NO. OF DAYS			140.00				
YEARLY MEAN			2.43				

WATER DISTRICT #37 & 37-M							
CANAL NAME		MAX	CANAL NUMBER 12				1993.00
OWNER	W MOLYNEUX						
DATE							
1	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	DATE
2			0.25	1.60	1.39	1.39	1.00
3			0.25	1.60	1.39	1.39	2.00
4			0.25	1.60	1.39	1.39	3.00
5			0.25	1.60	1.39	1.39	4.00
6			0.25	1.60	1.39	1.39	5.00
7			0.25	1.60	1.39	1.39	6.00
8			2.32	1.60	1.39	1.39	7.00
9			2.32	1.60	1.39	1.39	8.00
10			2.32	0.39	1.39	1.39	9.00
11			2.32	0.39	1.39	1.39	10.00
12			2.32	0.39	1.39	1.39	11.00
13			2.32	0.39	1.39	1.39	12.00
14			2.32	0.39	1.39	1.39	13.00
15			2.32	1.39	1.39	1.39	14.00
16			2.32	1.39	1.39	1.39	15.00
17			2.32	1.39	1.39	1.39	16.00
18			2.32	1.39	1.39	1.39	17.00
19			2.32	1.39	1.39	1.39	18.00
20			2.32	1.39	1.39	1.39	19.00
21			2.32	1.39	1.39	1.39	20.00
22			2.32	1.39	1.39	1.39	21.00
23			2.32	1.39	1.39	1.39	22.00
24			2.32	1.39	1.39	1.39	23.00
25			2.32	1.39	1.39	1.39	24.00
26			2.32	1.39	1.39	1.39	25.00
27			2.32	1.39	1.39	1.39	26.00
28			2.32	1.39	1.39	1.39	27.00
29		0.25	2.32	1.39	1.39	1.39	28.00
30		0.25	2.32	1.39	1.39	1.39	29.00
31		0.25	1.60	1.39	1.39	1.39	30.00
		0.25		1.39	1.39		31.00
TOTAL							
	0.00	1.00	56.46	39.77	43.09	41.70	
YEARLY C.F.S.			182.02				
YEARLY ACRE FEET			360.40				
TOTAL NO. OF DAYS			126.00				
YEARLY MEAN			1.44				

	WATER DISTRICT #37 & 37-M						
CANAL NAME		MILL	CANAL NUMBER 16-P				1993.00
OWNER	PAT MILLINGTON						
DATE							
1	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	DATE
2			6.00	7.12	7.82	7.80	1.00
3			6.00	7.12	7.90	7.80	2.00
4			6.00	7.12	7.90	7.70	3.00
5			7.00	7.12	7.90	7.70	4.00
6			7.00	7.12	7.90	7.70	5.00
7			7.00	7.12	7.66	7.70	6.00
8			7.02	7.12	7.66	7.70	7.00
9			7.02	7.12	7.66	7.70	8.00
10				7.12	7.70	7.70	9.00
11				7.12	7.70	7.70	10.00
12				7.12		7.70	11.00
13				7.12		7.70	12.00
14				7.12			13.00
15				7.12			14.00
16				7.12			15.00
17				7.12			16.00
18				7.12			17.00
19			7.00	7.12			18.00
20		7.00	7.00	7.12			19.00
21		7.00	7.00	7.12			20.00
22		7.00	7.00	7.12			21.00
23		7.00	7.00	7.12	7.82		22.00
24		7.00	7.12	7.90	7.82		23.00
25		6.00	7.12	7.90	7.82		24.00
26		6.00	7.12	7.90	7.56		25.00
27		6.00	7.12	7.90	7.56		26.00
28		6.00	7.12	7.90	7.80		27.00
29		6.00	7.12	7.82	7.80		28.00
30		6.00	7.12	7.82	7.80		29.00
31		6.00	7.12	7.82	7.66		30.00
		6.00		7.82	7.66		31.00
TOTAL							
	0.00	83.00	145.00	227.42	155.10	92.60	
YEARLY C.F.S.			703.12				
YEARLY ACRE FEET			1392.18				
TOTAL NO. OF DAYS			97.00				
YEARLY MEAN			7.25				

	WATER DISTRICT #37 & 37-M						
CANAL NAME		CSV PUMP	CANAL NUMBER 00P8				1993.00
OWNER	NATURE CONSERVANCY						
DATE							
1	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	DATE
2							1.00
3							2.00
4							3.00
5							4.00
6							5.00
7							6.00
8							7.00
9				0.60			8.00
10				0.60			9.00
11				0.60			10.00
12				0.60			11.00
13				0.60			12.00
14				0.60			13.00
15				0.60			14.00
16				0.60			15.00
17							16.00
18							17.00
19							18.00
20							19.00
21							20.00
22							21.00
23							22.00
24							23.00
25							24.00
26							25.00
27							26.00
28							27.00
29							28.00
30							29.00
31							30.00
							31.00
TOTAL							
MEAN	0.00	0.00	0.00	4.80	0.00	0.00	
A. F.							
	0.00	0.00	0.00	9.50	0.00	0.00	
YEARLY C.F.S.			4.80				
YEARLY ACRE FEET			9.50				
TOTAL NO. OF DAYS			8.00				
YEARLY MEAN			0.60				

	WATER DISTRICT #37 & 37-M						
CANAL NAME		NEIDER	CANAL NUMBER 23-P				1993.00
OWNER	C & Y RANCHES						
DATE							
1	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	DATE
2			1.10		0.80	0.70	1.00
3			1.10	1.10	0.75	0.70	2.00
4			1.10	1.10	0.75	0.70	3.00
5				1.10	0.75	0.70	4.00
6				1.10	0.75	0.70	5.00
7				1.10	0.70	0.75	6.00
8				1.10	0.70	0.75	7.00
9				1.10	0.70	0.75	8.00
10				1.10	0.70	0.75	9.00
11				1.10	0.70	0.75	10.00
12				1.20	0.70	0.75	11.00
13				1.20	0.70	0.75	12.00
14				1.20	0.70	0.75	13.00
15		1.30		1.10	0.70	0.75	14.00
16		1.30		1.10	0.70	0.75	15.00
17		1.30	0.90	1.10	0.70	0.75	16.00
18		1.10	0.90		0.70	0.75	17.00
19		1.10	0.90		0.70	0.75	18.00
20		1.10	0.90	0.85	0.70	0.75	19.00
21		1.10	0.90	0.85	0.70	0.75	20.00
22		0.80	0.90	0.90	0.70	0.75	21.00
23		0.80	0.90	0.90	0.70	0.75	22.00
24		0.80	1.10	0.90	0.70	0.75	23.00
25		0.80	1.10	0.90	0.70	0.75	24.00
26		0.80	1.10	0.90	0.70	0.75	25.00
27		1.10	1.10	0.90	0.70	0.75	26.00
28		1.10	1.10	0.90	0.70	0.75	27.00
29		1.10	1.10	0.90	0.70	0.75	28.00
30		1.10	1.10	0.90	0.70	0.75	29.00
31		1.10	1.10	0.80	0.70	0.75	30.00
		1.10		0.80	0.70		31.00
TOTAL							
	0.00	18.90	18.40	28.20	22.00	22.25	
YEARLY C.F.S.			109.75				
YEARLY ACRE FEET			217.31				
TOTAL NO. OF DAYS			125.00				
YEARLY MEAN			0.88				

	WATER DISTRICT #37 & 37-M						
CANAL NAME		O DRAIN	CANAL NUMBER 18				1993.00
OWNER	PICABO LIVESTOCK						
DATE							
	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	DATE
1							
2			5.30	6.77	16.37	9.62	1.00
3			12.16	15.11	10.71	9.62	2.00
4		1.48	12.16	15.11	10.71	9.62	3.00
5		1.48	13.00	15.11	10.08	9.62	4.00
6		1.56	13.00	16.94	10.08	9.62	5.00
7		1.56	13.00	16.94	12.33	9.62	6.00
8		2.91	30.20	16.94	12.33	9.62	7.00
9		2.91	30.20	16.94	12.33	10.71	8.00
10		2.91	19.32	15.82	22.96	10.71	9.00
11		3.96	19.32	15.82	22.96	11.68	10.00
12		3.96	20.49	15.82	15.82	11.68	11.00
13		2.60	20.49	10.40	15.82	11.68	12.00
14		2.60	20.49	10.40	21.60	14.56	13.00
15		4.50	17.89	5.86	21.60	14.56	14.00
16		4.50	17.89	5.86	21.60	14.56	15.00
17		4.50	16.94	5.36	20.64	14.56	16.00
18		6.24	16.94	5.36	20.64	15.11	17.00
19		6.24	14.04	5.36	24.20	15.11	18.00
20		4.18	14.04	8.73	24.20	15.11	19.00
21		4.18	14.04	8.73	20.26	20.98	20.00
22		3.74	4.41	9.48	20.26	20.98	21.00
23		3.74	4.41	9.48	20.26	23.18	22.00
24		3.74	7.87	10.08	18.92	23.18	23.00
25		4.50	7.87	10.08	18.92	20.06	24.00
26		4.50	7.87	10.08	16.37	20.06	25.00
27		6.50	7.87	23.18	16.37	20.06	26.00
28		6.50	7.87	23.18	17.13	24.80	27.00
29		6.50	6.90	17.31	17.13	24.80	28.00
30		6.50	6.90	17.31	17.13	26.88	29.00
31		6.50	6.77	16.37	13.69	26.88	30.00
		5.30		16.37	13.69		31.00
TOTAL							
	0.00	120.29	409.65	396.30	537.11	479.23	
	YEARLY C.F.S.		1942.58				
	YEARLY ACRE FEET		3846.31				
	TOTAL NO. OF DAYS		151.00				
	YEARLY MEAN		12.86				

	WATER DISTRICT #37 & 37-M						
CANAL NAME	OSTERHOUSE		CANAL NUMBER 31				1993.00
OWNER	HARRY RINKER						
DATE							
1	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	DATE
2		5.00	5.00		2.74	2.74	1.00
3		5.00	5.00	2.80	2.74	2.74	2.00
4		4.80	5.00	2.80	2.74	2.74	3.00
5		4.80	5.00	2.80	2.74	2.74	4.00
6			5.00	2.80	2.74	2.74	5.00
7				2.80	2.74	2.74	6.00
8				2.74	2.74	2.74	7.00
9				2.74	2.74	2.74	8.00
10				2.74		2.74	9.00
11				2.74		2.74	10.00
12				2.74	2.74	2.74	11.00
13				2.74	2.74	2.74	12.00
14				2.74	2.74	2.74	13.00
15		4.41		2.74	2.74	2.74	14.00
16		4.41		2.74	2.74	2.74	15.00
17		4.41		2.74	2.74	2.74	16.00
18		5.00		2.74	2.74	2.74	17.00
19		5.00		2.74	2.74	2.74	18.00
20		5.00		2.74	2.74	2.74	19.00
21		5.00		2.74	2.74		20.00
22		5.00		2.74	2.74		21.00
23		5.00		2.74	2.74		22.00
24		5.00		2.74	2.74		23.00
25		5.00		2.74	2.74		24.00
26		5.00		2.74	2.74		25.00
27		5.00		2.74	2.74		26.00
28		5.00		2.74	2.74		27.00
29		5.00		2.74	2.74		28.00
30		5.00		2.74	2.74		29.00
31	5.00	5.00		2.74	2.74		30.00
		5.00		2.74	2.74		31.00
TOTAL							
	5.00	107.83	25.00	82.50	79.46	52.06	
YEARLY C.F.S.			351.85				
YEARLY ACRE FEET			696.66				
TOTAL NO. OF DAYS			106.00				
YEARLY MEAN			3.32				

	WATER DISTRICT #37 & 37-M						
CANAL NAME		PATTERSON		CANAL NUMBER 15 A			1993.00
OWNER		FISH & GAME					
DATE							
1	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	DATE
2	12.81	10.04	11.89	15.98	12.15	11.76	1.00
3	12.81	10.40	11.00	14.66	12.15	11.76	2.00
4	12.81	11.00	11.00	14.66	12.15	11.60	3.00
5	12.81	11.00	11.40	14.66	12.15	11.60	4.00
6	13.69	11.50	11.40	14.66	12.15	11.60	5.00
7	13.69	11.50	11.40	14.66	13.12	12.31	6.00
8	12.81	11.00	14.21	13.00	13.12	12.31	7.00
9	12.81	11.00	14.21	13.00	12.15	12.31	8.00
10	12.81	11.00	15.98	13.00	12.15	12.31	9.00
11	12.81	11.00	15.98	13.00	12.15	11.66	10.00
12	12.81	11.00	15.98	13.00	13.24	11.66	11.00
13	11.86	10.36	15.98	13.00	13.24	11.66	12.00
14	11.86	10.36	15.98	13.00	13.24	12.31	13.00
15	10.93	11.00	15.98	12.71	13.24	12.31	14.00
16	10.93	11.00	15.98	13.21	13.24	12.31	15.00
17	10.93	11.00	15.98	13.00	13.24	12.31	16.00
18	10.93	10.36	15.98	13.00	13.24	12.31	17.00
19	10.93	10.36	15.98	13.00	13.24	12.31	18.00
20	10.93	11.00	15.98	13.00	13.24	12.31	19.00
21	10.93	11.00	15.98	13.00	13.24	12.31	20.00
22	10.93	11.00	15.98	12.15	13.24	12.31	21.00
23	10.93	11.00	15.98	12.15	13.24	12.31	22.00
24	10.04	11.89	15.98	14.21	13.63	11.66	23.00
25	10.04	11.89	15.98	14.21	13.63	10.28	24.00
26	10.04	11.89	14.66	14.21	13.63	10.28	25.00
27	10.04	12.70	14.66	14.21	13.63	10.28	26.00
28	10.04	12.70	14.66	14.21	12.43	11.66	27.00
29	10.04	12.70	13.28	12.15	12.43	11.66	28.00
30	10.04	12.70	13.28	12.15	12.43	11.66	29.00
31	10.04	12.70	15.98	12.15	12.43	11.66	30.00
		11.89		12.15	12.43		31.00
TOTAL							
	345.08	349.94	438.71	415.15	398.99	354.78	
YEARLY C.F.S.			2302.65				
YEARLY ACRE FEET			4559.25				
TOTAL NO. OF DAYS			183.00				
YEARLY MEAN			12.58				

	WATER DISTRICT #37 & 37-M						
CANAL NAME	PATTEN CREEK PUMP CANAL NUMBER 00P3						1993.00
OWNER	JOHN STEVENSON FROM LUCKE WELL						
DATE							
1	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	DATE
2			1.20				1.00
3			1.20				2.00
4			1.20				3.00
5			1.20				4.00
6			1.20				5.00
7			1.20				6.00
8			1.20				7.00
9			1.20				8.00
10			1.20				9.00
11			1.20				10.00
12			1.20				11.00
13			1.20				12.00
14			1.20				13.00
15			1.20				14.00
16			1.20				15.00
17			1.20				16.00
18			1.20				17.00
19			1.20				18.00
20			1.20				19.00
21			1.20				20.00
22			1.20				21.00
23			1.20				22.00
24			1.20				23.00
25			1.20				24.00
26			1.20				25.00
27			1.20				26.00
28			1.20				27.00
29			1.20				28.00
30			1.20				29.00
31			1.20				30.00
							31.00
TOTAL							
	0.00	0.00	36.00	0.00	0.00	0.00	
YEARLY C.F.S.			36.00				
YEARLY ACRE FEET			71.28				
TOTAL NO. OF DAYS			30.00				
YEARLY MEAN			1.20				

	WATER DISTRICT #37 & 37-M						
CANAL NAME	PATTERSON		CANAL NUMBER 15				1993.00
OWNER	W. MOLYNEUX						
DATE							
2	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	DATE
3			1.69	1.69	1.69	1.69	2.00
4			1.69	1.69	1.69	1.69	3.00
5			1.69	1.69	1.69	1.69	4.00
6			1.69	1.69	1.69	1.69	5.00
7			1.69	1.69	1.69	1.69	6.00
8		0.40	1.69	1.69	1.69	1.69	7.00
9		0.40	1.69	1.69	1.69	1.69	8.00
10		0.40	1.69	1.69	1.69	1.69	9.00
11		0.40	1.69	1.69	1.69	1.69	10.00
12		0.40	1.69	1.69	1.69	1.69	11.00
13		0.40	1.69	1.69	1.69	1.69	12.00
14		0.40	1.69	1.69	1.69	1.69	13.00
15		0.40	1.69	1.69	1.69	1.69	14.00
16		0.40	1.69	1.69	1.69	1.69	15.00
17		0.40	1.69	1.69	1.69	1.69	16.00
18		0.40	1.69	1.69	1.69	1.69	17.00
19		0.40	1.69	1.69	1.69	1.69	18.00
20		0.40	1.69	1.69	1.69	1.69	19.00
21		0.40	1.69	1.69	1.69	1.69	20.00
22		0.40	1.69	1.69	1.69	1.69	21.00
23		0.40	1.69	1.69	1.69	1.69	22.00
24		0.40	1.69	1.69	1.69	1.69	23.00
25		0.40	1.69	1.69	1.69	1.69	24.00
26		0.40	1.69	1.69	1.69	1.69	25.00
27		0.40	1.69	1.69	1.69	1.69	26.00
28		0.40	1.69	1.69	1.69	1.69	27.00
29		1.69	1.69	1.69	1.69	1.69	28.00
30		1.69	1.69	1.69	1.69	1.69	29.00
31		1.69	1.69	1.69	1.69	1.69	30.00
		1.69		1.69	1.69		31.00
TOTAL							
	0.00	15.16	49.01	50.70	50.70	49.01	
YEARLY C.F.S.			214.58				
YEARLY ACRE FEET			424.87				
TOTAL NO. OF DAYS			143.00				
YEARLY MEAN			1.50				

	WATER DISTRICT #37 & 37-M						
CANAL NAME	PRINZ WELL		CANAL NUMBER 00P-6				1993.00
OWNER	50% NATURE CONSERVANCY			35% R GARDNER 15% STINSON			
DATE							
1	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	DATE
2					2.24	2.24	1.00
3				4.20	2.24	2.24	2.00
4				4.20	2.24	2.24	3.00
5				4.20	2.24	2.24	4.00
6				4.20	2.24	2.24	5.00
7				4.20	2.24	2.24	6.00
8				4.20	2.24	2.24	7.00
9				4.20	2.24	2.24	8.00
10				4.20	2.24	2.24	9.00
11				4.20	2.24	2.24	10.00
12				4.20	2.24	2.24	11.00
13				4.20	2.24	2.24	12.00
14				4.20	2.24	2.24	13.00
15				4.20	2.24	2.24	14.00
16				4.20	2.24	2.24	15.00
17				4.20	2.24	2.24	16.00
18				4.20	2.24	2.24	17.00
19				4.20	2.24	2.24	18.00
20				2.24	2.24	2.24	19.00
21				2.24	2.24	2.24	20.00
22				2.24	2.24	2.24	21.00
23				2.24	2.24	2.24	22.00
24				2.24	2.24	2.24	23.00
25				2.24	2.24		24.00
26				2.24	2.24		25.00
27		2.79		2.24	2.24		26.00
28		2.79		2.24	2.24		27.00
29				2.24	2.24		28.00
30				2.24	2.24		29.00
31				2.24	2.24		30.00
				2.24	2.24		31.00
TOTAL							
	0.00	5.58	0.00	100.52	69.44	51.52	
YEARLY C.F.S.			227.06				
YEARLY ACRE FEET			449.58				
TOTAL NO. OF DAYS			86.00				
YEARLY MEAN			2.64				

WATER DISTRICT #37 & 37-M							
CANAL NAME		PUGEL	CANAL NUMBER 75				1993.00
OWNER	EDITH FREDRICKSON						
DATE							
1	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	DATE
2							1.00
3							2.00
4					1.00		3.00
5					1.00		4.00
6					1.00		5.00
7					1.00		6.00
8					1.00		7.00
9					1.00		8.00
10			4.00		1.00		9.00
11			4.00		1.00		10.00
12			4.00		1.00		11.00
13			4.00				12.00
14							13.00
15							14.00
16							15.00
17							16.00
18							17.00
19							18.00
20							19.00
21							20.00
22							21.00
23							22.00
24							23.00
25							24.00
26							25.00
27							26.00
28							27.00
29							28.00
30							29.00
31							30.00
							31.00
TOTAL							
	0.00	0.00	16.00	0.00	9.00	0.00	
YEARLY C.F.S.			25.00				
YEARLY ACRE FEET			49.50				
TOTAL NO. OF DAYS			13.00				
YEARLY MEAN			1.92				

	WATER DISTRICT #37 & 37-M						
CANAL NAME		PUGEL		CANAL NUMB	ER 75-P		1993.00
OWNER	GERTRUDE PEET						
DATE							
	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	DATE
1							
2					1.33		1.00
3					1.33		2.00
4							3.00
5							4.00
6					1.33		5.00
7					1.33		6.00
8					1.33	1.33	7.00
9					1.33	1.33	8.00
10					1.33	1.33	9.00
11				2.00	1.33	1.33	10.00
12				2.00	1.33	1.33	11.00
13				2.00	1.00	1.33	12.00
14				2.00	1.00	1.33	13.00
15				2.00			14.00
16							15.00
17							16.00
18							17.00
19							18.00
20							19.00
21				1.12			20.00
22				1.12			21.00
23				1.33			22.00
24				1.33			23.00
25				1.33			24.00
26				1.33			25.00
27				1.33			26.00
28				1.33			27.00
29				1.33			28.00
30				1.33			29.00
31				1.33			30.00
				1.33			31.00
TOTAL							
	0.00	0.00	0.00	25.54	13.97	9.31	
YEARLY C.F.S.			48.82				
YEARLY ACRE FEET			96.66				
TOTAL NO. OF DAYS			35.00				
YEARLY MEAN			1.39				

WATER DISTRICT #37 & 37-M							1993.00
CANAL NAME	PUGEL		CANAL NUMBER 75				
OWNER	ELLYN SUE RAGONE						
DATE							
	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	DATE
1							
2			3.12				1.00
3			3.12				2.00
4			3.12				3.00
5			3.12				4.00
6			3.12				5.00
7			3.12				6.00
8			3.12				7.00
9			3.12				8.00
10			3.12				9.00
11			3.12				10.00
12			3.12				11.00
13			3.12				12.00
14			3.12				13.00
15			3.12				14.00
16			3.12				15.00
17			3.12				16.00
18			3.12				17.00
19			3.12				18.00
20			3.12				19.00
21			3.12				20.00
22			3.12				21.00
23			3.12				22.00
24			3.12				23.00
25							24.00
26							25.00
27							26.00
28							27.00
29							28.00
30							29.00
31							30.00
							31.00
TOTAL							
	0.00	0.00	71.76	0.00	0.00	0.00	
YEARLY C.F.S.			71.76				
YEARLY ACRE FEET			142.08				
TOTAL NO. OF DAYS			23.00				
YEARLY MEAN			3.12				

	WATER DISTRICT #37 & 37-M						
CANAL NAME	ROGERS WELL		CANAL NUMBER 000-0P				1993.00
OWNER	DEAN ROGERS		WATER FOR PUMP OUT OF CANE CREEK				
DATE							
1	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	DATE
2							1.00
3							2.00
4							3.00
5							4.00
6							5.00
7							6.00
8							7.00
9							8.00
10							9.00
11							10.00
12							11.00
13							12.00
14							13.00
15							14.00
16							15.00
17							16.00
18							17.00
19							18.00
20							19.00
21							20.00
22							21.00
23			2.40				22.00
24			2.40				23.00
25			2.40				24.00
26			2.40				25.00
27			2.40				26.00
28			2.40				27.00
29			2.40				28.00
30			2.40				29.00
31			2.40				30.00
							31.00
TOTAL							
	0.00	0.00	21.60	0.00	0.00	0.00	
YEARLY C.F.S.			21.60				
YEARLY ACRE FEET			42.77				
TOTAL NO. OF DAYS			9.00				
YEARLY MEAN			2.40				

	WATER DISTRICT #37 & 37-M						
CANAL NAME	STALKER CREEK PUMP CANAL NUMBER 00-P7						1993.00
OWNER	ROBERT GARDNER FROM PRINZ WELL						
DATE							
1	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	DATE
2					1.08		1.00
3					1.08		2.00
4					1.08		3.00
5					1.08		4.00
6					1.08		5.00
7					1.14		6.00
8					1.14		7.00
9					1.14		8.00
10				0.90	1.06		9.00
11				0.90	1.06		10.00
12				0.90	1.02		11.00
13				0.64	1.02		12.00
14				0.64	1.22		13.00
15					1.22		14.00
16					1.22		15.00
17					1.14		16.00
18					1.14		17.00
19					1.14		18.00
20				1.14	1.14		19.00
21				1.14	1.14		20.00
22				0.48	1.04		21.00
23				0.48	1.04		22.00
24				0.76			23.00
25				0.76			24.00
26				0.76			25.00
27				1.14			26.00
28				1.14			27.00
29				1.12			28.00
30				1.12			29.00
31				1.08			30.00
				1.08			31.00
TOTAL							
	0.00	0.00	0.00	16.18	24.42	0.00	
YEARLY C.F.S.			40.60				
YEARLY ACRE FEET			80.39				
TOTAL NO. OF DAYS			40.00				
YEARLY MEAN			1.02				

	WATER DISTRICT #37 & 37-M						
CANAL NAME		STANFIELD	CANAL NUMBER 13				1993.00
OWNER		ROBERT GARDNER					
DATE							
1	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	DATE
2			4.41	3.46	3.46	1.00	1.00
3			3.20	3.13	3.46	1.00	2.00
4			3.20	3.13	3.46	1.00	3.00
5			3.20	3.13	2.93	1.00	4.00
6			3.20	3.02	2.93	1.00	5.00
7			3.20	3.02	3.46	1.00	6.00
8			2.12	2.54	3.46	1.00	7.00
9			2.12	2.54	3.46	1.00	8.00
10			4.60	2.35	2.93	1.00	9.00
11			4.60	2.35	2.93	1.00	10.00
12			3.98	2.35	2.93	1.00	11.00
13			3.98	2.13	2.93	1.00	12.00
14			3.98	2.13	2.93	1.00	13.00
15			3.98	2.13	2.93	1.00	14.00
16			3.98	2.13	2.93	1.00	15.00
17			3.80	2.89	2.93	1.00	16.00
18			3.80	2.89	2.93	1.00	17.00
19			3.14	2.89	1.00	1.00	18.00
20			3.14	2.13	1.00	1.00	19.00
21			3.14	2.13	1.00	1.00	20.00
22			2.12	2.13	1.00	1.00	21.00
23			2.12	2.13	1.00	3.32	22.00
24			2.00	2.89	1.00	3.32	23.00
25		1.45	2.00	2.89	1.00	3.32	24.00
26		1.45	2.64	2.89	1.00	3.32	25.00
27		4.00	2.64	3.17	1.00	3.32	26.00
28		4.00	2.64	3.17	1.00	3.32	27.00
29		4.00	2.85	2.93	1.00	3.32	28.00
30		4.00	2.85	3.46	1.00	3.32	29.00
31		4.00	3.46	3.46	1.00	3.32	30.00
		4.41		3.46	1.00		31.00
TOTAL							
	0.00	27.31	96.09	85.05	66.99	50.88	
YEARLY C.F.S.			326.32				
YEARLY ACRE FEET			646.11				
TOTAL NO. OF DAYS			130.00				
YEARLY MEAN			2.51				

	WATER DISTRICT #37 & 37-M						
CANAL NAME	STEVE WELL		CANAL NUMBER 00-0P				1993.00
OWNER	JOHN STEVENSON		INTO BUHLER DRAIN FOR STEVENSON				
DATE							
1	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	DATE
2			1.00	1.00			1.00
3			1.00	1.00			2.00
4			1.00	1.00			3.00
5			1.00	1.00			4.00
6			1.00	1.00			5.00
7			1.00	1.00			6.00
8			1.00	1.00			7.00
9			1.00	1.00			8.00
10			1.00	1.00			9.00
11			1.00	1.00			10.00
12			1.00	1.00			11.00
13			1.00	1.00			12.00
14		1.00	1.00	1.00			13.00
15		1.00	1.00	1.00			14.00
16		1.00	1.00	1.00			15.00
17		1.00	1.00	1.00			16.00
18		1.00	1.00	1.00			17.00
19		1.00	1.00	1.00			18.00
20		1.00	1.00	1.00			19.00
21		1.00	1.00				20.00
22		1.00	1.00				21.00
23		1.00	1.00				22.00
24		1.00	1.00				23.00
25		1.00	1.00				24.00
26		1.00	1.00				25.00
27		1.00	1.00				26.00
28		1.00	1.00				27.00
29		1.00	1.00				28.00
30		1.00	1.00				29.00
31		1.00	1.00				30.00
		1.00					31.00
TOTAL							
	0.00	19.00	30.00	19.00	0.00	0.00	
YEARLY C.F.S.			68.00				
YEARLY ACRE FEET			134.64				
TOTAL NO. OF DAYS			68.00				
YEARLY MEAN			1.00				

	WATER DISTRICT #37 & 37-M						
CANAL NAME		SWAN		CANAL NUMBER 21			1993.00
OWNER		BILL SWANSON					
DATE							
1	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	DATE
2							1.00
3							2.00
4							3.00
5							4.00
6							5.00
7							6.00
8							7.00
9							8.00
10							9.00
11							10.00
12							11.00
13							12.00
14							13.00
15							14.00
16							15.00
17							16.00
18							17.00
19							18.00
20							19.00
21							20.00
22							21.00
23						2.50	22.00
24						2.50	23.00
25						2.50	24.00
26						2.50	25.00
27						2.50	26.00
28						2.50	27.00
29						2.50	28.00
30						2.50	29.00
31						2.50	30.00
							31.00
TOTAL							
	0.00	0.00	0.00	0.00	0.00	22.50	
YEARLY C.F.S.			22.50				
YEARLY ACRE FEET			44.55				
TOTAL NO. OF DAYS			9.00				
YEARLY MEAN			2.50				

WATER DISTRICT #37 & 37-M							
CANAL NAME	TEETER CANYON		CANAL NUMBER 00-P5				1993.00
OWNER	JOHN STEVENSON		FROM ARTESIAN WELL INTO PATTEN CREEK STEVE #2				
DATE							
1	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	DATE
2					1.88		1.00
3				1.52	1.88		2.00
4				1.52	1.88		3.00
5				1.52	1.88		4.00
6				1.54	1.88		5.00
7				1.54	1.74		6.00
8				1.80	1.74		7.00
9				1.80	1.74		8.00
10				1.80	1.88		9.00
11				1.80	1.88		10.00
12				1.80			11.00
13				1.92			12.00
14				1.92			13.00
15				1.82			14.00
16				1.82			15.00
17				1.88			16.00
18				1.88			17.00
19				1.88			18.00
20				1.92			19.00
21				1.92			20.00
22				1.90			21.00
23				1.90			22.00
24			3.80	1.92			23.00
25			3.80	1.92			24.00
26			3.94	1.92			25.00
27			3.94	1.88			26.00
28			3.94	1.88			27.00
29			2.11	1.88			28.00
30			2.11	1.88			29.00
31				1.88			30.00
				1.88			31.00
TOTAL							
	0.00	0.00	23.64	54.44	18.38	0.00	
YEARLY C.F.S.			96.46				
YEARLY ACRE FEET			190.99				
TOTAL NO. OF DAYS			47.00				
YEARLY MEAN			2.05				

	WATER DISTRICT #37 & 37-M						
CANAL NAME		TICK TOCK	CANAL NUMBER 16-P1				1993.00
OWNER	TICK TOCK		PICABO LIVESTOCK				
DATE							
1	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	DATE
2						6.90	1.00
3					9.10	6.90	2.00
4					9.10	6.90	3.00
5					7.00	6.90	4.00
6					7.00	6.90	5.00
7					7.00	6.90	6.00
8					7.00	6.90	7.00
9					7.00	6.90	8.00
10					7.00	6.90	9.00
11					7.00	6.90	10.00
12					7.00	6.90	11.00
13					7.00	6.90	12.00
14					7.00		13.00
15					7.00		14.00
16				9.00	7.00		15.00
17				9.00	7.00		16.00
18				9.00	7.00		17.00
19				9.00	9.00		18.00
20				9.00	9.00		19.00
21				9.00	6.90		20.00
22				9.10	6.90		21.00
23				9.10	6.90		22.00
24				9.10	6.90		23.00
25				9.10	6.90		24.00
26				9.10	6.90		25.00
27				9.10	6.90		26.00
28				9.10	6.90		27.00
29				9.10	6.90		28.00
30				9.10	6.90		29.00
31				9.10	6.90		30.00
				9.10	6.90		31.00
TOTAL							
	0.00	0.00	0.00	154.10	217.00	82.80	
	YEARLY C.F.S.		453.90				
	YEARLY ACRE FEET		898.72				
	TOTAL NO. OF DAYS		59.00				
	YEARLY MEAN		7.69				

	WATER DISTRICT #37 & 37-M						
CANAL NAME		UHRIG	CANAL NUMBER 63				1993.00
OWNER	Y-3 RANCH						
DATE							
1	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	DATE
2		4.00	2.84		6.02		1.00
3		4.00	2.84		6.02		2.00
4		4.00	2.84		6.02		3.00
5		4.00	2.84		6.02		4.00
6		4.00			6.02		5.00
7		4.00			6.02		6.00
8		4.00			6.02		7.00
9		4.00			6.02		8.00
10		4.00			6.02		9.00
11		4.00		5.60	6.02		10.00
12		4.00		5.60	6.02		11.00
13		4.00		5.60	5.22		12.00
14		2.84		5.60	5.22		13.00
15		2.84		5.60	5.22		14.00
16	6.36	2.84		5.60	5.22		15.00
17	6.36	2.84		5.60	5.22		16.00
18	6.36	2.84		5.64	5.22		17.00
19	6.36	2.84		5.64	5.22		18.00
20	6.36	2.84		5.64	5.22		19.00
21	6.36	2.84		5.64	5.22		20.00
22	6.36	2.84		5.64	5.22		21.00
23	6.36	2.84		5.64	5.22		22.00
24	6.36	2.84		5.64	5.22		23.00
25	6.98	2.84		6.74	5.22		24.00
26	6.98	2.84		6.74	5.22		25.00
27	6.98	2.84		6.74			26.00
28	6.98	2.84		6.02			27.00
29	6.98	2.84		6.02			28.00
30	4.00	2.84		6.02			29.00
31	4.00	2.84		6.02			30.00
		2.84		6.02			31.00
TOTAL							
	100.14	101.96	11.36	129.00	139.30	0.00	
YEARLY C.F.S.			481.76				
YEARLY ACRE FEET			953.88				
TOTAL NO. OF DAYS			98.00				
YEARLY MEAN			4.92				

WATER DISTRICT #37 & 37-M							
CANAL NAME	WILLIS		CANAL NUMBER 0001				1993.00
OWNER	JOHN STEVENSON						
DATE							
1	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	DATE
2			2.45	5.04		4.24	1.00
3			2.45	5.04	5.00	4.24	2.00
4			2.45	5.04	5.00	4.24	3.00
5			2.45	5.04	5.00	4.24	4.00
6			2.45	4.41	5.00	4.24	5.00
7			2.45	4.41	3.86	4.24	6.00
8				5.86	3.86	4.24	7.00
9				5.86	3.86	4.24	8.00
10				4.89	4.24	4.24	9.00
11				4.89	4.24	4.24	10.00
12				4.89	4.24	4.24	11.00
13				4.74	4.24	4.24	12.00
14				4.74	4.24	4.24	13.00
15				3.49	4.24	4.24	14.00
16				3.49	4.24	4.24	15.00
17				3.49	4.24	4.24	16.00
18				3.49	4.24	4.24	17.00
19			4.41	3.49	4.24	4.24	18.00
20			4.41	3.49	4.24	4.24	19.00
21			4.41	3.49	4.24	4.24	20.00
22			4.41	3.49	4.24	4.24	21.00
23			4.41	3.49	4.24	4.24	22.00
24			5.04	3.49	4.24	4.24	23.00
25			5.04	3.49	4.24	4.24	24.00
26			5.04	3.49	4.24	4.24	25.00
27			5.04	3.49	4.24	4.24	26.00
28			5.04	3.49	4.24	4.24	27.00
29		3.00	6.60	5.00	4.24	4.24	28.00
30		3.00	6.60	5.00	4.24	4.24	29.00
31		2.45	5.04	5.00	4.24	4.24	30.00
				5.00	4.24		31.00
TOTAL							
	0.00	8.45	80.19	133.71	129.10	127.20	
YEARLY C.F.S.			478.65				
YEARLY ACRE FEET			947.73				
TOTAL NO. OF DAYS			113.00				
YEARLY MEAN			4.24				

	WATER DISTRICT #37 & 37-M						
CANAL NAME	ALBERTSON		CANAL NUMBER 17				1993.00
OWNER	PICABO LIVESTOCK						
DATE							
	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	DATE
1							
2			1.42	1.96	1.96	1.96	1.00
3			1.42	1.96	1.96	1.96	2.00
4			1.42	1.96	1.96	1.96	3.00
5			1.69	1.96	1.96	1.96	4.00
6			1.69	1.96	1.96	1.96	5.00
7			1.69	1.96	1.96	1.96	6.00
8			1.69	1.96	1.96	1.96	7.00
9			1.69	1.96	1.96	1.96	8.00
10			1.69	1.96	1.96	1.96	9.00
11			1.69	1.96	1.96	1.96	10.00
12			1.69	1.96	1.96	1.96	11.00
13		1.42	1.69	1.96	1.96	1.96	12.00
14		1.42	1.69	1.96	1.96	1.96	13.00
15		1.42	0.48	1.96	1.96	1.96	14.00
16		1.42	0.48	1.96	1.96	1.96	15.00
17		1.42	0.48	1.96	1.96	1.96	16.00
18		1.42	0.48	1.96	1.96	1.96	17.00
19		1.42	1.96	1.96	1.96	1.96	18.00
20		1.42	1.96	1.96	1.96	1.96	19.00
21		1.42	1.96	1.96	1.96	1.96	20.00
22		1.42	1.96	1.96	1.96	1.96	21.00
23		1.42	1.96	1.96	1.96	1.96	22.00
24		1.42	1.96	1.96	1.96	1.96	23.00
25		1.42	1.96	1.96	1.96	1.96	24.00
26		1.42	1.96	1.96	1.96	1.96	25.00
27		1.42	1.96	1.96	1.96	1.96	26.00
28		1.42	1.96	1.96	1.96	1.96	27.00
29		1.42	1.96	1.96	1.96	1.96	28.00
30		1.42	1.96	1.96	1.96	1.96	29.00
31		1.42	1.96	1.96	1.96	1.96	30.00
		1.42		1.96	1.96		31.00
TOTAL							
	0.00	28.40	48.56	60.76	60.76	58.80	
YEARLY C.F.S.			257.28				
YEARLY ACRE FEET			509.41				
TOTAL NO. OF DAYS			142.00				
YEARLY MEAN			1.81				

WATER DISTRICT #37 & 37-M						
NAME	BANNON		CANAL NUMB	ER 49		1993.00
OWNER	VARIOUS					
APRIL						
	MAY	JUNE	JULY	AUG.	SEPT.	DATE
		5.30	6.00	7.98	5.69	1.00
		5.30	6.00	7.98	5.69	2.00
		4.50	4.50	7.98	5.69	3.00
		4.50	4.50	7.98	5.69	4.00
		2.84	4.50	7.38	5.69	5.00
		2.84	4.00	7.38	5.69	6.00
		2.84	4.00	7.38	4.48	7.00
		3.48	4.50	7.38	4.48	8.00
		3.48	4.50	7.38	4.48	9.00
		3.20	6.74	7.38	4.48	10.00
		3.20	6.74	7.38	4.48	11.00
		3.20	6.74	5.68	4.48	12.00
		3.20	6.42	5.68	4.48	13.00
		3.20	6.42	5.68	2.00	14.00
		3.20	3.69	5.68	2.00	15.00
		3.20	3.69	5.68	4.00	16.00
		2.00	4.62	4.00	4.00	17.00
		2.00	4.62	4.00	4.48	18.00
		2.00	4.62	6.96	4.48	19.00
		2.00	3.00	6.96	4.48	20.00
		2.00	3.00	6.96	5.68	21.00
	6.36	5.30	2.13	6.96	5.68	22.00
	6.36	5.30	2.13	6.96	5.68	23.00
	6.36	6.36	7.98	5.68	5.68	24.00
	6.36	6.36	7.98	5.68	5.68	25.00
	6.36	6.04	7.98	5.68	5.68	26.00
	5.30	6.04	7.98	5.68	5.68	27.00
	5.30	6.04	7.98	5.68	4.48	28.00
	5.30	6.36	7.98	5.68	4.48	29.00
	5.30	3.36	7.98	5.68	4.00	30.00
	5.30		7.98	5.68		31.00
0						
	58.30	118.64	170.90	200.22	143.66	
YEARLY C.F.S.						
		691.72				
ARLY ACRE FEET						
		1369.61				
TAL NO. OF DAYS						
		132.00				
YEARLY MEAN						
		5.24				

WATER DISTRICT #37 & 37-M							
CANAL NAME	BASELINE CANAL			STATION N MBER 55-C			1993.00
DAILY DISCHARGE IN SECOND FEET							
DATE							
	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	DATE
1							
2		29.00	75.00	79.00	78.00	27.00	1.00
3		39.00	77.00	84.00	78.00	46.00	2.00
4		37.00	84.00	90.00	77.00	30.00	3.00
5		39.00	84.00	79.00	75.00	22.00	4.00
6		27.00	79.00	58.00	75.00	25.00	5.00
7		27.00	94.00	82.00	66.00	22.00	6.00
8		26.00	81.00	77.00	60.00	18.00	7.00
9		22.00	63.00	79.00	72.00	18.00	8.00
10		22.00	66.00	81.00	66.00	16.00	9.00
11		21.00	62.00	77.00	59.00	13.00	10.00
12		19.00	68.00	75.00	55.00	13.00	11.00
13		36.00	58.00	73.00	56.00	13.00	12.00
14	14.00	27.00	45.00	70.00	54.00	14.00	13.00
15	26.00	39.00	70.00	66.00	55.00	18.00	14.00
16	26.00	28.00	72.00	63.00	52.00	21.00	15.00
17	26.00	20.00	77.00	69.00	53.00	22.00	16.00
18	28.00	30.00	72.00	75.00	54.00	23.00	17.00
19	29.00	31.00	66.00	85.00	48.00	28.00	18.00
20	29.00	49.00	70.00	84.00	44.00	29.00	19.00
21	27.00	52.00	73.00	88.00	44.00	26.00	20.00
22	30.00	58.00	81.00	90.00	53.00	26.00	21.00
23	34.00	39.00	81.00	83.00	59.00	25.00	22.00
24	16.00	22.00	63.00	83.00	56.00	23.00	23.00
25	16.00	74.00	56.00	81.00	51.00	22.00	24.00
26	16.00	90.00	60.00	77.00	47.00	22.00	25.00
27	16.00	79.00	59.00	69.00	44.00	19.00	26.00
28	18.00	71.00	68.00	46.00	42.00	19.00	27.00
29	17.00	95.00	72.00	56.00	38.00	19.00	28.00
30	19.00	73.00	144.00	84.00	38.00	19.00	29.00
31	19.00	73.00	44.00	86.00	36.00	18.00	30.00
		67.00		82.00	28.00		31.00
TOTAL							
MEAN	406.00	1361.00	2164.00	2371.00	1713.00	656.00	
A.F.	23.00	44.00	72.00	76.00	55.00	22.00	
	804.00	2695.00	4285.00	4695.00	3392.00	1299.00	
YEARLY C.F.S.			8671.00				
YEARLY ACRE FEET			17168.58				
TOTAL NUMBER OF DAYS			S	171.00			
YEARLY MEAN			51.00				

	WATER DISTRICT #37 & 37-M						
CANAL NAME	BICKETT WELL			CANAL NUMB	ER 00-P1		1993.00
OWNER	OHN FLOOD						
DATE							
	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	DATE
1							
2							1.00
3							2.00
4							3.00
5							4.00
6							5.00
7							6.00
8							7.00
9							8.00
10							9.00
11							10.00
12							11.00
13							12.00
14							13.00
15							14.00
16							15.00
17							16.00
18							17.00
19							18.00
20							19.00
21							20.00
22							21.00
23							22.00
24							23.00
25							24.00
26							25.00
27							26.00
28							27.00
29							28.00
30							29.00
31							30.00
							31.00
TOTAL							
	0.00	0.00	0.00	0.00	0.00	0.00	
YEARLY C.F.S.			0.00				
YEARLY ACRE FEET			0.00				
TOTAL NO. OF DAYS			0.00				
YEARLY MEAN			#DIV/0!				

	WATER DISTRICT #37 & 37-M						
CANAL NAME	ROGERS		CANAL NUMBER 000-0P1				1993.00
OWNER	DEAN ROGERS WATER INTO BUHLER DRAIN						
DATE							
	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	DATE
1							
2							1.00
3							2.00
4							3.00
5							4.00
6							5.00
7							6.00
8							7.00
9							8.00
10							9.00
11							10.00
12							11.00
13							12.00
14							13.00
15							14.00
16							15.00
17							16.00
18							17.00
19							18.00
20							19.00
21							20.00
22							21.00
23							22.00
24							23.00
25							24.00
26							25.00
27							26.00
28							27.00
29							28.00
30							29.00
31							30.00
							31.00
TOTAL							
	0.00	0.00	0.00	0.00	0.00	0.00	
YEARLY C.F.S.			0.00				
YEARLY ACRE FEET			0.00				
TOTAL NO. OF DAYS			0.00				
YEARLY MEAN			#DIV/0!				

WATER DISTRICT #37 & 37-M							1993.00
CANAL NAME	CHAUMELL		CANAL NUMBER 22-P3				
OWNER	PAT MILLINGTON						
DATE							
	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	DATE
1							
2			0.46	0.48	0.52	0.32	1.00
3			0.40	0.48	0.52	0.32	2.00
4			0.40	0.48	0.52	0.32	3.00
5			0.48	0.48	0.52	0.32	4.00
6			0.48	0.48	0.52	0.32	5.00
7			0.48	0.48	0.52	0.32	6.00
8				0.06	0.52	0.32	7.00
9				0.06	0.52	0.32	8.00
10				0.48	0.52	0.32	9.00
11				0.48	0.52	0.32	10.00
12				0.48	0.52	0.32	11.00
13				0.48	0.52	0.32	12.00
14				0.48	0.52	0.32	13.00
15				0.48	0.52	0.32	14.00
16				0.48	0.52	0.32	15.00
17			0.48	0.48	0.52	0.32	16.00
18			0.48	0.48	0.52	0.32	17.00
19			0.48	0.48	0.52	0.32	18.00
20		0.44	0.48	0.40	0.52	0.32	19.00
21		0.44	0.48	0.40	0.52	0.32	20.00
22		0.50	0.48	0.40	0.52	0.32	21.00
23		0.50	0.48	0.40	0.52	0.32	22.00
24		0.50	0.48	0.52	0.52	0.32	23.00
25		0.32	0.48	0.52	0.52	0.32	24.00
26		0.32	0.48	0.52	0.52	0.32	25.00
27		0.32	0.48	0.52	0.52		26.00
28		0.32	0.48	0.52	0.32		27.00
29		0.30	0.48	0.52	0.32		28.00
30		0.30	0.48	0.52	0.32		29.00
31		0.30	0.48	0.52	0.32		30.00
		0.46		0.52	0.32		31.00
TOTAL							
	0.00	5.02	9.90	14.08	15.12	8.00	
YEARLY C.F.S.			52.12				
YEARLY ACRE FEET			103.20				
TOTAL NO. OF DAYS			121.00				
YEARLY MEAN			0.43				

	WATER DISTRICT #37 & 37-M						1993.00
CANAL NAME	HEATH		CANAL NUMBER 10				
OWNER	FRED JUDD						
DATE							
	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	DATE
1							
2							1.00
3				0.80			2.00
4				0.80			3.00
5				0.80			4.00
6				0.80			5.00
7				0.80			6.00
8				0.80			7.00
9				0.80			8.00
10				0.80			9.00
11				0.80			10.00
12				0.80			11.00
13				0.80			12.00
14				0.80			13.00
15				0.80			14.00
16				0.80			15.00
17				0.80			16.00
18				0.80			17.00
19				0.80			18.00
20				0.80			19.00
21				0.80			20.00
22				0.80			21.00
23				0.80			22.00
24							23.00
25							24.00
26							25.00
27				0.80			26.00
28				0.80			27.00
29							28.00
30							29.00
31							30.00
							31.00
TOTAL							
	0.00	0.00	0.00	18.40	0.00	0.00	
YEARLY C.F.S.			18.40				
YEARLY ACRE FEET			36.43				
TOTAL NO. OF DAYS			23.00				
YEARLY MEAN			0.80				

WATER DISTRICT #37 & 37-M							1993.00
CANAL NAME	HICE	CANAL NUMBER 71					
OWNER	DAVIS INVESTMENT SPRING CREEK RANCH						
DATE							
	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	DATE
1							
2			9.64	4.20	2.78	3.94	1.00
3			9.64	4.20	2.78	3.40	2.00
4			9.64	4.62	5.20	3.40	3.00
5			9.64	4.62	5.20	3.16	4.00
6			6.58	4.62	5.20	3.16	5.00
7			6.58	4.62	5.20	3.16	6.00
8			6.58	4.62	5.06	4.62	7.00
9			5.50	5.50	5.06	4.62	8.00
10			5.50	5.50	5.06	4.76	9.00
11			3.80	6.10	4.34	4.76	10.00
12			3.80	6.10	4.34	4.76	11.00
13			3.80	6.10	7.06	4.76	12.00
14		6.26	3.80	5.64	7.06	4.76	13.00
15		6.26	3.80	5.64	7.06	4.76	14.00
16		6.26	4.06	6.10	7.06	4.76	15.00
17		6.26	4.06	6.10	7.06	4.76	16.00
18		6.26	4.06	5.80	2.10	4.76	17.00
19		6.26	4.06	5.80	2.10	5.06	18.00
20		6.26	4.62	5.80	4.90	5.06	19.00
21		6.26	4.62	5.50	4.90	5.06	20.00
22		6.26	4.62	5.50	5.50	5.06	21.00
23		5.20	4.62	7.62	5.50	5.06	22.00
24		5.20	4.62	7.62	5.34	5.50	23.00
25		5.20	4.62	6.26	5.34	5.50	24.00
26		5.20	4.62	6.26	5.34	5.50	25.00
27		5.20	5.30	6.26	4.76	5.50	26.00
28		4.06	5.30	3.28	4.76	5.50	27.00
29		4.06	5.30	3.28	5.30	5.06	28.00
30		4.06	4.34	2.78	5.30	5.06	29.00
31		4.06	4.34	2.78	3.94		30.00
		4.06		2.78	3.94		31.00
TOTAL							
	0.00	102.64	161.46	161.60	154.54	135.22	
YEARLY C.F.S.			715.46				
YEARLY ACRE FEET			1416.61				
TOTAL NO. OF DAYS			140.00				
YEARLY MEAN			5.11				

	WATER DISTRICT #37 & 37-M						1993.00
CANAL NAME		HICE	CANAL NUMBER 71-A				
OWNER	BOB DAVIS			SPRING CREEK			
DATE							
	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	DATE
1							
2			5.50	0.78	3.40	4.76	1.00
3			5.50	0.78	3.40	4.48	2.00
4			7.38	0.78	6.58	4.48	3.00
5			7.38	0.78	6.58	4.20	4.00
6			2.78	0.78	6.58	4.20	5.00
7			2.78	0.78	6.58	4.20	6.00
8			2.78	0.78	5.50	4.76	7.00
9			3.40	1.78	5.50	4.76	8.00
10			3.40	1.78	5.50	4.90	9.00
11			1.78	2.32	5.34	4.90	10.00
12			1.78	2.32	5.34	4.76	11.00
13			0.42	2.32	1.68	4.76	12.00
14		4.06	0.42	2.68	1.68	4.76	13.00
15		4.06	0.42	2.68	1.68	5.06	14.00
16		4.06	1.94	7.06	1.68	5.06	15.00
17		4.06	1.94	7.06	1.68	5.06	16.00
18		4.06	1.00	6.74	1.68	5.06	17.00
19		4.06	1.00	6.74	1.68	4.76	18.00
20		4.06	1.20	6.74	1.50	4.76	19.00
21		4.06	1.20	6.74	1.50	4.76	20.00
22		4.06	1.20	6.74	1.50	4.76	21.00
23		4.06	1.20	6.90	1.50	4.76	22.00
24		4.06	1.20	6.90	1.50		23.00
25		4.06	1.20	7.06	1.28		24.00
26		3.66	1.20	7.06	1.28		25.00
27		3.66	1.68	7.06	1.28		26.00
28		4.20	1.68	3.40	1.28		27.00
29		4.20	1.68	3.40	4.76		28.00
30		4.20	0.86	3.40	4.76		29.00
31		4.20	0.86	3.40	4.76		30.00
		4.20		3.40	4.76		31.00
TOTAL							
	0.00	77.04	66.76	121.14	103.72	103.96	
YEARLY C.F.S.			472.62				
YEARLY ACRE FEET			935.79				
TOTAL NO. OF DAYS			133.00				
YEARLY MEAN			3.55				

	WATER DISTRICT #37 & 37-M						1993.00
CANAL NAME	IDEN	CANAL NUMBER 19					
OWNER	IDAHO FISH & GAME		USER: PICABO LIVESTOCK				
DATE							
	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	DATE
1							
2			6.50	3.79	7.82	7.82	1.00
3			7.92	1.96	7.82	7.82	2.00
4		3.92	7.92	1.96	7.82	7.82	3.00
5		3.92	10.00	1.96	7.82	7.82	4.00
6		5.68	10.00	5.47	7.82	7.82	5.00
7		5.68	10.00	5.47	7.82	7.82	6.00
8		6.00	10.00	4.80	7.82	7.82	7.00
9		6.00	10.00	4.80	7.82	7.89	8.00
10		6.00	10.00	4.80	7.82	7.89	9.00
11		6.00	10.00	4.80	7.82	7.89	10.00
12		6.00	10.00	4.80	7.82	7.89	11.00
13		5.68	10.00	4.80	7.82	7.89	12.00
14		5.68	10.00	4.80	7.82	7.89	13.00
15		5.68	5.80	1.96	7.82	7.89	14.00
16		5.68	5.80	1.96	7.82	7.89	15.00
17		5.68	5.80	9.78	7.82	7.89	16.00
18		5.68	5.80	9.78	7.82	7.89	17.00
19		5.68	5.80	9.78	7.82	7.89	18.00
20		5.68		9.78	7.82	7.89	19.00
21		5.68		9.78	7.82	7.89	20.00
22		5.68		9.78	7.82	7.89	21.00
23		5.68		9.78	7.82	7.89	22.00
24		5.68	3.79	9.78	7.82	7.89	23.00
25		6.50	3.79	9.78	7.82	7.89	24.00
26		6.50	3.79	9.78	7.82	7.89	25.00
27		6.50	3.79	9.78	7.82	7.89	26.00
28		6.50	3.79	9.78	7.82	7.89	27.00
29		6.50	3.79	7.82	7.82	7.89	28.00
30		6.50	3.79	7.82	7.82	7.89	29.00
31		6.50	3.79	7.82	7.82	7.89	30.00
		6.50		7.82	7.82		31.00
TOTAL							
	0.00	169.36	181.66	206.77	242.42	236.21	
YEARLY C.F.S.			1036.42				
YEARLY ACRE FEET			2052.11				
TOTAL NO. OF DAYS			147.00				
YEARLY MEAN			7.05				

	WATER DISTRICT #37 & 37-M						1993.00
CANAL NAME	KILPATRICK		CANAL NUMBER 18				
OWNER	PICABO LIVESTOCK						
DATE							
	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	DATE
1							
2			33.00	28.20	24.12	D	1.00
3			31.56	27.40	24.12	25.36	2.00
4		2.94	31.56	27.40	24.12	25.36	3.00
5		2.94	31.56	27.40	29.28	25.36	4.00
6		7.20	31.56	27.12	29.28	25.36	5.00
7		7.20	31.56	27.12	29.28	25.36	6.00
8		5.88	20.32	27.12	29.28	25.36	7.00
9		5.88	20.32	27.12	29.28	25.36	8.00
10		5.88	20.32	19.96	29.28	25.36	9.00
11		8.50	20.32	19.96	29.28	25.36	10.00
12		8.50	10.36	19.96	29.28	25.36	11.00
13		8.50	10.36	19.96	29.28	25.36	12.00
14		8.50	10.36	19.96	29.28	25.36	13.00
15		16.00	10.36	19.96	29.28	25.36	14.00
16		16.00	10.36	19.96	29.28	25.36	15.00
17		16.00	10.36	19.96	29.28	25.36	16.00
18		17.00	10.36	19.96	29.28	25.36	17.00
19		17.00	10.36	19.96	22.48	25.36	18.00
20		21.00	10.36	19.96	22.48	25.36	19.00
21		21.00	10.36	19.96	22.48	25.36	20.00
22		23.00	22.48	19.96	22.48	25.36	21.00
23		23.00	22.48	19.96	22.48	25.36	22.00
24		23.00	22.48	19.96	22.48	25.36	23.00
25		27.96	22.48	19.96	22.48	16.12	24.00
26		27.96	27.96	19.96	25.36	16.12	25.00
27		33.00	27.96	19.96	25.36	16.12	26.00
28		33.00	27.96	19.96	25.36	12.96	27.00
29		33.00	31.56	22.48	25.36	12.96	28.00
30		33.00	31.56	22.48	25.36	12.96	29.00
31		33.00	28.20	24.12	25.36	12.96	30.00
		33.00		24.12	25.36		31.00
TOTAL							
	0.00	518.84	640.80	691.32	817.16	658.12	
YEARLY C.F.S.			3326.24				
YEARLY ACRE FEET			6585.96				
TOTAL NO. OF DAYS			151.00				
YEARLY MEAN			22.03				

	WATER DISTRICT #37 & 37-M						1993.00
CANAL NAME		KLINE	CANAL NUMBER 37				
OWNER		LEROY LEW	USER	L KAMAMARA			
DATE							
	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	DATE
1							
2			1.00	1.00	1.00		1.00
3			1.00	1.00	1.00		2.00
4			1.00	1.00	1.00		3.00
5			1.00	1.00	1.00		4.00
6			1.00	1.00	1.00		5.00
7			1.00	1.00	1.00		6.00
8			1.00	1.00	1.00		7.00
9			1.00	1.00	1.00		8.00
10			1.00	1.00	1.00		9.00
11			1.00	1.00	1.00		10.00
12			1.00	1.00	1.00		11.00
13			1.00	1.00	1.00		12.00
14		1.00	1.00	1.00	1.00		13.00
15		1.00	1.00	1.00	1.00		14.00
16		1.00	1.00	1.00	1.00		15.00
17		1.00	1.00	1.00	1.00		16.00
18		1.00	1.00	1.00			17.00
19		1.00	1.00	1.00			18.00
20		1.00	1.00	1.00			19.00
21		1.00	1.00	0.50			20.00
22		1.00	1.00	0.50			21.00
23		1.00	1.00	0.50			22.00
24		1.00	1.00	0.50			23.00
25		1.00	1.00	0.50			24.00
26		1.00	1.00	0.50			25.00
27		1.00	1.00	0.50			26.00
28		1.00	1.00	1.00			27.00
29		1.00	1.00	1.00			28.00
30		1.00	1.00	1.00			29.00
31		1.00	1.00	1.00			30.00
		1.00		1.00			31.00
TOTAL							
	0.00	19.00	30.00	27.50	16.00	0.00	
YEARLY C.F.S.			92.50				
YEARLY ACRE FEET			183.15				
TOTAL NO. OF DAYS			96.00				
YEARLY MEAN			0.96				

	WATER DISTRICT #37 & 37-M						1993.00
CANAL NAME		LAWSON	CANAL NUMBER 24-P1				
OWNER	OHN FLOOD						
DATE							
	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	DATE
1							
2			0.94	1.00	0.94		1.00
3			0.90	0.78	0.92		2.00
4			0.90	0.78	0.92		3.00
5			0.94	0.78	1.92		4.00
6			0.94	0.84	1.92		5.00
7				0.84	1.88		6.00
8				1.68	1.88		7.00
9				1.68	1.88		8.00
10				0.48	1.04		9.00
11				0.48	1.04	1.22	10.00
12				0.48		1.22	11.00
13						1.22	12.00
14							13.00
15			0.30	1.00			14.00
16			0.30	1.00			15.00
17				1.80			16.00
18				1.80			17.00
19				1.80	1.04		18.00
20		1.40		1.14	1.04		19.00
21		1.40		1.14	1.04		20.00
22		1.06	1.26	1.00	1.04		21.00
23		1.06	1.26	1.00	1.04		22.00
24		1.06	1.40	1.76			23.00
25		0.94	1.40	1.76			24.00
26		0.94	1.80	1.80	1.24		25.00
27		1.10	1.80	1.66	1.24		26.00
28		1.10	1.80	1.66	2.32		27.00
29		0.86	1.04	0.92	2.32		28.00
30		0.86	1.04	0.92	2.32		29.00
31		0.86	1.00	0.94	0.76		30.00
		0.94		0.94	0.76		31.00
TOTAL							
	0.00	13.58	19.02	33.86	30.50	3.66	
YEARLY C.F.S.			100.62				
YEARLY ACRE FEET			199.22				
TOTAL NO. OF DAYS			84.00				
YEARLY MEAN			1.20				

	WATER DISTRICT #37 & 37-M						1993.00
CANAL NAME		LAWSON	CANAL NUMBER 24-P				
OWNER	OHN FLOODWATER FROM LUCKE WELL OO-P1						
DATE							
	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	DATE
1							
2			3.20	2.98	2.72	1.42	1.00
3			3.24	2.80	2.70	1.42	2.00
4			3.24	2.80	2.70	1.42	3.00
5			1.42	2.80		1.42	4.00
6			1.42	2.80		1.42	5.00
7				2.80		1.42	6.00
8				1.24		1.42	7.00
9				1.24		1.42	8.00
10				2.46		1.42	9.00
11				2.46			10.00
12			0.12	2.46	1.06		11.00
13			0.12	2.90	1.06		12.00
14			0.12	2.90	1.06		13.00
15			0.32	2.80	1.06		14.00
16			0.32	2.80	1.06		15.00
17			0.34	0.58	1.06		16.00
18			0.34	0.58	1.06		17.00
19			0.62	0.58	0.82		18.00
20		3.20	0.62	2.64	0.82		19.00
21		3.20	0.62	2.64			20.00
22		3.26	0.96	2.60			21.00
23		3.26	0.96	2.60			22.00
24		3.26	2.54				23.00
25		3.14	2.54				24.00
26		3.14	2.12		1.42		25.00
27		3.00	2.12	0.30	1.42		26.00
28		3.00	2.12	0.30			27.00
29		2.98	3.14	2.70			28.00
30		2.98	3.14	2.70			29.00
31		2.98	2.98	2.72	1.42		30.00
		3.20		2.72	1.42		31.00
TOTAL							
	0.00	40.60	38.68	61.90	22.86	12.78	
YEARLY C.F.S.			176.82				
YEARLY ACRE FEET			350.10				
TOTAL NO. OF DAYS			91.00				
YEARLY MEAN			1.94				

	WATER DISTRICT #37 & 37-M						1993.00
CANAL NAME		LOVING	CANAL NUMBER 12 A				
OWNER	GERALD BASHAW						
DATE							
	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	DATE
1							
2		0.04	5.26	13.73	8.80	1.38	1.00
3		0.04	6.95	13.73	4.97	1.38	2.00
4		0.04	6.95	13.73	4.97	1.02	3.00
5		0.04	8.25	13.73	2.08	1.02	4.00
6		0.04	8.25	11.36	2.08	1.02	5.00
7		0.10	8.25	11.36	4.69	2.64	6.00
8		0.10	15.00	3.24	4.69	2.64	7.00
9		0.10	15.00	3.24	4.69	3.87	8.00
10		0.10	16.00	2.19	10.23	3.87	9.00
11		0.10	16.00	2.19	10.23	1.77	10.00
12		0.10	13.73	2.19	6.63	1.77	11.00
13	0.30	0.10	13.73	3.36	6.63	1.77	12.00
14	0.30	0.10	12.53	3.36	9.15	4.14	13.00
15	0.30	0.10	12.53	4.97	9.15	4.14	14.00
16	0.30	0.10	12.53	4.97	9.15	4.14	15.00
17	0.30	0.10	13.32	6.17	9.15	4.14	16.00
18	0.30	0.10	13.32	6.17	9.15	0.86	17.00
19	0.30	0.10	12.53	6.17	6.63	0.86	18.00
20	0.30	6.32	12.53	2.64	6.63	0.86	19.00
21	0.30	6.32	12.53	2.64	1.87	2.19	20.00
22	0.04	2.87	12.53	4.14	1.87	2.19	21.00
23	0.04	2.87	12.53	4.14	1.87	2.87	22.00
24	0.04	2.87	11.94	9.51	2.64	2.87	23.00
25	0.04	7.50	11.94	9.51	2.64	0.86	24.00
26	0.04	7.50	5.86	9.51	3.36	0.86	25.00
27	0.04	11.90	5.86	7.61	3.36	0.86	26.00
28	0.04	11.90	5.86	7.61	3.87	0.94	27.00
29	0.04	9.80	14.98	2.64	3.87	0.94	28.00
30	0.04	9.80	14.98	2.64	3.87	1.02	29.00
31	0.04	5.26	13.73	8.80	5.26	1.02	30.00
				8.80	5.26		31.00
TOTAL							
	3.10	86.41	345.40	206.05	169.44	59.91	
YEARLY C.F.S.			870.31				
YEARLY ACRE FEET			1723.21				
TOTAL NO. OF DAYS			171.00				
YEARLY MEAN			5.09				

	WATER DISTRICT #37 & 37-M						1992.00
CANAL NAME	LUCKE WELL		CANAL NUMBER 00-P4				
OWNER	OHN FLOOD		DELIVERED TO LAWSON 24-P 10%LOSS				
DATE							
	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	DATE
1							
2		4.50	4.50	4.40	4.40	4.40	1.00
3		4.50	4.50	4.40	4.40	4.40	2.00
4		4.50	4.50	4.40	4.40	4.40	3.00
5		4.50	4.50	4.40	4.40	4.40	4.00
6		4.50	4.50	4.40	4.40	4.40	5.00
7		4.50	4.50	4.40	4.40	4.40	6.00
8		4.50	4.50	4.40	4.40	4.40	7.00
9		4.50	4.50	4.40	4.40	4.40	8.00
10		4.50	4.50	4.40	4.40	4.40	9.00
11		4.50	4.50	4.40	4.40	4.40	10.00
12		4.50	4.50	4.40	4.40	4.40	11.00
13		4.50	4.50	4.40	4.40	4.40	12.00
14		4.50	4.50	4.40	4.40	4.40	13.00
15		4.50	4.50	4.40	4.40	4.40	14.00
16		4.50	4.50	4.40	4.40	4.40	15.00
17		4.50	4.50	4.40	4.40	4.40	16.00
18		4.50	4.50	4.40	4.40	4.40	17.00
19		4.50	4.50	4.40	4.40	4.40	18.00
20		4.50	4.50	4.40	4.40	4.40	19.00
21	2.00	4.50	4.50	4.40	4.40	4.40	20.00
22	2.00	4.50	4.50	4.40	4.40	4.40	21.00
23	2.00	4.50	4.50	4.40	4.40	4.40	22.00
24	2.00	4.50	4.50	4.40	4.40	4.40	23.00
25	2.00	4.50	4.40	4.40	4.40	4.40	24.00
26	2.00	4.50	4.40	4.40	4.40	4.40	25.00
27	2.00	4.50	4.40	4.40	4.40	4.40	26.00
28	2.00	4.50	4.40	4.40	4.40	4.40	27.00
29	2.00	4.50	4.40	4.40	4.40	4.40	28.00
30	4.50	4.50	4.40	4.40	4.40	4.40	29.00
31	4.50	4.50	4.40	4.40	4.40	4.40	30.00
		4.50		4.40	4.40		31.00
TOTAL							
	27.00	139.50	134.30	136.40	136.40	132.00	
YEARLY C.F.S.			705.60				
YEARLY ACRE FEET			1397.09				
TOTAL NO. OF DAYS			164.00				
YEARLY MEAN			4.30				
							1993.00

CANAL NAME	RINKER WELL		CANAL NUMBER18-P				
OWNER	HARRY RINKER						
DATE							
	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	DATE
1							
2					2.80		1.00
3					2.80		2.00
4					2.80		3.00
5					2.80		4.00
6				2.80	2.80		5.00
7				2.80	2.80		6.00
8				2.80	2.80		7.00
9				2.80	2.80		8.00
10				2.80	2.80		9.00
11				2.80	2.80		10.00
12				2.80	2.80		11.00
13				2.80	2.80		12.00
14				2.80	2.80		13.00
15				2.80	2.80		14.00
16				2.80	2.80		15.00
17				2.80			16.00
18				2.80			17.00
19				2.80	2.80		18.00
20				2.80	2.80		19.00
21				2.80	2.80		20.00
22				2.80	2.80		21.00
23				2.80			22.00
24				2.80			23.00
25				2.80			24.00
26				2.80			25.00
27				2.80			26.00
28				2.80			27.00
29				2.80			28.00
30				2.80			29.00
31				2.80			30.00
				2.80			31.00
TOTAL							
	0.00	0.00	0.00	75.60	53.20	0.00	
YEARLY C.F.S.			128.80				
YEARLY ACRE FEET			255.02				
TOTAL NO. OF DAYS			46.00				
YEARLY MEAN			2.80				

	WATER DISTRICT #37 & 37-M						1993.00
CANAL NAME		SCOFIELD	CANAL NUMBER 42-P3				
OWNER	MICHAEL SCHWEITZER						
DATE							
	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	DATE
1							
2			0.20	0.20	0.20		1.00
3			0.20	0.20	0.20		2.00
4			0.20	0.20			3.00
5			0.20	0.20			4.00
6			0.20	0.20			5.00
7			0.20	0.20			6.00
8			0.20	0.20			7.00
9			0.20	0.20			8.00
10			0.20	0.20			9.00
11			0.20	0.20			10.00
12			0.20	0.20			11.00
13			0.20	0.20			12.00
14			0.20	0.20			13.00
15			0.20	0.20			14.00
16			0.20	0.20			15.00
17			0.20	0.20			16.00
18			0.20	0.20			17.00
19			0.20	0.20			18.00
20			0.20	0.20			19.00
21			0.20	0.20			20.00
22			0.20	0.20			21.00
23		0.20	0.20	0.20			22.00
24		0.20	0.20	0.20			23.00
25		0.20	0.20	0.20			24.00
26		0.20	0.20	0.20			25.00
27		0.20	0.20	0.20			26.00
28		0.20	0.20	0.20			27.00
29		0.20	0.20	0.20			28.00
30		0.20	0.20	0.20			29.00
31		0.20	0.20	0.20			30.00
		0.20		0.20			31.00
TOTAL							
	0.00	2.00	6.00	6.20	0.40	0.00	
YEARLY C.F.S.			14.60				
YEARLY ACRE FEET			28.91				
TOTAL NO. OF DAYS			73.00				
YEARLY MEAN			0.20				

	WATER DISTRICT #37 & 37-M						
CANAL NAME		PECK	CANAL NUMBER 41				1993.00
OWNER	THOMAS PECK						
DATE	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	DATE
1			0.36	0.36	0.36	0.36	1.00
2			0.36	0.36	0.36	0.36	2.00
3			0.36	0.36	0.36	0.36	3.00
4			0.36	0.36	0.36		4.00
5			0.36	0.36	0.36		5.00
6			0.36	0.36	0.36		6.00
7			0.36	0.36	0.36		7.00
8			0.36	0.36	0.36		8.00
9			0.36	0.36	0.36		9.00
10			0.36	0.36	0.36		10.00
11			0.36	0.36	0.36		11.00
12			0.36	0.36	0.36		12.00
13		0.36	0.36	0.36	0.36		13.00
14		0.36	0.36	0.36	0.36		14.00
15		0.36	0.36	0.36	0.36		15.00
16		0.36	0.36	0.36	0.36		16.00
17		0.36	0.36	0.36	0.36		17.00
18		0.36	0.36	0.36	0.36		18.00
19		0.36	0.36	0.36	0.36		19.00
20		0.36	0.36	0.36	0.36		20.00
21		0.36	0.36	0.36	0.36		21.00
22		0.36	0.36	0.36	0.36		22.00
23		0.36	0.36	0.36	0.36		23.00
24		0.36	0.36	0.36	0.36		24.00
25		0.36	0.36	0.36	0.36		25.00
26		0.36	0.36	0.36	0.36		26.00
27		0.36	0.36	0.36	0.36		27.00
28		0.36	0.36	0.36	0.36		28.00
29		0.36	0.36	0.36	0.36		29.00
30		0.36	0.36	0.36	0.36		30.00
31		0.36		0.36	0.36		31.00
TOTAL	0.00	6.84	10.80	11.16	11.16	1.08	
YEARLY C.F.S.			41.04				
YEARLY ACRE FEET			81.26				
TOTAL NO. OF DAYS			114.00				
YEARLY MEAN			0.36				

	WATER DISTRICT #37 & 37-M						
CANAL NAME		HAUGH	CANAL NUMBER 42-A				1993.00
OWNER	USER: CHRIS HAUGH						
DATE	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	DATE
1		1.00	1.66	1.00	1.00	1.00	1.00
2		1.00	1.66	1.00	1.00	1.00	2.00
3		1.00	1.66	1.00	1.00	1.00	3.00
4		1.00	1.66	1.00	1.00	1.00	4.00
5		1.00	1.66	1.00	1.00	1.00	5.00
6		1.00	1.66	1.00	1.00	1.00	6.00
7		1.00	1.66	1.00	1.00	1.00	7.00
8		1.00	1.66	1.00	1.00	1.00	8.00
9		1.00	1.66	1.00	1.00	1.00	9.00
10		1.00	1.84	1.00	1.00	1.00	10.00
11		1.00	1.84	1.00	1.00	1.00	11.00
12		1.00	1.84	1.00	1.00	1.00	12.00
13		1.00	1.66	1.00	1.00	1.00	13.00
14		1.00	1.66	1.00	1.00	1.00	14.00
15	1.00	1.00	1.00	1.00	1.00	1.00	15.00
16	1.00	1.00	1.00	1.00	1.00	1.00	16.00
17	1.00	1.00	1.00	1.00	1.00	1.00	17.00
18	1.00		1.00	1.00	1.00	1.00	18.00
19	1.00	1.40	1.00	1.00	1.00	1.00	19.00
20	1.00	1.40	1.00	1.00	1.00	1.00	20.00
21	1.00	1.40	1.00	1.00	1.00	1.00	21.00
22	1.00	1.40	1.00	1.00	1.00	1.00	22.00
23	1.00	1.40	1.00	1.00	1.00	1.00	23.00
24	1.00	1.40	1.00	1.00	1.00	1.00	24.00
25	1.00	1.40	1.00	1.00	1.00	1.00	25.00
26	1.00	1.40	1.00	1.00	1.00	1.00	26.00
27	1.00	1.40	1.00	1.00	1.00	1.00	27.00
28	1.00	1.40	1.00	1.00	1.00	1.00	28.00
29	1.00	1.66	1.00	1.00	1.00	1.00	29.00
30	1.00	1.66	1.00	1.00	1.00	1.00	30.00
31		1.66		1.00	1.00		31.00
TOTAL	16.00	35.98	39.78	31.00	31.00	30.00	
YEARLY C.F.S.			183.76				
YEARLY ACRE FEET			363.84				
TOTAL NO. OF DAYS			168.00				
YEARLY MEAN			1.09				

	WATER DISTRICT #37 & 37-M						
CANAL NAME		BRAMON	CANAL NUMBER 43				1993.00
OWNER	FRANK BRAMON						
DATE	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	DATE
1		0.38	0.38	0.38			1.00
2		0.38	0.38	0.38			2.00
3		0.38	0.38	0.38			3.00
4		0.38	0.38	0.38			4.00
5		0.38	0.38	0.38			5.00
6		0.38	0.38	0.38			6.00
7		0.38	0.38	0.38			7.00
8		0.38	0.38	0.38			8.00
9		0.38	0.38	0.38			9.00
10		0.38	0.38	0.38			10.00
11		0.38	0.38	0.38			11.00
12		0.38	0.38	0.38			12.00
13		0.38	0.38	0.38			13.00
14		0.38	0.38	0.38			14.00
15		0.38	0.38	0.38			15.00
16		0.38	0.38	0.38			16.00
17		0.38	0.38				17.00
18		0.38	0.38				18.00
19		0.38	0.38				19.00
20		0.38	0.38				20.00
21		0.38	0.38				21.00
22		0.38	0.38				22.00
23		0.38	0.38				23.00
24		0.38	0.38				24.00
25		0.38	0.38				25.00
26		0.38	0.38				26.00
27		0.38	0.38				27.00
28		0.38	0.38				28.00
29	0.38	0.38	0.38				29.00
30	0.38	0.38	0.38				30.00
31		0.38					31.00
TOTAL	0.76	11.78	11.40	6.08	0.00	0.00	
YEARLY C.F.S.			30.02				
YEARLY ACRE FEET			59.44				
TOTAL NO. OF DAYS			79.00				
YEARLY MEAN			0.38				

	WATER DISTRICT #37 & 37-M						
CANAL NAME		KOHLER	CANAL NUMBER 44				1993.00
OWNER	TED DEVINE						
DATE	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	DATE
1				5.12			1.00
2				5.12			2.00
3				5.12			3.00
4				5.12			4.00
5				5.12	4.20		5.00
6				5.12	4.20		6.00
7				5.12	4.20	4.20	7.00
8					4.20	4.20	8.00
9					4.20	4.20	9.00
10				5.12	4.20	4.20	10.00
11				5.12	4.20	4.20	11.00
12				5.12	4.20	4.20	12.00
13				5.12	4.20	4.20	13.00
14				5.12		4.20	14.00
15		4.92		5.12		4.20	15.00
16		4.92		5.12		4.20	16.00
17		4.92		5.12		4.20	17.00
18		5.50		5.12		4.20	18.00
19		5.50	5.12		4.20	4.20	19.00
20		5.50	5.12		4.20	4.20	20.00
21		5.50	5.12		4.20	4.20	21.00
22					4.20	4.20	22.00
23					4.20	4.20	23.00
24						4.20	24.00
25		5.50					25.00
26		5.50					26.00
27		4.36					27.00
28		4.36					28.00
29		4.36					29.00
30		4.36					30.00
31		4.36					31.00
TOTAL	0.00	69.56	15.36	81.92	58.80	75.60	
YEARLY C.F.S.			301.24				
YEARLY ACRE FEET			596.46				
TOTAL NO. OF DAYS			65.00				
YEARLY MEAN			4.63				

	WATER DISTRICT #37 & 37-M						
CANAL NAME	MOLLY PUMP		CANAL NUMBER 39-P				1993.00
OWNER	W. MOLYNEUX						
DATE	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	DATE
1			0.58	0.40	0.54	0.54	1.00
2			0.46	0.60	0.54	0.54	2.00
3			0.46	0.60	0.54	0.54	3.00
4			0.46	0.60	0.54	0.54	4.00
5			0.46	0.60	0.54	0.54	5.00
6			0.46	0.60	0.54	0.54	6.00
7				0.60	0.54		7.00
8				0.60	0.54		8.00
9				0.64	0.54		9.00
10				0.64	0.54	0.54	10.00
11				0.64	0.54	0.54	11.00
12				0.64	0.54	0.54	12.00
13				0.64	0.54	0.54	13.00
14		0.41		0.60	0.54	0.54	14.00
15		0.41		0.62	0.54	0.54	15.00
16		0.41		0.62	0.54	0.54	16.00
17		0.36			0.54		17.00
18		0.36			0.54		18.00
19		0.36		0.54	0.54		19.00
20		0.36		0.54	0.54		20.00
21		0.40	0.60	0.54	0.54		21.00
22		0.40	0.60	0.54	0.54		22.00
23		0.40	0.60	0.54	0.54		23.00
24		0.40	0.60	0.54	0.54		24.00
25		0.40	1.22	0.54	0.54		25.00
26		0.40	1.22	0.56	0.54		26.00
27		0.40	1.22	0.56	0.54		27.00
28		0.58	1.22	0.56	0.54		28.00
29		0.58	1.22	0.56	0.54		29.00
30		0.58	0.40	0.54			30.00
31		0.58		0.54			31.00
TOTAL	0.00	7.79	11.78	16.74	15.66	7.02	
YEARLY C.F.S.			58.99				
YEARLY ACRE FEET			116.80				
TOTAL NO. OF DAYS			105.00				
YEARLY MEAN			0.56				

	WATER DISTRICT #37 & 37-M						
CANAL NAME		BILL	CANAL NUMBER 9				1993.00
OWNER	BILL MC MAHAN						
DATE	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	DATE
1						0.98	1.00
2						0.98	2.00
3						2.24	3.00
4						2.24	4.00
5						2.24	5.00
6						1.96	6.00
7						1.96	7.00
8						2.43	8.00
9						2.43	9.00
10						3.36	10.00
11						3.36	11.00
12							12.00
13							13.00
14							14.00
15							15.00
16							16.00
17							17.00
18							18.00
19							19.00
20							20.00
21							21.00
22							22.00
23							23.00
24						3.81	24.00
25						3.81	25.00
26						3.81	26.00
27							27.00
28							28.00
29							29.00
30							30.00
31							31.00
TOTAL	0.00	0.00	0.00	0.00	0.00	35.61	
YEARLY C.F.S.			35.61				
YEARLY ACRE FEET			70.51				
TOTAL NO. OF DAYS			14.00				
YEARLY MEAN			2.54				

	WATER DISTRICT #37 & 37-M						
CANAL NAME		WERRY	CANAL NUMBER 38-P				1992.00
OWNER	JACK PARKER						
DATE	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	DATE
1							1.00
2			0.20				2.00
3			0.20				3.00
4			0.20				4.00
5			0.20		0.40		5.00
6			0.20		0.40		6.00
7			0.20		0.40		7.00
8			0.20		0.40		8.00
9			0.20		0.40		9.00
10			0.20	0.40	0.40		10.00
11				0.40	0.40		11.00
12				0.40	0.40		12.00
13				0.40	0.40		13.00
14				0.40			14.00
15				0.40			15.00
16				0.40			16.00
17							17.00
18							18.00
19							19.00
20							20.00
21					0.40		21.00
22					0.40		22.00
23							23.00
24							24.00
25							25.00
26							26.00
27							27.00
28					0.40		28.00
29					0.40		29.00
30					0.40		30.00
31					0.40		31.00
TOTAL	0.00	0.00	1.80	2.80	6.00	0.00	
YEARLY C.F.S.			10.60				
YEARLY ACRE FEET			20.99				
TOTAL NO. OF DAYS			31.00				
YEARLY MEAN			0.34				

	WATER DISTRICT #37 & 37-M						
CANAL NAME		GILLIHAN	CANAL NUMBER 11				1993.00
OWNER	GARY CASTLE						
DATE	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	DATE
1			1.00				1.00
2							2.00
3							3.00
4							4.00
5							5.00
6							6.00
7							7.00
8							8.00
9							9.00
10							10.00
11							11.00
12							12.00
13							13.00
14		1.00					14.00
15		1.00					15.00
16		1.00					16.00
17		1.00					17.00
18		1.00					18.00
19		1.00					19.00
20		1.00					20.00
21		1.00					21.00
22		1.00					22.00
23		1.00					23.00
24		1.00					24.00
25		1.00					25.00
26		1.00					26.00
27		1.00					27.00
28		1.00	1.00				28.00
29		1.00	1.00				29.00
30		1.00					30.00
31		1.00					31.00
TOTAL	0.00	18.00	3.00	0.00	0.00	0.00	
YEARLY C.F.S.			21.00				
YEARLY ACRE FEET			41.58				
TOTAL NO. OF DAYS			21.00				
YEARLY MEAN			1.00				

	WATER DISTRICT #37 & 37-M						
CANAL NAME		CHAUMELL	CANAL NUMBER 22-P2				1993.00
OWNER	PAT MILLINGTON						
DATE	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	DATE
1				0.20	0.21		1.00
2							2.00
3							3.00
4			0.12				4.00
5			0.12				5.00
6			0.12		0.21	0.21	6.00
7					0.21	0.21	7.00
8					0.21	0.21	8.00
9				0.20	0.21	0.21	9.00
10				0.20	0.21	0.21	10.00
11				0.20		0.21	11.00
12				0.21			12.00
13				0.21			13.00
14							14.00
15							15.00
16				0.21	0.21		16.00
17				0.21	0.21	0.21	17.00
18			0.20	0.21	0.21	0.21	18.00
19		0.12	0.20	0.21	0.21	0.21	19.00
20		0.12	0.20	0.21	0.21	0.21	20.00
21		0.12	0.20		0.21	0.21	21.00
22		0.12	0.20		0.21		22.00
23		0.12	0.20		0.21		23.00
24		0.12	0.20		0.21		24.00
25		0.12					25.00
26		0.12					26.00
27		0.12			0.21		27.00
28		0.12	0.20	0.21	0.21		28.00
29		0.12	0.20	0.21	0.21		29.00
30		0.12	0.20	0.21	0.21		30.00
31				0.21	0.21		31.00
TOTAL	0.00	1.44	2.36	3.11	4.20	2.31	
YEARLY C.F.S.			13.42				
YEARLY ACRE FEET			26.57				
TOTAL NO. OF DAYS			71.00				
YEARLY MEAN			0.19				

	WATER DISTRICT #37 & 37-M						
CANAL NAME		CHAUMELL	CANAL NUMBER 22-P4				1993.00
OWNER	PAT MILLINGTON						
DATE	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	DATE
1			1.28	1.98	2.30	0.90	1.00
2			1.76	1.86	2.30	0.90	2.00
3			1.76	1.86	2.30	1.68	3.00
4			1.46	1.86	2.30	1.68	4.00
5			1.46	1.58	2.30	1.68	5.00
6				1.58	2.22	2.32	6.00
7				1.66	2.22	2.32	7.00
8				1.66	2.22	2.32	8.00
9				2.16	2.02	2.32	9.00
10				2.16	2.02	2.32	10.00
11				2.16	2.02	2.32	11.00
12				1.96	2.02	2.32	12.00
13				1.96	2.30	2.00	13.00
14		1.46		1.96	2.30	2.00	14.00
15		1.46		1.96	1.84	2.00	15.00
16		1.46		1.98	1.84	2.00	16.00
17		1.56		1.98	1.84	2.00	17.00
18		1.56	2.12	1.98	1.84	2.00	18.00
19		1.60	2.12	2.30	1.84	2.00	19.00
20		1.60	2.12	2.30	2.12	2.00	20.00
21		1.54	2.02	2.28	2.12	2.00	21.00
22		1.54	2.02	2.28	2.30	2.32	22.00
23		1.54	1.60	2.30	2.30	2.32	23.00
24		1.60	1.60	2.30	2.30	2.32	24.00
25		1.60	2.02	2.30	2.32	2.32	25.00
26		1.60	2.02	2.30	2.32	2.32	26.00
27		1.60	2.02	2.30	2.04	2.32	27.00
28		1.60	1.80	2.28	2.04	2.32	28.00
29		1.60	1.80	2.28	2.04	2.32	29.00
30		1.60	1.98	2.30	1.68	2.32	30.00
31		1.28		2.30	1.68		31.00
TOTAL	0.00	27.80	32.96	64.12	65.30	61.96	
YEARLY C.F.S.			252.14				
YEARLY ACRE FEET			499.24				
TOTAL NO. OF DAYS			128.00				
YEARLY MEAN			1.97				

	WATER DISTRICT #37 & 37-M						
CANAL NAME		GILLIHAN	CANAL NUMBER 11				1993.00
OWNER	WARD WOODS						
DATE	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	DATE
1					0.30	0.30	1.00
2					0.30	0.30	2.00
3					0.30	0.30	3.00
4					0.30	0.30	4.00
5					0.30	0.30	5.00
6					0.30	0.30	6.00
7					0.30	0.30	7.00
8					0.30	0.30	8.00
9					0.30	0.30	9.00
10					0.30	0.30	10.00
11					0.30	0.30	11.00
12				0.30	0.30	0.30	12.00
13				0.30	0.30	0.30	13.00
14				0.30	0.30	0.30	14.00
15				0.30	0.30	0.30	15.00
16				0.30	0.30	0.30	16.00
17				0.30	0.30	0.30	17.00
18				0.30	0.30	0.30	18.00
19				0.30	0.30	0.30	19.00
20				0.30	0.30	0.30	20.00
21				0.30	0.30	0.30	21.00
22				0.30	0.30	0.30	22.00
23				0.30	0.30	0.30	23.00
24	1.00			0.30	0.30	0.30	24.00
25	1.00			0.30	0.30	0.30	25.00
26	1.00			0.30	0.30	0.30	26.00
27	1.00			0.30	0.30	0.30	27.00
28				0.30	0.30	0.30	28.00
29				0.30	0.30	0.30	29.00
30				0.30	0.30	0.30	30.00
31				0.30	0.30		31.00
TOTAL	4.00	0.00	0.00	6.00	9.30	9.00	
YEARLY C.F.S.			28.30				
YEARLY ACRE FEET			56.03				
TOTAL NO. OF DAYS			85.00				
YEARLY MEAN			0.33				

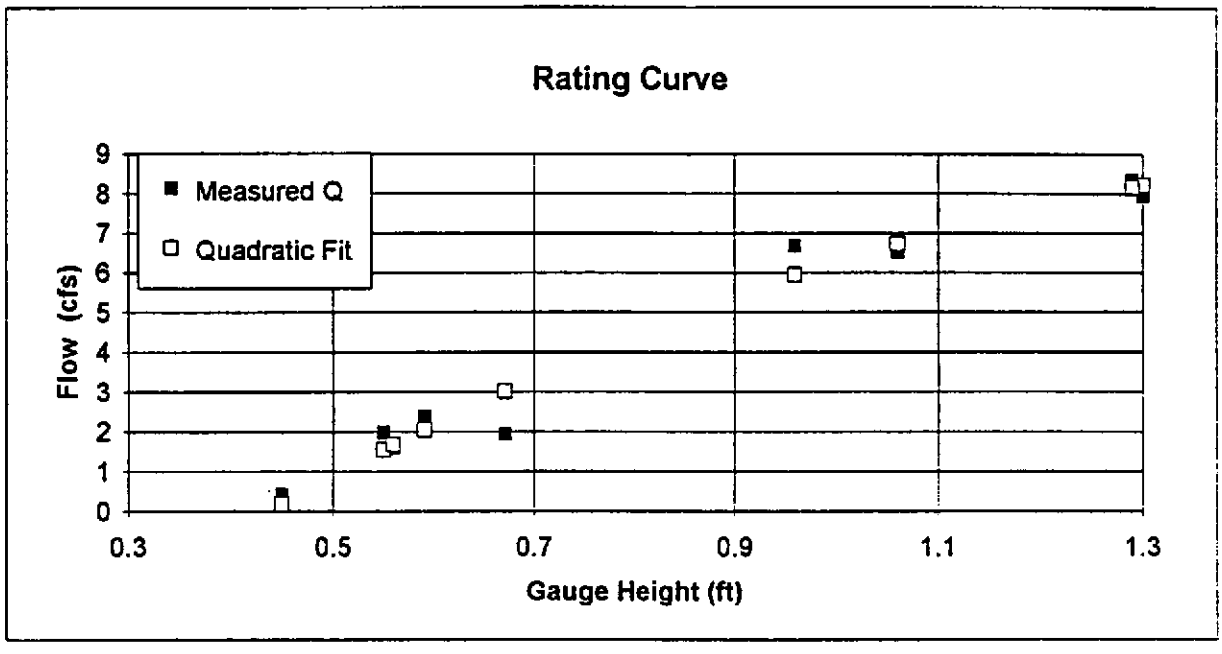
	WATER DISTRICT #37 & 37-M						
CANAL NAME	NAME	GILLIHAN		CANAL NUMB	ER 11		1993.00
OWNER	KENNETH WORTHINGTON						
DATE	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	DATE
1			0.40	0.40	0.40	0.40	1.00
2			0.40	0.40	0.40	0.40	2.00
3			0.40	0.40	0.40	0.40	3.00
4			0.40	0.40	0.40	0.40	4.00
5			0.40	0.40	0.40	0.40	5.00
6			0.40	0.40	0.40	0.40	6.00
7		0.40	0.40	0.40	0.40	0.40	7.00
8		0.40	0.40	0.40	0.40	0.40	8.00
9		0.40	0.40	0.40	0.40	0.40	9.00
10		0.40	0.40	0.40	0.40	0.40	10.00
11		0.40	0.40	0.40	0.40	0.40	11.00
12		0.40	0.40	0.40	0.40	0.40	12.00
13		0.40	0.40	0.40	0.40	0.40	13.00
14		0.40	0.40	0.40	0.40	0.40	14.00
15		0.40	0.40	0.40	0.40	0.40	15.00
16		0.40	0.40	0.40	0.40	0.40	16.00
17		0.40	0.40	0.40	0.40	0.40	17.00
18		0.40	0.40	0.40	0.40	0.40	18.00
19		0.40	0.40	0.40	0.40	0.40	19.00
20		0.40	0.40	0.40	0.40	0.40	20.00
21		0.40	0.40	0.40	0.40	0.40	21.00
22		0.40	0.40	0.40	0.40	0.40	22.00
23		0.40	0.40	0.40	0.40	0.40	23.00
24		0.40	0.40	0.40	0.40	0.40	24.00
25		0.40	0.40	0.40	0.40	0.40	25.00
26		0.40	0.40	0.40	0.40	0.40	26.00
27		0.40	0.40	0.40	0.40	0.40	27.00
28		0.40	0.40	0.40	0.40	0.40	28.00
29		0.40	0.40	0.40	0.40	0.40	29.00
30		0.40	0.40	0.40	0.40	0.40	30.00
31		0.40		0.40	0.40		31.00
TOTAL	0.00	10.00	12.00	12.40	12.40	12.00	
YEARLY C.F.S.			58.80				
YEARLY ACRE FEET			116.42				
TOTAL NO. OF DAYS			147.00				
YEARLY MEAN			0.40				

	WATER DISTRICT #37 & 37-M						
CANAL NAME		GILLIHAN	CANAL NUMBER 11				1993.00
OWNER		FISH & GAME	USER:PICABO LIVESTOCK				
DATE	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	DATE
1			4.14	3.00	5.50	6.00	1.00
2			4.14	3.00	5.50	6.00	2.00
3			4.14	3.00	5.50	6.00	3.00
4			4.14	3.00		6.00	4.00
5			4.14	7.00		6.00	5.00
6				7.00		6.00	6.00
7				10.00		6.00	7.00
8				10.00		6.00	8.00
9				10.00		6.00	9.00
10				10.00		6.00	10.00
11			3.00	10.00		6.00	11.00
12		4.14	3.00	10.00		6.00	12.00
13		4.14	3.00	10.00		6.00	13.00
14		4.14		8.02		6.00	14.00
15		4.14		8.02		6.00	15.00
16		4.14		8.02	6.00	6.00	16.00
17		4.14		8.02	6.00	6.00	17.00
18		4.14		8.02	6.00	6.00	18.00
19		4.14		9.28	6.00	6.00	19.00
20		4.14		9.28	6.00	6.00	20.00
21		4.14	3.00	7.35	6.00	6.00	21.00
22		4.14	3.00	7.35	6.00	6.00	22.00
23		4.14	3.00	7.35	6.00	6.00	23.00
24		4.14	3.00	7.35	6.00	6.00	24.00
25		4.14	3.00	7.35	6.00	6.00	25.00
26		4.14	3.00	7.35	6.00	6.00	26.00
27		4.14	3.00	7.35	6.00	2.20	27.00
28		4.14	3.00	7.35	6.00	2.20	28.00
29		4.14	3.00	7.35	6.00	2.20	29.00
30		4.14	3.00	5.50	6.00	2.20	30.00
31		4.14		5.50	6.00		31.00
TOTAL	0.00	82.80	59.70	231.81	112.50	164.80	
YEARLY C.F.S.			651.61				
YEARLY ACRE FEET			1290.19				
TOTAL NO. OF DAYS			118.00				
YEARLY MEAN			5.52				

Appendix C

Rating Curves and Hydrographs for Surface Streams

Figure 1. Rating Curve and Hydrograph for Brock Creek



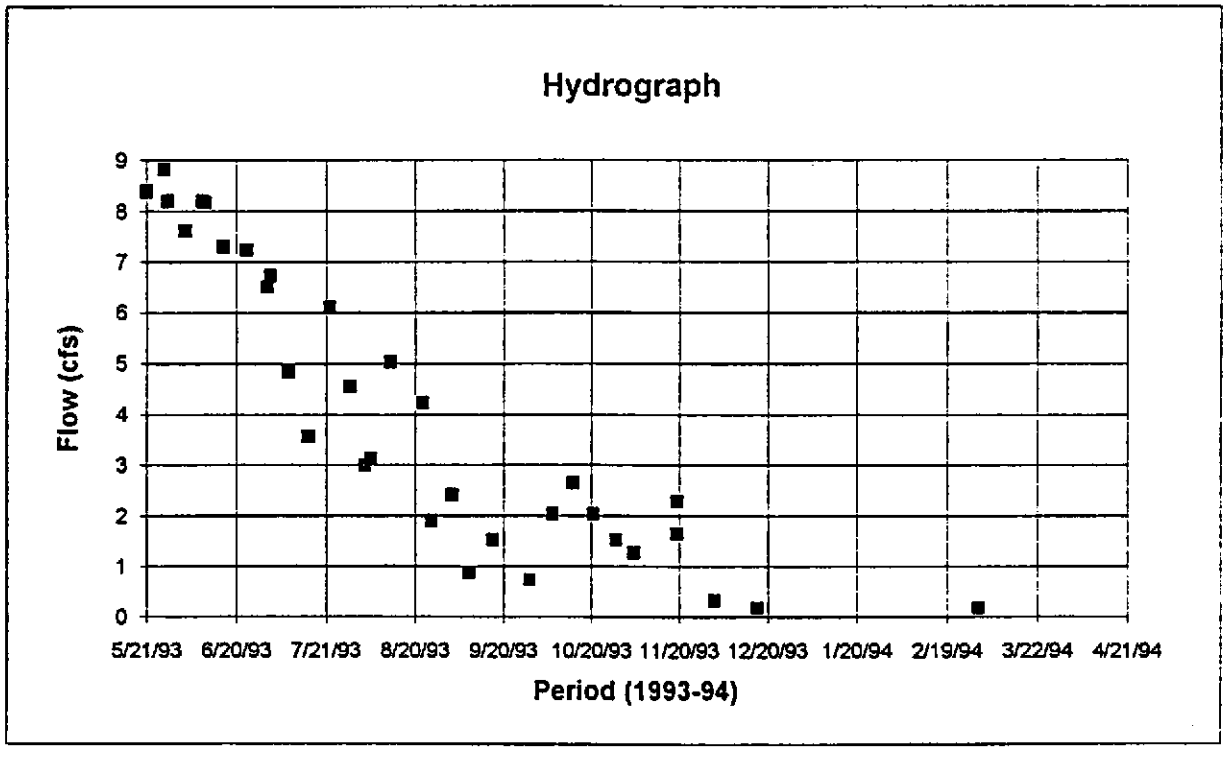
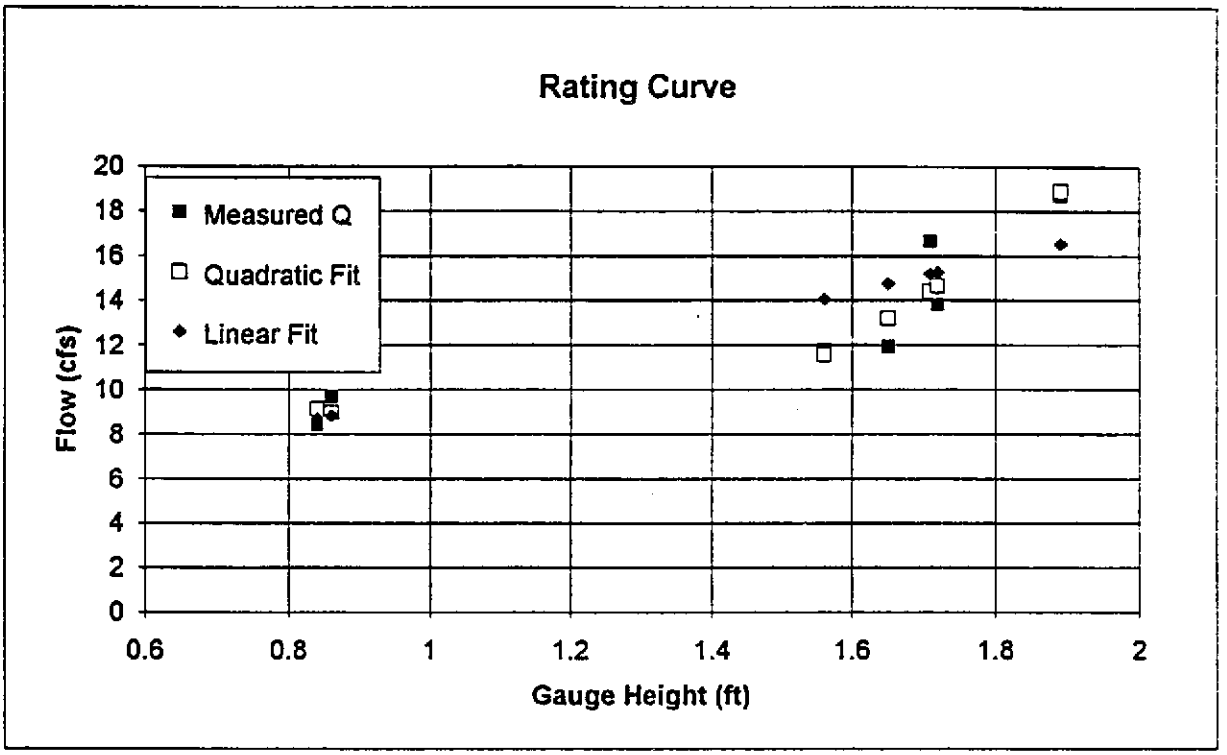


Figure 2. Rating Curve and Hydrograph for Crystal Creek



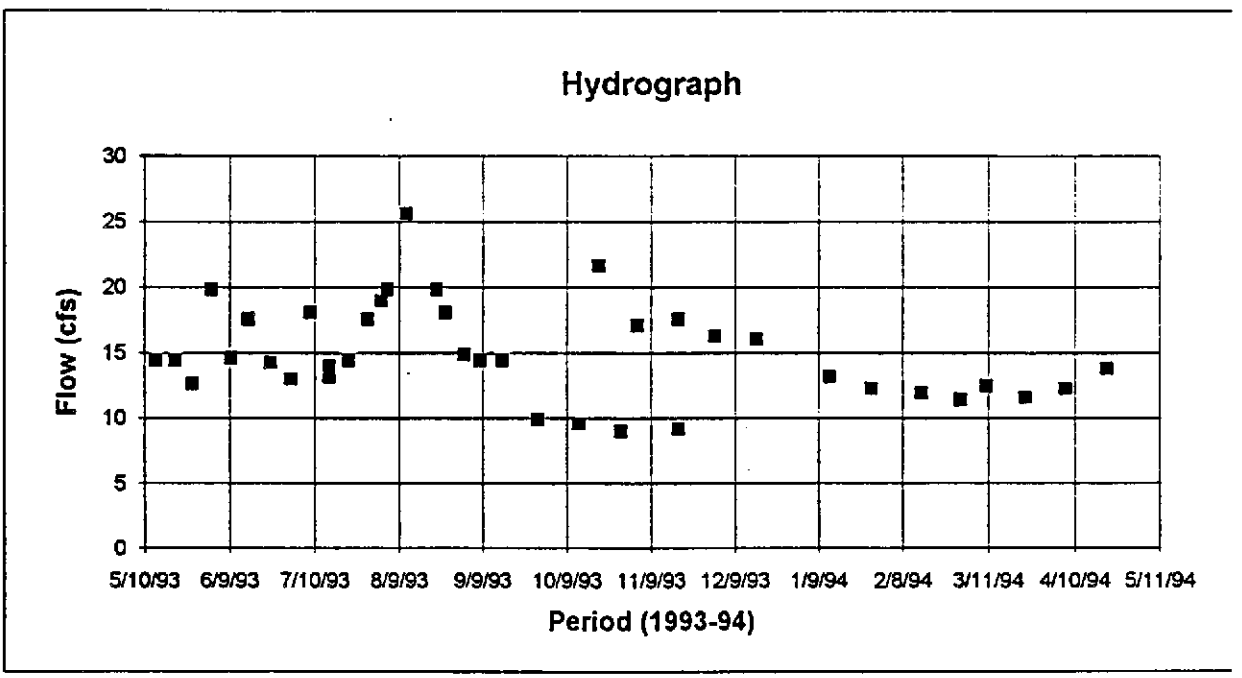
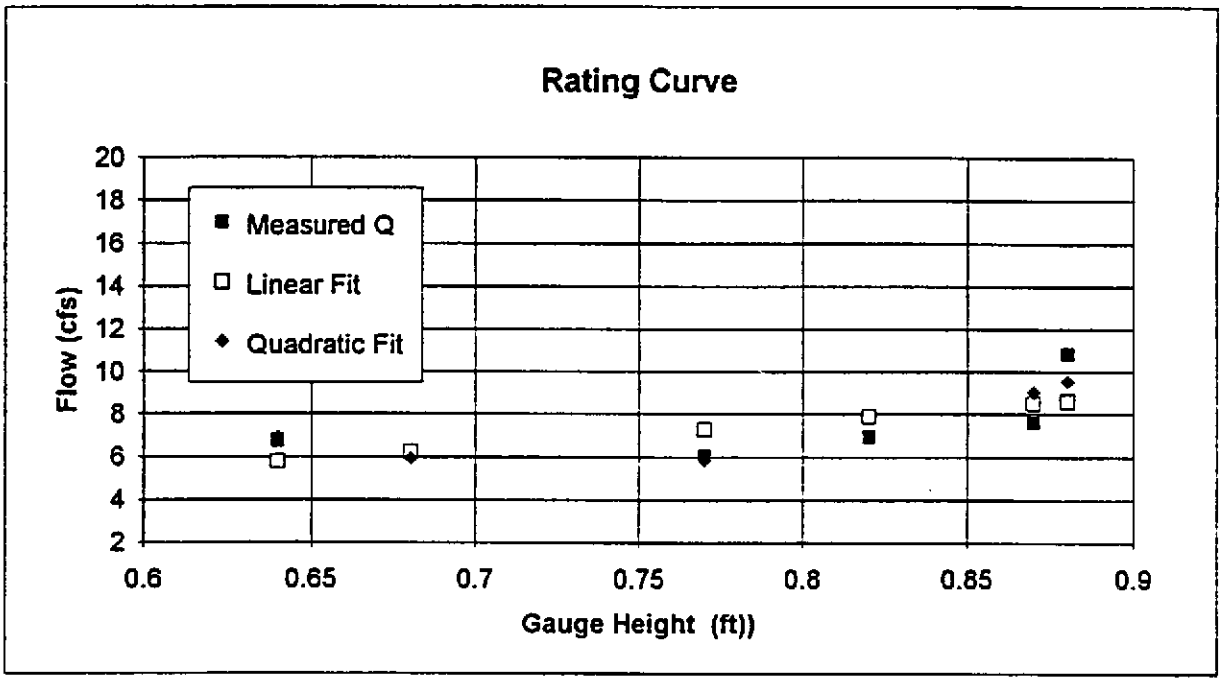


Figure 3. Rating Curve and Hydrograph for Spring Creek



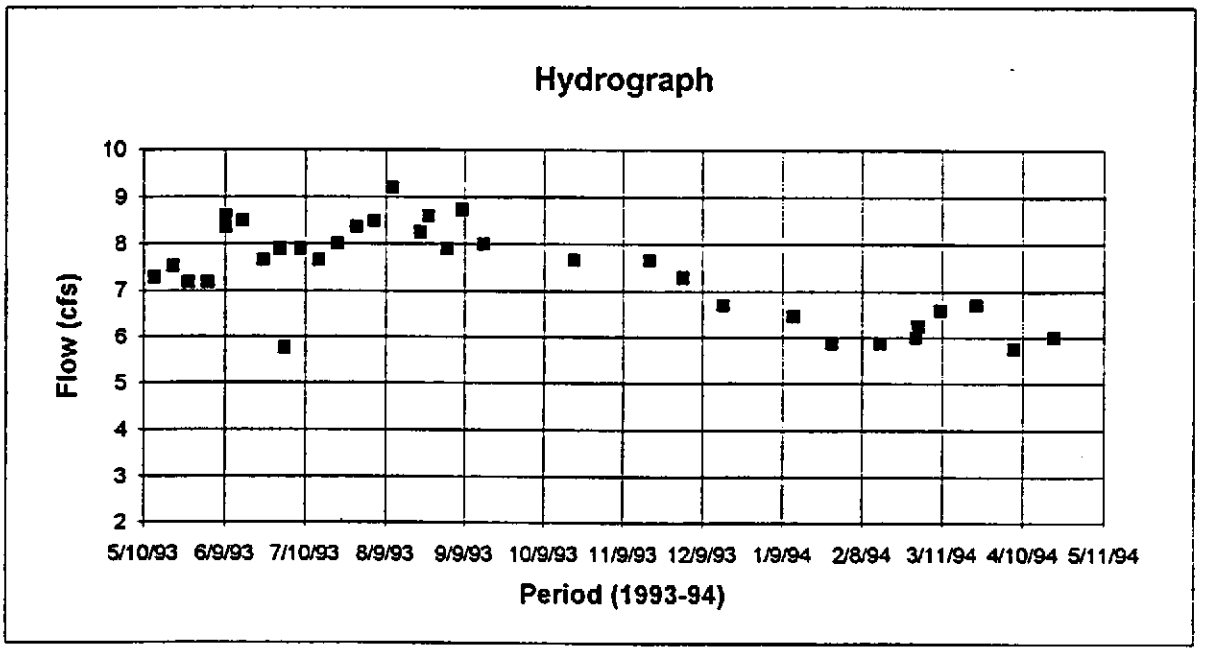
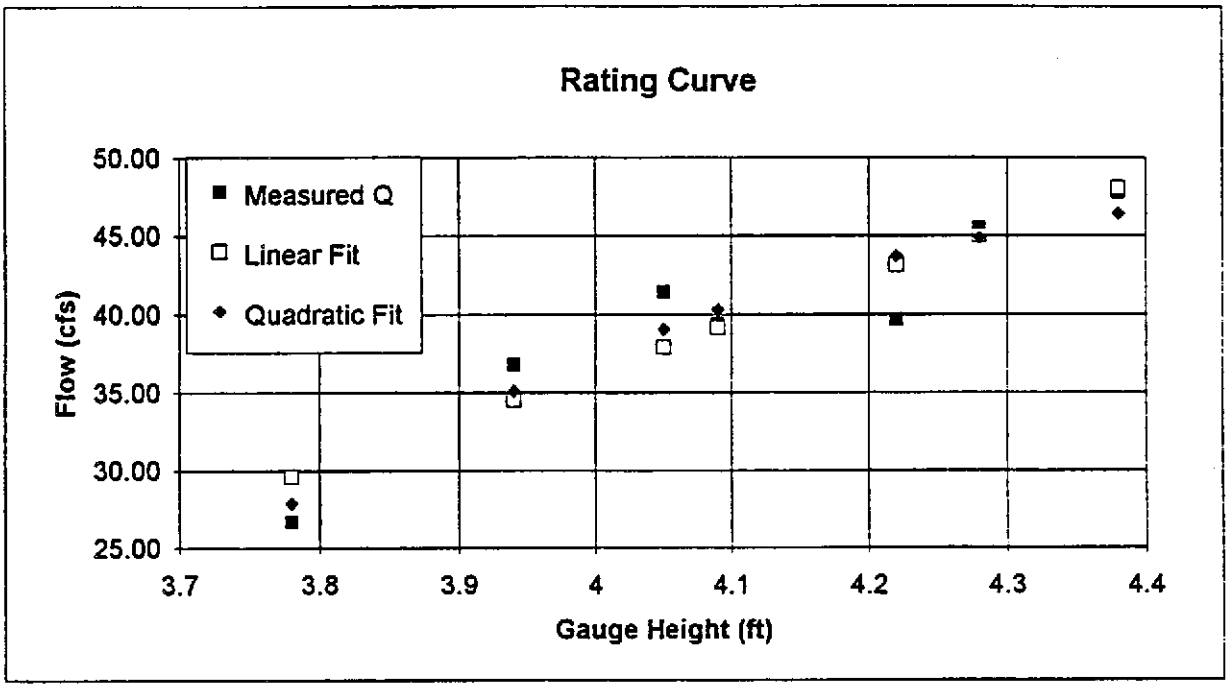


Figure 4. Rating Curve and Hydrograph for Willow Creek at Mouth



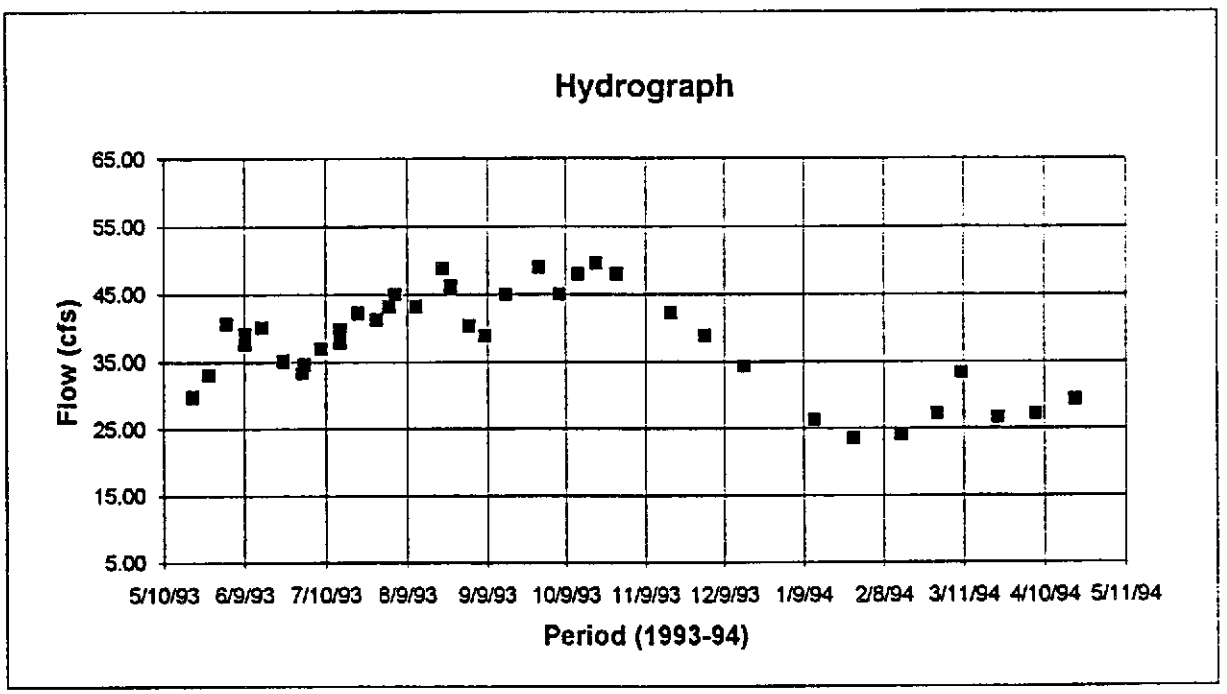
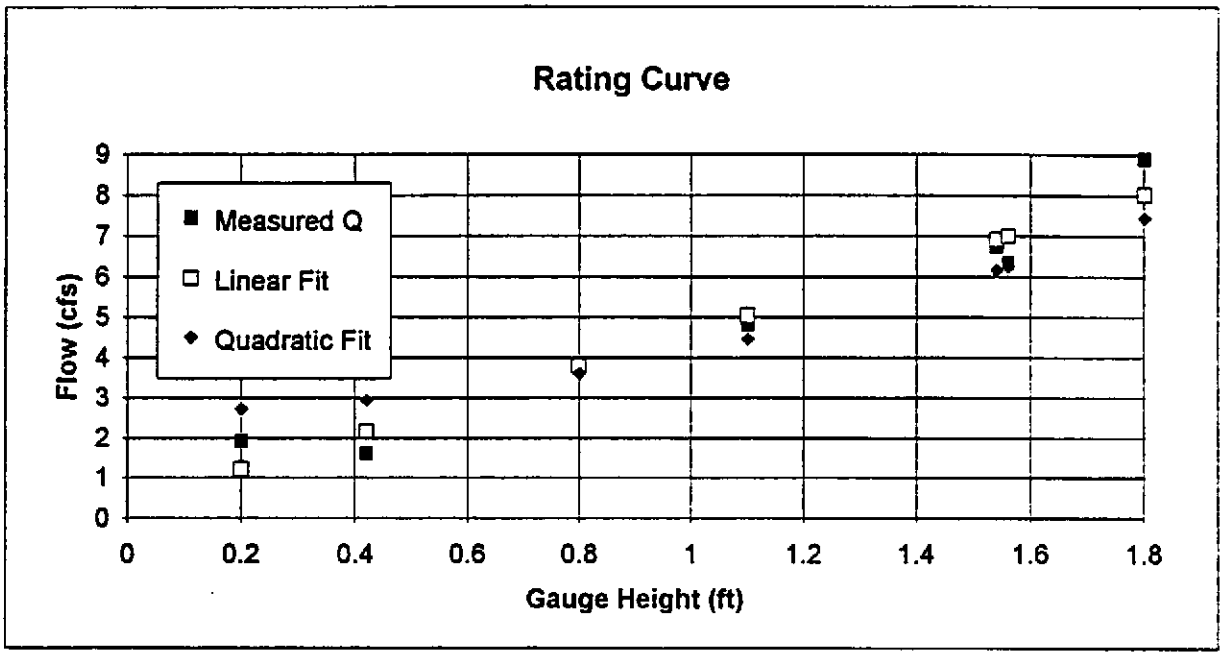


Figure 5. Rating Curve and Hydrograph for Willow Creek at Rest Area



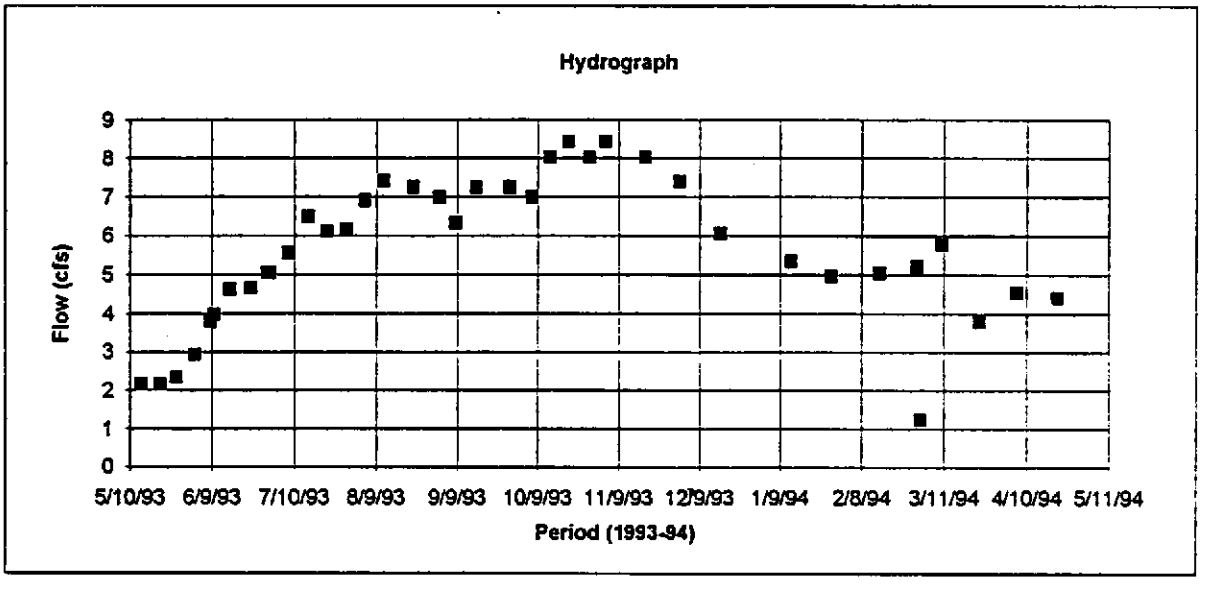
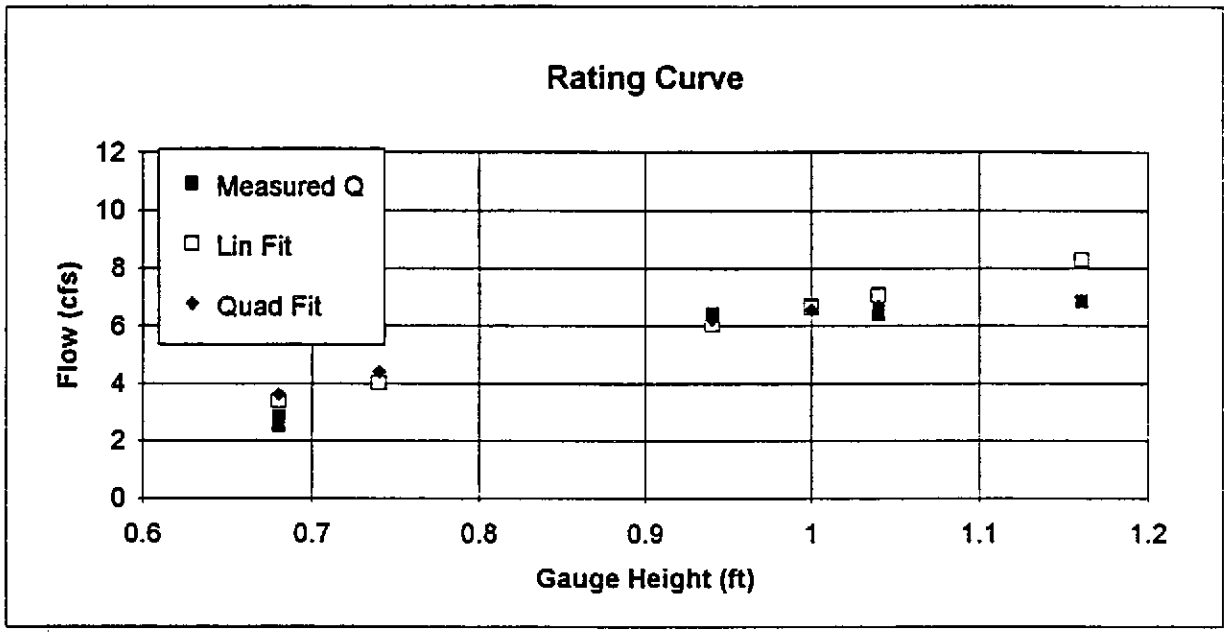


Figure 6. Rating Curve and Hydrograph for Buhler Drain



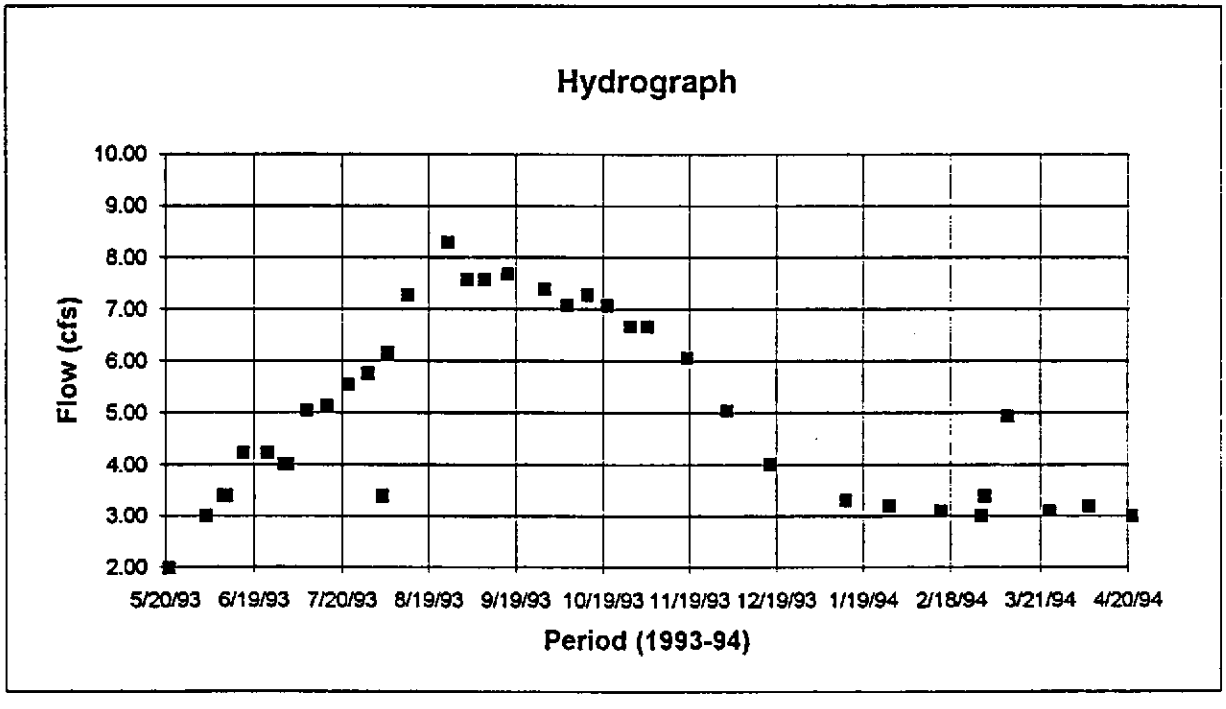
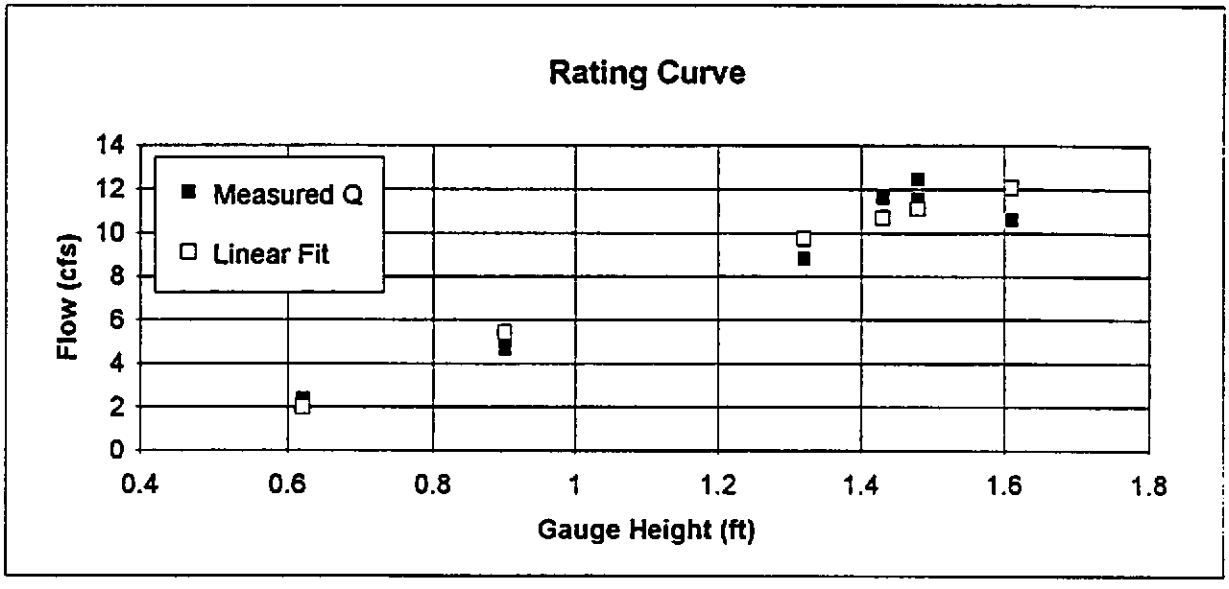


Figure 7. Rating Curve and Hydrograph for Patton Creek



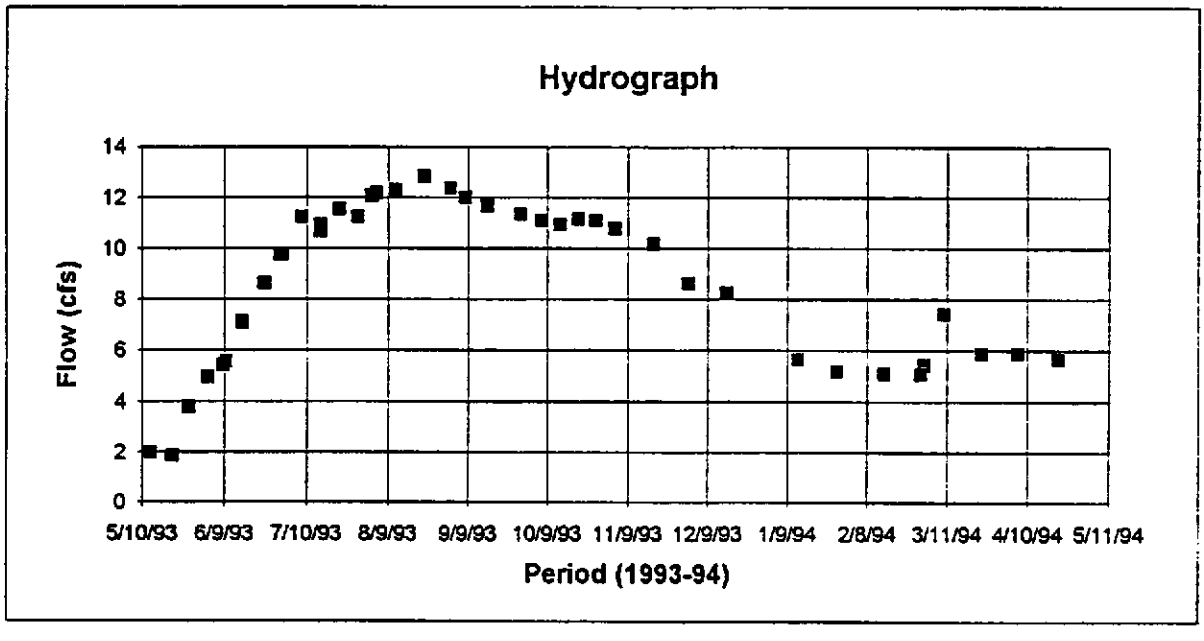
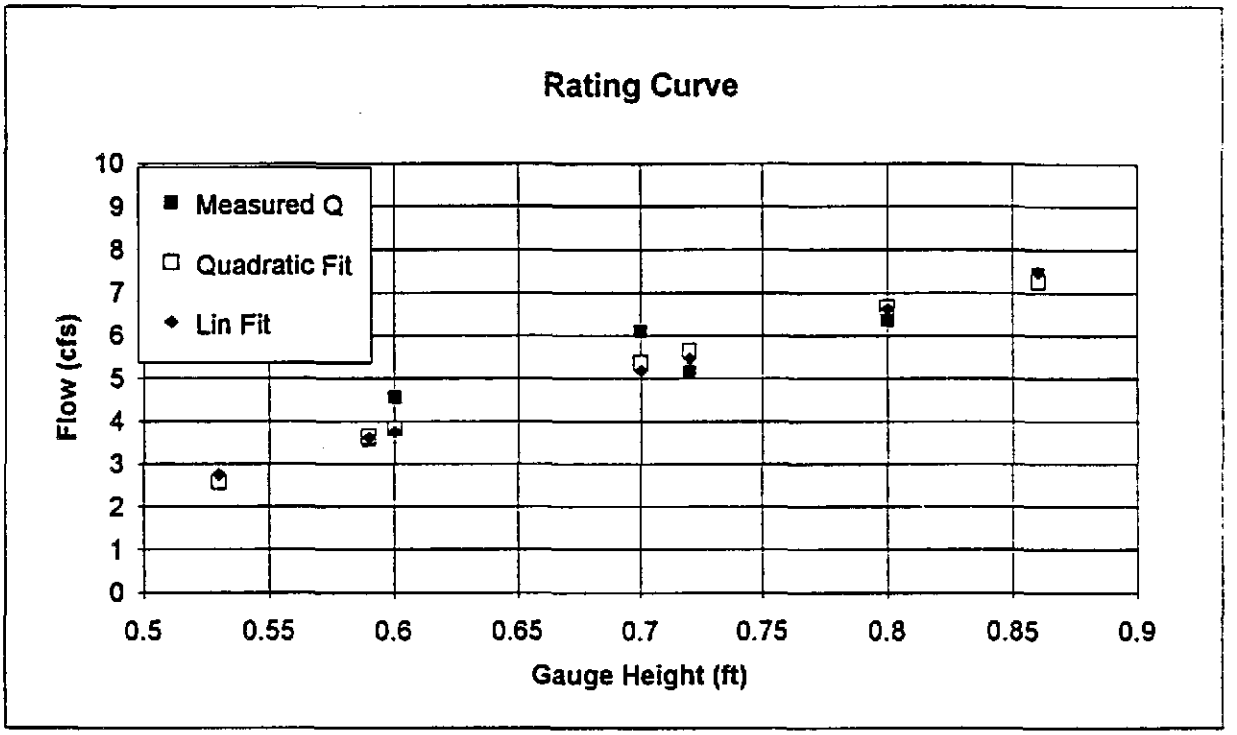


Figure 8. Rating Curve and Hydrograph for Cain Creek



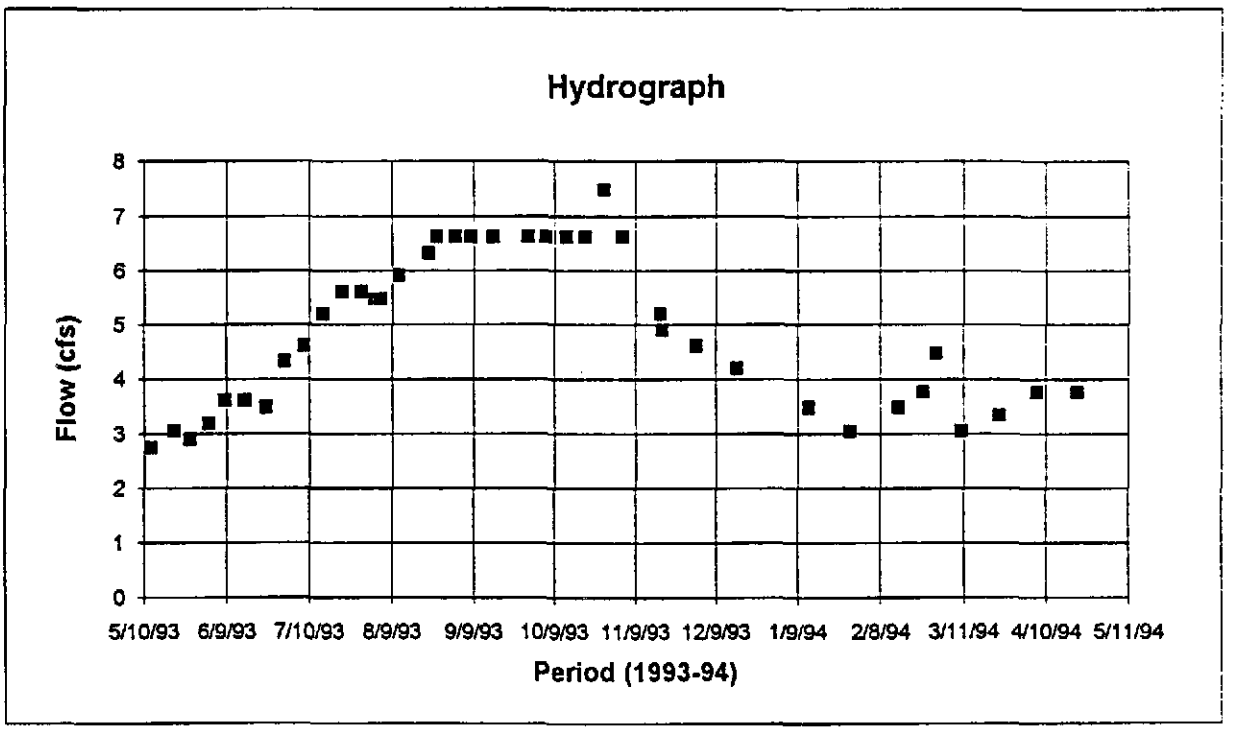
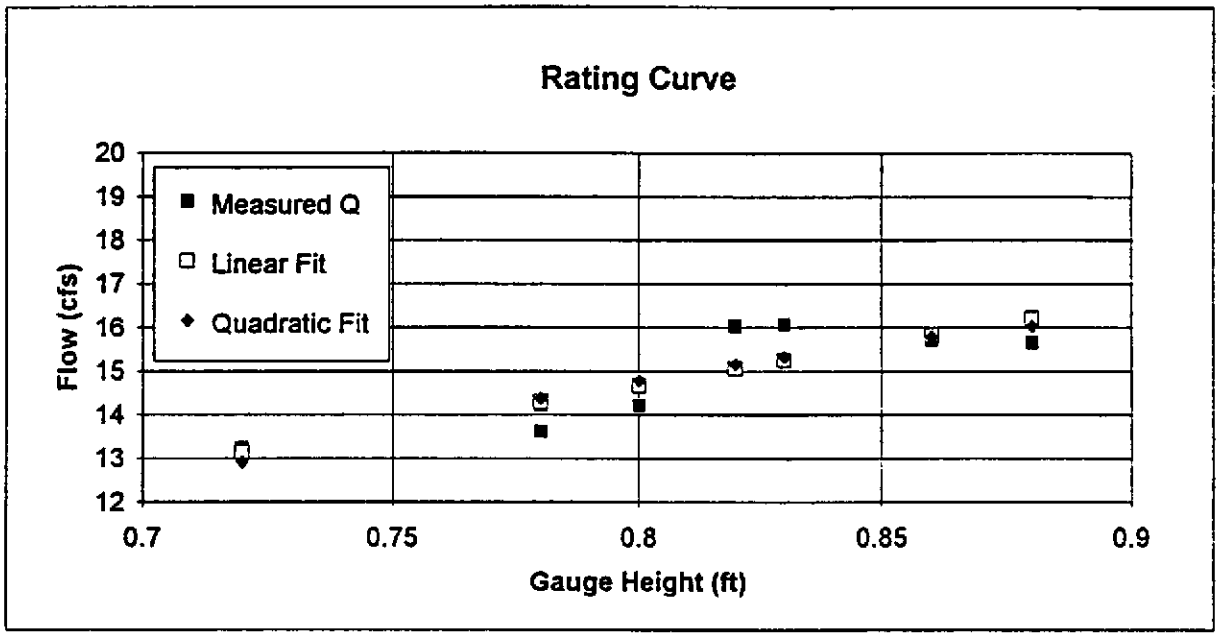


Figure 9. Rating Curve and Hydrograph for Channey Creek



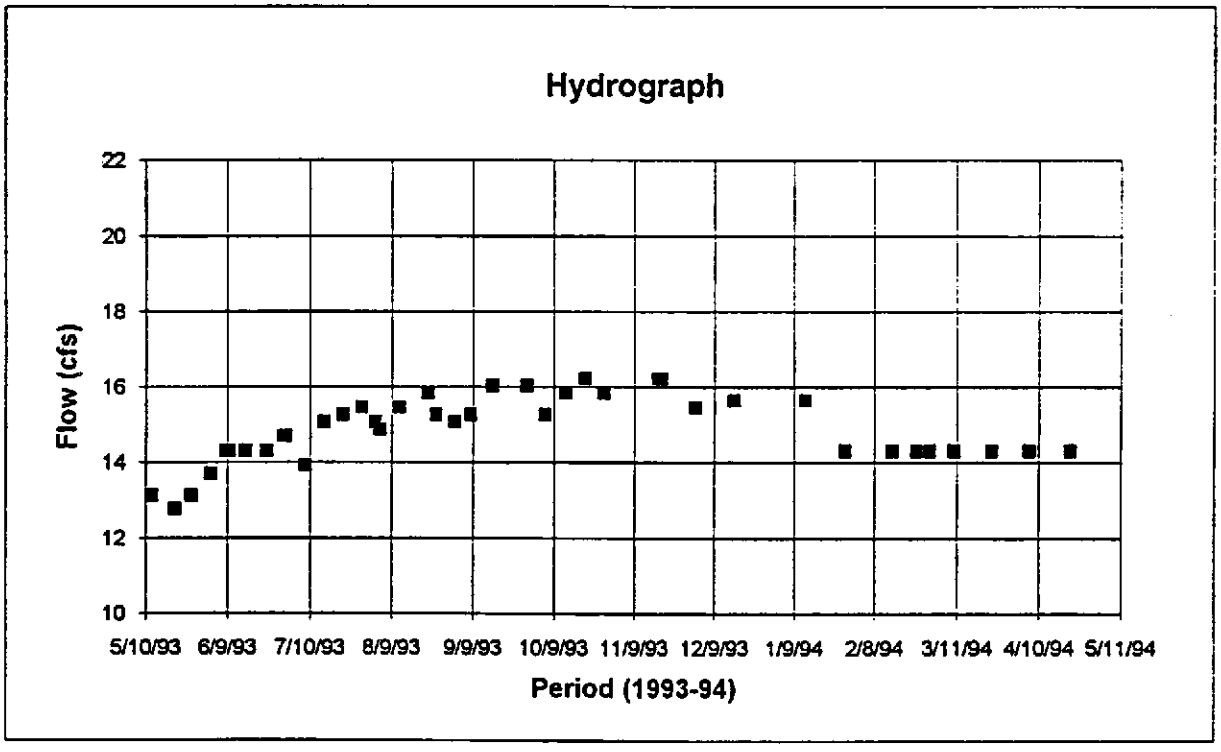
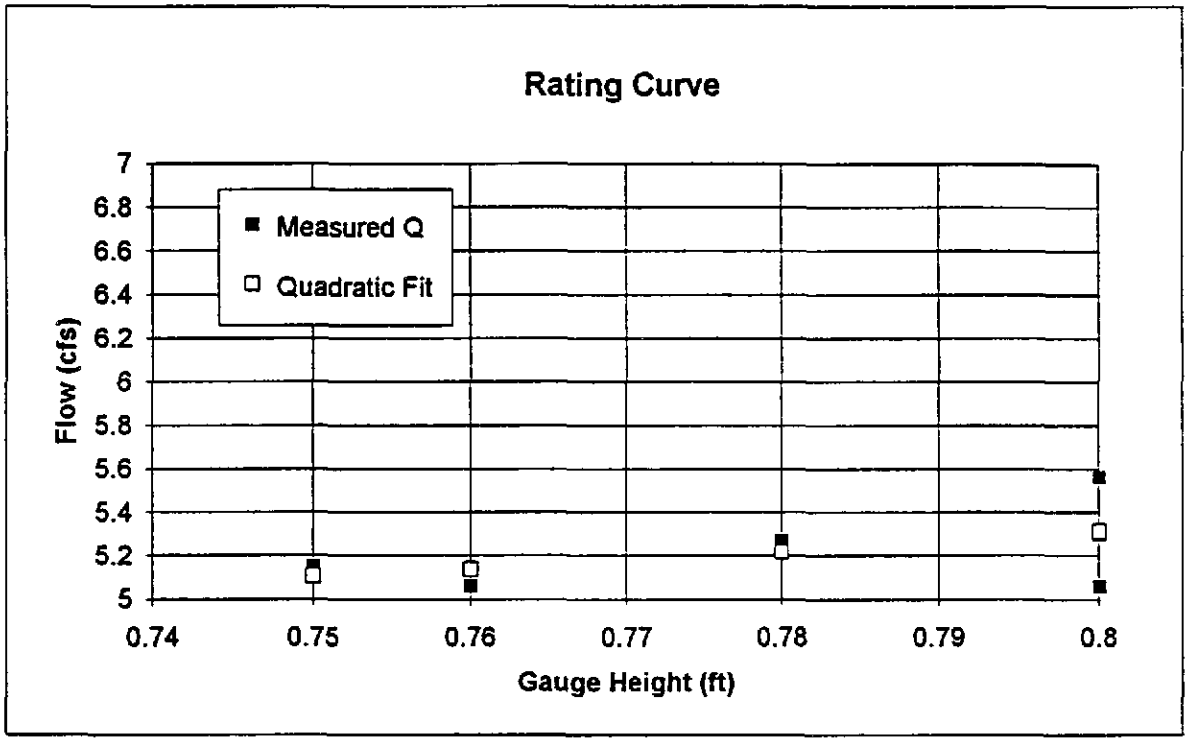


Figure 10. Rating Curve and Hydrograph for Mud Creek



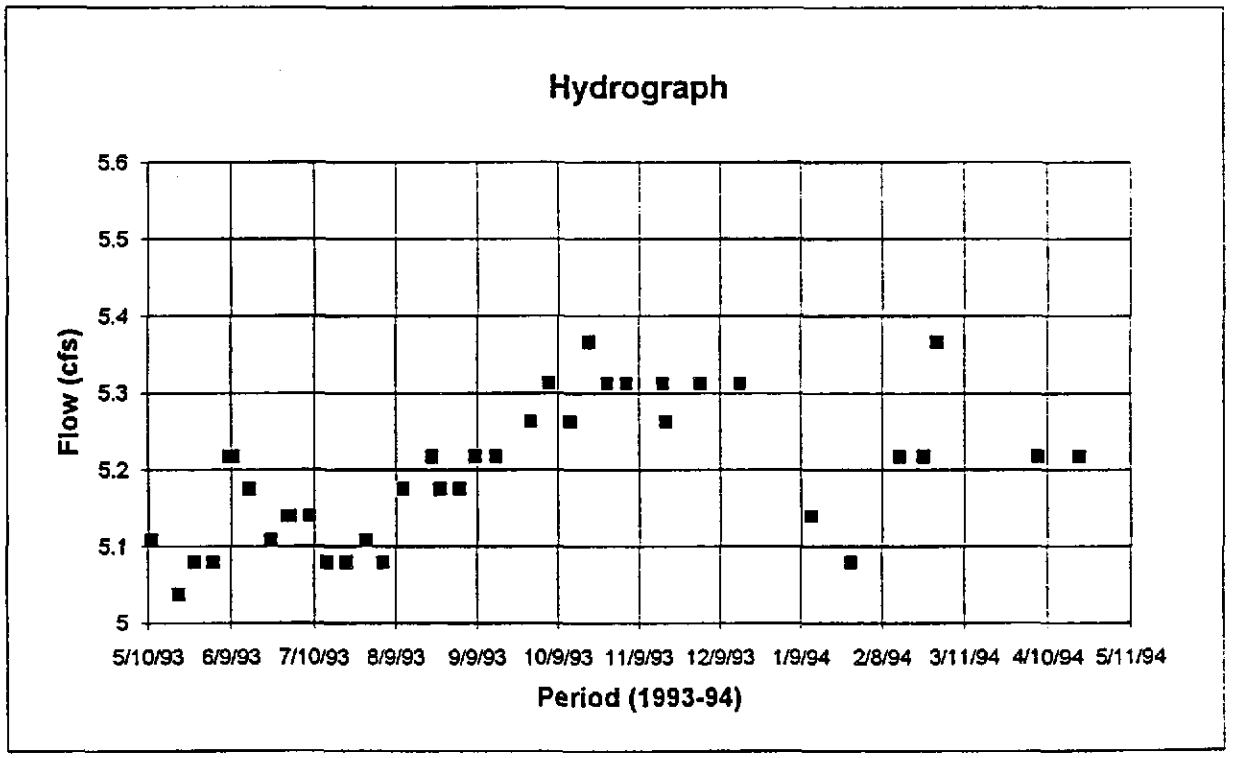
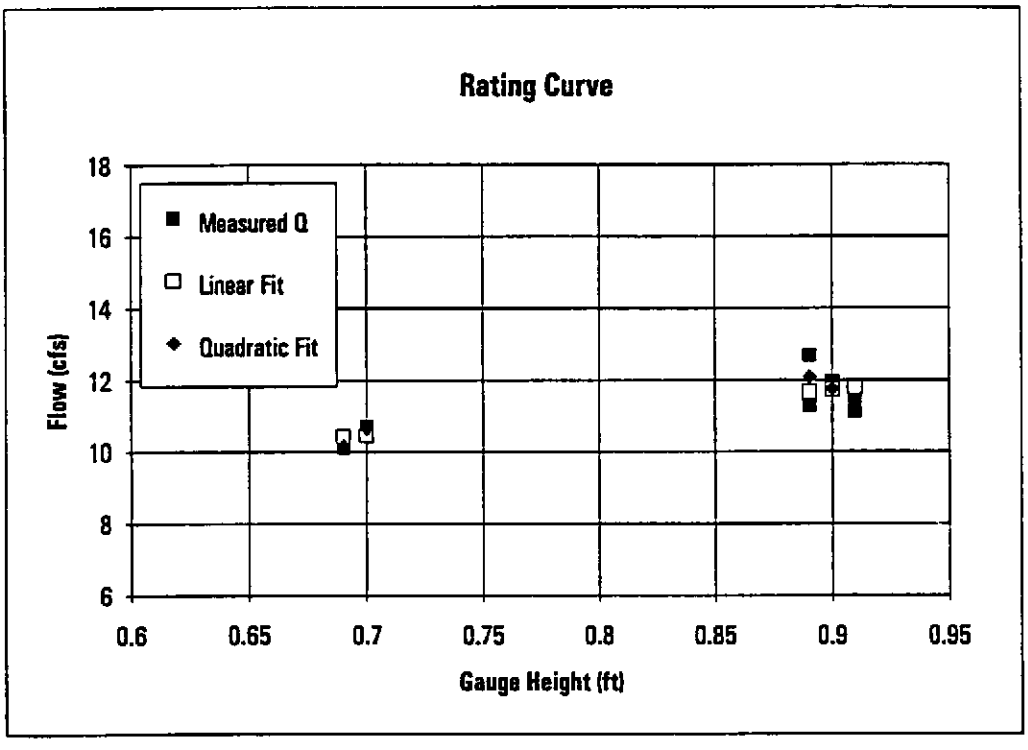


Figure 11. Rating Curve and Hydrograph for Wilson Creek



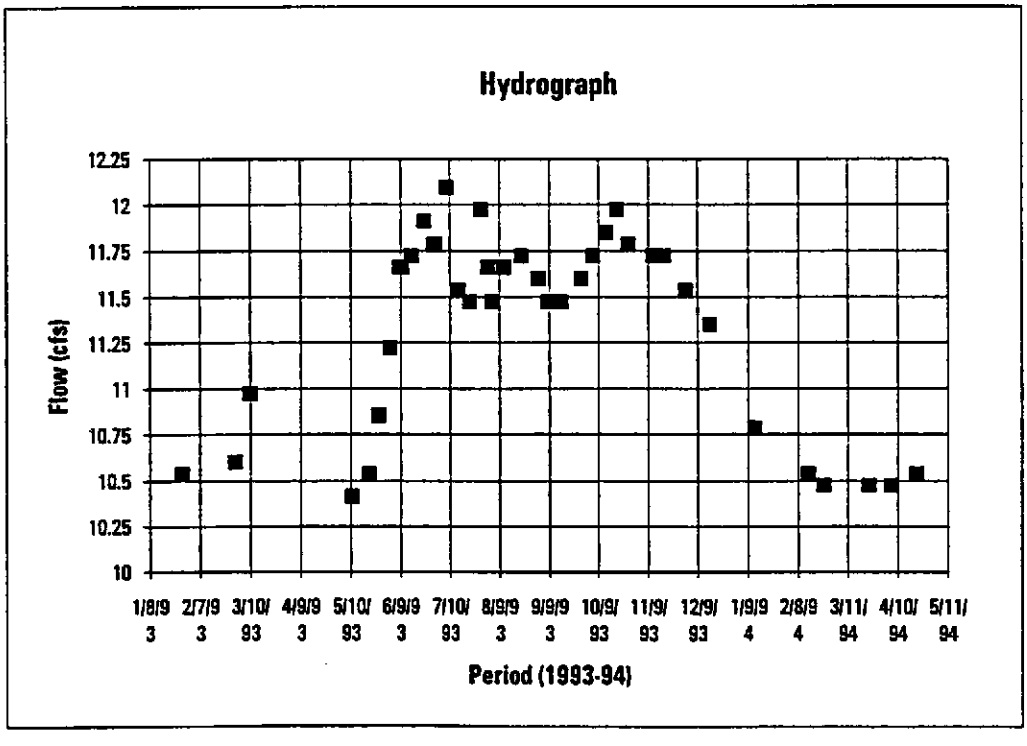
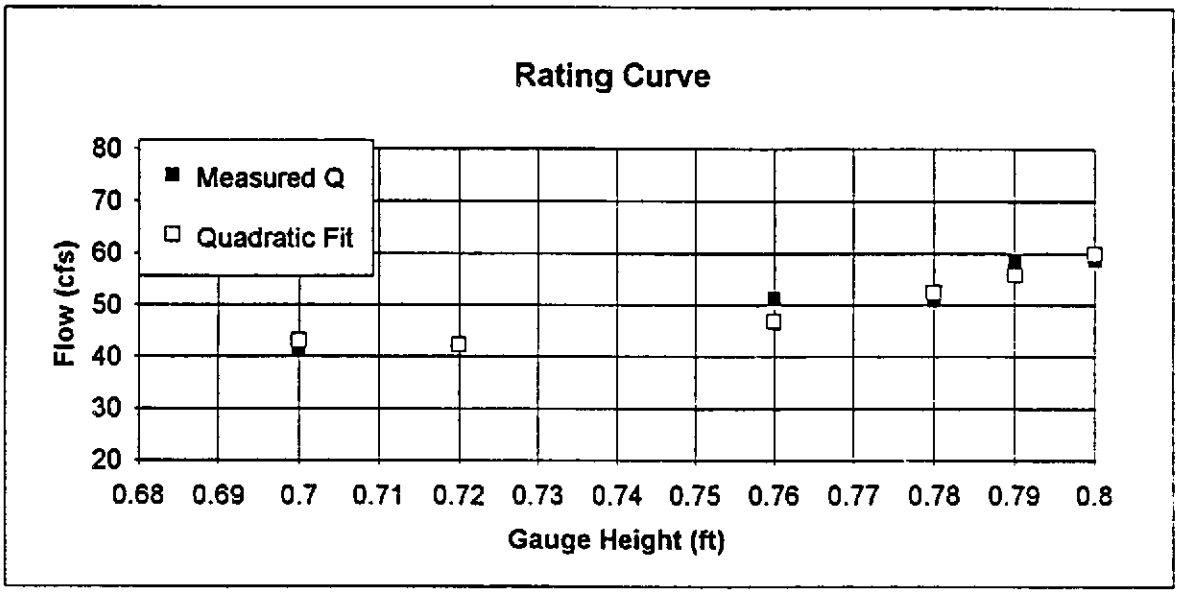


Figure 12. Rating Curve and Hydrograph for Grove Creek



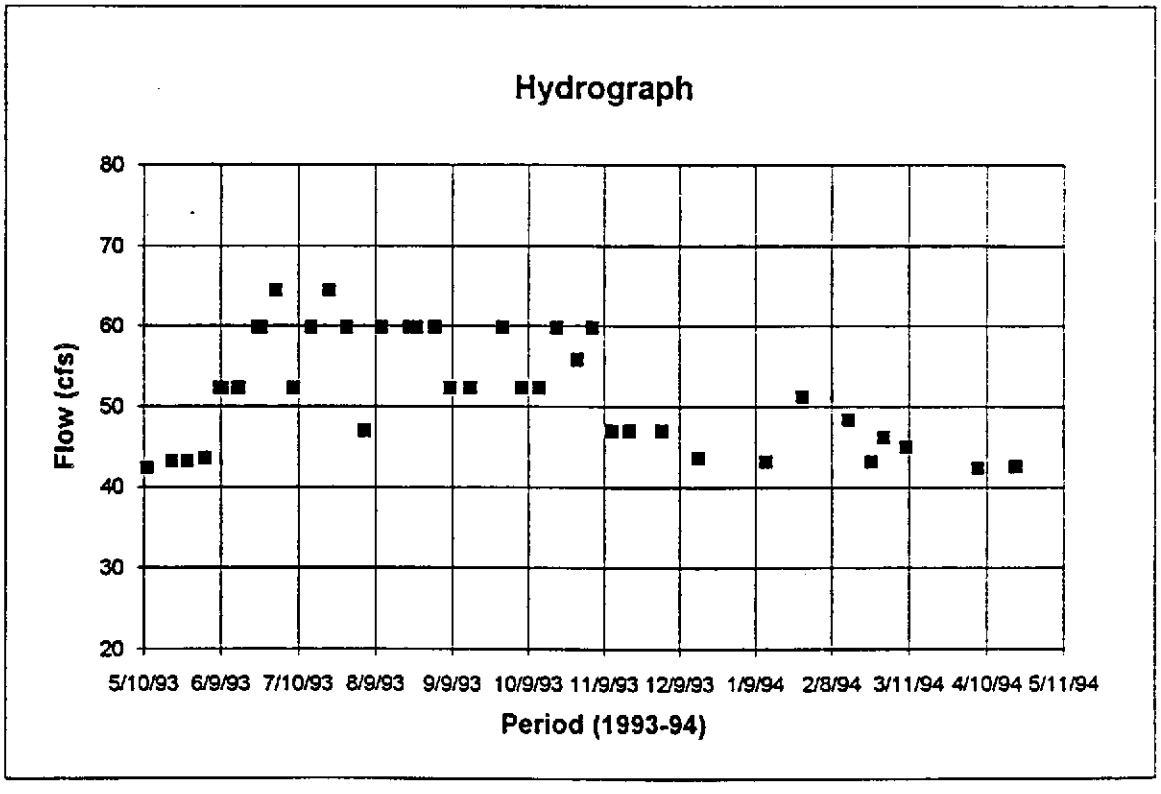
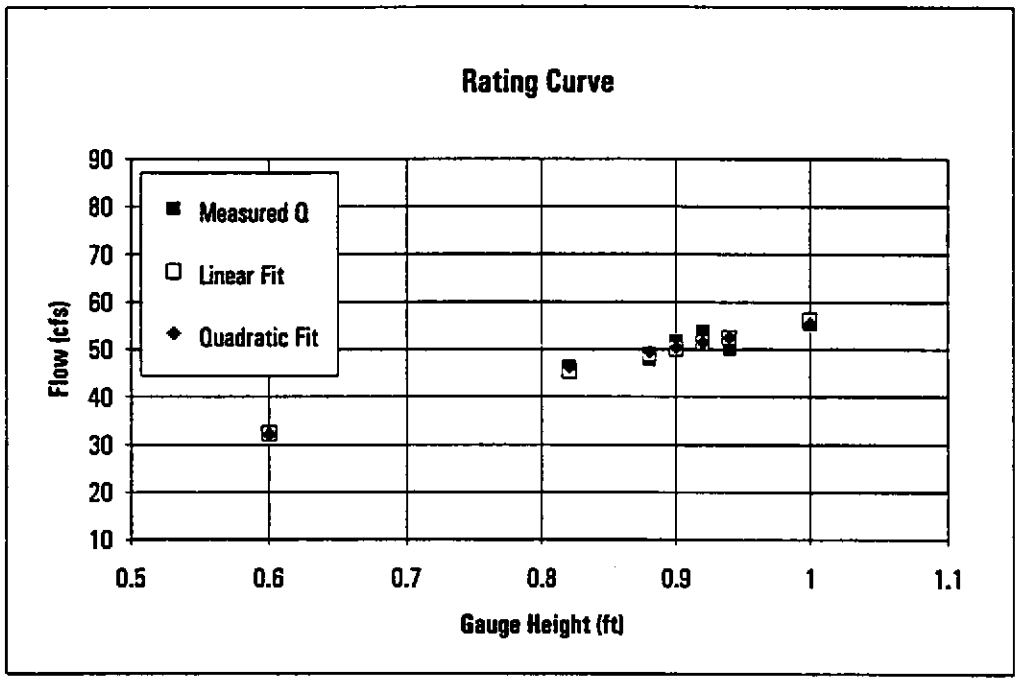


Figure 13. Rating Curve and Hydrograph for Loving Creek



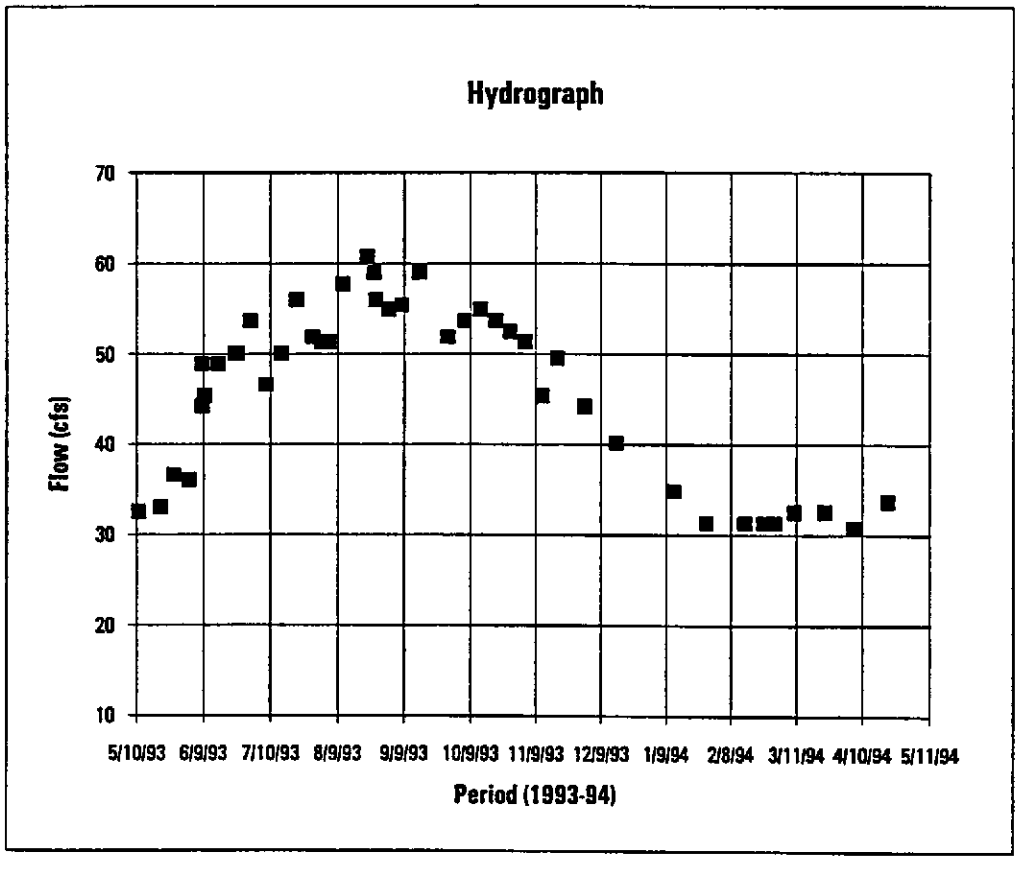
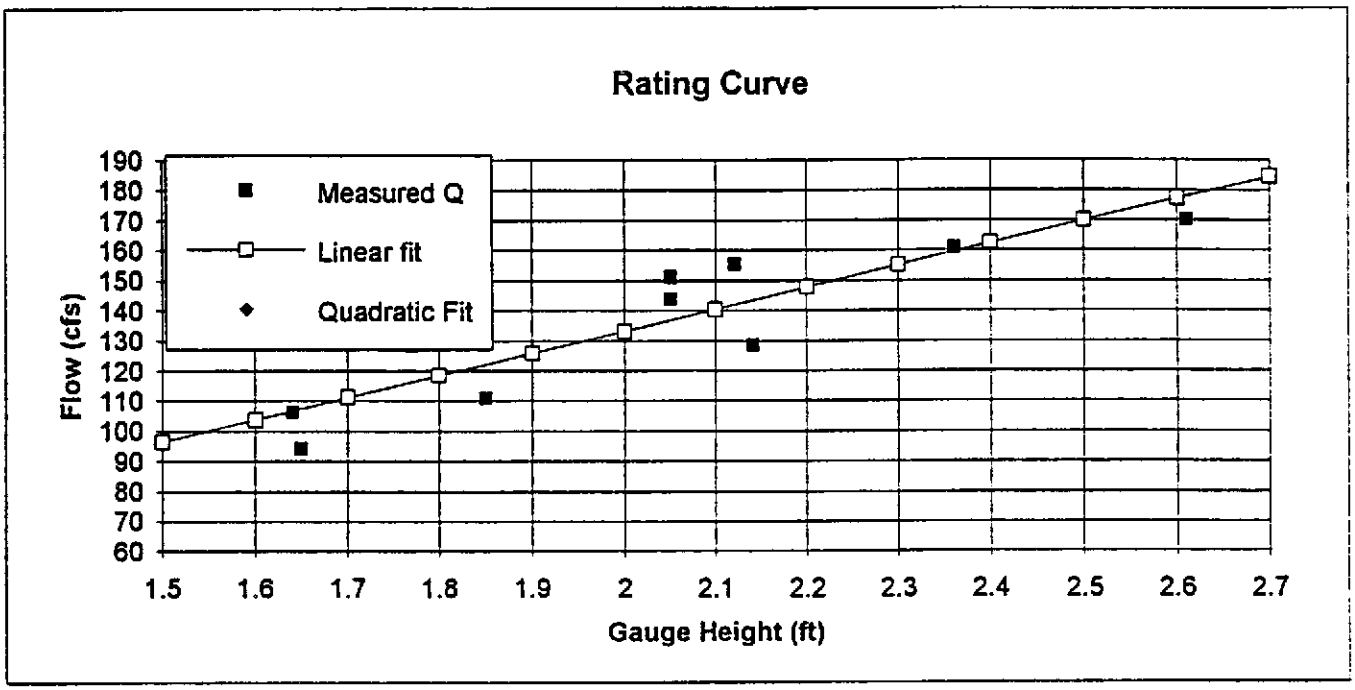


Figure 14. Rating Curve and Hydrograph for Silver Creek at Swanson Bridge



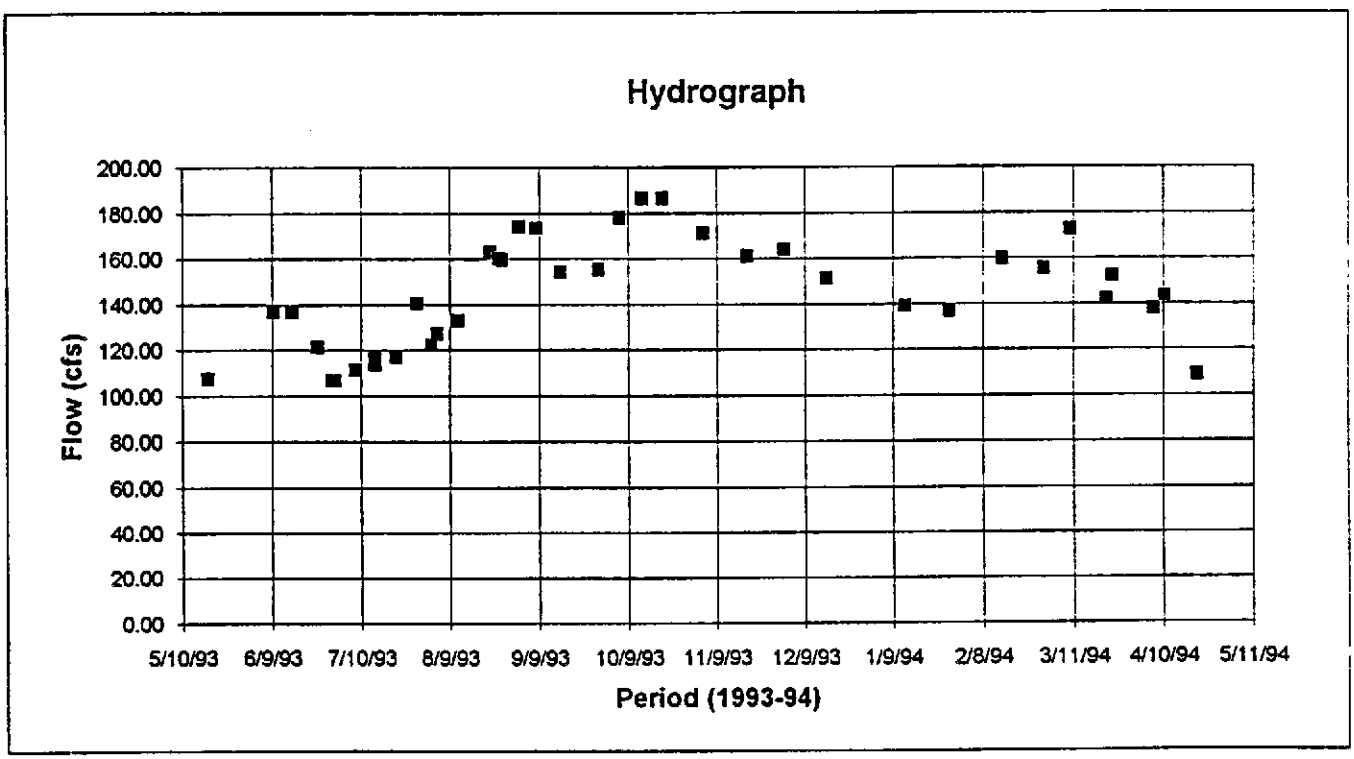
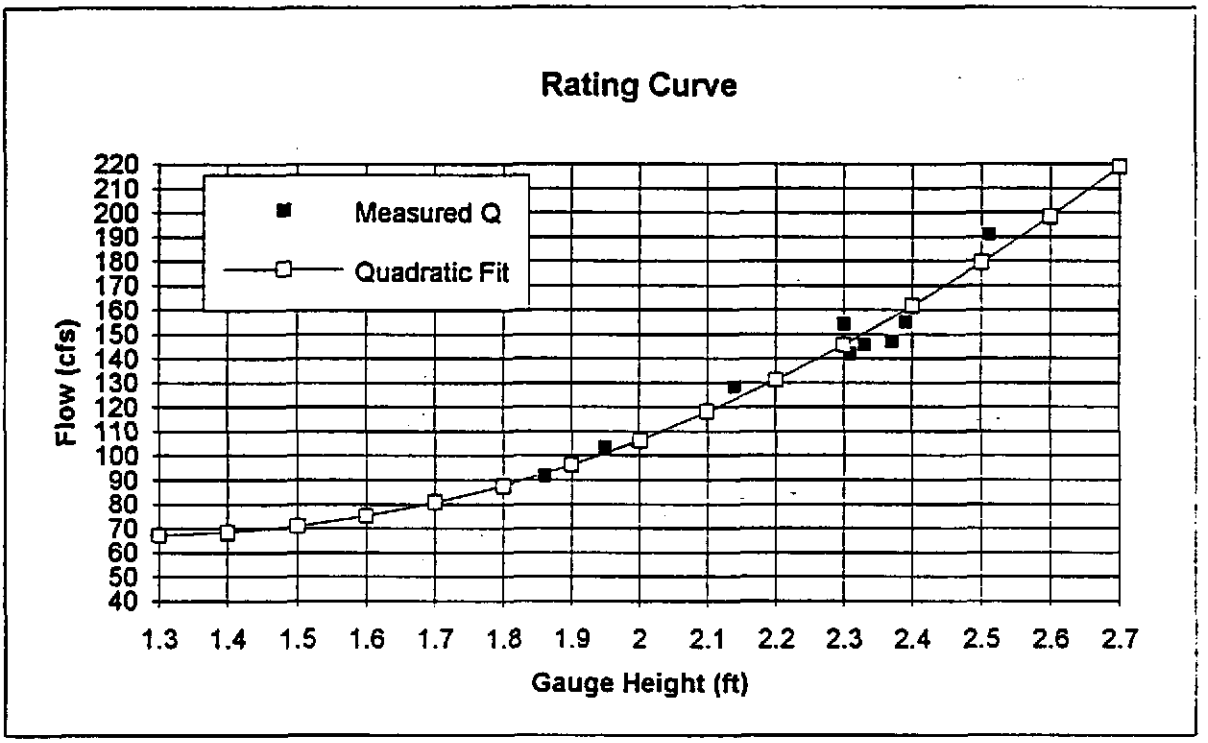
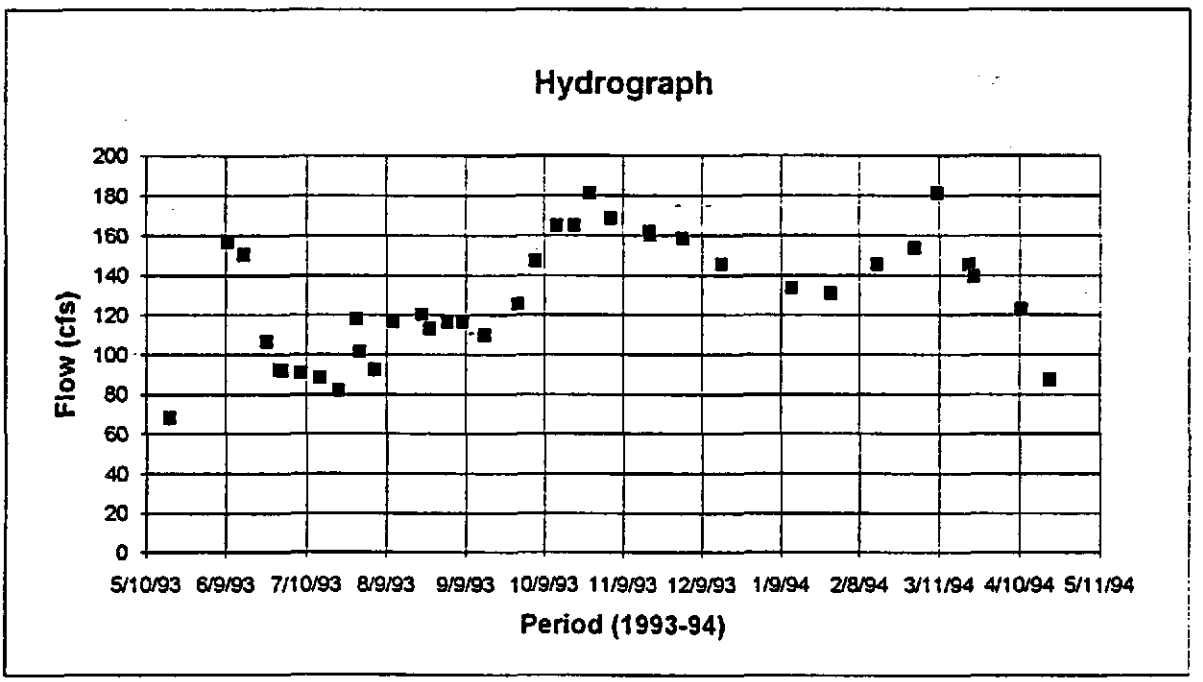


Figure 15. Rating Curve and Hydrograph for Silver Creek at Priest Road





Appendix D

Meteorological Data

Meterological Data at Picabo Agrimet Weather Station

EJ EJ WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

DAILY VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	0.15	0.25	0.29	0.30	0.00
2	---	---	---	---	---	---	---	0.21	0.04	0.11	0.32	0.00
3	---	---	---	---	---	---	---	0.06	0.08	0.21	0.33	0.00
4	---	---	---	---	---	---	---	---	0.08	0.20	0.19	0.00
5	---	---	---	---	---	---	---	0.07	0.08	0.27	0.29	0.00
6	---	---	---	---	---	---	---	0.11	0.04	0.28	0.30	0.00
7	---	---	---	---	---	---	---	0.18	0.12	0.28	0.11	0.00
8	---	---	---	---	---	---	---	0.13	0.20	0.28	0.28	0.00
9	---	---	---	---	---	---	---	0.19	0.23	0.31	0.24	0.00
10	---	---	---	---	---	---	---	0.27	0.12	0.32	0.30	0.00
11	---	---	---	---	---	---	---	0.32	0.16	0.31	0.20	0.00
12	---	---	---	---	---	---	---	0.37	0.21	0.29	0.16	0.00
13	---	---	---	---	---	---	---	0.31	0.26	0.27	0.25	0.00
14	---	---	---	---	---	---	---	0.16	0.29	0.25	0.18	0.00
15	---	---	---	---	---	---	---	0.25	0.23	0.26	0.20	0.00
16	---	---	---	---	---	---	---	0.23	0.17	0.25	0.17	0.00
17	---	---	---	---	---	---	---	0.25	0.28	0.23	0.23	0.00
18	---	---	---	---	---	---	---	0.28	0.31	0.27	0.25	0.00
19	---	---	---	---	---	---	---	0.30	0.34	0.28	0.28	0.00
20	---	---	---	---	---	---	---	0.29	0.35	0.25	0.19	0.00
21	---	---	---	---	---	---	0.18	0.24	0.19	0.20	0.19	0.00
22	---	---	---	---	---	---	0.08	0.25	0.24	0.09	0.24	0.00
23	---	---	---	---	---	---	0.15	0.26	0.22	0.06	0.26	0.00
24	---	---	---	---	---	---	0.16	0.27	0.26	0.25	0.23	0.00
25	---	---	---	---	---	---	0.08	0.29	0.29	0.26	0.19	0.00
26	---	---	---	---	---	---	0.17	0.29	0.36	0.23	0.19	0.00
27	---	---	---	---	---	---	0.13	0.29	0.34	0.27	0.23	0.00
28	---	---	---	---	---	---	0.17	0.23	0.27	0.33	0.24	0.00
29	---	---	---	---	---	---	0.07	0.27	0.20	0.34	0.20	0.00
30	---	---	---	---	---	---	0.12	0.24	0.25	0.31	0.21	0.00
31	---	---	---	---	---	---	---	0.23	---	0.31	0.23	---
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	1.31	6.99	6.46	7.86	7.18	5.00
MEAN	0.00	0.00	0.00	0.00	0.00	0.00	0.13	0.23	0.22	0.25	0.23	0.00
MAX	0.00	0.00	0.00	0.00	0.00	0.00	0.18	0.37	0.36	0.34	0.33	0.00
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.06	0.04	0.06	0.11	0.00

WTR YR 1993 TOTAL 34.83 MEAN 0.22 MAX 0.37 MIN 0.04

PICABO

ET ET WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
DAILY VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	0.16	0.27	0.27	0.28	0.00
2	---	---	---	---	---	---	---	0.20	0.10	0.19	0.27	0.00
3	---	---	---	---	---	---	---	0.10	0.12	0.25	0.29	0.00
4	---	---	---	---	---	---	---	---	0.10	0.21	0.20	0.00
5	---	---	---	---	---	---	---	0.11	0.10	0.27	0.26	0.00
6	---	---	---	---	---	---	---	0.12	0.06	0.27	0.29	0.00
7	---	---	---	---	---	---	---	0.19	0.14	0.30	0.14	0.00
8	---	---	---	---	---	---	---	0.17	0.19	0.25	0.26	0.00
9	---	---	---	---	---	---	---	0.19	0.20	0.30	0.26	0.00
10	---	---	---	---	---	---	---	0.26	0.14	0.32	0.27	0.00
11	---	---	---	---	---	---	---	0.27	0.20	0.29	0.20	0.00
12	---	---	---	---	---	---	---	0.30	0.25	0.33	0.20	0.00
13	---	---	---	---	---	---	---	0.28	0.26	0.27	0.24	0.00
14	---	---	---	---	---	---	---	0.26	0.26	0.27	0.23	0.00
15	---	---	---	---	---	---	---	0.27	0.23	0.27	0.22	0.00
16	---	---	---	---	---	---	---	0.25	0.18	0.25	0.18	0.00
17	---	---	---	---	---	---	---	0.24	0.25	0.25	0.21	0.00
18	---	---	---	---	---	---	---	0.27	0.27	0.26	0.22	0.00
19	---	---	---	---	---	---	---	0.26	0.27	0.28	0.26	0.00
20	---	---	---	---	---	---	---	0.27	0.31	0.25	0.25	0.00
21	---	---	---	---	---	---	0.16	0.27	0.25	0.22	0.22	0.00
22	---	---	---	---	---	---	0.09	0.28	0.28	0.13	0.23	0.00
23	---	---	---	---	---	---	0.17	0.25	0.29	0.08	0.25	0.00
24	---	---	---	---	---	---	0.18	0.25	0.28	0.22	0.24	0.00
25	---	---	---	---	---	---	0.10	0.30	0.25	0.24	0.21	0.00
26	---	---	---	---	---	---	0.19	0.26	0.28	0.22	0.21	0.00
27	---	---	---	---	---	---	0.15	0.29	0.30	0.24	0.24	0.00
28	---	---	---	---	---	---	0.18	0.27	0.30	0.31	0.24	0.00
29	---	---	---	---	---	---	0.13	0.28	0.28	0.29	0.20	0.00
30	---	---	---	---	---	---	0.14	0.27	0.28	0.28	0.23	0.00
31	---	---	---	---	---	---	---	0.29	---	0.30	0.24	---
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	1.49	7.18	6.69	7.88	7.24	5.00
MEAN	0.00	0.00	0.00	0.00	0.00	0.00	0.15	0.24	0.22	0.25	0.23	0.00
MAX	0.00	0.00	0.00	0.00	0.00	0.00	0.19	0.30	0.31	0.33	0.29	0.00
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.10	0.06	0.08	0.14	0.00

WTR YR 1993 TOTAL 35.77 MEAN 0.22 MAX 0.33 MIN 0.06

				PICABO								
MM	MM	WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993										
				MEAN VALUES								
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	65.10	42.61	26.58	30.24	12.99	5.15	41.59	47.21	56.15	60.89	66.29	63.00
2	63.29	41.16	29.43	10.12	10.60	13.56	39.84	53.63	47.76	56.15	68.80	59.00
3	48.75	32.46	19.93	-4.19	12.69	12.03	41.10	46.64	47.95	54.31	69.23	65.00
4	49.46	30.12	1.74	11.57	17.91	24.24	42.46	36.25	47.57	54.85	67.57	65.00
5	49.48	31.92	5.05	10.05	18.95	28.19	35.02	44.38	52.18	57.26	70.11	66.00
6	47.97	34.70	10.02	9.90	26.41	26.46	36.76	49.15	48.23	57.79	67.44	67.00
7	42.35	37.76	29.60	14.43	26.08	29.70	39.82	44.41	48.39	58.54	59.92	64.00
8	48.57	32.38	30.76	21.61	27.98	25.55	43.96	44.05	51.63	58.59	63.36	64.00
9	48.10	31.28	31.11	23.21	29.50	27.68	42.39	46.30	54.67	63.47	67.07	64.00
10	46.91	24.15	31.28	17.13	29.58	31.19	33.56	58.89	53.68	63.27	69.81	67.00
11	54.39	26.09	31.36	17.58	29.87	31.23	33.27	68.79	50.47	63.12	63.61	66.00
12	57.58	31.40	15.39	4.40	21.35	25.63	33.35	73.43	47.09	58.94	62.95	50.00
13	53.74	33.34	9.51	23.84	16.45	26.96	36.92	68.43	53.65	56.98	62.29	44.00
14	43.33	35.55	10.58	34.08	15.73	32.47	39.19	61.75	62.84	58.17	62.09	50.00
15	38.53	37.48	12.12	21.94	18.93	38.74	40.90	62.27	60.38	58.81	62.29	54.00
16	45.79	37.58	6.85	26.56	8.09	37.93	43.39	62.46	51.78	57.94	55.92	57.00
17	47.90	35.73	16.54	13.62	12.69	35.66	45.68	61.49	58.93	57.46	57.14	53.00
18	48.58	34.52	2.65	28.51	29.61	37.93	40.86	63.60	61.30	57.72	64.15	50.00
19	51.63	34.68	1.48	24.02	34.26	37.33	39.85	65.53	66.61	65.10	72.89	52.00
20	54.24	30.97	19.25	30.32	24.35	38.43	17.91	65.64	71.82	62.39	74.97	51.00
21	53.25	23.48	24.09	30.82	22.10	31.86	50.82	61.15	63.38	59.24	60.57	45.00
22	48.56	29.68	28.37	22.77	19.50	36.91	47.81	56.52	54.28	54.84	60.11	48.00
23	48.99	24.87	20.86	10.39	22.60	41.46	44.10	56.75	49.92	53.29	65.03	50.00
24	52.39	16.52	15.39	15.22	23.37	41.79	46.03	62.73	54.44	56.92	59.03	52.00
25	52.97	9.53	5.66	16.69	16.81	42.34	45.69	68.93	60.81	58.29	52.05	56.00
26	49.55	9.05	14.99	9.39	4.60	44.89	46.13	63.45	69.29	57.89	53.17	54.00
27	49.26	15.97	30.06	7.91	5.27	40.85	43.65	64.21	69.40	59.85	59.07	59.00
28	47.80	23.33	33.71	13.37	0.00	41.45	47.67	63.83	63.46	69.72	62.08	58.00
29	45.04	19.45	32.04	11.33	---	39.46	43.52	61.17	54.50	74.26	55.94	61.00
30	40.74	23.12	20.60	4.49	---	38.81	45.65	63.76	56.51	66.49	56.03	60.00
31	39.98	---	18.29	11.32	---	41.56	---	65.77	---	66.23	60.46	---
TOTAL	15.00	70.88	5.00	22.64	5.00	7.44	12.00	12.57	16.00	58.77	19.00	27.00
MEAN	49.49	29.03	18.88	16.86	19.22	32.50	40.96	58.47	56.30	59.96	62.95	57.00
MAX	65.10	42.61	33.71	34.08	34.26	44.89	50.82	73.43	71.82	74.26	74.97	67.00
MIN	38.53	9.05	1.48	-4.19	0.00	5.15	17.91	36.25	47.09	53.29	52.05	44.00
WTR YR 1993 TOTAL				15327.45 MEAN		41.99 MAX		74.97 MIN		-4.19		

		PICABO										
MN	MN	WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993										
		MIN VALUES										
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	50.20	39.35	16.24	26.93	5.15	-7.50	33.45	32.08	42.35	41.67	42.11	47.00
2	46.11	32.43	6.69 -	11.90	-0.66	0.91	32.90	44.04	43.31	46.04	46.18	39.00
3	43.75	23.39	1.91 -	17.25	-0.18	3.11	29.92	38.20	43.69	41.98	49.23	44.00
4	41.00	22.45	-7.97	2.71	8.85	13.80	34.63	36.94	33.90	40.99	54.82	52.00
5	39.27	7.48 -	11.74	-4.90	4.21	23.55	20.25	35.71	49.23	42.70	51.56	51.00
6	35.26	30.70	-6.47	1.69	22.37	21.74	28.03	40.42	43.63	36.31	45.55	46.00
7	26.93	30.78	22.92	-1.76	5.31	20.09	29.13	36.01	41.40	41.26	49.49	43.00
8	35.73	27.72	28.03	11.60	20.48	14.19	29.21	32.38	38.47	38.61	45.16	46.00
9	33.85	23.16	21.98	9.00	27.87	17.65	34.48	27.59	37.97	42.63	46.97	40.00
10	30.70	14.04	24.18	-0.26	27.56	25.83	25.59	38.94	45.30	45.41	51.56	46.00
11	35.42	16.32	20.95	2.64	23.63	26.14	22.92	45.12	40.42	40.82	48.68	48.00
12	41.24	27.17	1.06 -	11.43	6.72	19.46	26.38	48.75	31.18	43.38	46.68	32.00
13	40.29	28.11	-2.78	16.55	6.25	19.15	24.10	50.46	34.09	33.17	43.90	26.00
14	28.50	24.57	3.19	29.05	3.11	27.24	29.76	50.01	43.00	43.80	46.97	33.00
15	24.96	26.85	-6.79	7.04	12.78	34.48	30.31	48.38	47.08	43.80	51.22	34.00
16	30.23	27.48	-4.51	17.26	-7.65	33.93	29.68	49.27	37.64	43.97	43.11	42.00
17	33.30	31.57	-0.50	3.11	-4.12	33.38	32.75	45.05	44.04	44.15	38.40	43.00
18	34.16	32.75	-7.57	14.35	21.66	33.45	34.08	45.97	45.37	37.14	43.87	44.00
19	35.66	31.73	15.52	11.76	28.89	30.07	28.27	47.11	48.20	45.72	53.82	38.00
20	36.52	18.67	9.71	19.38	16.63	1.73 -	46.96	48.35	53.94	49.08	61.55	40.00
21	35.73	11.68	15.14	24.26	17.02	20.25	35.38	52.92	52.72	48.24	51.18	27.00
22	34.95	25.04	23.23	11.91	11.52	24.18	40.62	43.25	47.19	43.56	42.94	31.00
23	30.62	14.04	12.70	-5.53	12.15	29.60	35.55	38.51	37.31	48.24	46.93	36.00
24	34.87	-0.03	6.25	3.50	11.13	35.26	37.81	45.65	34.99	45.16	44.01	33.00
25	40.45	-0.11	-5.69	7.59	-4.43	35.89	34.36	49.97	37.61	42.52	37.07	41.00
26	32.75	-1.91	-2.31	-0.58	-7.34	37.31	37.14	44.29	49.08	41.53	31.88	33.00
27	36.91	0.20	22.92	-1.05	12.29	35.18	29.12	46.15	49.38	42.87	39.17	39.00
28	33.69	21.50	22.05	1.53	17.25	33.45	28.89	47.69	51.68	46.01	39.48	38.00
29	39.59	14.27	24.18	0.43	---	32.04	38.47	49.23	41.50	51.75	38.97	43.00
30	34.24	17.65	3.66	-7.50	---	28.66	35.98	45.69	37.27	47.73	37.47	37.00
31	31.41	---	-0.50	-6.16	---	28.34	---	50.09	---	44.74	40.75	---
TOTAL	11.00	39.05	2.00	53.97	2.00	62.56	8.00	54.22	12.00	44.98	14.00	3.00
MEAN	35.75	21.30	7.45	4.97	8.55	24.60	28.74	43.68	42.76	43.39	45.51	40.00
MAX	50.20	39.35	28.03	29.05	28.89	37.31	40.62	52.92	53.94	51.75	61.55	52.00
MIN	24.96	1.91 -	5.52 -	7.25 -	17.25	7.50 -	46.96	27.59	31.18	33.17	31.88	26.00
	WTR YR 1993 TOTAL		10593.06 MEAN		29.02 MAX		61.55 MIN		-46.96			

				PICABO								
MX	MX	WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993										
		MAX VALUES										
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	86.13	47.61	33.93	35.97	21.66	21.98	49.89	60.02	67.77	75.83	87.91	79.00
2	80.08	48.86	35.11	28.27	21.35	25.99	48.71	64.16	52.45	70.17	87.48	78.00
3	55.39	43.83	30.15	7.75	26.30	33.93	50.67	60.29	56.09	67.21	87.06	88.00
4	63.17	35.58	21.50	21.58	28.97	33.38	49.65	50.27	57.47	68.90	83.29	87.00
5	63.80	35.26	22.92	25.51	30.15	35.18	44.23	52.84	56.71	71.13	88.05	85.00
6	63.33	39.27	25.83	19.77	30.78	34.79	49.10	57.51	54.14	73.92	87.91	86.00
7	58.46	51.69	33.30	31.65	35.18	41.87	51.85	51.37	57.89	72.51	73.75	82.00
8	65.14	36.91	33.77	26.61	31.80	41.63	56.80	56.34	61.37	74.60	81.97	84.00
9	64.75	38.96	36.13	27.56	31.65	35.50	48.00	60.42	67.71	82.36	86.64	85.00
10	66.40	34.71	40.29	28.42	34.40	38.01	42.18	75.71	67.56	77.87	90.09	89.00
11	75.83	34.16	37.39	24.26	33.93	36.44	43.36	83.55	62.28	81.71	80.36	82.00
12	78.50	41.16	25.99	18.44	30.00	29.21	41.87	84.43	58.80	72.45	81.84	63.00
13	67.97	37.39	17.49	29.60	26.85	33.77	50.67	82.29	72.07	75.53	79.04	61.00
14	57.91	52.64	18.91	38.09	30.07	38.88	49.34	79.98	82.29	72.40	84.22	71.00
15	52.17	54.21	19.30	33.61	22.92	41.87	49.96	82.36	74.26	72.73	80.10	69.00
16	61.76	55.23	17.10	35.50	16.55	43.68	55.94	78.48	63.07	71.35	66.30	74.00
17	64.43	45.09	24.57	26.38	25.51	41.79	54.60	76.48	71.57	71.19	76.66	66.00
18	66.24	37.07	16.32	36.52	35.81	42.02	45.96	81.32	75.07	75.95	85.04	66.00
19	71.35	39.74	15.53	34.48	40.84	44.62	51.54	83.02	84.09	87.62	90.53	70.00
20	74.89	40.14	24.41	37.86	30.47	.48 1	17.42	81.00	89.87	74.95	86.29	65.00
21	72.21	32.20	33.53	37.86	25.75	43.83	63.73	71.03	80.48	72.62	75.30	64.00
22	63.96	36.60	33.45	36.91	26.30	52.09	57.01	67.01	60.51	64.40	76.84	68.00
23	65.92	32.51	28.19	18.36	28.19	56.65	53.19	70.70	59.10	59.27	85.11	69.00
24	74.81	26.22	28.50	21.19	32.12	51.54	55.15	77.14	70.06	68.90	73.75	70.00
25	70.09	27.40	15.61	25.51	26.69	51.30	56.30	82.36	79.72	75.18	67.97	75.00
26	68.83	28.03	26.22	23.94	21.58	55.86	53.98	77.44	88.13	74.32	72.23	75.00
27	67.97	29.76	37.07	23.00	21.98	47.61	54.62	78.85	85.38	78.17	79.54	81.00
28	63.72	27.01	38.57	26.46	21.74	51.30	61.32	78.54	75.77	90.83	81.00	79.00
29	48.71	23.71	35.97	17.42	---	50.04	55.07	71.57	67.16	92.04	69.90	82.00
30	48.24	28.27	30.31	18.67	---	50.20	57.09	80.61	72.01	83.35	74.60	80.00
31	48.55	---	27.48	27.40	---	54.76	---	81.90	---	86.71	82.43	---
TOTAL	20.00	41.22	8.00	44.55	7.00	5.20	16.00	38.99	20.00	36.17	25.00	86.00
MEAN	65.51	38.04	27.90	27.24	28.20	42.10	53.97	72.23	69.03	75.36	80.75	76.00
MAX	86.13	55.23	40.29	38.09	40.84	.65 1	17.42	84.43	89.87	92.04	90.53	89.00
MIN	48.24	23.71	15.53	7.75	16.55	21.98	41.87	50.27	52.45	59.27	66.30	61.00
	WTR YR 1993 TOTAL			20031.04 MEAN		54.88 MAX		117.42 MIN		7.75		

PICABO

PC PC WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
LAST VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.24	6.50	6.95	4.77	6.84	8.87	3.42	4.57	5.25	8.41	9.08	9.00
2	5.24	6.56	6.94	4.80	6.84	8.87	3.44	4.59	5.49	8.44	9.10	9.00
3	5.41	6.56	6.96	4.79	6.84	8.87	3.44	5.01	5.77	8.43	9.11	9.00
4	5.45	6.56	6.97	4.80	6.84	8.88	3.71	5.09	5.77	8.55	9.10	9.00
5	5.48	6.58	6.95	4.80	6.85	8.87	3.72	5.20	6.02	8.60	9.06	9.00
6	5.48	6.58	6.95	4.82	6.85	8.87	3.72	5.21	7.49	8.58	9.07	9.00
7	5.46	6.62	6.97	4.82	6.85	8.85	3.72	5.22	8.00	8.58	9.16	9.00
8	5.46	6.66	6.97	4.92	6.85	8.87	3.72	5.21	7.98	8.59	9.14	9.00
9	5.47	6.69	6.98	5.06	6.95	8.87	3.76	5.21	7.98	8.63	9.12	9.00
10	5.48	6.67	3.58	5.06	7.01	8.87	3.78	5.20	8.26	8.63	9.19	9.00
11	5.49	6.67	3.58	5.08	7.07	8.87	3.79	5.19	8.35	8.63	9.20	9.00
12	5.50	6.68	3.58	5.09	7.08	8.87	3.82	5.18	8.36	8.63	9.20	9.00
13	5.53	6.69	3.58	5.09	7.08	8.88	3.81	5.18	8.35	8.63	9.19	9.00
14	5.54	6.69	3.59	5.16	7.09	9.03	3.85	5.17	8.35	8.62	9.21	9.00
15	5.54	6.68	3.58	5.20	7.09	9.13	3.87	5.24	8.40	8.63	9.22	9.00
16	5.53	6.69	3.58	5.24	7.17	9.23	3.87	5.24	8.39	8.63	9.21	9.00
17	5.54	6.68	3.60	5.26	7.19	9.69	3.87	5.27	8.39	8.63	9.22	9.00
18	5.54	6.68	3.61	5.34	7.52	9.97	3.99	5.26	8.39	8.64	9.22	9.00
19	5.53	6.68	3.61	5.34	8.02	9.97	3.99	5.25	8.40	8.64	9.23	9.00
20	5.54	6.85	3.63	6.29	8.32	9.99	3.87	5.24	8.39	8.63	9.22	9.00
21	5.54	6.84	3.67	6.44	8.48	10.02	4.22	5.27	8.42	8.63	9.53	9.00
22	5.55	6.88	3.69	6.85	8.56	10.01	4.29	5.27	8.44	8.63	9.52	9.00
23	5.54	6.92	3.69	6.85	8.59	10.02	4.31	5.25	8.45	8.94	9.51	9.00
24	5.54	6.92	3.69	6.84	8.75	10.07	4.28	5.27	8.42	9.02	9.53	9.00
25	5.54	6.94	3.69	6.84	8.86	10.59	4.27	5.25	8.42	9.04	9.55	9.00
26	5.54	6.94	3.69	6.85	8.86	10.80	4.28	5.25	8.42	9.04	9.54	9.00
27	5.53	6.95	3.69	6.85	8.85	10.89	4.28	5.24	8.41	9.05	9.52	9.00
28	5.55	6.95	3.69	6.85	8.87	10.90	4.26	5.24	8.42	9.09	9.52	9.00
29	6.09	6.94	3.90	6.85	---	10.94	4.58	5.24	8.44	9.07	9.55	9.00
30	6.32	6.94	4.05	6.84	---	10.94	4.59	5.25	8.41	9.08	9.52	9.00
31	6.33	---	4.30	6.84	---	3.30	---	5.27	---	9.08	9.52	---
TOTAL	172.52	202.19	143.91	176.63	212.17	290.80	118.52	160.53	236.03	270.42	288.06	270.00
MEAN	5.57	6.74	4.64	5.70	7.58	9.38	3.95	5.18	7.87	8.72	9.29	9.00
MAX	6.33	6.95	6.98	6.85	8.87	10.94	4.59	5.27	8.45	9.09	9.55	9.00
MIN	5.24	6.50	3.58	4.77	6.84	3.30	3.42	4.57	5.25	8.41	9.06	9.00

WTR YR 1993 TOTAL 2561.43 MEAN 7.02 MAX 10.94 MIN 3.30

					PICABO								
PP	PP	WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993											
				DELTA	VALUES								
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1	0.01	0.17	0.01	0.47	0.01	0.00	0.12	0.00	0.00	0.01	0.00	0.00	
2	0.00	0.06	0.00	0.02	0.00	0.00	0.01	0.02	0.24	0.01	0.00	0.00	
3	0.16	0.01	0.02	0.00	0.00	0.00	0.01	0.41	0.28	0.00	0.00	0.00	
4	0.05	0.00	0.01	0.01	0.00	0.02	0.27	0.09	0.00	0.12	0.00	0.00	
5	0.03	0.01	0.00	0.00	0.01	0.00	0.01	0.10	0.26	0.05	0.00	0.00	
6	0.00	0.00	0.01	0.02	0.00	0.00	0.01	0.01	1.47	0.00	0.01	0.00	
7	0.00	0.05	0.01	0.00	0.00	0.00	0.00	0.00	0.51	0.00	0.09	0.00	
8	0.00	0.04	0.00	0.10	0.01	0.02	0.00	0.00	0.00	0.01	0.00	0.00	
9	0.01	0.02	0.01	0.14	0.09	0.00	0.04	0.00	0.00	0.04	0.00	0.00	
10	0.01	0.00	0.00	0.01	0.06	0.01	0.02	0.00	0.28	0.00	0.06	0.00	
11	0.01	0.00	0.00	0.01	0.06	0.00	0.01	0.00	0.09	0.01	0.02	0.00	
12	0.01	0.01	0.01	0.01	0.01	0.01	0.03	0.00	0.01	0.00	0.00	0.00	
13	0.03	0.01	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	
14	0.01	0.00	0.01	0.07	0.01	0.15	0.03	0.00	0.00	0.00	0.02	0.00	
15	0.00	0.00	0.00	0.04	0.01	0.10	0.02	0.08	0.04	0.00	0.01	0.00	
16	0.00	0.01	0.00	0.05	0.08	0.10	0.00	0.00	0.00	0.00	0.00	0.00	
17	0.01	0.00	0.02	0.02	0.02	0.46	0.01	0.03	0.00	0.00	0.01	0.00	
18	0.00	0.00	0.01	0.08	0.33	0.28	0.12	0.00	0.00	0.00	0.00	0.00	
19	0.00	0.00	0.00	0.01	0.49	0.00	0.01	0.00	0.00	0.00	0.01	0.00	
20	0.01	0.17	0.02	0.95	0.30	0.02	0.00	0.00	0.00	0.00	0.00	0.00	
21	0.00	0.00	0.04	0.15	0.16	0.03	0.35	0.02	0.03	0.00	0.31	0.00	
22	0.01	0.05	0.02	0.41	0.09	0.00	0.07	0.01	0.02	0.00	0.00	0.00	
23	0.00	0.04	0.00	0.00	0.03	0.01	0.02	0.00	0.00	0.31	0.00	0.00	
24	0.00	0.00	0.00	0.00	0.16	0.05	0.00	0.00	0.00	0.08	0.03	0.00	
25	0.00	0.01	0.00	0.00	0.11	0.52	0.00	0.00	0.00	0.02	0.00	0.00	
26	0.00	0.00	0.00	0.01	0.00	0.21	0.01	0.00	0.00	0.00	0.00	0.00	
27	0.00	0.01	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.01	0.00	0.00	
28	0.01	0.00	0.00	0.00	0.02	0.01	0.00	0.00	0.00	0.04	0.00	0.00	
29	0.54	0.00	0.22	0.00	---	0.05	0.33	0.00	0.00	0.00	0.00	0.00	
30	0.23	0.00	0.15	0.00	---	0.00	0.01	0.01	0.00	0.00	0.00	0.00	
31	0.01	---	0.26	0.00	---	0.00	---	0.02	---	0.00	0.00	---	
TOTAL	1.15	0.67	0.83	2.58	2.07	2.15	1.51	0.80	3.23	0.71	0.57	0.00	
MEAN	0.04	0.02	0.03	0.08	0.07	0.07	0.05	0.03	0.11	0.02	0.02	0.00	
MAX	0.54	0.17	0.26	0.95	0.49	0.52	0.35	0.41	1.47	0.31	0.31	0.00	
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
WTR YR 1993 TOTAL				5.41 MEAN		0.01 MAX		1.47 MIN		-7.63			
Note: Values in the shaded cells are corrected values													

		PICABO										
SP	SP	WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993										
		LAST VALUES										
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	1.78	1.49	0.02	-1.74	0.00
2	---	---	---	---	---	---	---	1.81	1.48	-0.06	0.45	0.00
3	---	---	---	---	---	---	---	1.81	1.44	-0.05	0.26	0.00
4	---	---	---	---	---	---	---	1.73	1.47	-0.09	0.33	0.00
5	---	---	---	---	---	---	---	1.73	1.45	-0.06	0.27	0.00
6	---	---	---	---	---	---	---	1.71	1.43	-0.05	0.24	0.00
7	---	---	---	---	---	---	---	1.66	1.40	-0.04	0.15	0.00
8	---	---	---	---	---	---	---	1.70	1.44	-0.05	0.11	0.00
9	---	---	---	---	---	---	---	1.73	1.50	-0.03	0.24	0.00
10	---	---	---	---	---	---	---	1.88	1.48	-0.06	0.33	0.00
11	---	---	---	---	---	---	---	1.93	1.38	-0.05	0.11	0.00
12	---	---	---	---	---	---	---	1.94	1.50	-0.14	0.22	0.00
13	---	---	---	---	---	---	---	1.88	1.62	-0.14	0.13	0.00
14	---	---	---	---	---	---	---	1.88	1.76	-0.17	0.26	0.00
15	---	---	---	---	---	---	---	1.84	1.62	-0.13	0.16	0.00
16	---	---	---	---	---	---	---	1.81	1.56	-0.19	-0.11	0.00
17	---	---	---	---	---	---	---	1.83	1.71	-0.19	0.04	0.00
18	---	---	---	---	---	---	---	1.83	1.70	-0.14	0.39	0.00
19	---	---	---	---	---	---	---	1.82	1.75	-0.04	0.63	0.00
20	---	---	---	---	---	---	---	1.82	1.92	-0.09	0.48	0.00
21	---	---	---	---	---	---	1.76	1.78	1.66	-0.16	0.10	0.00
22	---	---	---	---	---	---	1.78	1.76	-0.20	-0.09	0.10	0.00
23	---	---	---	---	---	---	1.83	1.76	-0.27	-0.16	0.24	0.00
24	---	---	---	---	---	---	1.83	1.80	-0.19	-0.22	0.02	0.00
25	---	---	---	---	---	---	1.82	1.82	0.07	-0.14	-0.09	0.00
26	---	---	---	---	---	---	1.80	1.77	0.23	0.10	-0.08	0.00
27	---	---	---	---	---	---	1.78	1.77	0.17	0.08	0.08	0.00
28	---	---	---	---	---	---	1.80	1.64	0.01	0.77	0.32	0.00
29	---	---	---	---	---	---	1.82	1.55	-0.06	0.37	0.22	0.00
30	---	---	---	---	---	---	1.77	0.85	-0.03	0.22	-0.04	0.00
31	---	---	---	---	---	---	---	1.54	---	0.26	0.22	---
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	17.99	54.16	32.49	-0.72	4.04	3.00
MEAN	0.00	0.00	0.00	0.00	0.00	0.00	1.80	1.75	1.08	-0.02	0.13	0.00
MAX	0.00	0.00	0.00	0.00	0.00	0.00	1.83	1.94	1.92	0.77	0.63	0.00
MIN	0.00	0.00	0.00	0.00	0.00	0.00	1.76	0.85	-0.27	-0.22	-1.74	0.00
WTR YR 1993 TOTAL		111.88	MEAN	0.69	MAX	1.94	MIN	-1.74				

				PICABO								
SR	SR	WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993										
		SRAD		VALUES								
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	-5.00	.89 6	.08 6	.02 6	.11 5	17.00
2	---	---	---	---	---	---	-5.00	.48 1	.94 2	.54 6	.81 5	12.00
3	---	---	---	---	---	---	-2.00	.53 2	.62 5	.36 6	.98 5	18.00
4	---	---	---	---	---	---	---	-2.00	.92 5	.45 3	.37 3	63.00
5	---	---	---	---	---	---	-2.00	.95 2	.83 6	.16 5	.27 4	92.00
6	---	---	---	---	---	---	-3.00	.00 1	.00 7	.49 6	.84 5	2.00
7	---	---	---	---	---	---	-6.00	.63 3	.32 6	.87 2	.91 5	0.00
8	---	---	---	---	---	---	-4.00	.47 5	.06 6	.28 6	.56 4	60.00
9	---	---	---	---	---	---	-6.00	.67 6	.43 6	.07 4	.34 4	78.00
10	---	---	---	---	---	---	-6.00	.83 3	.84 7	.61 5	.12 4	85.00
11	---	---	---	---	---	---	-6.00	.44 4	.13 6	.97 4	.01 4	53.00
12	---	---	---	---	---	---	-6.00	.77 7	.04 7	.92 3	.37 3	97.00
13	---	---	---	---	---	---	-6.00	.61 7	.26 6	.80 5	.70 4	63.00
14	---	---	---	---	---	---	-3.00	.89 6	.96 6	.25 4	.13 4	15.00
15	---	---	---	---	---	---	-5.00	.23 5	.20 6	.50 4	.43 4	10.00
16	---	---	---	---	---	---	-5.00	.19 4	.05 6	.17 4	.47 3	87.00
17	---	---	---	---	---	---	-5.00	.58 6	.32 5	.72 5	.47 2	11.00
18	---	---	---	---	---	---	-6.00	.00 7	.44 6	.16 5	.00 2	58.00
19	---	---	---	---	---	---	-6.00	.86 7	.84 5	.90 5	.14 3	52.00
20	---	---	---	---	---	---	-6.00	.31 6	.30 5	.13 3	.41 2	36.00
21	---	---	---	---	---	-5.00	.63 5	.79 4	.80 4	.84 4	.39 4	33.00
22	---	---	---	---	---	-2.00	.39 6	.45 6	.18 2	.76 5	.97 4	56.00
23	---	---	---	---	---	-5.00	.26 6	.95 6	.36 1	.78 5	.58 3	92.00
24	---	---	---	---	---	-5.00	.44 6	.06 7	.14 6	.66 5	.28 4	38.00
25	---	---	---	---	---	-2.00	.60 5	.78 6	.18 6	.64 5	.47 4	1.00
26	---	---	---	---	---	-6.00	.78 6	.71 7	.36 5	.14 5	.32 4	28.00
27	---	---	---	---	---	-5.00	.99 6	.47 6	.82 6	.27 5	.67 4	11.00
28	---	---	---	---	---	-5.00	.23 4	.51 6	.66 6	.98 5	.16 3	80.00
29	---	---	---	---	---	-2.00	.09 6	.03 5	.86 6	.96 5	.21 4	8.00
30	---	---	---	---	---	-4.00	.40 5	.05 6	.66 6	.63 5	.42 3	36.00
31	---	---	---	---	---	---	-4.00	88.66	-6.00	.01 5	39.04	---
TOTAL	0.00	0.00	0.00	0.00	0.00	.00 45	81 166	79 163	60 186	04 160	95 125	6.00
MEAN	0.00	0.00	0.00	0.00	0.00	.00 4	.68 5	.69 5	.65 6	.49 5	.84 4	16.00
MAX	0.00	0.00	0.00	0.00	0.00	.00 6	.78 6	.77 7	.26 7	.92 6	.98 5	18.00
MIN	0.00	0.00	0.00	0.00	0.00	.00 2	.39 2	.53 1	.00 1	.78 2	.91 2	11.00
WTR YR 1993 TOTAL 84824.05 MEAN 523.61 MAX 716.26 MIN 139.00												

PICABO

SR2 SR2 WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

SRAD VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	-2.00	26.00
2	---	---	---	---	---	---	---	---	---	---	---	48.00
3	---	---	---	---	---	---	---	---	---	---	---	35.00
4	---	---	---	---	---	---	---	---	---	---	---	88.00
5	---	---	---	---	---	---	---	---	---	---	---	46.00
6	---	---	---	---	---	---	---	---	---	---	48.16	53.00
7	---	---	---	---	---	---	---	---	---	-1.00	31.01	51.00
8	---	---	---	---	---	---	---	---	---	---	71.42	52.00
9	---	---	---	---	---	---	---	---	---	-1.00	89.37	56.00
10	---	---	---	---	---	---	---	---	---	---	71.01	50.00
11	---	---	---	---	---	---	---	---	---	-1.00	37.13	91.00
12	---	---	---	---	---	---	---	---	---	-1.00	.58 1	2.00
13	---	---	---	---	---	---	---	---	---	---	98.77	76.00
14	---	---	---	---	---	---	---	---	---	-1.00	.89 1	39.00
15	---	---	---	---	---	---	---	---	---	-2.00	.76 1	26.00
16	---	---	---	---	---	---	---	---	---	-1.00	.64 1	73.00
17	---	---	---	---	---	---	---	---	---	---	.14 1	36.00
18	---	---	---	---	---	---	---	---	---	-1.00	.74 1	71.00
19	---	---	---	---	---	---	---	---	---	---	.53 1	57.00
20	---	---	---	---	---	---	---	---	---	---	.82 1	98.00
21	---	---	---	---	---	---	---	---	---	-1.00	.52 1	44.00
22	---	---	---	---	---	---	---	---	---	---	76.73	73.00
23	---	---	---	---	---	---	---	---	---	---	.40 1	15.00
24	---	---	---	---	---	---	---	---	---	---	77.54	60.00
25	---	---	---	---	---	---	---	---	---	---	97.95	72.00
26	---	---	---	---	---	---	---	---	---	-1.00	3.67	53.00
27	---	---	---	---	---	---	---	---	---	-1.00	6.52	56.00
28	---	---	---	---	---	---	---	---	---	---	72.24	88.00
29	---	---	---	---	---	---	---	---	---	-1.00	24.07	40.00
30	---	---	---	---	---	---	---	---	---	-1.00	.54 1	24.00
31	---	---	---	---	---	---	---	---	---	-1.00	42.03	---
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	.00 27	.18 29	12.00
MEAN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	.00 1	6.93	97.00
MAX	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	.00 2	.76 2	26.00
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.82	35.00

WTR YR 1993 TOTAL 5693.00 MEAN 101.66 MAX 226.10 MIN 0.82

PICABO

TA TA WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	50.37	53.66	42.47	46.01	31.00
2	---	---	---	---	---	---	---	48.99	70.67	52.43	43.95	45.00
3	---	---	---	---	---	---	---	67.12	81.91	57.48	43.08	38.00
4	---	---	---	---	---	---	---	49.51	77.83	62.98	51.35	42.00
5	---	---	---	---	---	---	---	62.91	75.43	52.63	49.56	39.00
6	---	---	---	---	---	---	---	69.32	86.22	42.86	46.18	36.00
7	---	---	---	---	---	---	---	53.61	78.88	37.51	68.75	39.00
8	---	---	---	---	---	---	---	50.66	65.74	47.77	55.60	31.00
9	---	---	---	---	---	---	---	46.80	62.47	40.38	40.61	35.00
10	---	---	---	---	---	---	---	36.09	74.90	32.49	42.80	31.00
11	---	---	---	---	---	---	---	25.89	67.55	37.02	63.59	27.00
12	---	---	---	---	---	---	---	15.45	52.47	35.82	56.00	42.00
13	---	---	---	---	---	---	---	30.72	45.15	46.14	55.91	56.00
14	---	---	---	---	---	---	---	39.66	45.32	41.00	54.66	40.00
15	---	---	---	---	---	---	---	49.73	56.70	40.91	55.59	36.00
16	---	---	---	---	---	---	---	45.48	68.69	43.53	62.31	38.00
17	---	---	---	---	---	---	---	44.86	54.26	42.61	54.72	61.00
18	---	---	---	---	---	---	---	45.66	50.19	40.22	47.11	74.00
19	---	---	---	---	---	---	---	46.82	50.73	39.89	34.05	62.00
20	---	---	---	---	---	---	---	45.99	41.09	45.59	31.86	56.00
21	---	---	---	---	---	---	33.41	42.70	60.03	48.10	63.75	36.00
22	---	---	---	---	---	---	57.77	44.92	53.76	58.82	58.76	31.00
23	---	---	---	---	---	---	49.36	43.54	38.32	86.08	51.27	29.00
24	---	---	---	---	---	---	54.03	39.33	46.45	68.60	45.96	29.00
25	---	---	---	---	---	---	52.84	29.19	52.93	56.31	42.89	31.00
26	---	---	---	---	---	---	52.03	44.27	46.44	62.12	40.10	33.00
27	---	---	---	---	---	---	44.03	32.82	43.74	58.32	36.08	29.00
28	---	---	---	---	---	---	40.24	32.86	48.58	43.63	33.35	30.00
29	---	---	---	---	---	---	57.83	38.06	39.30	36.59	43.06	28.00
30	---	---	---	---	---	---	57.81	34.16	39.12	42.02	39.89	27.00
31	---	---	---	---	---	---	---	38.33	---	39.09	30.40	---
TOTAL	0.00	0.00	0.00	0.00	0.00	.00 4	.35 13	.82 17	.53 14	.41 14	.20 11	74.00
MEAN	0.00	0.00	0.00	0.00	0.00	0.00	49.94	43.41	57.62	47.79	48.04	39.00
MAX	0.00	0.00	0.00	0.00	0.00	0.00	57.83	69.32	86.22	86.08	68.75	74.00
MIN	0.00	0.00	0.00	0.00	0.00	0.00	33.41	15.45	38.32	32.49	30.40	27.00

WTR YR 1993 TOTAL 7718.40 MEAN 47.35 MAX 86.22 MIN 15.45

PICABO

TG TG WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

DAILY VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.01	8.88	12.91	18.00	14.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.08	1.22	10.08	18.00	14.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	3.04	8.60	18.00	18.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.73	9.45	19.05	19.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.42	3.36	10.57	18.78	18.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.76	2.07	11.96	18.00	18.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.69	3.95	11.25	11.87	16.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.17	5.68	12.30	15.98	17.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.21	8.86	16.18	18.00	17.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.86	8.78	13.93	18.78	18.00
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16.78	6.14	15.85	15.18	16.00
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.21	4.40	11.23	15.92	6.00
13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16.38	11.03	12.77	14.52	5.00
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.99	16.15	11.20	17.11	10.00
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16.18	12.13	11.37	15.66	9.00
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.24	6.54	10.68	8.15	12.00
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.24	10.79	10.59	13.33	8.00
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.66	12.53	12.97	17.52	8.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16.51	17.04	18.00	19.91	10.00
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.50	19.97	12.48	23.77	7.00
21	0.00	0.00	0.00	0.00	0.00	0.00	6.87	11.97	16.60	11.31	13.24	7.00
22	0.00	0.00	0.00	0.00	0.00	0.00	3.50	8.50	5.26	7.20	13.42	9.00
23	0.00	0.00	0.00	0.00	0.00	0.00	1.60	10.35	4.55	4.64	17.55	9.00
24	0.00	0.00	0.00	0.00	0.00	0.00	2.57	13.57	10.03	9.45	11.87	10.00
25	0.00	0.00	0.00	0.00	0.00	0.00	3.15	16.18	14.86	12.59	8.99	12.00
26	0.00	0.00	0.00	0.00	0.00	0.00	1.99	13.72	18.00	12.16	11.12	12.00
27	0.00	0.00	0.00	0.00	0.00	0.00	2.31	14.43	17.69	14.09	14.77	15.00
28	0.00	0.00	0.00	0.00	0.00	0.00	5.66	14.27	13.72	18.00	15.50	14.00
29	0.00	0.00	0.00	0.00	---	0.00	2.53	10.79	8.58	18.88	9.95	16.00
30	0.00	0.00	0.00	0.00	---	0.00	3.54	15.31	11.01	16.68	12.30	15.00
31	0.00	---	0.00	0.00	---	0.00	---	15.99	---	18.00	16.21	---
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	.72 3	.11 2	.59 3	.37 4	.45 3	91.00
MEAN	0.00	0.00	0.00	0.00	0.00	0.00	1.12	11.00	9.55	12.50	15.50	13.00
MAX	0.00	0.00	0.00	0.00	0.00	0.00	6.87	17.21	19.97	18.88	23.77	19.00
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.22	4.64	8.15	5.00

WTR YR 1993 TOTAL 1920.41 MEAN 5.26 MAX 23.77 MIN 0.00

PICABO

UA UA WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

DAILY VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	3.86	5.74	3.31	2.55	4.00
2	---	---	---	---	---	---	---	6.05	3.09	3.86	2.44	2.00
3	---	---	---	---	---	---	---	3.87	4.53	6.06	3.70	3.00
4	---	---	---	---	---	---	---	5.65	2.62	3.23	2.47	3.00
5	---	---	---	---	---	---	---	4.41	6.60	4.41	3.32	3.00
6	---	---	---	---	---	---	---	6.83	4.50	3.36	3.40	3.00
7	---	---	---	---	---	---	---	9.67	5.23	4.82	2.03	3.00
8	---	---	---	---	---	---	---	4.24	5.48	2.38	3.17	3.00
9	---	---	---	---	---	---	---	3.01	3.29	3.43	3.67	2.00
10	---	---	---	---	---	---	---	6.03	3.01	4.74	3.21	3.00
11	---	---	---	---	---	---	---	6.44	5.47	2.81	2.93	5.00
12	---	---	---	---	---	---	---	6.60	6.03	5.49	2.72	5.00
13	---	---	---	---	---	---	---	4.10	2.67	2.46	3.30	2.00
14	---	---	---	---	---	---	---	4.73	3.03	3.81	3.67	2.00
15	---	---	---	---	---	---	---	3.62	4.69	4.23	3.66	4.00
16	---	---	---	---	---	---	---	3.71	2.33	3.06	3.89	2.00
17	---	---	---	---	---	---	---	3.61	2.98	3.87	2.12	2.00
18	---	---	---	---	---	---	---	4.20	3.83	2.36	2.74	2.00
19	---	---	---	---	---	---	---	3.50	2.41	2.80	4.65	2.00
20	---	---	---	---	---	---	---	4.34	3.42	3.80	7.93	2.00
21	---	---	---	---	---	---	4.88	5.72	4.15	2.99	3.87	2.00
22	---	---	---	---	---	---	5.24	6.53	5.90	2.12	3.02	2.00
23	---	---	---	---	---	---	8.35	3.48	7.56	1.96	3.55	3.00
24	---	---	---	---	---	---	8.35	3.78	4.69	3.64	4.41	3.00
25	---	---	---	---	---	---	2.10	6.54	2.36	3.29	2.68	3.00
26	---	---	---	---	---	---	7.40	3.06	2.81	3.38	2.95	2.00
27	---	---	---	---	---	---	3.85	4.02	4.00	2.52	3.79	3.00
28	---	---	---	---	---	---	4.00	4.28	5.02	4.33	4.31	2.00
29	---	---	---	---	---	---	5.54	5.05	4.77	3.80	3.40	2.00
30	---	---	---	---	---	---	3.63	3.79	3.63	3.20	3.49	4.00
31	---	---	---	---	---	---	---	5.13	---	2.96	3.43	---
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	.34 1	.85 1	.84 1	.48 1	6.47	99.00
MEAN	0.00	0.00	0.00	0.00	0.00	0.00	5.33	4.83	4.19	3.50	3.43	3.00
MAX	0.00	0.00	0.00	0.00	0.00	0.00	8.35	9.67	7.56	6.06	7.93	5.00
MIN	0.00	0.00	0.00	0.00	0.00	0.00	2.10	3.01	2.33	1.96	2.03	2.00

WTR YR 1993 TOTAL 643.30 MEAN 3.95 MAX 9.67 MIN 1.96

PICABO

UD UD WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

WDIR VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	-2.00	.89 2	.86 2	.22 1	.56 2	38.00
2	---	---	---	---	---	---	-2.00	.00 2	.79 2	.64 1	.05 2	1.00
3	---	---	---	---	---	---	-2.00	.21 2	.08 2	59.00	.64 2	19.00
4	---	---	---	---	---	---	-2.00	21.99	.54 2	.38 1	.60 2	22.00
5	---	---	---	---	---	---	-2.00	5.18	.82 2	.08 2	.95 2	6.00
6	---	---	---	---	---	---	-2.00	45.83	.10 2	.28 2	.58 2	2.00
7	---	---	---	---	---	---	-2.00	.99 2	.02 2	.10 2	.09 1	92.00
8	---	---	---	---	---	---	-2.00	.59 1	.66 1	.67 2	.09 2	10.00
9	---	---	---	---	---	---	-1.00	.80 1	.33 2	.84 1	.01 1	11.00
10	---	---	---	---	---	---	---	68.26	.51 2	.68 2	.14 2	21.00
11	---	---	---	---	---	---	---	.84 2	.53 2	.55 1	.68 2	51.00
12	---	---	---	---	---	---	---	.91 2	.46 2	.22 2	.18 2	55.00
13	---	---	---	---	---	---	-1.00	.16 1	2.25	.67 2	.98 2	19.00
14	---	---	---	---	---	---	-1.00	.24 1	.07 2	.25 1	.86 1	82.00
15	---	---	---	---	---	---	-2.00	.11 2	.97 2	.24 2	.51 2	17.00
16	---	---	---	---	---	---	-2.00	.74 2	.57 2	.16 2	.67 1	85.00
17	---	---	---	---	---	---	-1.00	.94 2	.08 2	43.72	.82 1	45.00
18	---	---	---	---	---	---	-2.00	.66 2	.56 1	.95 1	.69 1	84.00
19	---	---	---	---	---	---	-2.00	.59 2	.94 1	.80 1	.99 2	9.00
20	---	---	---	---	---	---	-2.00	20.38	.30 2	35.11	.79 2	47.00
21	---	---	---	---	---	-2.00	.22 2	.03 2	.72 2	.92 2	.08 1	63.00
22	---	---	---	---	---	-2.00	.39 2	.57 2	.25 2	.76 1	.70 1	70.00
23	---	---	---	---	---	-2.00	.18 1	.02 2	.38 1	.75 2	.19 1	98.00
24	---	---	---	---	---	-2.00	43.47	.90 2	.46 2	.88 2	.23 2	0.00
25	---	---	---	---	---	-2.00	.27 1	8.81	.49 2	.49 1	.95 2	38.00
26	---	---	---	---	---	-2.00	.33 1	.18 1	.71 2	.03 2	.98 1	70.00
27	---	---	---	---	---	-2.00	.75 1	.52 2	.57 1	.31 2	.53 2	14.00
28	---	---	---	---	---	-2.00	.20 1	.63 2	38.55	.13 2	.71 1	42.00
29	---	---	---	---	---	-2.00	.55 2	.58 2	.03 1	.69 1	.49 2	6.00
30	---	---	---	---	---	-2.00	.78 1	.20 2	.31 2	.85 1	.80 2	45.00
31	---	---	---	---	---	---	-1.00	89.85	-2.00	.52 2	40.70	---
TOTAL	0.00	0.00	0.00	0.00	0.00	.00 24	.14 57	.60 56	.91 64	.89 56	.24 60	73.00
MEAN	0.00	0.00	0.00	0.00	0.00	.00 2	.11 1	.83 1	.06 2	.96 1	.94 2	2.00
MAX	0.00	0.00	0.00	0.00	0.00	.00 2	.55 2	.03 2	.38 2	.00 2	.95 2	55.00
MIN	0.00	0.00	0.00	0.00	0.00	.00 2	15.20	66.90	65.49	36.67	.82 1	11.00

WTR YR 1993 TOTAL 32056.10 MEAN 196.66 MAX 276.95 MIN 16.82

PICABO

WR WR WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

WRUN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	92.63	1.00	79.43	61.25	1.00
2	---	---	---	---	---	---	-1.00	45.17	74.20	92.63	58.52	52.00
3	---	---	---	---	---	---	---	92.88	1.00	45.42	88.89	82.00
4	---	---	---	---	---	---	-1.00	35.51	63.00	77.44	59.26	73.00
5	---	---	---	---	---	---	-1.00	5.83	1.00	5.82	79.68	92.00
6	---	---	---	---	---	---	-1.00	63.84	1.00	80.68	81.67	92.00
7	---	---	---	---	---	---	-2.00	32.07	1.00	15.79	48.80	83.00
8	---	---	---	---	---	---	-1.00	1.84	1.00	57.02	76.19	79.00
9	---	---	---	---	---	---	---	72.21	78.93	82.42	88.15	59.00
10	---	---	---	---	---	---	-1.00	44.67	72.21	1.00	76.94	86.00
11	---	---	---	---	---	---	-1.00	54.63	1.00	67.48	70.22	1.00
12	---	---	---	---	---	---	-1.00	58.36	1.00	31.72	65.24	1.00
13	---	---	---	---	---	---	---	98.36	63.99	59.01	79.18	69.00
14	---	---	---	---	---	---	-1.00	13.54	72.71	91.38	88.15	68.00
15	---	---	---	---	---	---	---	86.90	1.00	1.59	87.90	97.00
16	---	---	---	---	---	---	---	89.14	56.02	73.46	93.38	58.00
17	---	---	---	---	---	---	---	86.65	71.46	92.88	50.80	53.00
18	---	---	---	---	---	---	-1.00	0.85	91.88	56.52	65.74	67.00
19	---	---	---	---	---	---	---	83.91	57.77	.23 1	11.55	66.00
20	---	---	---	---	---	---	-1.00	4.08	82.17	.13 1	90.24	67.00
21	---	---	---	---	---	-1.00	18.28	1.00	99.60	71.71	92.88	59.00
22	---	---	---	---	---	-1.00	25.75	1.00	41.68	50.80	72.46	61.00
23	---	---	---	---	---	-2.00	0.45	83.41	1.00	47.06	85.16	88.00
24	---	---	---	---	---	-2.00	0.44	90.64	1.00	.40 1	5.82	85.00
25	---	---	---	---	---	---	50.30	1.00	56.52	78.93	64.24	89.00
26	---	---	---	---	---	-1.00	77.54	73.46	67.48	81.17	70.72	50.00
27	---	---	---	---	---	---	92.38	96.36	96.11	60.51	90.89	74.00
28	---	---	---	---	---	---	96.11	1.00	20.52	1.00	3.33	62.00
29	---	---	---	---	---	-1.00	32.97	1.00	14.54	91.13	81.67	70.00
30	---	---	---	---	---	---	87.15	90.89	87.15	76.69	83.66	1.00
31	---	---	---	---	---	---	-1.00	23.01	---		82.42	---
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	12.00	95.63	30.00	3.03	25.00	23.00
MEAN	0.00	0.00	0.00	0.00	0.00	0.00	1.00	15.99	1.00	83.97	82.42	79.00
MAX	0.00	0.00	0.00	0.00	0.00	0.00	2.00	32.07	1.00	45.42	1.00	1.00
MIN	0.00	0.00	0.00	0.00	0.00	0.00	50.30	72.21	56.02	47.06	48.80	50.00

WTR YR 1993 TOTAL 15438.83 MEAN 94.72 MAX 232.07 MIN 47.06

PICABO

XC XC WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

MIN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	49.02	61.44	60.03	63.02	60.00
2	---	---	---	---	---	---	---	51.14	60.50	61.29	63.72	60.00
3	---	---	---	---	---	---	---	51.38	57.67	59.24	65.14	60.00
4	---	---	---	---	---	---	---	49.34	54.13	59.32	65.53	62.00
5	---	---	---	---	---	---	---	46.74	55.31	58.61	64.98	61.00
6	---	---	---	---	---	---	---	46.90	53.97	57.91	64.59	62.00
7	---	---	---	---	---	---	---	46.90	52.17	58.77	65.30	62.00
8	---	---	---	---	---	---	---	46.90	52.24	59.24	62.70	62.00
9	---	---	---	---	---	---	---	46.66	53.74	59.79	63.09	61.00
10	---	---	---	---	---	---	---	50.12	57.20	61.05	64.43	61.00
11	---	---	---	---	---	---	---	53.11	55.00	60.66	65.61	62.00
12	---	---	---	---	---	---	---	56.10	52.40	61.05	63.80	61.00
13	---	---	---	---	---	---	---	57.83	53.74	59.87	63.33	57.00
14	---	---	---	---	---	---	---	58.53	56.88	60.81	63.57	57.00
15	---	---	---	---	---	---	---	58.61	60.66	60.81	63.96	57.00
16	---	---	---	---	---	---	---	58.61	58.14	61.52	64.04	58.00
17	---	---	---	---	---	---	---	57.83	57.91	61.05	61.44	59.00
18	---	---	---	---	---	---	---	58.14	60.26	60.11	61.92	59.00
19	---	---	---	---	---	---	---	59.87	61.68	61.13	64.20	56.00
20	---	---	---	---	---	---	---	60.97	63.25	63.09	66.87	56.00
21	---	---	---	---	---	---	45.48	61.92	64.51	63.17	65.61	53.00
22	---	---	---	---	---	---	49.26	59.95	62.39	61.84	62.39	52.00
23	---	---	---	---	---	---	48.00	59.08	60.11	61.36	62.15	52.00
24	---	---	---	---	---	---	49.18	60.97	58.38	59.16	62.62	52.00
25	---	---	---	---	---	---	49.34	62.15	59.64	58.69	60.81	53.00
26	---	---	---	---	---	---	49.10	61.76	61.52	59.95	58.93	53.00
27	---	---	---	---	---	---	48.63	61.84	63.17	59.79	59.01	53.00
28	---	---	---	---	---	---	48.39	61.84	64.75	60.26	59.71	53.00
29	---	---	---	---	---	---	50.20	61.68	62.15	63.64	60.42	54.00
30	---	---	---	---	---	---	49.02	61.21	59.48	63.57	59.64	54.00
31	---	---	---	---	---	---	---	62.23	---	62.86	59.01	---
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	4.00	39.33	17.00	79.64	19.00	36.00
MEAN	0.00	0.00	0.00	0.00	0.00	0.00	48.66	56.11	58.48	60.63	62.95	57.00
MAX	0.00	0.00	0.00	0.00	0.00	0.00	50.20	62.23	64.75	63.64	66.87	62.00
MIN	0.00	0.00	0.00	0.00	0.00	0.00	45.48	46.66	52.17	57.91	58.93	52.00

WTR YR 1993 TOTAL 9547.53 MEAN 58.57 MAX 66.87 MIN 45.48

PICABO

XD XD WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

MIN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	49.26	61.92	61.13	64.04	61.00
2	---	---	---	---	---	---	---	50.12	60.66	61.84	64.35	61.00
3	---	---	---	---	---	---	---	51.22	58.38	60.26	65.30	61.00
4	---	---	---	---	---	---	---	48.55	56.10	60.19	65.69	62.00
5	---	---	---	---	---	---	---	47.76	56.02	59.87	65.14	62.00
6	---	---	---	---	---	---	---	47.76	55.00	59.32	65.22	63.00
7	---	---	---	---	---	---	---	47.84	53.50	59.95	65.69	63.00
8	---	---	---	---	---	---	---	48.08	53.97	60.19	63.72	63.00
9	---	---	---	---	---	---	---	48.16	55.15	60.58	64.12	62.00
10	---	---	---	---	---	---	---	50.59	57.59	61.68	64.82	62.00
11	---	---	---	---	---	---	---	52.87	56.33	61.60	65.77	63.00
12	---	---	---	---	---	---	---	55.47	54.76	61.92	64.59	63.00
13	---	---	---	---	---	---	---	57.28	55.55	61.05	64.20	60.00
14	---	---	---	---	---	---	---	58.06	57.75	61.60	64.35	59.00
15	---	---	---	---	---	---	---	58.46	60.66	61.68	64.35	59.00
16	---	---	---	---	---	---	---	58.61	59.48	62.15	64.51	59.00
17	---	---	---	---	---	---	---	58.22	59.01	61.84	63.09	60.00
18	---	---	---	---	---	---	---	58.46	60.74	61.36	63.25	60.00
19	---	---	---	---	---	---	---	59.87	61.92	61.92	64.59	58.00
20	---	---	---	---	---	---	---	60.89	63.41	63.17	66.08	57.00
21	---	---	---	---	---	---	45.33	61.44	64.27	63.33	65.69	56.00
22	---	---	---	---	---	---	48.94	60.42	62.94	62.47	63.88	55.00
23	---	---	---	---	---	---	47.84	59.79	61.21	61.68	63.49	54.00
24	---	---	---	---	---	---	48.86	60.97	59.79	60.26	63.72	54.00
25	---	---	---	---	---	---	49.10	61.92	60.50	60.19	62.62	55.00
26	---	---	---	---	---	---	48.79	61.92	61.99	61.05	61.21	55.00
27	---	---	---	---	---	---	48.47	62.07	63.41	60.89	60.97	55.00
28	---	---	---	---	---	---	48.55	61.99	64.35	61.36	61.36	55.00
29	---	---	---	---	---	---	49.41	61.76	62.86	63.57	61.84	56.00
30	---	---	---	---	---	---	49.02	61.60	61.05	64.20	61.29	56.00
31	---	---	---	---	---	---	---	62.23	---	63.88	60.74	---
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	4.00	43.64	17.00	6.18	19.00	82.00
MEAN	0.00	0.00	0.00	0.00	0.00	0.00	48.43	56.25	59.34	61.49	63.86	59.00
MAX	0.00	0.00	0.00	0.00	0.00	0.00	49.41	62.23	64.35	64.20	66.08	63.00
MIN	0.00	0.00	0.00	0.00	0.00	0.00	45.33	47.76	53.50	59.32	60.74	54.00

WTR YR 1993 TOTAL 9676.99 MEAN 59.37 MAX 66.08 MIN 45.33

PICABO

XG XG WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

MAX VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	54.05	68.13	67.73	69.62	66.00
2	---	---	---	---	---	---	---	55.55	65.85	65.92	70.01	65.00
3	---	---	---	---	---	---	---	54.92	60.19	64.67	70.64	66.00
4	---	---	---	---	---	---	---	52.09	58.53	65.06	69.31	66.00
5	---	---	---	---	---	---	---	49.89	56.88	64.82	70.48	67.00
6	---	---	---	---	---	---	---	51.22	56.18	65.69	70.80	67.00
7	---	---	---	---	---	---	---	53.03	57.83	65.85	69.70	67.00
8	---	---	---	---	---	---	---	53.58	60.42	66.40	68.52	67.00
9	---	---	---	---	---	---	---	57.36	64.43	67.26	68.91	67.00
10	---	---	---	---	---	---	---	58.77	61.92	67.34	70.48	67.00
11	---	---	---	---	---	---	---	61.92	61.21	67.81	69.54	67.00
12	---	---	---	---	---	---	---	63.96	62.47	66.63	67.89	65.00
13	---	---	---	---	---	---	---	65.45	64.82	66.87	68.76	62.00
14	---	---	---	---	---	---	---	65.69	67.65	66.63	67.73	62.00
15	---	---	---	---	---	---	---	66.24	68.44	67.03	68.44	62.00
16	---	---	---	---	---	---	---	64.75	64.51	67.03	67.34	63.00
17	---	---	---	---	---	---	---	64.67	67.97	66.79	67.18	62.00
18	---	---	---	---	---	---	---	66.79	69.70	67.10	68.05	62.00
19	---	---	---	---	---	---	---	68.36	71.11	68.36	69.38	60.00
20	---	---	---	---	---	---	---	68.68	71.90	68.52	69.86	59.00
21	---	---	---	---	---	---	52.24	67.42	69.31	67.18	69.07	58.00
22	---	---	---	---	---	---	51.69	66.24	67.58	65.77	67.65	57.00
23	---	---	---	---	---	---	52.56	67.65	65.85	63.64	68.05	57.00
24	---	---	---	---	---	---	53.50	68.52	66.16	64.59	67.34	57.00
25	---	---	---	---	---	---	52.56	68.05	67.97	65.61	65.53	58.00
26	---	---	---	---	---	---	53.03	69.54	70.01	65.45	64.75	58.00
27	---	---	---	---	---	---	52.87	68.91	71.19	66.16	65.22	59.00
28	---	---	---	---	---	---	54.60	67.42	69.70	67.81	65.85	59.00
29	---	---	---	---	---	---	53.97	68.52	67.34	70.17	65.06	59.00
30	---	---	---	---	---	---	53.03	67.34	66.87	69.54	64.90	59.00
31	---	---	---	---	---	---	---	67.89	---	69.54	65.22	---
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	5.00	44.47	19.00	68.97	21.00	84.00
MEAN	0.00	0.00	0.00	0.00	0.00	0.00	53.01	62.72	65.40	66.74	68.11	62.00
MAX	0.00	0.00	0.00	0.00	0.00	0.00	54.60	69.54	71.90	70.17	70.80	67.00
MIN	0.00	0.00	0.00	0.00	0.00	0.00	51.69	49.89	56.18	63.64	64.75	57.00

WTR YR 1993 TOTAL 10501.29 MEAN 64.43 MAX 71.90 MIN 49.89

PICABO

XH XH WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

MAX VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	51.93	64.67	64.43	66.63	63.00
2	---	---	---	---	---	---	---	53.03	64.51	64.43	66.87	64.00
3	---	---	---	---	---	---	---	53.50	60.58	62.54	67.65	64.00
4	---	---	---	---	---	---	---	52.24	58.85	62.54	67.65	64.00
5	---	---	---	---	---	---	---	49.57	57.04	62.54	67.42	64.00
6	---	---	---	---	---	---	---	49.57	56.57	62.62	67.73	65.00
7	---	---	---	---	---	---	---	50.59	56.18	62.86	67.81	65.00
8	---	---	---	---	---	---	---	51.14	57.59	63.33	66.16	65.00
9	---	---	---	---	---	---	---	53.03	60.11	63.88	66.40	65.00
10	---	---	---	---	---	---	---	54.68	60.03	64.35	67.42	65.00
11	---	---	---	---	---	---	---	57.12	58.93	64.67	67.58	65.00
12	---	---	---	---	---	---	---	59.24	58.85	64.67	66.87	65.00
13	---	---	---	---	---	---	---	60.81	60.50	64.04	66.40	63.00
14	---	---	---	---	---	---	---	61.29	62.86	64.12	66.48	61.00
15	---	---	---	---	---	---	---	61.60	63.88	64.27	66.24	61.00
16	---	---	---	---	---	---	---	61.44	63.41	64.43	66.24	61.00
17	---	---	---	---	---	---	---	61.29	63.49	64.35	65.77	61.00
18	---	---	---	---	---	---	---	62.47	64.90	64.35	65.53	61.00
19	---	---	---	---	---	---	---	63.64	66.32	65.14	66.71	61.00
20	---	---	---	---	---	---	---	64.20	67.03	65.45	67.42	59.00
21	---	---	---	---	---	---	49.73	64.27	67.03	65.45	67.50	59.00
22	---	---	---	---	---	---	49.96	63.64	65.30	64.90	66.63	57.00
23	---	---	---	---	---	---	50.83	63.49	64.43	63.25	65.77	56.00
24	---	---	---	---	---	---	51.46	64.43	63.17	62.54	65.85	56.00
25	---	---	---	---	---	---	51.77	64.51	64.43	63.02	65.45	57.00
26	---	---	---	---	---	---	51.30	65.30	65.92	63.25	64.20	57.00
27	---	---	---	---	---	---	51.93	65.30	66.87	63.57	63.41	57.00
28	---	---	---	---	---	---	51.93	64.98	66.79	64.59	63.72	57.00
29	---	---	---	---	---	---	52.64	64.67	66.24	66.48	63.88	58.00
30	---	---	---	---	---	---	51.46	64.67	63.96	66.48	63.49	58.00
31	---	---	---	---	---	---	---	64.59	---	66.55	63.25	---
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	5.00	42.23	18.00	89.09	20.00	48.00
MEAN	0.00	0.00	0.00	0.00	0.00	0.00	51.30	59.43	62.68	64.16	66.13	61.00
MAX	0.00	0.00	0.00	0.00	0.00	0.00	52.64	65.30	67.03	66.55	67.81	65.00
MIN	0.00	0.00	0.00	0.00	0.00	0.00	49.73	49.57	56.18	62.54	63.25	56.00

WTR YR 1993 TOTAL 10123.31 MEAN 62.11 MAX 67.81 MIN 49.57

PICABO

YM YM WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	27.62	37.27	36.21	41.28	29.00
2	---	---	---	---	---	---	---	33.10	38.25	38.66	42.74	35.00
3	---	---	---	---	---	---	---	35.70	42.50	38.38	43.15	36.00
4	---	---	---	---	---	---	---	13.82	40.59	41.33	48.34	39.00
5	---	---	---	---	---	---	---	29.29	44.54	36.75	47.41	36.00
6	---	---	---	---	---	---	---	39.07	44.24	32.67	42.74	36.00
7	---	---	---	---	---	---	---	27.33	41.78	30.06	49.23	36.00
8	---	---	---	---	---	---	---	24.16	40.09	36.96	43.39	31.00
9	---	---	---	---	---	---	---	24.35	40.58	35.82	39.28	33.00
10	---	---	---	---	---	---	---	27.88	45.48	29.65	42.46	32.00
11	---	---	---	---	---	---	---	28.84	39.19	33.80	49.60	30.00
12	---	---	---	---	---	---	---	21.77	29.58	29.05	44.75	25.00
13	---	---	---	---	---	---	---	34.41	29.64	33.34	44.16	27.00
14	---	---	---	---	---	---	---	35.78	39.00	32.42	42.62	22.00
15	---	---	---	---	---	---	---	41.18	44.03	33.60	45.30	27.00
16	---	---	---	---	---	---	---	39.25	41.22	33.83	42.36	30.00
17	---	---	---	---	---	---	---	38.42	40.94	33.77	38.24	39.00
18	---	---	---	---	---	---	---	39.17	41.21	30.79	40.77	42.00
19	---	---	---	---	---	---	---	42.71	45.33	38.02	39.32	37.00
20	---	---	---	---	---	---	---	42.37	44.34	38.90	42.46	34.00
21	---	---	---	---	---	---	21.47	37.22	48.52	38.66	46.26	15.00
22	---	---	---	---	---	---	32.68	34.34	35.75	40.53	43.69	15.00
23	---	---	---	---	---	---	24.66	32.86	24.53	49.18	43.47	17.00
24	---	---	---	---	---	---	29.11	36.04	33.28	45.15	36.32	18.00
25	---	---	---	---	---	---	28.91	33.37	40.86	40.29	26.79	24.00
26	---	---	---	---	---	---	27.98	38.11	45.07	43.45	26.03	23.00
27	---	---	---	---	---	---	22.03	31.21	44.24	42.82	27.33	24.00
28	---	---	---	---	---	---	22.41	32.30	41.37	42.80	30.04	23.00
29	---	---	---	---	---	---	29.13	34.02	28.41	42.91	31.97	25.00
30	---	---	---	---	---	---	30.52	33.30	30.31	40.16	26.79	23.00
31	---	---	---	---	---	---	---	36.34	---	37.57	25.59	---
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	2.00	25.33	11.00	57.53	12.00	76.00
MEAN	0.00	0.00	0.00	0.00	0.00	0.00	26.89	33.08	39.40	37.34	39.80	29.00
MAX	0.00	0.00	0.00	0.00	0.00	0.00	32.68	42.71	48.52	49.18	49.60	42.00
MIN	0.00	0.00	0.00	0.00	0.00	0.00	21.47	13.82	24.53	29.05	25.59	15.00

WTR YR 1993 TOTAL 5744.50 MEAN 35.24 MAX 49.60 MIN 13.82

PICABO												
ZK ZK WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993												
MAX VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	59.32	74.57	73.47	75.60	71.00
2	---	---	---	---	---	---	---	60.11	64.20	67.03	75.91	70.00
3	---	---	---	---	---	---	---	56.57	61.76	68.83	76.15	73.00
4	---	---	---	---	---	---	---	53.74	59.16	69.54	72.21	71.00
5	---	---	---	---	---	---	---	51.46	58.38	69.70	75.75	73.00
6	---	---	---	---	---	---	---	53.50	57.12	71.66	76.30	73.00
7	---	---	---	---	---	---	---	57.12	61.44	71.51	68.99	73.00
8	---	---	---	---	---	---	---	57.75	65.30	72.14	73.32	72.00
9	---	---	---	---	---	---	---	64.20	72.06	73.32	73.79	72.00
10	---	---	---	---	---	---	---	64.67	64.04	72.61	76.54	73.00
11	---	---	---	---	---	---	---	68.52	66.32	73.24	73.00	72.00
12	---	---	---	---	---	---	---	70.09	68.91	70.64	72.06	69.00
13	---	---	---	---	---	---	---	71.51	72.37	72.45	74.02	66.00
14	---	---	---	---	---	---	---	71.51	75.04	71.35	73.00	66.00
15	---	---	---	---	---	---	---	73.55	76.15	72.14	73.71	67.00
16	---	---	---	---	---	---	---	71.51	70.48	71.90	71.11	68.00
17	---	---	---	---	---	---	---	71.59	74.73	72.06	71.98	65.00
18	---	---	---	---	---	---	---	73.71	76.93	73.24	73.79	66.00
19	---	---	---	---	---	---	---	75.12	78.43	75.36	75.44	63.00
20	---	---	---	---	---	---	---	74.73	78.90	74.34	74.97	62.00
21	---	---	---	---	---	---	57.04	72.53	73.39	71.90	73.32	60.00
22	---	---	---	---	---	---	53.66	70.96	72.76	66.79	72.45	60.00
23	---	---	---	---	---	---	56.57	74.02	70.33	63.72	73.87	60.00
24	---	---	---	---	---	---	57.36	75.52	71.82	69.62	72.29	61.00
25	---	---	---	---	---	---	55.47	73.32	73.79	71.35	69.38	63.00
26	---	---	---	---	---	---	56.88	75.67	76.54	71.35	68.91	62.00
27	---	---	---	---	---	---	55.86	74.89	77.48	71.98	70.25	63.00
28	---	---	---	---	---	---	60.11	72.45	75.04	74.81	71.27	63.00
29	---	---	---	---	---	---	54.60	74.81	70.09	77.17	69.23	64.00
30	---	---	---	---	---	---	56.57	73.71	72.37	75.52	69.38	63.00
31	---	---	---	---	---	---	---	73.63	---	75.28	70.33	---
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	5.00	11.79	21.00	26.02	22.00	16.00
MEAN	0.00	0.00	0.00	0.00	0.00	0.00	56.41	68.12	70.33	71.81	72.85	67.00
MAX	0.00	0.00	0.00	0.00	0.00	0.00	60.11	75.67	78.90	77.17	76.54	73.00
MIN	0.00	0.00	0.00	0.00	0.00	0.00	53.66	51.46	57.12	63.72	68.91	60.00
WTR YR 1993 TOTAL 11287.12 MEAN 69.25 MAX 78.90 MIN 51.46												

PICABO

ZL ZL WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

MIN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	46.90	59.01	56.80	59.40	58.00
2	---	---	---	---	---	---	---	50.59	58.85	59.01	60.58	56.00
3	---	---	---	---	---	---	---	49.81	55.63	56.65	62.78	57.00
4	---	---	---	---	---	---	---	46.66	49.96	56.88	63.80	59.00
5	---	---	---	---	---	---	---	45.01	53.74	55.39	63.33	59.00
6	---	---	---	---	---	---	---	44.93	52.48	54.05	61.68	59.00
7	---	---	---	---	---	---	---	45.09	50.44	55.31	62.70	59.00
8	---	---	---	---	---	---	---	44.54	49.18	55.94	59.71	59.00
9	---	---	---	---	---	---	---	43.52	50.83	56.80	60.11	58.00
10	---	---	---	---	---	---	---	47.92	55.31	58.22	62.47	58.00
11	---	---	---	---	---	---	---	51.69	52.17	57.43	63.88	59.00
12	---	---	---	---	---	---	---	55.31	48.00	57.75	61.21	58.00
13	---	---	---	---	---	---	---	57.12	49.96	55.70	60.42	52.00
14	---	---	---	---	---	---	---	57.59	54.37	57.83	60.89	52.00
15	---	---	---	---	---	---	---	57.20	59.01	58.30	62.23	53.00
16	---	---	---	---	---	---	---	57.20	55.00	58.77	62.39	56.00
17	---	---	---	---	---	---	---	55.94	55.47	58.14	57.43	56.00
18	---	---	---	---	---	---	---	56.41	57.98	56.02	58.85	57.00
19	---	---	---	---	---	---	---	58.38	59.64	58.22	62.54	52.00
20	---	---	---	---	---	---	---	59.71	61.68	61.44	67.65	52.00
21	---	---	---	---	---	---	45.17	61.13	63.25	61.52	64.59	47.00
22	---	---	---	---	---	---	48.79	57.67	60.50	59.40	58.30	46.00
23	---	---	---	---	---	---	46.03	56.80	57.12	60.11	58.53	47.00
24	---	---	---	---	---	---	48.16	59.87	55.00	56.41	59.08	46.00
25	---	---	---	---	---	---	48.16	60.74	56.80	54.84	56.65	50.00
26	---	---	---	---	---	---	47.84	59.79	59.56	56.33	53.58	48.00
27	---	---	---	---	---	---	46.19	59.71	61.13	56.02	54.52	49.00
28	---	---	---	---	---	---	46.43	59.79	63.57	56.73	55.78	49.00
29	---	---	---	---	---	---	49.65	59.87	59.32	61.76	56.41	50.00
30	---	---	---	---	---	---	46.98	59.01	55.78	60.58	55.39	50.00
31	---	---	---	---	---	---	---	60.66	---	59.16	54.84	---
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	4.00	86.56	16.00	87.51	18.00	23.00
MEAN	0.00	0.00	0.00	0.00	0.00	0.00	47.34	54.41	56.02	57.66	60.06	54.00
MAX	0.00	0.00	0.00	0.00	0.00	0.00	49.65	61.13	63.57	61.76	67.65	59.00
MIN	0.00	0.00	0.00	0.00	0.00	0.00	45.17	43.52	48.00	54.05	53.58	46.00

WTR YR 1993 TOTAL 9113.57 MEAN 55.91 MAX 67.65 MIN 43.52

PICABO

EJ EJ WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAILY VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.17	0.05	0.02	0.01	0.00	0.08	0.11	0.17	0.22	0.38	---	---
2	0.15	0.04	---	0.01	0.00	0.08	0.15	0.15	0.27	0.28	---	---
3	0.18	0.06	0.02	0.03	0.01	0.09	0.05	0.21	0.25	0.29	---	---
4	0.17	0.04	0.01	0.02	0.01	0.08	0.08	0.11	0.29	0.31	---	---
5	0.13	0.04	0.01	0.02	0.02	0.04	0.08	0.17	0.25	0.13	---	---
6	0.13	0.03	0.01	0.01	0.02	0.07	0.06	0.27	0.16	0.22	---	---
7	0.06	0.04	0.01	0.01	0.01	0.07	0.10	0.23	0.17	0.31	---	---
8	0.03	0.03	0.01	0.00	0.01	0.08	0.11	0.23	0.22	0.36	---	---
9	0.06	0.04	0.03	0.01	0.00	0.09	0.08	0.24	0.27	0.35	---	---
10	0.08	0.05	0.03	0.00	0.01	0.04	0.10	0.25	0.32	0.37	---	---
11	0.04	0.05	0.02	0.01	0.01	0.09	0.16	0.31	0.32	0.36	---	---
12	0.10	0.04	0.02	0.01	0.00	0.10	0.16	0.21	0.29	0.35	---	---
13	0.09	0.01	0.00	0.01	0.00	0.11	0.12	0.26	0.18	0.35	---	---
14	0.08	0.03	0.01	0.01	0.03	0.13	0.16	0.21	0.23	---	---	---
15	0.03	0.02	0.01	0.02	0.03	0.12	0.18	0.14	0.24	---	---	---
16	0.05	0.04	0.00	0.01	0.06	0.06	0.21	0.08	0.21	---	---	---
17	0.08	0.04	0.01	0.02	0.02	0.10	0.22	0.11	0.29	---	---	---
18	0.06	0.03	0.01	0.03	0.03	0.06	0.23	0.17	0.34	---	---	---
19	0.08	0.02	0.00	0.03	---	0.06	0.24	0.10	0.37	---	---	---
20	0.08	0.03	0.00	0.02	---	0.08	0.26	---	0.36	---	---	---
21	0.07	0.02	0.00	0.04	---	0.08	0.23	0.18	0.31	---	---	---
22	0.10	0.01	0.00	0.04	---	0.03	0.14	0.26	0.36	---	---	---
23	0.11	0.00	0.00	0.03	---	0.06	0.05	0.28	0.38	---	---	---
24	0.09	0.00	0.00	0.03	0.07	0.07	0.08	0.30	0.37	---	---	---
25	0.08	0.00	0.00	0.04	0.06	0.11	0.05	0.33	0.40	---	---	---
26	0.07	0.00	0.00	0.01	0.03	0.11	0.03	0.30	0.33	---	---	---
27	0.04	0.00	0.01	0.02	0.03	0.10	0.05	0.11	0.31	---	---	---
28	0.06	0.01	0.01	0.03	0.05	0.15	0.06	0.19	0.37	---	---	---
29	0.04	0.02	0.00	0.00	---	0.13	0.16	0.23	0.38	---	---	---
30	0.06	0.02	0.01	0.01	---	0.14	0.14	0.31	0.38	---	---	---
31	0.05	---	0.02	0.00	---	0.08	---	0.05	---	---	---	---
TOTAL	2.62	0.81	0.28	0.54	0.51	2.69	3.85	6.16	8.84	4.06	0.00	0.00
MEAN	0.08	0.03	0.01	0.02	0.02	0.09	0.13	0.21	0.29	0.31	0.00	0.00
MAX	0.18	0.06	0.03	0.04	0.07	0.15	0.26	0.33	0.40	0.38	0.00	0.00
MIN	0.03	0.00	0.00	0.00	0.00	0.03	0.03	0.05	0.16	0.13	0.00	0.00

WTR YR 1994 TOTAL 30.36 MEAN 0.11 MAX 0.40 MIN 0.00

PICABO

ET ET WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAILY VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.22	0.08	0.03	0.00	0.05	0.06	0.12	0.18	0.22	0.37	---	---
2	0.17	0.08	---	0.01	0.04	0.07	0.13	0.17	0.27	0.33	---	---
3	0.20	0.12	0.03	0.01	0.04	0.07	0.08	0.19	0.24	0.36	---	---
4	0.20	0.07	0.03	0.01	0.04	0.08	0.12	0.12	0.28	0.33	---	---
5	0.21	0.08	0.05	0.02	0.04	0.05	0.11	0.15	---	0.26	---	---
6	0.16	0.08	0.04	0.04	0.04	0.08	0.08	0.26	0.26	0.24	---	---
7	0.12	0.07	0.01	0.04	0.00	0.08	0.12	0.21	0.24	0.28	---	---
8	0.07	0.07	0.00	0.01	0.02	0.08	0.13	0.22	0.29	0.29	---	---
9	0.08	0.07	0.03	0.01	0.02	0.09	0.09	0.23	0.26	0.34	---	---
10	0.09	0.09	0.03	0.02	0.02	0.05	0.10	0.23	0.28	0.37	---	---
11	0.07	0.09	0.04	0.01	0.03	0.08	0.15	0.27	0.28	0.37	---	---
12	0.10	0.07	0.05	0.02	0.06	0.10	0.17	0.23	0.25	0.37	---	---
13	0.09	0.05	0.05	0.02	0.04	0.10	0.17	0.28	0.25	0.33	---	---
14	0.09	0.07	0.05	0.03	0.04	0.11	0.19	0.23	0.31	---	---	---
15	0.05	0.05	0.03	0.03	0.05	0.11	0.18	0.21	0.30	---	---	---
16	0.06	0.06	0.01	0.02	0.07	0.09	0.18	0.13	0.27	---	---	---
17	0.08	0.06	0.02	0.03	0.04	0.13	0.19	0.15	0.28	---	---	---
18	0.08	0.08	0.04	0.04	0.04	0.09	0.21	0.19	0.32	---	---	---
19	0.10	0.07	0.03	0.03	---	0.11	0.21	0.13	0.32	---	---	---
20	0.09	0.07	0.01	0.04	---	0.10	0.23	---	0.35	---	---	---
21	0.09	0.06	0.01	0.05	---	0.09	0.22	0.17	0.32	---	---	---
22	0.10	0.03	0.01	0.05	---	0.05	0.17	0.23	0.35	---	---	---
23	0.12	0.02	0.02	0.05	---	0.11	0.11	0.25	0.37	---	---	---
24	0.13	0.04	0.02	0.03	0.04	0.10	0.11	0.25	0.36	---	---	---
25	0.12	0.05	0.02	0.05	0.04	0.11	0.08	0.27	0.38	---	---	---
26	0.11	0.04	0.01	0.02	0.02	0.12	0.05	0.27	0.36	---	---	---
27	0.07	0.03	0.00	0.03	0.03	0.12	0.06	0.17	0.34	---	---	---
28	0.10	0.01	0.02	0.04	0.05	0.16	0.08	0.24	0.34	---	---	---
29	0.08	0.00	0.02	0.02	---	0.14	0.16	0.24	0.37	---	---	---
30	0.10	0.02	0.03	0.04	---	0.15	0.15	0.28	0.36	---	---	---
31	0.09	---	0.01	0.06	---	0.10	---	0.10	---	---	---	---
TOTAL	3.44	1.78	0.75	0.88	0.86	2.98	4.15	6.25	8.82	4.24	0.00	0.00
MEAN	0.11	0.06	0.02	0.03	0.04	0.10	0.14	0.21	0.30	0.33	0.00	0.00
MAX	0.22	0.12	0.05	0.06	0.07	0.16	0.23	0.28	0.38	0.37	0.00	0.00
MIN	0.05	0.00	0.00	0.00	0.00	0.05	0.05	0.10	0.22	0.24	0.00	0.00

WTR YR 1994 TOTAL 34.15 MEAN 0.12 MAX 0.38 MIN 0.00

PICABO

MM MM WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	60.88	34.62	31.96	29.91	12.79	38.57	43.67	48.23	54.78	72.22	---	---
2	58.13	35.78	31.90	26.85	13.71	40.75	47.45	50.06	58.42	65.98	---	---
3	59.97	44.18	26.01	32.99	15.21	41.38	42.83	51.28	65.31	61.59	---	---
4	61.29	33.51	29.68	34.23	17.34	41.16	38.35	54.93	60.41	62.28	---	---
5	61.54	29.59	18.03	31.27	20.81	38.22	37.49	57.84	60.46	56.53	---	---
6	58.01	28.09	22.58	23.47	24.89	35.22	40.08	61.50	57.99	56.39	---	---
7	47.80	30.28	27.43	18.14	31.21	35.36	37.40	60.17	48.92	64.15	---	---
8	39.13	29.77	33.97	25.08	24.55	37.00	38.72	58.27	50.73	71.03	---	---
9	42.35	32.41	33.76	24.50	20.20	37.69	43.54	62.47	59.25	74.70	---	---
10	44.71	37.45	34.45	15.76	24.49	36.49	46.46	65.42	63.71	74.28	---	---
11	47.74	36.88	39.62	25.79	23.99	39.01	46.56	67.20	68.77	68.99	---	---
12	48.54	30.31	30.04	25.44	11.15	40.34	48.78	62.92	68.61	68.68	---	---
13	48.34	23.07	21.34	22.51	17.40	43.77	47.06	58.08	64.45	69.46	---	---
14	46.53	28.00	26.28	19.23	23.36	48.54	46.45	56.73	49.75	---	---	---
15	43.20	25.55	23.04	28.12	26.28	50.15	47.92	59.37	52.40	---	---	---
16	41.33	32.69	22.19	23.29	37.32	47.53	56.16	47.77	51.88	---	---	---
17	43.77	34.21	21.35	24.98	36.75	39.21	62.39	44.10	59.00	---	---	---
18	41.51	32.62	19.38	27.76	30.58	42.14	64.13	50.14	65.58	---	---	---
19	42.26	23.10	15.64	27.60	24.37	35.37	65.34	47.52	69.81	---	---	---
20	40.23	25.61	11.72	26.17	22.85	33.41	64.07	45.48	75.60	---	---	---
21	44.23	29.00	17.66	30.05	27.82	40.90	66.83	51.13	74.33	---	---	---
22	49.65	31.23	15.90	31.54	24.91	34.02	51.96	56.14	73.57	---	---	---
23	50.42	19.47	15.65	33.34	24.32	29.37	45.84	59.97	72.18	---	---	---
24	48.60	4.54	13.86	34.65	37.19	32.69	44.59	62.56	70.46	---	---	---
25	42.91	2.56	13.57	35.34	37.94	38.70	39.62	66.67	74.64	---	---	---
26	39.39	5.13	20.11	28.66	37.40	40.46	38.35	67.96	64.79	---	---	---
27	38.98	12.12	26.85	26.68	35.56	37.48	37.85	58.10	63.33	---	---	---
28	47.20	28.65	17.98	26.39	32.93	46.49	38.74	53.80	72.67	---	---	---
29	31.95	34.89	14.92	21.82	---	41.74	43.70	58.37	73.93	---	---	---
30	33.95	32.39	21.12	20.14	---	46.50	46.39	63.80	73.73	---	---	---
31	39.64	---	26.25	11.51	---	43.70	---	55.80	---	---	---	---
TOTAL	14.00	27.70	7.00	13.21	7.00	33.36	14.00	63.78	19.00	66.28	0.00	0.00
MEAN	46.59	27.59	23.36	26.23	25.62	39.79	47.29	56.90	63.98	66.64	0.00	0.00
MAX	61.54	44.18	39.62	35.34	37.94	50.15	66.83	67.96	75.60	74.70	0.00	0.00
MIN	31.95	2.56	11.72	11.51	11.15	29.37	37.40	44.10	48.92	56.39	0.00	0.00

WTR YR 1994 TOTAL 11728.25 MEAN 41.01 MAX 75.60 MIN 2.56

PICABO

MN MN WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

MIN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	44.04	18.29	23.90	21.28	-3.96	27.52	27.22	39.27	45.09	52.22	---	---
2	39.74	20.16	23.66	16.72	2.08	30.09	29.16	34.23	38.77	48.06	---	---
3	44.88	31.28	16.40	24.38	2.79	31.25	34.89	32.21	49.94	42.39	---	---
4	43.31	17.87	14.99	24.20	4.70	30.16	27.55	43.21	46.11	40.45	---	---
5	47.66	20.09	7.12	18.36	7.35	29.52	23.86	48.27	44.90	42.46	---	---
6	40.72	14.26	13.27	8.83	12.65	24.14	33.57	44.49	47.37	36.51	---	---
7	34.49	19.04	16.00	8.68	23.04	21.83	30.45	41.84	32.90	45.12	---	---
8	32.11	17.33	29.12	14.70	16.97	26.00	23.90	39.68	33.10	49.94	---	---
9	34.00	16.44	27.45	8.80	4.27	24.14	34.89	47.26	42.46	52.10	---	---
10	32.21	29.06	25.73	-4.80	13.64	28.86	37.87	47.33	42.46	55.39	---	---
11	36.94	26.78	28.66	16.87	7.12	27.79	27.82	48.46	46.29	48.24	---	---
12	33.96	14.85	12.98	10.90	-5.16	29.39	33.33	52.68	52.02	40.11	---	---
13	40.79	10.27	3.61	8.65	0.30	30.92	36.21	42.08	52.45	44.77	---	---
14	37.94	12.20	17.08	4.19	7.66	34.39	35.65	31.78	40.96	---	---	---
15	35.19	10.12	11.91	12.32	13.90	33.40	25.53	50.05	37.27	---	---	---
16	31.85	22.18	17.51	9.10	25.70	38.74	35.38	43.59	34.99	---	---	---
17	36.48	20.76	11.98	6.47	26.51	29.29	44.63	37.54	33.66	---	---	---
18	28.62	16.83	12.83	13.38	26.07	28.12	47.69	36.77	47.33	---	---	---
19	28.52	10.87	3.41	13.49	12.83	24.99	51.07	40.38	48.90	---	---	---
20	26.41	13.93	-1.00	7.50	6.36	15.50	44.15	39.78	53.35	---	---	---
21	31.28	11.95	12.69	22.32	21.28	29.82	46.01	35.48	51.79	---	---	---
22	37.64	15.90	11.76	20.76	15.35	26.78	37.90	41.33	50.80	---	---	---
23	38.91	6.28	7.85	21.56	12.54	18.86	36.94	43.07	51.91	---	---	---
24	34.46	-5.20	4.62	18.61	33.17	15.90	38.37	43.14	45.55	---	---	---
25	25.73	-5.69	-1.35	28.02	32.90	23.49	33.86	48.71	51.60	---	---	---
26	20.96	-7.67	5.24	20.83	34.26	26.24	33.63	48.16	55.43	---	---	---
27	22.94	-5.65	16.80	19.07	27.72	20.34	33.66	48.60	40.48	---	---	---
28	34.16	9.33	2.98	16.33	19.32	25.84	33.60	38.87	49.08	---	---	---
29	18.47	29.56	0.66	9.02	---	23.21	29.79	42.80	55.97	---	---	---
30	20.93	28.39	8.23	6.20	---	27.42	33.60	47.84	52.14	---	---	---
31	26.34	---	14.63	-3.96	---	32.31	---	52.76	---	---	---	---
TOTAL	10.00	39.81	4.00	22.78	4.00	36.25	10.00	31.66	13.00	97.76	0.00	0.00
MEAN	33.60	14.66	12.93	13.64	14.33	26.98	34.74	42.96	45.84	45.98	0.00	0.00
MAX	47.66	31.28	29.12	28.02	34.26	38.74	51.07	52.76	55.97	55.39	0.00	0.00
MIN	18.47	-7.67	-1.35	-4.80	-5.16	15.50	23.86	31.78	32.90	36.51	0.00	0.00

WTR YR 1994 TOTAL 7889.27 MEAN 27.58 MAX 55.97 MIN -7.67

PICABO

MX MX WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

MAX VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	80.93	49.45	40.48	35.52	31.02	52.18	60.29	58.93	64.45	89.43	---	---
2	78.11	50.91	38.37	34.62	29.79	58.15	64.69	63.68	76.36	78.85	---	---
3	81.71	55.84	36.94	43.63	33.33	54.58	50.24	65.81	83.49	76.18	---	---
4	84.84	45.94	36.97	43.76	33.37	51.91	51.72	67.21	71.57	79.91	---	---
5	82.95	43.07	32.67	36.48	34.89	46.79	50.95	71.52	87.06	74.49	---	---
6	71.90	43.83	33.70	35.58	37.94	48.02	50.80	78.79	69.06	71.84	---	---
7	58.45	45.51	34.85	32.21	36.71	48.90	45.12	73.12	60.56	82.36	---	---
8	44.88	45.97	39.07	30.32	33.43	49.16	51.68	72.79	65.27	90.83	---	---
9	51.83	49.45	43.07	36.64	28.79	53.55	50.35	80.29	73.97	98.05	---	---
10	57.94	54.74	46.04	34.52	31.78	49.23	58.28	81.71	81.06	90.39	---	---
11	61.91	53.66	46.26	33.70	33.83	51.68	62.10	84.97	87.77	88.70	---	---
12	61.73	47.19	39.88	38.00	28.76	53.15	65.61	77.68	81.19	88.63	---	---
13	62.89	36.34	32.41	38.04	32.87	60.82	54.18	71.35	73.35	87.55	---	---
14	60.33	43.21	39.17	40.48	40.79	65.22	57.51	73.97	58.45	---	---	---
15	53.51	43.25	36.71	41.81	41.03	67.87	67.66	67.31	65.76	---	---	---
16	54.38	48.97	25.40	35.32	48.27	60.78	77.38	53.03	65.71	---	---	---
17	55.39	49.04	31.75	42.46	42.94	49.16	81.25	53.47	78.97	---	---	---
18	53.31	39.58	32.01	43.66	35.45	54.74	83.02	64.93	82.49	---	---	---
19	59.19	40.48	30.22	43.66	36.08	41.50	81.84	53.94	89.80	---	---	---
20	57.22	43.04	20.16	46.18	32.28	47.01	82.56	58.24	98.46	---	---	---
21	58.67	46.43	22.39	44.95	37.21	52.14	82.16	66.40	94.35	---	---	---
22	66.90	42.80	20.96	49.16	33.33	40.89	63.31	70.65	92.95	---	---	---
23	69.32	24.17	27.75	46.72	33.00	40.45	57.68	77.56	88.92	---	---	---
24	64.26	14.23	27.35	45.83	41.19	48.86	54.18	79.22	87.20	---	---	---
25	59.14	21.03	33.33	46.43	48.97	54.70	49.82	83.49	95.14	---	---	---
26	56.30	25.12	33.20	32.44	41.57	55.39	42.63	84.90	70.70	---	---	---
27	50.88	27.49	34.95	36.21	42.63	53.59	44.63	68.43	84.02	---	---	---
28	58.93	40.92	34.39	36.61	43.80	66.60	47.95	70.76	93.49	---	---	---
29	46.29	42.28	29.66	28.96	---	58.49	56.59	73.63	91.81	---	---	---
30	52.18	40.52	32.87	33.73	---	64.11	59.32	77.74	92.80	---	---	---
31	53.27	---	36.94	26.41	---	58.80	---	62.89	---	---	---	---
TOTAL	19.00	54.46	10.00	94.04	10.00	58.42	18.00	88.41	24.00	97.21	0.00	0.00
MEAN	61.60	41.82	33.87	38.52	36.61	53.50	60.18	70.59	80.21	84.40	0.00	0.00
MAX	84.84	55.84	46.26	49.16	48.97	67.87	83.02	84.97	98.46	98.05	0.00	0.00
MIN	44.88	14.23	20.16	26.41	28.76	40.45	42.63	53.03	58.45	71.84	0.00	0.00

WTR YR 1994 TOTAL 15588.73 MEAN 54.51 MAX 98.46 MIN 14.23

PICABO

PC PC WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

LAST VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.83	10.49	4.26	5.01	5.72	7.01	7.09	8.63	10.52	10.49	---	---
2	9.83	10.49	4.29	5.02	5.72	7.01	7.09	8.63	10.51	10.50	---	---
3	9.82	10.49	4.29	5.02	5.72	7.01	7.20	8.63	10.53	10.52	---	---
4	9.83	10.51	4.39	5.31	5.72	7.01	7.20	8.63	10.53	10.51	---	---
5	9.84	10.50	4.39	5.37	5.72	7.01	7.19	8.63	10.53	10.54	---	---
6	9.84	10.51	4.39	5.37	5.72	7.01	7.34	8.63	10.54	10.56	---	---
7	9.98	10.51	4.40	5.37	5.86	7.02	7.38	8.62	10.55	10.55	---	---
8	10.09	10.51	4.91	5.51	5.92	7.02	7.38	8.62	10.54	10.54	---	---
9	10.09	10.50	4.93	5.54	5.98	7.01	7.38	8.62	10.55	10.49	---	---
10	10.08	10.52	4.94	5.65	6.04	7.01	7.46	8.63	10.52	10.51	---	---
11	10.08	10.52	4.94	5.65	6.31	7.09	7.45	8.64	10.52	10.52	---	---
12	10.08	10.52	4.95	5.65	6.31	7.08	7.47	8.66	10.53	10.51	---	---
13	10.10	10.52	4.94	5.65	6.32	7.08	7.47	8.67	10.56	10.50	---	---
14	10.10	10.52	4.95	5.64	6.32	7.07	7.47	8.67	10.56	---	---	---
15	10.19	0.90	4.95	5.64	6.31	7.04	7.45	8.72	10.58	---	---	---
16	10.35	4.08	4.95	5.64	6.34	7.07	7.44	8.70	10.56	---	---	---
17	10.38	4.08	4.96	5.65	6.66	7.06	7.45	8.99	10.53	---	---	---
18	10.40	4.08	4.97	5.65	6.71	7.06	7.45	9.02	10.53	---	---	---
19	10.48	4.08	4.97	5.64	6.72	7.06	7.45	9.16	10.52	---	---	---
20	10.48	4.08	4.97	5.65	6.74	7.07	7.45	9.67	10.53	---	---	---
21	10.47	4.08	4.97	5.64	6.76	7.06	7.46	9.66	10.53	---	---	---
22	10.51	4.15	4.97	5.64	6.81	7.08	7.45	9.65	10.50	---	---	---
23	10.51	4.15	4.97	5.63	6.94	7.07	7.66	9.65	10.51	---	---	---
24	10.50	4.16	4.97	5.64	6.94	7.07	7.70	9.65	10.49	---	---	---
25	10.50	4.16	4.97	5.63	6.94	7.06	8.00	9.66	10.50	---	---	---
26	10.49	4.16	4.97	5.65	6.94	7.08	8.13	9.64	10.51	---	---	---
27	10.49	4.17	4.97	5.63	6.98	7.06	8.37	10.07	10.52	---	---	---
28	10.51	4.17	4.97	5.63	7.01	7.06	8.55	10.06	10.49	---	---	---
29	10.49	4.17	4.95	5.63	---	7.06	8.63	10.03	10.50	---	---	---
30	10.49	4.20	4.95	5.65	---	7.06	8.67	10.04	10.50	---	---	---
31	10.50	---	4.95	5.67	---	7.07	---	10.46	---	---	---	---
TOTAL	3.00	9.98	1.00	71.67	1.00	18.53	2.00	83.74	3.00	36.74	0.00	0.00
MEAN	10.24	7.00	4.82	5.54	6.36	7.05	7.60	9.15	10.53	10.52	0.00	0.00
MAX	10.51	10.52	4.97	5.67	7.01	7.09	8.67	10.46	10.58	10.56	0.00	0.00
MIN	9.82	0.90	4.26	5.01	5.72	7.01	7.09	8.62	10.49	10.49	0.00	0.00

WTR YR 1994 TOTAL 2209.19 MEAN 7.72 MAX 10.58 MIN 0.90

					PICABO							
	PP	PP	WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994									
			DELTA VALUES									
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.06	0.06	0.05	0.00	0.02	0.00	0.06	0.00	---	---
2	0.00	0.00	0.03	0.01	0.00	0.01	0.00	0.00	0.00	0.00	---	---
3	0.00	0.00	0.00	0.01	0.00	0.00	0.10	0.00	0.00	0.00	---	---
4	0.01	0.00	0.10	0.28	0.00	0.00	0.01	0.00	0.00	0.00	---	---
5	0.01	0.00	0.00	0.06	0.00	0.00	-0.01	0.00	0.00	0.03	---	---
6	0.01	0.00	0.00	0.00	0.00	0.00	0.16	0.00	0.00	0.01	---	---
7	0.13	0.00	0.01	0.00	0.14	0.00	0.03	0.00	0.00	0.00	---	---
8	0.12	0.00	0.52	0.14	0.06	0.00	0.00	0.00	0.00	0.00	---	---
9	0.00	0.00	0.02	0.03	0.05	0.00	0.00	0.01	0.00	0.00	---	---
10	0.00	0.02	0.01	0.10	0.06	0.00	0.08	0.01	0.00	0.00	---	---
11	0.00	0.00	0.01	0.00	0.27	0.08	0.00	0.01	0.01	0.00	---	---
12	0.00	0.00	0.01	0.00	0.00	0.00	0.01	0.02	0.01	0.00	---	---
13	0.02	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.03	0.00	---	---
14	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	---	---	---
15	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	---	---	---
16	0.17	0.00	0.00	0.00	0.01	0.00	0.00	0.02	0.00	---	---	---
17	0.02	0.00	0.01	0.01	0.33	0.00	0.00	0.28	0.00	---	---	---
18	0.02	0.00	0.01	0.00	0.05	0.00	0.00	0.03	0.00	---	---	---
19	0.09	0.00	0.00	0.00	0.01	0.00	0.00	0.15	0.00	---	---	---
20	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.51	0.00	---	---	---
21	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	---	---	---
22	0.00	0.07	0.01	0.00	0.05	0.00	0.00	0.00	0.00	---	---	---
23	0.00	0.01	0.00	0.00	0.12	0.00	0.21	0.00	0.01	---	---	---
24	0.00	0.01	0.00	0.00	0.00	0.00	0.04	0.00	0.00	---	---	---
25	0.00	0.00	0.00	0.00	0.01	0.00	0.30	0.00	0.00	---	---	---
26	0.00	0.00	0.00	0.01	0.00	0.00	0.13	0.00	0.00	---	---	---
27	0.00	0.01	0.00	0.00	0.03	0.00	0.24	0.43	0.00	---	---	---
28	0.01	0.00	0.01	0.00	0.03	0.00	0.18	0.00	0.00	---	---	---
29	0.00	0.01	0.00	0.00	---	0.00	0.08	0.00	0.01	---	---	---
30	0.00	0.02	0.00	0.02	---	0.00	0.00	0.00	0.00	---	---	---
31	0.00	---	0.00	0.02	---	0.01	---	0.42	---	---	---	---
TOTAL	0.70	0.15	0.82	0.75	1.33	0.10	1.58	1.94	0.13	0.04	0.00	0.00
MEAN	0.02	0.00	0.03	0.02	0.05	0.00	0.05	0.06	0.00	0.00	0.00	0.00
MAX	0.17	0.07	0.52	0.28	0.33	0.08	0.30	0.51	0.06	0.03	0.00	0.00
MIN	0.00	0.00	0.00	0.00	0.00	0.00	-0.01	0.00	0.00	0.00	0.00	0.00
	WTR YR 1994 TOTAL				7.54 MEAN		0.03 MAX		0.52 MIN	-0.01		

PICABO

PU PU WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAILY VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.66	0.87	1.63	2.35	3.63	3.74	5.29	7.29	7.35	---	---
2	0.00	0.66	0.90	1.64	2.35	3.63	3.74	5.29	7.29	7.35	---	---
3	0.00	0.66	0.90	1.65	2.35	3.63	3.85	5.29	7.29	7.35	---	---
4	0.01	0.66	0.99	1.93	2.35	3.63	3.85	5.29	7.29	7.35	---	---
5	0.02	0.66	0.99	1.99	2.35	3.63	3.84	5.29	7.29	7.38	---	---
6	0.02	0.66	0.99	1.99	2.35	3.63	3.99	5.29	7.29	7.39	---	---
7	0.16	0.66	1.00	1.99	2.49	3.63	4.03	5.29	7.29	7.39	---	---
8	0.27	0.66	1.52	2.13	2.55	3.63	4.03	5.29	7.29	7.39	---	---
9	0.27	0.65	1.53	2.16	2.60	3.63	4.03	5.29	7.29	7.39	---	---
10	0.26	0.67	1.54	2.27	2.67	3.63	4.11	5.30	7.29	7.39	---	---
11	0.26	0.67	1.55	2.27	2.94	3.71	4.10	5.31	7.29	7.39	---	---
12	0.26	0.67	1.55	2.27	2.94	3.71	4.11	5.34	7.30	7.39	---	---
13	0.28	0.67	1.55	2.27	2.95	3.71	4.11	5.35	7.33	7.39	---	---
14	0.28	0.67	1.55	2.27	2.95	3.71	4.11	5.35	7.33	---	---	---
15	0.37	0.67	1.55	2.27	2.95	3.71	4.11	5.39	7.33	---	---	---
16	0.53	0.67	1.55	2.27	2.96	3.71	4.11	5.41	7.33	---	---	---
17	0.56	0.67	1.56	2.27	3.28	3.71	4.11	5.70	7.33	---	---	---
18	0.58	0.67	1.57	2.27	3.33	3.71	4.11	5.73	7.33	---	---	---
19	0.66	0.67	1.57	2.27	3.34	3.71	4.11	5.87	7.33	---	---	---
20	0.66	0.67	1.57	2.27	3.36	3.71	4.11	6.38	7.33	---	---	---
21	0.66	0.67	1.57	2.27	3.38	3.71	4.11	6.38	7.33	---	---	---
22	0.66	0.74	1.58	2.27	3.43	3.71	4.11	6.38	7.33	---	---	---
23	0.66	0.75	1.58	2.27	3.56	3.71	4.32	6.38	7.34	---	---	---
24	0.66	0.76	1.57	2.27	3.56	3.71	4.36	6.38	7.34	---	---	---
25	0.66	0.76	1.57	2.27	3.56	3.71	4.66	6.38	7.34	---	---	---
26	0.66	0.76	1.57	2.28	3.56	3.71	4.79	6.38	7.34	---	---	---
27	0.66	0.77	1.57	2.27	3.60	3.71	5.03	6.81	7.34	---	---	---
28	0.67	0.77	1.58	2.27	3.63	3.71	5.21	6.81	7.34	---	---	---
29	0.66	0.78	1.58	2.27	---	3.71	5.29	6.81	7.35	---	---	---
30	0.66	0.80	1.58	2.29	---	3.71	5.29	6.81	7.35	---	---	---
31	0.66	---	1.58	2.31	---	3.72	---	7.23	---	---	---	---
TOTAL	12.72	20.86	44.13	67.12	.69 1	.22 1	.47 1	.49 2	19.53	95.90	0.00	0.00
MEAN	0.41	0.70	1.42	2.17	2.99	3.68	4.25	5.85	7.32	7.38	0.00	0.00
MAX	0.67	0.80	1.58	2.31	3.63	3.72	5.29	7.23	7.35	7.39	0.00	0.00
MIN	0.00	0.65	0.87	1.63	2.35	3.63	3.74	5.29	7.29	7.35	0.00	0.00

WTR YR 1994 TOTAL 967.13 MEAN 3.38 MAX 7.39 MIN 0.00

PICABO

SP SP WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

LAST VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.50	1.40	1.40	0.00	0.00	0.00	-0.05	---	---
2	0.00	0.00	0.00	0.50	1.40	0.80	0.00	0.00	0.00	-0.07	---	---
3	0.00	0.00	0.00	0.60	1.40	0.30	0.00	0.00	0.00	-0.07	---	---
4	0.00	0.00	0.10	0.80	1.40	0.00	0.00	0.00	0.00	-0.09	---	---
5	0.00	0.00	0.10	0.90	1.40	0.00	0.00	0.00	0.00	0.00	---	---
6	0.00	0.00	0.10	0.90	1.40	0.00	0.00	0.00	0.00	-0.05	---	---
7	0.00	0.00	0.10	0.90	1.60	0.00	0.00	0.00	0.00	-0.06	---	---
8	0.00	0.00	0.40	1.10	1.60	0.00	0.00	0.00	0.00	-0.04	---	---
9	0.00	0.00	0.40	1.10	1.60	0.00	0.00	0.00	0.00	-0.07	---	---
10	0.00	0.00	0.40	1.10	1.80	0.00	0.00	0.00	0.00	-0.07	---	---
11	0.00	0.00	0.40	1.10	2.00	0.00	0.00	0.00	0.00	-0.06	---	---
12	0.00	0.00	0.40	1.10	2.00	0.00	0.00	0.00	0.00	-0.06	---	---
13	0.00	0.00	0.40	1.10	2.00	0.00	0.00	0.00	0.00	-0.07	---	---
14	0.00	0.00	0.40	1.10	2.00	0.00	0.00	0.00	0.00	---	---	---
15	0.00	0.00	0.40	1.20	2.10	0.00	0.00	0.00	0.00	---	---	---
16	0.00	0.00	0.40	1.20	2.20	0.00	0.00	0.00	0.00	---	---	---
17	0.00	0.00	0.40	1.20	2.50	0.00	0.00	0.00	0.00	---	---	---
18	0.00	0.00	0.40	1.20	2.50	0.00	0.00	0.00	0.01	---	---	---
19	0.00	0.00	0.40	1.20	2.50	0.00	0.00	0.00	0.05	---	---	---
20	0.00	0.00	0.40	1.20	2.50	0.00	0.00	0.00	0.10	---	---	---
21	0.00	0.00	0.40	1.20	2.60	0.00	0.00	0.00	0.04	---	---	---
22	0.00	0.00	0.40	1.20	2.70	0.00	0.00	0.00	0.06	---	---	---
23	0.00	0.00	0.40	1.20	2.70	0.00	0.00	0.00	0.00	---	---	---
24	0.00	0.00	0.40	1.20	2.70	0.00	0.00	0.00	0.01	---	---	---
25	0.00	0.00	0.40	1.20	2.40	0.00	0.00	0.00	0.00	---	---	---
26	0.00	0.00	0.40	1.20	2.20	0.00	0.00	0.00	-0.07	---	---	---
27	0.00	0.00	0.40	1.20	2.00	0.00	0.00	0.00	-0.02	---	---	---
28	0.00	0.00	0.40	1.20	1.80	0.00	0.00	0.00	0.00	---	---	---
29	0.00	0.00	0.40	1.20	---	0.00	0.00	0.00	-0.04	---	---	---
30	0.00	0.00	0.40	1.30	---	0.00	0.00	0.00	-0.01	---	---	---
31	0.00	---	0.40	1.40	---	0.00	---	0.00	---	---	---	---
TOTAL	0.00	0.00	10.00	33.50	56.40	2.50	0.00	0.00	0.13	-0.76	0.00	0.00
MEAN	0.00	0.00	0.32	1.08	2.01	0.08	0.00	0.00	0.00	-0.06	0.00	0.00
MAX	0.00	0.00	0.40	1.40	2.70	1.40	0.00	0.00	0.10	0.00	0.00	0.00
MIN	0.00	0.00	0.00	0.50	1.40	0.00	0.00	0.00	-0.07	-0.09	0.00	0.00

WTR YR 1994 TOTAL 101.77 MEAN 0.36 MAX 2.70 MIN -0.09

				PICABO								
	SR	SR	WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994									
			SRAD	VALUES								
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.00	62.35	88.61	73.41	2.00	54.87	4.00	50.32	6.00	4.53	---	---
2	3.00	89.35	-1.00	42.47	2.00	55.74	4.00	73.45	6.00	79.86	---	---
3	3.00	9.36	1.00	69.83	2.00	49.66	1.00	13.32	5.00	78.47	---	---
4	3.00	25.00	1.00	92.08	2.00	30.97	3.00	98.84	6.00	1.93	---	---
5	2.00	17.17	1.00	54.18	2.00	98.94	3.00	34.35	-3.00	35.31	---	---
6	3.00	54.53	1.00	85.91	2.00	86.15	2.00	26.35	4.00	59.89	---	---
7	2.00	47.59	1.00	39.00	94.69	3.00	69.11	5.00	29.92	6.00	---	---
8	1.00	12.38	59.07	48.21	1.00	93.53	5.00	61.61	6.00	84.54	---	---
9	2.00	1.54	1.00	93.82	1.00	6.11	3.00	39.04	6.00	26.78	---	---
10	2.00	5.45	1.00	78.52	98.60	1.00	28.81	5.00	1.49	6.00	---	---
11	1.00	18.49	77.32	1.00	51.49	3.00	49.02	6.00	31.98	7.00	---	---
12	3.00	21.96	1.00	49.85	2.00	20.46	5.00	66.07	5.00	2.36	---	---
13	2.00	44.64	1.00	75.92	2.00	10.47	4.00	45.02	3.00	86.27	---	---
14	2.00	20.65	1.00	0.67	3.00	27.40	5.00	46.42	7.00	---	---	---
15	1.00	12.84	1.00	72.01	2.00	64.86	5.00	29.23	7.00	---	---	---
16	1.00	8.92	59.51	1.00	88.85	2.00	38.17	2.00	20.69	---	---	---
17	2.00	82.44	96.43	1.00	95.12	4.00	7.77	4.00	20.17	---	---	---
18	2.00	9.80	1.00	96.77	2.00	26.74	4.00	23.84	7.00	---	---	---
19	2.00	6.32	1.00	14.57	2.00	42.26	5.00	30.97	7.00	---	---	---
20	3.00	98.07	63.42	2.00	7.62	4.00	68.58	-6.00	29.39	---	---	---
21	2.00	67.66	58.20	2.00	35.42	3.00	73.44	5.00	63.80	---	---	---
22	2.00	53.00	39.95	2.00	49.23	1.00	11.34	6.00	52.39	---	---	---
23	3.00	-1.00	72.88	1.00	63.22	4.00	75.05	6.00	14.09	---	---	---
24	2.00	52.46	1.00	88.08	3.00	44.34	3.00	80.21	7.00	---	---	---
25	2.00	3.90	1.00	0.66	3.00	87.35	2.00	88.01	7.00	---	---	---
26	2.00	0.24	1.00	66.46	1.00	77.80	1.00	12.45	7.00	---	---	---
27	1.00	82.44	91.65	1.00	63.32	4.00	40.20	2.00	79.76	---	---	---
28	2.00	82.09	1.00	34.55	2.00	99.50	2.00	25.58	6.00	---	---	---
29	2.00	98.17	1.00	12.06	-5.00	13.41	6.00	59.44	6.00	---	---	---
30	2.00	2.07	1.00	11.53	-4.00	90.39	4.00	91.50	6.00	---	---	---
31	1.00	-1.00	46.81	2.00	-2.00	88.85	-1.00	29.87	---		---	---
TOTAL	81.00	90.88	36.00	0.19	65.00	57.30	1.00	58.84	1.00	20.54	0.00	0.00
MEAN	2.00	89.34		64.52		76.04		11.96		40.04	0.00	0.00
MAX	3.00	62.35		34.55		13.41		91.50		4.53	0.00	0.00
MIN	1.00	53.00	39.95	48.21	94.69	1.00	45.94	1.00	96.57	3.00	0.00	0.00
WTR YR 1994 TOTAL			95397.48 MEAN		338.29 MAX		722.76 MIN		39.95			

				PICABO								
	SR2	SR2	WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994									
				SRAD VALUES								
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	71.01	23.68	83.67	62.85	80.40	65.30		17.53		58.77	---	---
2	29.39	59.18	---	74.69	31.83	60.40	1.00	63.24	1.00	97.13	---	---
3	30.61	64.08		41.22	53.47	71.42	1.00	46.51	1.00	26.52	---	---
4	37.55	68.98	76.32	80.81	37.14	82.85	2.00	46.51	82.44	1.00	---	---
5	89.79	36.64	67.34	41.63	35.51	1.00	4.47	2.00	-1.00	95.90	---	---
6	96.32	35.51	90.07	26.12	72.65	45.71	1.00	57.11	2.00	66.92	---	---
7	1.00	36.73	90.60	1.00	84.89	51.02	1.00	15.49	1.00	61.63	---	---
8	1.00	65.29	44.08	28.16	71.01	41.63	1.00	48.15	99.58	60.00	---	---
9	1.00	3.26	89.79	44.08	1.00	33.06	2.00	85.30	89.79	1.00	---	---
10	0.00	72.24	72.24	87.34	72.65	1.00	34.67	1.00	62.04	1.00	---	---
11	0.00	48.98	17.00	2.44	82.44	1.00	87.75	62.04	1.00	53.47	---	---
12	---	37.55	23.67	97.95	61.63	38.77	1.00	70.19	2.00	55.51	---	---
13	0.00	84.89	46.12	57.55	1.00	59.59	2.00	21.21	2.00	57.14	---	---
14	95.50	21.84	96.73	33.47	1.00	52.24	1.00	15.90	67.34	---	---	---
15	82.44	44.90	72.24	63.26	1.00	8.97	1.00	8.15	88.56	---	---	---
16		81.30	53.47	46.93	1.00	64.88	1.00	8.96	1.00	---	---	---
17		64.89	78.77	49.79	93.87	52.24	1.00	39.98	61.63	---	---	---
18		25.31	65.30	72.65	1.00	88.15	1.00	68.15	63.26	---	---	---
19	71.83	15.92	37.14	26.12	2.00	14.28	1.00	5.29	64.48	---	---	---
20	42.85	17.15	59.18	22.45	1.00	83.67	1.00	95.09	1.00	---	---	---
21		39.59	53.47	63.26	2.00	91.41	1.00	77.54	1.00	---	---	---
22	32.25	61.62	39.18	28.98	2.00	38.76	1.00	93.46	1.00	---	---	---
23	28.58	80.81	30.61	48.16	2.00	81.22	1.00	6.93	62.04	---	---	---
24	73.87		68.16	75.50	1.00	22.03	2.00	10.20	93.46	---	---	---
25	33.87	39.59	32.24	82.03	1.00	53.46	2.00	19.58	60.00	---	---	---
26	38.36	39.18	93.05	62.04	1.00	78.77	1.00	61.21	61.22	---	---	---
27		6.51	85.71	1.00	42.44	1.00	35.49	2.00	41.62	---	---	---
28	84.08	85.30	24.90	39.18	1.00	44.48	1.00	77.54	72.65	---	---	---
29	17.55	95.52	61.22	95.50	---	41.22	1.00	36.31	66.93	---	---	---
30	32.24	69.38	88.16	91.01	---	67.75	2.00	56.32	62.85	---	---	---
31		---	54.69	1.00	-1.00	66.92	-1.00	11.01	---	---	---	---
TOTAL	24.00	56.00	27.36	19.00	73.57	29.00	96.71	55.00	34.80	13.00	0.00	0.00
MEAN		1.00	20.91	64.30	1.00	94.79	1.00	78.33	1.00	5.27	0.00	0.00
MAX	1.00	39.00	40.67	1.00	47.73	1.00	74.26	3.00	94.26	1.00	0.00	0.00
MIN	17.55	15.92	23.67	22.45	31.83	33.06	87.75	56.32	60.00	53.47	0.00	0.00
		WTR YR 1994 TOTAL		35768.58 MEAN		126.39 MAX		3981.30 MIN			15.92	

PICABO

TA TA WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30.02	52.21	85.23	84.69	64.06	74.86	66.65	57.67	66.12	26.53	---	---
2	39.55	38.04	76.74	75.11	67.34	73.33	55.28	46.82	47.13	35.05	---	---
3	37.03	37.93	74.90	85.15	66.25	66.97	62.80	42.75	49.29	27.50	---	---
4	32.09	52.80	77.32	87.20	64.33	62.13	55.33	52.19	42.38	29.11	---	---
5	38.24	56.18	62.57	78.00	56.94	66.06	59.80	60.32	31.90	40.00	---	---
6	58.03	53.93	66.69	70.80	56.34	69.88	75.82	44.91	35.42	49.17	---	---
7	68.21	50.75	74.81	68.78	92.28	59.20	62.45	42.78	41.38	45.79	---	---
8	82.33	49.48	90.72	88.36	87.33	60.26	45.12	51.83	42.12	37.72	---	---
9	71.60	43.19	72.75	85.38	83.61	54.66	51.84	47.32	35.83	31.59	---	---
10	64.24	31.64	75.61	78.20	87.93	70.91	63.49	41.14	37.38	26.23	---	---
11	66.42	31.14	56.17	80.43	73.48	63.18	49.61	36.42	41.83	24.99	---	---
12	72.70	49.85	65.12	78.67	66.25	45.31	44.01	52.50	48.06	25.01	---	---
13	74.42	74.26	61.29	83.87	67.31	42.69	30.02	40.28	44.80	25.82	---	---
14	72.47	52.94	56.54	83.23	67.90	32.65	32.66	34.77	41.89	---	---	---
15	82.99	53.67	70.50	71.41	62.41	33.20	37.08	31.33	33.73	---	---	---
16	82.71	40.45	90.47	72.54	48.34	41.58	31.68	56.24	39.24	---	---	---
17	76.27	42.54	79.08	70.72	72.64	48.67	28.01	78.85	30.76	---	---	---
18	69.26	38.89	70.02	57.48	87.87	48.49	27.63	59.54	27.16	---	---	---
19	65.76	45.43	73.71	59.04	72.14	45.18	35.37	66.18	24.46	---	---	---
20	62.59	46.53	84.56	67.42	82.68	38.31	36.81	79.20	24.60	---	---	---
21	57.26	41.92	84.98	60.51	82.12	46.43	30.56	59.92	33.48	---	---	---
22	50.60	67.18	84.85	57.62	68.40	65.92	56.49	49.71	40.59	---	---	---
23	43.89	80.98	78.84	58.80	74.24	45.85	65.21	35.38	32.57	---	---	---
24	46.30	79.41	81.61	77.85	79.52	42.26	77.11	37.59	24.07	---	---	---
25	37.11	69.83	74.97	71.48	80.77	39.48	85.24	37.72	22.27	---	---	---
26	45.02	70.79	75.46	94.83	87.49	39.08	86.81	38.54	25.21	---	---	---
27	49.21	67.69	79.23	84.52	89.10	49.07	86.67	65.03	29.90	---	---	---
28	36.83	57.36	78.33	68.55	74.71	39.85	80.83	56.22	27.05	---	---	---
29	56.10	85.15	79.62	84.52	---	38.70	53.30	54.15	26.28	---	---	---
30	46.75	85.29	71.57	71.65	---	27.46	60.17	39.55	26.75	---	---	---
31	41.45	---	78.40	56.19	---	47.24	---	73.65	---	---	---	---
TOTAL		47.45	23.00	13.00	20.00	78.86	16.00	70.50	10.00	24.51	0.00	0.00
MEAN	56.69	54.92	75.25	74.61	73.71	50.93	54.46	50.66	35.79	32.65	0.00	0.00
MAX	82.99	85.29	90.72	94.83	92.28	74.86	86.81	79.20	66.12	49.17	0.00	0.00
MIN	30.02	31.14	56.17	56.19	48.34	27.46	27.63	31.33	22.27	24.99	0.00	0.00

WTR YR 1994 TOTAL 16395.71 MEAN 57.33 MAX 94.83 MIN 22.27

PICABO

TG TG WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAILY VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15.47	0.00	0.00	0.00	0.00	1.09	5.14	4.46	7.22	19.11	0.00	0.00
2	14.06	0.46	0.00	0.00	0.00	4.07	7.34	6.84	13.18	14.43	0.00	0.00
3	15.85	2.92	0.00	0.00	0.00	2.29	0.12	7.91	16.74	13.09	0.00	0.00
4	17.42	0.00	0.00	0.00	0.00	0.95	0.86	8.60	10.79	14.96	0.00	0.00
5	16.48	0.00	0.00	0.00	0.00	0.00	0.48	10.76	18.00	12.24	0.00	0.00
6	10.95	0.00	0.00	0.00	0.00	0.00	0.40	14.39	9.53	10.92	0.00	0.00
7	4.22	0.00	0.00	0.00	0.00	0.00	0.00	11.56	5.28	16.18	0.00	0.00
8	-2.55	0.00	0.00	0.00	0.00	0.00	0.84	11.39	7.64	18.00	0.00	0.00
9	0.92	0.00	0.00	0.00	0.00	1.77	0.17	15.15	11.99	19.05	0.00	0.00
10	3.97	2.37	0.00	0.00	0.00	0.00	4.14	15.85	15.53	20.70	0.00	0.00
11	5.96	1.83	0.00	0.00	0.00	0.84	6.05	17.49	18.00	18.00	0.00	0.00
12	5.87	0.00	0.00	0.00	0.00	1.58	7.81	15.18	16.61	18.00	0.00	0.00
13	6.44	0.00	0.00	0.00	0.00	5.41	2.09	10.68	12.90	18.00	0.00	0.00
14	5.17	0.00	0.00	0.00	0.00	7.61	3.76	11.99	4.22	0.00	0.00	0.00
15	1.75	0.00	0.00	0.00	0.00	8.93	8.83	8.68	7.88	0.00	0.00	0.00
16	2.19	0.00	0.00	0.00	0.00	5.39	13.69	1.52	7.86	0.00	0.00	0.00
17	2.70	0.00	0.00	0.00	0.00	0.00	15.63	1.73	14.49	0.00	0.00	0.00
18	1.65	0.00	0.00	0.00	0.00	2.37	16.51	7.47	16.25	0.00	0.00	0.00
19	4.59	0.00	0.00	0.00	---	0.00	16.45	1.97	18.00	0.00	0.00	0.00
20	3.61	0.00	0.00	0.00	---	0.00	16.28	4.12	19.67	0.00	0.00	0.00
21	4.33	0.00	0.00	0.00	---	1.07	16.08	8.20	18.90	0.00	0.00	0.00
22	8.45	0.00	0.00	0.00	---	0.00	6.65	10.32	18.40	0.00	0.00	0.00
23	9.66	0.00	0.00	0.00	---	0.00	3.84	13.78	18.95	0.00	0.00	0.00
24	7.13	0.00	0.00	0.00	0.00	0.00	2.09	14.61	18.00	0.00	0.00	0.00
25	4.57	0.00	0.00	0.00	0.00	2.35	0.00	16.74	18.80	0.00	0.00	0.00
26	3.15	0.00	0.00	0.00	0.00	2.70	0.00	17.45	13.07	0.00	0.00	0.00
27	0.44	0.00	0.00	0.00	0.00	1.79	0.00	9.22	17.01	0.00	0.00	0.00
28	4.46	0.00	0.00	0.00	0.00	8.30	0.00	10.38	18.00	0.00	0.00	0.00
29	0.00	0.00	0.00	0.00	---	4.25	3.29	11.82	20.98	0.00	0.00	0.00
30	1.09	0.00	0.00	0.00	---	7.06	4.66	13.87	19.07	0.00	0.00	0.00
31	1.63	---	0.00	0.00	---	4.40	---	7.82	---	0.00	0.00	---
TOTAL	1.00	7.58	0.00	0.00	0.00	74.22	1.00	21.95	4.00	12.68	0.00	0.00
MEAN	5.86	0.25	0.00	0.00	0.00	2.39	5.44	10.39	14.43	6.86	0.00	0.00
MAX	17.42	2.92	0.00	0.00	0.00	8.93	16.51	17.49	20.98	20.70	0.00	0.00
MIN	-2.55	0.00	0.00	0.00	0.00	0.00	0.00	1.52	4.22	0.00	0.00	0.00

WTR YR 1994 TOTAL 1394.22 MEAN 3.87 MAX 20.98 MIN -2.55

PICABO

UA UA WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAILY VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.99	2.73	3.51	3.24	1.96	1.98	3.41	5.47	5.19	3.99	---	---
2	2.09	2.18	---	1.66	1.99	2.20	2.82	4.37	2.89	5.65	---	---
3	2.80	5.72	1.53	1.66	1.65	2.42	4.41	2.97	3.05	5.30	---	---
4	2.68	2.78	6.68	1.60	2.17	3.70	4.31	2.53	4.98	3.81	---	---
5	3.94	2.58	1.98	7.59	2.03	1.92	3.15	2.20	3.72	4.77	---	---
6	3.78	2.57	2.56	3.53	2.02	2.60	4.08	5.18	6.69	3.80	---	---
7	4.15	2.51	1.74	1.54	0.73	2.26	6.25	3.98	5.22	2.88	---	---
8	3.88	2.29	1.51	0.91	0.79	2.49	3.23	4.68	6.23	2.34	---	---
9	1.92	2.52	2.44	1.75	1.79	2.53	3.80	3.35	3.29	3.15	---	---
10	2.23	2.44	1.98	1.10	1.73	2.50	3.99	3.81	3.31	5.02	---	---
11	2.55	2.53	4.22	1.36	2.98	3.07	3.80	3.42	3.02	3.59	---	---
12	2.68	2.20	6.87	2.09	1.93	3.33	4.67	4.72	3.75	4.00	---	---
13	2.26	1.95	3.57	1.36	2.06	2.54	7.04	5.68	6.15	2.94	---	---
14	2.81	3.19	2.47	0.89	1.94	3.16	7.27	2.90	8.35	---	---	---
15	2.03	1.64	1.39	3.61	2.29	3.38	3.01	6.51	4.99	---	---	---
16	1.73	2.15	0.95	1.82	4.51	3.67	3.15	3.19	4.90	---	---	---
17	2.68	2.28	1.23	2.73	5.76	5.93	3.66	5.92	2.71	---	---	---
18	2.97	5.07	2.68	1.77	4.37	4.11	3.99	4.12	3.92	---	---	---
19	2.90	2.03	1.72	1.44	1.91	7.01	3.72	5.76	2.66	---	---	---
20	1.86	2.02	1.14	1.56	5.79	2.88	3.14	---	3.44	---	---	---
21	2.42	1.91	1.45	2.26	1.88	3.94	4.49	2.41	3.40	---	---	---
22	2.37	3.00	1.69	2.45	5.14	4.59	4.12	3.57	4.08	---	---	---
23	2.69	3.09	1.50	2.95	2.78	5.27	3.60	3.16	4.05	---	---	---
24	3.77	1.78	1.25	3.19	12.50	3.30	3.10	2.53	4.05	---	---	---
25	2.30	1.72	1.27	2.96	2.36	2.81	3.50	2.36	3.39	---	---	---
26	2.17	1.42	1.09	0.89	1.38	3.89	3.24	3.37	8.33	---	---	---
27	1.74	2.28	1.12	1.14	1.85	3.48	1.69	4.94	3.12	---	---	---
28	4.07	2.57	1.44	2.19	1.62	5.54	2.21	3.77	2.75	---	---	---
29	1.55	1.21	1.28	1.36	---	3.69	3.01	4.11	4.64	---	---	---
30	2.22	2.83	2.83	1.72	---	3.66	4.61	4.44	3.78	---	---	---
31	3.56	---	2.24	2.18	---	3.05	---	3.68	---	---	---	---
TOTAL	84.79	75.19	67.33	66.50	79.91	1.00	16.47	1.00	30.05	51.24	0.00	0.00
MEAN	2.74	2.51	2.24	2.15	2.85	3.45	3.88	3.97	4.34	3.94	0.00	0.00
MAX	4.15	5.72	6.87	7.59	12.50	7.01	7.27	6.51	8.35	5.65	0.00	0.00
MIN	1.55	1.21	0.95	0.89	0.73	1.92	1.69	2.20	2.66	2.34	0.00	0.00

WTR YR 1994 TOTAL 897.48 MEAN 3.16 MAX 12.50 MIN 0.73

PICABO

UD UD WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

WDIR VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.00	93.40	2.00	37.85	2.00	23.35	2.00	5.63	2.00	63.78	---	---
2	1.00	45.36	2.00	85.82	2.00	17.37	1.00	30.42	1.00	86.02	---	---
3	2.00	50.95	1.00	23.67	2.00	5.57	2.00	32.56	2.00	82.19	---	---
4	1.00	48.60	2.00	46.96	2.00	43.61	2.00	80.80	2.00	78.81	---	---
5	1.00	77.88	1.00	42.96	1.00	68.68	2.00	71.77	1.00	72.95	---	---
6	1.00	1.39	2.00	45.08	2.00	29.88	2.00	22.00	2.00	49.51	---	---
7	2.00	88.06	62.91	2.00	77.91	1.00	37.76	1.00	70.49	1.00	---	---
8	1.00	43.24	2.00	94.37	1.00	57.57	1.00	0.35	2.00	55.35	---	---
9	1.00	36.34	2.00	31.92	2.00	1.57	2.00	36.09	2.00	38.88	---	---
10	1.00	78.77	1.00	97.00	2.00	48.08	2.00	85.75	2.00	71.15	2.00	---
11	1.00	96.58	91.96	2.00	95.93	2.00	9.24	1.00	85.49	2.00	---	---
12	1.00	78.61	2.00	27.48	1.00	60.57	2.00	23.03	2.00	58.00	---	---
13	1.00	87.83	85.40	89.54	1.00	24.74	2.00	38.01	2.00	55.91	---	---
14	2.00	89.46	1.00	63.48	1.00	59.90	2.00	9.20	2.00	---	---	---
15	1.00	79.12	2.00	26.04	1.00	78.44	1.00	33.44	2.00	---	---	---
16	1.00	56.43	2.00	0.46	86.64	2.00	76.95	1.00	81.35	---	---	---
17	1.00	80.74	2.00	23.20	88.59	2.00	97.03	2.00	86.06	---	---	---
18	2.00	50.00	2.00	73.39	2.00	18.94	1.00	58.23	2.00	---	---	---
19	2.00	82.90	2.00	39.18	2.00	35.48	1.00	71.45	2.00	---	---	---
20	1.00	89.30	3.00	21.89	85.61	2.00	80.73	2.00	26.04	---	---	---
21	1.00	57.05	2.00	85.04	3.00	57.16	1.00	74.66	1.00	---	---	---
22	1.00	38.99	2.00	76.19	2.00	45.24	2.00	68.83	1.00	---	---	---
23	2.00	34.84	1.00	54.34	2.00	39.34	1.00	67.10	2.00	---	---	---
24	2.00	97.16	2.00	94.49	2.00	1.06	1.00	91.43	2.00	---	---	---
25	1.00	4.51	2.00	23.98	3.00	16.58	2.00	33.96	2.00	---	---	---
26	2.00	6.23	1.00	74.13	2.00	51.28	1.00	26.57	2.00	---	---	---
27	1.00	10.68	34.54	2.00	41.31	2.00	58.04	2.00	25.21	---	---	---
28	1.00	91.60	90.10	2.00	19.55	2.00	12.80	2.00	68.92	2.00	---	---
29	1.00	12.52	2.00	97.12	---		15.97	2.00	79.29	---	---	---
30	1.00	25.23	1.00	84.76	-1.00	0.93	1.00	67.93	1.00	---	---	---
31	2.00	-2.00	39.51	2.00	-1.00	96.47	-2.00	17.80	---		---	---
TOTAL	53.00	1.47	61.00	90.96	54.00	45.39	60.00	30.37	72.00	7.48	0.00	0.00
MEAN	1.00	83.38	1.00	96.48	1.00	7.92	2.00	17.11	2.00	54.42	0.00	0.00
MAX	2.00	43.24	3.00	74.13	3.00	68.68	2.00	91.43	2.00	86.02	0.00	0.00
MIN	78.77	87.83	34.54	89.54	48.08	89.47	1.00	71.45	1.00	13.06	0.00	0.00

WTR YR 1994 TOTAL 58414.82 MEAN 204.25 MAX 344.75 MIN 34.54

PICABO

WR WR WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

WRUN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	95.87	65.49	84.16	77.69	47.06	47.56	81.92	1.00	24.50	95.87	---	---
2	50.05	52.29	---	39.84	47.81	52.79	67.73	1.00	69.47	1.00	---	---
3	67.23	1.00	36.60	39.84	39.59	58.02	1.00	71.21	73.21	1.00	---	---
4	64.24	66.73	1.00	38.35	52.04	88.89	1.00	60.76	1.00	91.38	---	---
5	94.62	62.00	47.56	1.00	48.80	46.06	75.70	52.79	89.39	1.00	---	---
6	90.64	61.75	61.51	84.66	48.56	62.50	97.86	1.00	60.61	91.13	---	---
7	99.60	60.26	41.83	36.85	17.43	54.28	1.00	95.62	1.00	69.22	---	---
8	93.13	55.06	36.35	21.91	18.92	59.76	77.44	1.00	49.40	56.27	---	---
9	46.06	60.51	58.52	42.08	43.08	60.76	91.13	80.43	78.93	75.70	---	---
10	53.54	58.52	47.56	26.39	41.58	60.01	95.87	91.38	79.43	1.00	---	---
11	61.25	60.76	1.00	32.62	71.46	73.70	91.13	82.17	72.46	86.15	---	---
12	64.24	52.79	1.00	50.05	46.31	79.93	1.00	13.29	89.89	96.11	---	---
13	54.28	46.81	85.66	32.62	49.55	61.00	1.00	36.20	1.00	70.47	---	---
14	67.48	76.44	59.26	21.41	46.56	75.94	1.00	69.72	2.00	---	---	---
15	48.80	39.34	33.37	86.65	55.03	81.17	72.21	1.00	19.77	---	---	---
16	41.58	51.54	22.91	43.57	1.00	88.15	75.70	76.44	1.00	---	---	---
17	64.24	54.78	29.63	65.49	1.00	1.00	87.90	1.00	64.99	---	---	---
18	71.21	1.00	64.24	42.58	1.00	98.60	95.87	98.85	94.12	---	---	---
19	69.72	48.80	41.33	34.61	45.82	1.00	89.39	1.00	63.74	---	---	---
20	44.57	48.55	27.39	37.35	1.00	69.22	75.45	---		---	---	---
21	58.02	45.82	34.86	54.28	45.07	94.62	1.00	57.77	81.67	---	---	---
22	56.77	71.96	40.59	58.76	1.00	1.00	98.85	85.66	97.86	---	---	---
23	64.49	74.20	36.10	70.72	66.73	1.00	86.40	75.94	97.11	---	---	---
24	90.39	42.83	29.88	76.44	3.00	79.18	74.45	60.76	97.11	---	---	---
25	55.28	41.33	30.38	70.97	56.52	67.48	83.91	56.52	81.42	---	---	---
26	52.04	34.11	26.15	21.41	33.12	93.38	77.69	80.92	1.00	---	---	---
27	41.83	54.78	26.89	27.39	44.32	83.42	40.59	1.00	74.95	---	---	---
28	97.61	61.75	34.61	52.54	38.84	1.00	53.04	90.39	65.99	---	---	---
29	37.10	29.13	30.63	32.62	---		72.21	98.60	1.00	---	---	---
30	53.29	67.98	67.98	41.33	---		10.56	1.00	90.67	---	---	---
31	85.41	---	53.78	52.29	---		---		---		---	---
TOTAL	20.00	5.27	16.00	95.58	19.00	25.00	95.54	28.00	21.02	12.00	0.00	0.00
MEAN	65.63	60.18	53.88	51.47	68.49	82.79	93.18	95.27	1.00	94.64	0.00	0.00
MAX	99.60	1.00	64.84	1.00	0.04	1.00	74.55	1.00	0.45	1.00	0.00	0.00
MIN	37.10	29.13	22.91	21.41	17.43	46.06	40.59	52.79	63.74	56.27	0.00	0.00

WTR YR 1994 TOTAL 21540.79 MEAN 75.85 MAX 300.04 MIN 17.43

PICABO

XC XC WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

MIN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	55.00	41.40	34.71	27.56	25.67	33.85	41.40	50.20	55.78	65.61	---	---
2	55.00	40.61	35.18	28.50	24.41	34.08	42.26	49.57	54.37	66.00	---	---
3	55.00	41.55	34.71	29.76	23.63	34.48	44.15	49.41	56.25	64.35	---	---
4	55.15	41.16	34.95	31.10	23.31	34.95	41.79	51.46	56.65	63.09	---	---
5	55.78	39.82	33.69	32.35	23.55	35.34	41.16	52.72	56.49	64.35	---	---
6	56.96	38.01	33.06	31.73	23.71	35.50	42.89	53.03	58.77	61.84	---	---
7	56.49	36.84	33.06	28.50	26.85	35.50	42.10	53.97	55.15	62.94	---	---
8	53.66	36.44	34.40	28.42	29.29	35.73	40.77	54.29	54.60	64.12	---	---
9	51.38	35.81	35.26	29.84	29.29	35.89	42.97	54.92	55.86	65.30	---	---
10	50.44	37.39	35.73	29.76	29.45	36.21	44.38	55.78	56.65	66.71	---	---
11	50.67	37.07	36.05	29.84	30.00	36.36	43.52	56.33	58.06	65.92	---	---
12	50.52	36.60	36.13	30.23	29.92	37.07	44.46	57.51	60.03	65.61	---	---
13	51.62	34.87	35.03	30.31	29.29	37.15	45.56	56.88	61.36	66.00	---	---
14	51.69	35.03	33.53	29.76	29.29	38.09	45.25	55.55	58.85	---	---	---
15	50.83	33.61	32.75	29.21	29.45	38.96	44.78	57.59	57.36	---	---	---
16	48.63	30.15	32.28	29.37	29.84	40.61	46.19	55.55	57.12	---	---	---
17	48.86	34.01	31.96	28.27	31.33	40.06	48.55	54.21	55.94	---	---	---
18	47.84	36.21	30.39	28.50	32.35	39.27	50.12	52.72	58.22	---	---	---
19	46.90	33.45	29.13	28.03	32.90	40.45	52.17	53.66	59.32	---	---	---
20	45.96	32.04	26.61	27.48	32.12	38.01	52.80	52.40	61.13	---	---	---
21	45.40	31.33	28.27	27.64	32.59	38.57	54.13	49.41	62.54	---	---	---
22	46.82	34.01	28.58	28.19	32.75	39.74	54.13	51.54	63.33	---	---	---
23	47.06	35.03	27.72	28.34	32.59	37.94	52.32	52.64	63.88	---	---	---
24	46.90	32.75	25.91	30.39	32.75	37.07	50.75	53.82	63.41	---	---	---
25	45.72	30.00	24.49	31.73	33.14	37.07	49.57	55.55	63.88	---	---	---
26	44.38	28.19	24.26	32.43	33.53	37.86	48.86	56.88	65.30	---	---	---
27	43.83	27.09	27.09	32.59	33.61	38.49	47.61	58.22	62.94	---	---	---
28	44.85	29.13	26.77	31.49	33.77	39.04	47.29	54.68	63.88	---	---	---
29	43.68	32.12	24.89	30.00	---	40.06	46.27	54.76	65.30	---	---	---
30	41.63	34.71	24.33	30.23	---	40.06	47.92	55.86	65.14	---	---	---
31	41.08	---	26.06	27.87	---	41.16	---	57.28	---	---	---	---
TOTAL	15.00	46.43	9.00	19.42	8.00	64.62	13.00	78.39	17.00	41.84	0.00	0.00
MEAN	49.35	34.88	30.87	29.66	29.66	37.57	46.54	54.14	59.59	64.76	0.00	0.00
MAX	56.96	41.55	36.13	32.59	33.77	41.16	54.13	58.22	65.30	66.71	0.00	0.00
MIN	41.08	27.09	24.26	27.48	23.31	33.85	40.77	49.41	54.37	61.84	0.00	0.00

WTR YR 1994 TOTAL 12151.47 MEAN 42.49 MAX 66.71 MIN 23.31

PICABO

XD XD WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

MIN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	56.49	43.83	35.81	28.89	28.34	33.93	42.10	50.04	55.86	65.69	---	---
2	56.49	43.05	36.13	29.84	27.24	34.24	42.89	50.04	55.15	65.92	---	---
3	56.41	43.36	36.21	30.23	26.46	34.63	44.23	50.20	56.18	64.98	---	---
4	56.65	43.52	36.21	31.41	25.99	35.26	42.73	51.54	56.80	64.20	---	---
5	56.96	42.42	35.58	32.28	25.91	35.66	42.18	52.32	56.65	64.51	---	---
6	57.83	41.08	34.87	32.90	25.99	35.81	43.05	52.95	58.22	62.86	---	---
7	57.43	39.98	34.79	31.10	27.09	35.97	42.73	53.90	56.18	63.25	---	---
8	55.31	39.51	35.18	30.31	28.97	36.21	41.95	54.37	55.55	64.27	---	---
9	53.50	38.80	35.81	30.70	30.00	36.44	43.20	54.76	56.25	65.22	---	---
10	52.72	39.43	36.36	31.02	30.15	36.60	44.30	55.55	56.96	66.32	---	---
11	52.56	39.51	36.68	30.94	30.39	36.76	44.23	56.10	57.98	66.16	---	---
12	52.40	39.19	36.91	31.33	30.55	37.62	45.01	57.04	59.32	66.08	---	---
13	52.95	38.17	36.44	31.41	30.15	37.78	45.88	56.96	60.42	66.32	---	---
14	53.03	37.70	35.58	31.02	30.07	38.57	45.72	56.18	59.16	---	---	---
15	52.40	36.84	34.79	30.62	30.23	39.51	45.56	56.96	58.22	---	---	---
16	50.99	34.01	34.16	30.70	30.39	40.84	46.66	55.70	57.98	---	---	---
17	50.75	36.60	33.93	30.00	31.02	40.61	48.47	54.60	57.20	---	---	---
18	50.12	37.62	32.83	30.00	32.04	40.22	49.89	53.58	58.46	---	---	---
19	49.26	36.52	31.80	29.68	32.67	40.69	51.46	53.82	59.48	---	---	---
20	48.39	35.26	30.07	29.21	32.75	39.19	52.48	52.72	60.74	---	---	---
21	47.76	34.56	30.39	29.21	32.83	39.35	53.50	51.07	62.07	---	---	---
22	48.55	35.50	30.62	29.45	32.98	40.22	53.97	52.17	62.78	---	---	---
23	48.94	36.44	30.07	29.76	32.98	38.96	52.72	53.03	63.49	---	---	---
24	48.86	35.11	28.89	30.47	32.98	38.17	51.22	54.13	63.41	---	---	---
25	48.16	33.22	27.79	31.57	33.22	37.94	50.20	55.31	63.72	---	---	---
26	46.98	31.65	27.24	32.35	33.61	38.72	49.41	56.57	64.75	---	---	---
27	46.19	30.70	28.34	32.98	33.69	39.27	48.39	57.59	63.57	---	---	---
28	46.58	31.49	29.05	32.67	33.77	39.90	48.08	55.39	64.04	---	---	---
29	46.03	32.90	27.79	31.65	---	40.84	47.45	55.23	64.82	---	---	---
30	44.46	34.95	27.17	31.41	---	41.08	48.63	55.86	65.14	---	---	---
31	43.68	---	28.03	30.00	---	41.95	---	56.88	---	---	---	---
TOTAL	15.00	22.92	10.00	55.11	8.00	82.94	14.00	82.56	17.00	45.78	0.00	0.00
MEAN	51.25	37.43	32.76	30.81	30.45	38.16	46.94	54.28	59.68	65.06	0.00	0.00
MAX	57.83	43.83	36.91	32.98	33.77	41.95	53.97	57.59	65.14	66.32	0.00	0.00
MIN	43.68	30.70	27.17	28.89	25.91	33.93	41.95	50.04	55.15	62.86	0.00	0.00

WTR YR 1994 TOTAL 12444.96 MEAN 43.51 MAX 66.32 MIN 25.91

PICABO

XG XG WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

MAX VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	59.71	43.91	36.05	29.68	27.95	35.73	46.19	54.84	58.61	72.14	---	---
2	59.64	42.57	36.21	29.76	26.46	36.84	47.68	54.21	58.85	71.04	---	---
3	59.87	44.62	36.13	31.33	25.59	37.62	46.27	55.08	60.81	69.23	---	---
4	60.03	43.99	35.58	32.28	25.59	38.17	45.56	54.92	60.42	69.38	---	---
5	60.42	42.26	35.50	33.30	25.59	38.17	45.25	56.57	61.44	68.76	---	---
6	60.50	40.45	34.01	33.30	26.77	37.78	45.88	57.43	61.29	66.95	---	---
7	59.56	39.27	34.32	31.49	29.13	37.23	45.25	58.14	58.85	69.46	---	---
8	56.57	38.57	35.26	29.84	30.15	38.33	45.33	57.91	59.16	71.04	---	---
9	54.60	38.72	35.89	30.78	30.15	38.33	46.58	59.32	60.81	71.98	---	---
10	53.97	39.98	36.05	30.86	30.07	38.57	48.00	59.87	62.15	72.37	---	---
11	53.66	39.43	36.21	30.70	30.62	40.69	49.18	61.13	63.49	72.14	---	---
12	54.52	38.64	36.36	30.94	30.62	40.14	49.65	60.97	64.20	72.29	---	---
13	55.08	37.78	36.29	31.02	29.92	41.24	48.86	60.66	63.72	72.45	---	---
14	54.52	36.91	34.87	30.70	30.00	42.50	49.57	59.87	62.47	---	---	---
15	53.27	36.05	34.16	30.15	30.00	43.91	50.44	59.32	62.94	---	---	---
16	51.93	36.68	33.14	30.23	31.25	43.99	51.93	57.91	61.84	---	---	---
17	52.32	36.68	33.06	29.68	32.28	43.20	53.97	56.18	63.09	---	---	---
18	51.22	37.62	31.88	29.52	32.90	42.65	55.23	56.02	64.67	---	---	---
19	50.20	36.36	30.31	29.21	33.14	42.57	57.12	55.63	66.24	---	---	---
20	49.18	34.32	28.97	28.82	33.14	40.84	57.83	54.13	67.73	---	---	---
21	49.26	34.24	29.45	29.21	32.83	42.50	58.69	53.97	67.97	---	---	---
22	50.67	36.05	29.37	29.68	32.98	41.71	57.91	56.41	69.23	---	---	---
23	50.83	35.81	29.13	30.23	32.83	40.22	55.94	57.59	69.54	---	---	---
24	50.59	34.95	27.64	31.65	33.14	39.67	53.11	58.77	69.23	---	---	---
25	49.49	32.43	26.54	32.43	33.61	41.00	52.40	60.26	70.72	---	---	---
26	47.45	30.00	27.17	32.98	33.69	42.50	51.38	61.36	69.70	---	---	---
27	46.58	29.60	29.60	33.14	33.93	42.65	50.59	60.81	68.91	---	---	---
28	47.92	32.12	29.29	33.06	34.24	44.30	50.20	57.98	70.41	---	---	---
29	47.21	34.79	26.69	31.88	---	44.70	52.32	58.61	70.88	---	---	---
30	44.15	35.66	26.85	30.86	---	45.33	53.19	60.66	71.82	---	---	---
31	44.15	---	28.19	30.31	---	44.85	---	60.26	---	---	---	---
TOTAL	16.00	20.46	10.00	59.02	8.00	67.93	15.00	96.79	19.00	19.23	0.00	0.00
MEAN	52.87	37.35	32.26	30.94	30.66	40.90	50.72	57.96	64.71	70.71	0.00	0.00
MAX	60.50	44.62	36.36	33.30	34.24	45.33	58.69	61.36	71.82	72.45	0.00	0.00
MIN	44.15	29.60	26.54	28.82	25.59	35.73	45.25	53.97	58.61	66.95	0.00	0.00

WTR YR 1994 TOTAL 13023.93 MEAN 45.54 MAX 72.45 MIN 25.59

				PICABO								
XH	XH	WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994										
				MAX	VALUES							
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	58.22	44.93	36.36	29.92	30.00	34.79	44.30	52.32	56.88	68.13	---	---
2	58.30	44.30	36.84	30.23	28.42	35.34	45.40	52.32	57.04	68.20	---	---
3	58.38	44.85	36.91	31.41	27.56	36.05	45.40	52.72	58.22	67.34	---	---
4	58.46	44.85	36.44	32.12	26.93	36.68	44.78	52.95	58.46	66.79	---	---
5	58.77	43.99	36.52	33.30	26.77	36.84	44.23	54.21	58.77	66.55	---	---
6	59.08	42.73	35.58	33.38	27.01	36.91	44.46	55.08	59.08	64.98	---	---
7	59.08	41.47	35.18	32.90	28.89	36.84	44.38	55.86	58.46	65.92	---	---
8	57.67	40.69	35.89	31.02	30.23	37.39	44.07	55.94	57.28	67.03	---	---
9	55.23	40.06	36.52	31.41	30.31	37.54	45.01	56.88	58.14	67.97	---	---
10	54.60	40.53	36.76	31.49	30.39	37.70	46.11	57.36	59.08	68.60	---	---
11	53.90	40.53	36.99	31.33	30.86	38.88	46.90	58.38	60.11	68.68	---	---
12	53.97	40.29	37.07	31.49	30.94	38.96	47.45	58.53	61.21	68.60	---	---
13	54.29	39.74	37.07	31.73	30.62	39.74	47.53	58.61	61.36	68.68	---	---
14	54.29	38.80	36.36	31.65	30.39	40.77	47.76	58.46	61.05	---	---	---
15	54.05	38.33	35.66	31.25	30.47	41.87	48.24	57.83	60.34	---	---	---
16	52.87	37.62	34.79	31.10	31.02	42.34	49.41	57.28	60.26	---	---	---
17	52.01	37.62	34.48	30.86	32.04	42.34	51.14	55.86	59.71	---	---	---
18	52.09	38.41	34.01	30.47	32.75	41.87	52.32	55.00	61.05	---	---	---
19	51.07	38.33	32.75	30.31	33.06	41.63	54.13	54.92	62.23	---	---	---
20	50.36	36.76	31.80	30.00	33.14	41.32	54.92	54.05	63.57	---	---	---
21	49.26	35.89	30.86	29.84	33.06	41.16	55.70	53.11	64.27	---	---	---
22	50.12	36.76	30.94	30.07	33.14	41.24	55.86	54.29	65.14	---	---	---
23	50.36	36.84	30.78	30.39	33.14	40.61	54.92	55.15	65.77	---	---	---
24	50.28	36.68	30.07	31.57	33.30	39.67	52.72	56.25	65.85	---	---	---
25	50.20	35.11	29.13	32.35	33.69	39.90	52.01	57.51	66.40	---	---	---
26	48.79	33.14	28.27	32.98	33.77	40.92	51.14	58.46	66.55	---	---	---
27	47.68	31.88	30.07	33.30	34.08	41.32	49.89	58.69	66.08	---	---	---
28	47.84	32.83	30.07	33.30	34.24	42.50	49.57	57.59	66.40	---	---	---
29	47.84	34.87	29.05	32.90	---	42.97	50.20	56.73	67.10	---	---	---
30	46.27	35.97	28.11	31.88	---	43.44	50.99	57.98	67.65	---	---	---
31	44.85	---	28.89	31.57	---	43.52	---	58.14	---	---	---	---
TOTAL	16.00	64.80	10.00	77.52	8.00	33.05	14.00	38.46	18.00	77.47	0.00	0.00
MEAN	52.91	38.83	33.56	31.53	31.08	39.78	49.03	56.08	61.78	67.50	0.00	0.00
MAX	59.08	44.93	37.07	33.38	34.24	43.52	55.86	58.69	67.65	68.68	0.00	0.00
MIN	44.85	31.88	28.11	29.84	26.77	34.79	44.07	52.32	56.88	64.98	0.00	0.00
	WTR YR 1994 TOTAL			12866.37 MEAN			44.99 MAX		68.68 MIN		26.77	

					PICABO							
YM	YM	WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994										
					MEAN VALUES							
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27.03	16.69	27.88	25.85	2.27	30.70	31.86	31.38	42.22	33.18	---	---
2	31.00	12.06	25.19	19.77	4.35	32.32	29.80	28.86	34.42	36.83	---	---
3	30.60	18.86	18.82	28.80	5.43	30.65	30.57	26.52	43.42	21.60	---	---
4	28.01	16.69	23.21	30.62	6.75	28.87	22.23	37.17	35.66	26.83	---	---
5	33.72	14.66	6.79	25.11	7.53	27.36	22.69	42.48	31.51	31.69	---	---
6	41.73	12.27	12.85	14.90	10.81	25.59	32.15	34.69	29.79	36.27	---	---
7	36.97	13.17	20.31	9.34	29.21	21.29	24.55	36.05	25.54	40.32	---	---
8	34.10	12.15	31.53	22.10	21.31	23.36	17.19	39.00	25.11	39.52	---	---
9	33.12	10.21	25.64	20.65	15.97	21.51	26.30	40.20	29.99	37.89	---	---
10	32.24	8.40	27.32	9.86	21.41	27.22	33.42	39.21	35.21	33.40	---	---
11	35.79	7.88	24.38	20.52	15.92	26.62	26.89	36.60	42.08	26.28	---	---
12	39.11	11.89	19.35	19.44	1.49	19.28	25.50	44.61	46.53	25.71	---	---
13	39.95	15.47	9.52	18.17	8.02	21.28	15.33	30.93	41.91	29.48	---	---
14	37.58	11.48	12.37	14.75	13.73	18.54	17.64	25.46	25.86	---	---	---
15	38.13	9.35	14.33	19.60	14.54	20.07	19.61	28.15	22.46	---	---	---
16	36.15	10.27	19.83	15.40	18.92	24.08	22.02	32.14	24.98	---	---	---
17	36.26	12.13	15.74	16.09	27.83	20.83	25.68	37.41	24.92	---	---	---
18	31.54	8.78	10.87	14.08	27.38	22.20	27.78	34.91	27.40	---	---	---
19	30.11	3.74	8.53	14.28	16.21	14.83	35.34	36.52	29.32	---	---	---
20	26.53	6.65	7.97	15.92	18.16	8.92	32.91	38.96	33.45	---	---	---
21	28.67	7.18	13.89	17.46	22.83	20.77	32.32	35.12	41.75	---	---	---
22	30.46	20.56	12.14	17.62	15.65	23.59	36.03	35.80	43.33	---	---	---
23	27.41	14.54	9.90	19.65	16.89	10.06	33.83	30.24	36.05	---	---	---
24	27.89	-0.49	9.16	27.98	31.41	9.14	37.30	34.06	29.59	---	---	---
25	16.38	-5.34	6.68	26.20	32.37	13.61	35.31	36.65	28.82	---	---	---
26	17.64	-2.67	13.31	27.37	33.99	15.63	34.70	37.92	27.29	---	---	---
27	20.30	2.90	21.18	22.47	32.57	17.85	34.03	45.99	27.19	---	---	---
28	21.48	12.66	11.96	16.92	25.36	19.47	33.00	37.02	34.06	---	---	---
29	16.51	30.79	9.55	17.79	---	13.96	26.28	40.11	34.28	---	---	---
30	12.48	28.31	12.69	11.78	---	8.70	31.76	37.75	33.72	---	---	---
31	16.76	---	20.19	-1.56	---	22.65	---	46.89	---	---	---	---
TOTAL	9.00	41.24	5.00	5.00	98.31	6.00	54.02	11.00	87.86	4.00	0.00	0.00
MEAN	29.54	11.37	16.23	18.68	17.80	20.68	28.47	36.09	32.93	32.23	0.00	0.00
MAX	41.73	30.79	31.53	30.62	33.99	32.32	37.30	46.89	46.53	40.32	0.00	0.00
MIN	12.48	-5.34	6.68	-1.56	1.49	8.70	15.33	25.46	22.46	21.60	0.00	0.00
	WTR YR 1994 TOTAL			6857.84 MEAN		23.98 MAX		46.89 MIN		-5.34		

PICABO

ZK ZK WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

MAX VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	63.88	43.05	36.13	29.68	25.59	36.76	49.81	59.08	61.21	80.08	---	---
2	63.49	42.42	35.42	29.45	25.12	39.27	52.24	58.14	62.31	74.73	---	---
3	64.12	45.48	34.71	31.49	24.41	40.61	47.53	59.08	64.90	74.42	---	---
4	64.35	42.81	34.40	32.75	25.12	40.92	48.47	58.14	63.33	75.67	---	---
5	64.98	40.29	33.77	33.38	25.59	40.61	48.08	59.95	66.08	70.17	---	---
6	64.35	38.64	32.67	33.14	27.01	39.82	48.71	61.13	62.94	71.74	---	---
7	59.87	38.01	33.38	28.42	29.84	38.72	47.53	62.23	60.26	77.56	---	---
8	54.29	37.31	34.48	28.89	30.55	40.37	48.55	61.13	63.02	79.68	---	---
9	56.25	38.80	34.95	30.07	29.68	40.37	49.81	64.04	65.61	80.71	---	---
10	55.86	40.77	35.11	29.84	29.76	40.37	51.54	64.20	67.81	80.39	---	---
11	54.76	39.90	35.18	30.00	30.15	43.91	53.97	66.08	68.68	80.39	---	---
12	57.20	38.33	35.26	30.31	30.07	42.65	54.37	65.45	68.99	80.71	---	---
13	58.14	36.13	35.11	30.23	28.97	44.15	51.93	64.51	66.08	81.02	---	---
14	56.25	36.13	32.90	29.37	30.00	45.88	53.66	63.57	66.32	---	---	---
15	53.66	34.71	31.41	29.52	29.60	47.29	55.15	60.81	68.36	---	---	---
16	53.82	36.84	31.65	29.21	31.96	46.58	57.28	57.91	65.06	---	---	---
17	54.29	36.91	31.25	28.89	32.67	45.40	59.95	56.96	69.86	---	---	---
18	51.93	37.23	28.89	28.74	33.06	44.78	61.36	58.61	71.11	---	---	---
19	51.54	33.69	27.87	28.50	33.14	44.46	63.25	55.70	73.94	---	---	---
20	49.57	33.22	25.75	28.27	32.98	42.50	63.72	55.78	76.07	---	---	---
21	51.07	33.77	27.95	29.05	32.43	45.17	64.35	56.02	74.89	---	---	---
22	53.03	35.81	27.09	29.84	32.51	42.34	60.74	59.95	76.46	---	---	---
23	53.42	33.93	26.46	30.70	32.28	41.55	55.55	61.44	76.07	---	---	---
24	52.64	32.04	25.75	32.20	33.14	41.08	55.55	62.70	75.67	---	---	---
25	48.86	27.32	23.86	32.67	33.53	43.52	55.15	64.59	78.58	---	---	---
26	46.98	26.30	26.30	32.90	33.61	45.56	51.54	65.77	74.10	---	---	---
27	47.37	27.56	29.76	33.06	33.85	45.64	52.80	61.92	74.97	---	---	---
28	49.49	31.49	27.32	32.51	34.24	47.68	52.40	59.79	78.11	---	---	---
29	44.93	35.73	24.96	30.70	---	48.08	56.41	61.68	77.88	---	---	---
30	42.97	35.89	25.99	29.92	---	48.71	56.96	64.98	79.60	---	---	---
31	44.78	---	27.95	27.64	---	47.13	---	61.13	---	---	---	---
TOTAL	16.00	90.51	9.00	9.00	50.86	13.00	28.36	18.00	98.27	10.00	0.00	0.00
MEAN	54.46	36.35	30.76	30.37	30.39	43.29	54.28	61.05	69.94	77.48	0.00	0.00
MAX	64.98	45.48	36.13	33.38	34.24	48.71	64.35	66.08	79.60	81.02	0.00	0.00
MIN	42.97	26.30	23.86	27.64	24.41	36.76	47.53	55.70	60.26	70.17	0.00	0.00

WTR YR 1994 TOTAL 13492.78 MEAN 47.18 MAX 81.02 MIN 23.86

PICABO

ZL ZL WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

MIN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	51.22	36.91	32.75	25.28	20.80	33.61	39.43	49.34	54.45	63.96	---	---
2	51.30	36.13	34.95	25.83	19.77	33.85	40.53	47.37	51.93	64.35	---	---
3	51.54	38.41	31.65	29.29	18.99	34.08	43.28	47.06	55.47	61.60	---	---
4	51.77	36.60	32.83	30.07	19.07	34.48	39.82	50.75	54.84	59.71	---	---
5	53.03	34.63	30.86	32.83	19.46	34.79	38.41	52.48	54.76	62.78	---	---
6	54.29	32.28	30.15	28.42	20.01	34.79	42.02	51.77	58.22	58.85	---	---
7	53.82	31.02	30.55	22.92	26.85	34.79	40.22	52.40	51.85	60.81	---	---
8	49.96	30.94	33.45	24.96	29.84	34.95	38.41	52.87	51.85	62.31	---	---
9	47.68	30.31	34.48	28.89	27.79	35.11	41.79	53.74	54.13	63.72	---	---
10	45.88	34.08	34.87	27.72	28.27	35.26	43.60	54.68	54.68	65.85	---	---
11	47.06	32.59	35.03	28.27	29.68	35.50	41.16	55.08	56.41	63.41	---	---
12	46.74	31.80	35.11	28.58	28.89	35.97	42.02	56.88	59.24	62.86	---	---
13	49.02	28.82	31.96	28.42	28.03	35.97	43.60	55.08	61.44	63.57	---	---
14	48.71	30.39	29.52	27.40	28.03	36.84	43.36	52.56	56.80	---	---	---
15	47.45	27.64	28.66	26.85	28.27	37.62	41.71	57.51	54.60	---	---	---
16	44.15	29.60	28.97	26.93	28.97	39.59	43.91	54.21	54.13	---	---	---
17	45.01	29.45	27.95	25.20	32.04	38.33	47.45	52.48	52.32	---	---	---
18	43.44	32.43	26.22	25.75	32.67	37.46	49.10	50.36	56.18	---	---	---
19	42.65	27.56	24.10	24.89	32.98	39.19	52.09	52.48	57.43	---	---	---
20	41.55	26.46	20.25	24.26	30.47	35.97	51.46	49.26	59.64	---	---	---
21	41.24	25.44	25.28	25.04	32.12	37.15	53.66	46.35	61.60	---	---	---
22	43.52	31.80	25.51	25.75	32.28	38.41	52.48	49.65	62.31	---	---	---
23	43.36	32.35	23.63	25.91	31.73	36.13	50.04	50.83	62.78	---	---	---
24	42.97	27.79	20.64	29.84	32.28	35.26	48.86	52.17	61.44	---	---	---
25	41.24	24.49	18.67	30.86	33.06	35.26	47.29	54.45	62.15	---	---	---
26	39.82	22.45	19.62	31.88	33.38	36.21	46.98	55.86	64.98	---	---	---
27	39.59	21.58	25.44	31.41	33.53	36.44	45.64	57.83	60.03	---	---	---
28	41.79	25.51	22.29	28.50	33.61	37.07	45.40	52.17	62.07	---	---	---
29	39.27	31.25	20.17	26.69	---	38.09	43.68	52.95	64.59	---	---	---
30	36.36	33.93	19.77	28.03	---	37.78	45.80	54.76	63.57	---	---	---
31	36.36	---	22.92	23.63	---	39.19	---	57.04	---	---	---	---
TOTAL	14.00	14.64	8.00	50.30	7.00	25.14	13.00	32.42	17.00	13.78	0.00	0.00
MEAN	45.54	30.49	27.69	27.43	28.32	36.29	44.77	52.66	57.86	62.60	0.00	0.00
MAX	54.29	38.41	35.11	32.83	33.61	39.59	53.66	57.83	64.98	65.85	0.00	0.00
MIN	36.36	21.58	18.67	22.92	18.99	33.61	38.41	46.35	51.85	58.85	0.00	0.00

WTR YR 1994 TOTAL 11478.28 MEAN 40.13 MAX 65.85 MIN 18.67

(Water Year October 1992 To September 1993)

*** ARCHIVES PARAMETERS ***

ET = MODIFIED PENMAN ETr (in) EJ = JENSEN-HAISE ETr (in)
MAX DAILY TEMPERATURE (deg F) TA = MEAN DAILY HUMIDITY (%)
= MIN DAILY TEMPERATURE (deg F) TU = MIDNIGHT HUMIDITY (%)
AN DAILY TEMPERATURE (deg F) YM = DAILY MEAN DEW POINT (deg F)
LY PRECIPITATION (in) UA = DAILY AVERAGE WIND SPEED (mph)
ULATED PRECIPITATION (in) UD = DAILY RESULTANT WIND DIR (deg az)
ILY SOLAR RADIATION (langley) UV = DAILY RESULTANT WIND RUN (miles)
WR = DAILY WIND RUN (miles)

*** ADDITIONAL ARCHIVES PARAMETERS ***

MIN/MAX 2" SOIL TEMP - PMAI,HERO,COVM,TWFI,ECHO,CRVO,ABEI,CRSM

MIN/MAX 4" SOIL TEMP - PMAI,BANO,HERO,COVM,AHTI,MRSO,TWFI,CRVO

= MIN/MAX 8" SOIL TEMP - PMAI,AHTI,MRSO,CRVO,ABEI,CRSM,MALI,AFTY

ZG/ZH = MIN/MAX 20" SOIL TEMP - PMAI,CRVO,ABEI,CRSM,ONTO
ZCN/ZCX = MIN/MAX 40" SOIL TEMP - CRVO,ABEI,CRSM

XB/XF = MIN/MAX 1" SOIL TEMP - PMAI,BANO

AFTY,PICI

ABEI,CRSM,MALI,PICI,AFTY,ECHO,RPTI,RXGI

ONTO,PICI

ZCM = MEAN 40" SOIL TEMP - CRVO
YB/YA = MIN/MAX CANOPY TEMP - BANO
YD/YC = MIN/MAX SHELTER TEMP - BANO
YY = MEAN SHELTER TEMP - BANO
YL = MEAN 1" SOIL TEMP - BANO
YW = MEAN 4" SOIL TEMP - BANO
Z1= MIN CANOPY TEMP (unshielded) - BANO
PE = 24 HOUR PAN EVAP - CRVO
WK/WL/WZ = MAX/MIN/MEAN WATER TEMP - CRVO
WR2 = WIND RUN (VAR. HT) - CRVO (2'),TWFI (12')

Appendix E

Land Use Data

Land Use Data of the Big Wood River-Silver Creek Area for 1993-94

Location				Node	Water Source				Acres Irrigated						Irrigation Method			
TN	RN	Sec.	Q.Sec	(i,j)	S. Water	G.Water	Dry	Total	Wheat	Barley	Oats	Alfalfa	Pasture	Canola	Potato	Sprinkler	Gravity	Sub-Irrig
2N	18E	15	SE	4,3		55		55				55				55		
		22	NE	4,4		78	30	108				56	52			78		
			NW	3,4			24	24					24					
		23	NW	5,4		85		85		53			32			42	43	
			SW	5,5		112		112		31		22	59			75	37	
		25	NW	7,6		67		67				67				67		
		26	NE	6,6		75		75		57			18			75		
			NW	5,6		28	74	102					102			28		
		27	NE	4,6			114	114					114					
		35	NE	6,8	35			35				35				35		
			SE	6,9	70			70					70			70		
1N	18E	1	NE	8,10		60		60					60			60		
			NW	7,10		55		55				55				55		
			SW	7,11	40			40				40				40		
			SE	8,11	100	25	25	150				125	25			125		
		2	NE	6,10	55			55				55				55		
		12	NE	8,12	96	60		156	30	56		22	48			156		
			NW	7,12		60		60			30		30			60		
			SW	7,13		148	12	160					160			36		112
		13	NE	8,14	46	24	70	140		46			94			70		
			SE	8,15		80	60	140					140					80
		14	NE	6,14		23	94	117		11		12	94			23		
			NW	5,14	27		28	55				27	28			27		
			SW	5,15	133			133		133						133		
			SE	6,15	44			44		44						44		
		15	SE	4,15	158			158	108			50				158		
		22	NE	4,16	85		75	160	85				75			85		
			NW	3,16			50	50					50					
			SE	4,17	54		106	160			18	36	106			36	18	
		23	NE	6,16	22			22				22				22		
			SW	5,17			147	147					147					

Location				Node	Water Source				Acres Irrigated						Irrigation Method			
TN	RN	Sec.	Q.Sec.	(i,j)	S.Water	G.Water	Dry	Total	Wheat	Barley	Oats	Alfalfa	Pasture	Canola	Potato	Sprinkler	Gravity	Sub-irrig
		24	NE	8,16	55	78	27	160				70	90			30	40	63
			SW	7,17	30			30				30					30	
			SE	8,17	90		70	160				90	70			50	40	
		25	NE	8,18	160			160			20	52	88			160		
			NW	7,18			47	47					47					
			SW	7,19			78	78					78					
			SE	8,19	147			147		147						147		
		27	NE	4,18		90	30	120				120					90	
		34	SE	4,21		70		70					70			70		
		35	NE	6,20		75		75					75			75		
			SE	6,21		140		140					140			140		
		36	NE	8,20		80		80					80					80
			NW	7,20		160		160		110					50	160		
			SW	7,21		160		160		160						160		
			SE	8,21	102		58	160				102	58			102		
1S	18E	1	NE	8,22		55		55		30		25				55		
			NW	7,22		50		50		20		12	18			50		
			SW	6,23		63		63		47		16				63		
			SE	7,23		160		160		40		80			40	120		
		2	NE	5,22		30		30					30			30		
			NW	4,22	50			50					50				50	
			SE	4,23		120		120					120			120		
			SW	5,23	80			80					80				80	
		3	NE	3,22	25			25					25				25	
			SW	2,23	80			80					80			80		
			SE	3,23	105			105					105			50	55	
		10	NE	3,24	35			35				35				35		
			NW	2,24	56	83		139				56	83			139		
		11	NE	5,24		158		158					158			158		
			NW	4,24	24	59		83					83			83		
			SW	4,25	120			120					120			120		
			SE	5,25	42	23		65					65			65		

Location				Node	Water Source				Acres Irrigated						Irrigation Method			
TN	RN	Sec.	Q.Sec.	(i,j)	S.Water	G.Water	Dry	Total	Wheat	Barley	Oats	Alfalfa	Pasture	Canola	Potato	Sprinkler	Gravity	Sub-irrig
		12	NE	7,24		95		95					95			95		
			NW	6,24	136			136		50		30	56			80	56	
			SW	6,25	30	65		95					65		30	30	65	
		13	NE	7,26		79		79				79				79		
			SW	6,27	50	85		135				85	50			85	50	
			SE	7,27		157		157					157			157		
		14	NE	5,26	100	60		160					160			160		
			NW	4,26		70		70					70			70		
			SE	5,27		45		45					45			45		
		15	NE	3,26	120			120					120			120		
			NW	2,26			48	48					48					
			SW	2,27	120			120					120				120	
			SE	3,27	100			100					100				100	
		16	NE	1,26	60		70	130					130			60		
		21	NE	1,28		70		70				70				70		
			SE	1,29	80			80		30		50				80		
		22	NW	2,28	72	15		87				87					87	
		23	NE	5,28		40	27	67				27	40			40		
			NW	4,28	62		60	122				60	62				62	
			SW	4,29			44	44					44					
		24	NE	7,28		85		85					85			85		
			NW	6,28		130		130					130			130		
			SW	6,29		45		45					45			45		
		26	NW	5,30	60			60				60				60		
			SW	4,31	80			80				80				80		
		27	NE	3,30	40			40				40				40		
			NW	2,30	35			35				35				35		
			SW	2,31	70			70				70				70		
			SE	3,31	90			90				90				90		
		28	NE	1,30	50			50				50				50		
1N	19E	6	NE	10,10	112		16	128		34	73	21				107	5	
		7	NE	10,12	110			110		60	50					110		

Location				Node	Water Source				Acres Irrigated						Irrigation Method			
TN	RN	Sec.	Q.Sec	(I,J)	S.Water	G.Water	Dry	Total	Wheat	Barley	Oats	Alfalfa	Pasture	Canola	Potato	Sprinkler	Gravity	Sub-irrig
			NW	9,12	15		85	100					100				15	
			SW	9,13	120		40	160	25	55		40	40			120		
		8	SW	11,13	90		21	111					111			90		
		17	NE	12,14	30	35		65				65				65		
			NW	11,14	70	80		150				150				150		
			SW	11,15	45	80		125				125				125		
			SE	12,15		110		110				110				110		
		18	NE	10,14	140			140				140				140		
			NW	9,14	30			30				30				30		
			SW	9,15		90	60	150				90	60			90		
			SE	10,15	160			160				160				160		
		19	NE	10,16	50	100		150		100		50				150		
			NW	9,16		75	40	115		75			40			75		
			SW	9,17	75	60		135		135						135		
			SE	10,17	150			150		150						150		
		20	NE	12,16		160		160				160				160		
			NW	11,16	90	70		160		70		90				150		
			SW	11,17	31	129		160		160						160		
			SE	12,17	79	81		160		79		81				160		
		21	SW	13,17		60		60				60				60		
		27	NE	16,18	44			44					44			44		
			NW	15,18	42			42					42			42		
			SW	15,19	120	30		150		120					30	150		
			SE	16,19	93			93		93						93		
		28	NW	13,18	31	83		114		83		31				114		
			SW	13,19	105		16	121				105	16			105		
			SE	14,19		115		115							115	115		
		29	NE	12,18	33	127		160		33					127	160		
			NW	11,18	150			150		40		110				150		
			SW	11,19	120		38	158				120	38			120		
			SE	12,19		120	38	158		120			38			120		
		30	NE	10,18		157		157		157						157		

Location				Node	Water Source				Acres Irrigated						Irrigation Method			
TN	RN	Sec.	Q.Sec	(i,j)	S.Water	G.Water	Dry	Total	Wheat	Barley	Oats	Alfalfa	Pasture	Canola	Potato	Sprinler	Gravity	Sub-irrig
			NW	9,18	160			160		160						160		
			SW	9,19	160			160		160						160		
			SE	10,19		154		154		154						154		
		31	NE	10,20	141			141		141						141		
			NW	9,20	160			160		160						160		
			SW	9,21	156			156		36		75	45			156		
			SE	10,21	150			150		133			17			139	11	
		32	NE	12,20	140		15	155					15		140	140		
			NW	11,20	160			160		160						160		
			SW	11,21	145	15		160		145			15			160		
			SE	12,21	136		24	160		136			24			136		
		33	NE	14,20	24	120		144		64					80	144		
			NW	13,20	160			160		160						160		
			SW	13,21		152		152		46		106				152		
			SE	14,21		152		152		137		15				152		
		34	NW	15,20		65		65		25					65	65		
			SW	15,21	29	80		109		94		15				109		
			SE	16,21		55		55		55						55		
		35	NW	17,20		57		57		57						57		
			SW	17,21		95		95		95						95		
			SE	18,21			35	35					35					
1S	19E	1	NW	18,22			30	30					30					
			SW	18,23	75		25	100				75	25			75		
		2	NE	17,22		45		45		45						45		
			NW	16,22		47		47		47						47		
			SW	16,23		160		160		160						260		
			SE	17,23		115		115		25		90				115		
		3	NE	15,22		45		45		45						45		
			NW	14,22		40		40					40			25		15
			SW	14,23		147		147					77	70		110		37
			SE	15,23	24	136		160		70			24	66		136	24	
		4	NE	13,22		53		53					53			53		

Location				Node	Water Source				Acres Irrigated							Irrigation Method			
TN	RN	Sec.	Q.Sec	(i,j)	S.Water	G.Water	Dry	Total	Wheat	Barley	Oats	Alfalfa	Pasture	Canola	Potato	Sprinkler	Gravity	Sub-Irrig
			NW	12,22		57		57					57			57		
			SW	12,23		160		160					160			160		
			SE	13,23		153		153		76			77			153		
		5	NE	11,22		51		51		51						51		
			NW	10,22		47		47		47						47		
			SW	10,23		139		139		139						139		
			SE	11,23		155		155		155						155		
		6	NE	9,22		53		53		53						53		
			NW	8,22		50		50			30	20				50		
			SW	8,23		160		160			80	80				160		
			SE	9,23		160		160		160						160		
		7	NE	9,24		125		125		35			90			125		
			NW	8,24	92	10		102			80	10	12			10	92	
			SW	8,25	40		120	160					160				40	
			SE	9,25			160	160					160					
		8	NE	11,24		140		140		70			70			140		
			NW	10,24	160			160					160			160		
			SW	10,25		160		160					160					160
			SE	11,25		160		160					160			160		
		9	NE	13,24		160		160					160			40		120
			NW	12,24		160		160					160			160		
			SW	12,25		150		150					150			150		
			SE	13,25		160		160					160					160
		10	NE	15,24	48	82		130		82		48				56	48	26
			NW	14,24		160		160		160						160		
			SW	14,25			160	160					160					160
			SE	15,25		130	30	160					160					130
		11	NE	17,24		160		160					160					160
			NW	16,24	70		70	140		140								
			SW	16,25			160	160		70			90					
			SE	17,25		130	30	160		30			130					30
		12	NW	18,24	160			160				100			60	160		

Location				Node	Water Source				Acres Irrigated							Irrigation Method			
TN	RN	Sec.	Q.Sec	(I,J)	S.Water	G.Water	Dry	Total	Wheat	Barley	Oats	Alfalfa	Pasture	Canola	Potato	Sprinkler	Gravity	Sub-irrig
			SW	18,25	160			160					160			160		
			SE	19,25	86			86		86						86		
		13	NE	19,26	96		47	143		20		76	47			96		
			NW	18,26		20	140	160		20			140			20		
			SW	18,27		129		129		50		79				129		
			SE	19,27	140			140					140				140	
		14	NE	17,26		150	10	160		160						73	77	
			NW	16,26		140	17	157		140			17				140	
			SW	16,27		30	125	155		145			10				30	
			SE	17,27		94		94		94							94	
		15	NE	15,26			145	145					145					
			NW	14,26			160	160		72			88					
			SW	14,27	100			100	100								100	
			SE	15,27		63	82	145		145						63		
		16	NE	13,26		130		130					130			130		
			NW	12,26			129	129		120			9					
			SW	12,27		117		117		86				31			117	
			SE	13,27		100	30	130		70			30	30			100	
		17	NE	11,26			150	150					150					
			NW	10,26		116		116		116							116	
			SW	10,27		105	55	160		105			55				105	
			SE	11,27		150		150		74		76					150	
		18	NE	9,26			155	155					155					
			NW	8,26			140	140					140					
			SW	8,27			155	155					155					
			SE	9,27			160	160					160					
		19	NE	9,28		21	22	43					43					21
			SE	9,29			35	35		35								
		20	NE	11,28		51	74	125		78			47				78	
			NW	10,28			65	65		65								
			SW	10,29			126	126		6			120					
			SE	11,29			135	135		45			90					

Location				Node	Water Source				Acres Irrigated						Irrigation Method			
TN	RN	Sec.	Q.Sec.	(I,j)	S.Water	G.Water	Dry	Total	Wheat	Barley	Oats	Alfalfa	Pasture	Canola	Potato	Sprinkler	Gravity	Sub-irrig
		21	NE	13,28		147		147				147					147	
			NW	12,28		128	25	153		128			25				128	
			SW	12,29			95	95					95					
			SE	13,29		140	9	149		130	10		9				140	
		22	NE	15,28		134		134		134							134	
			NW	14,28		159		159		108				51			159	
			SW	14,29		135		135		96		39					135	
			SE	15,29	60	69		129		69		60					129	
		23	NE	17,28		27	100	127		100		27					27	
			NW	16,28			111	111				70	41					
			SW	16,29			40	40		40								
			SE	17,29		37	80	117				37	80			37	40	
		24	NE	19,28		116		116				56	60			56	60	
			NW	18,28		155		155				75	80			143	12	
			SW	18,29	28	82	35	145				110	35			82	28	
			SE	19,29	10	34	67	111		10			101			10	24	10
		25	NE	19,30		50	15	65				50	15			50		
			NW	18,30		50	20	70		50			20			50		
			SW	18,31		55		55				55				55		
		26	NE	17,30		75		75		75						75		
			NW	16,30		30	50	80		30			50			30		
			SW	16,31		105		105		70					35	70	35	
			SE	17,31		89		89				30			59	30	59	
		27	NE	15,30	90		13	103				90	13			35	55	
			NW	14,30	27	43	15	85		45		25	15			27	43	
			SW	14,31	40			40		40						40		
			SE	15,31	45		21	66				45	21			45		
		28	NE	13,30	51	75		126		71	55					51	75	
			SE	13,31	64			64		64						64		
		29	NE	11,30			90	90					90					
			NW	10,30			65	65					65					
			SW	10,31			71	71		71								

Location				Node	Water Source				Acres Irrigated						Irrigation Method			
TN	RN	Sec.	Q.Sec.	(I,J)	S.Water	G.Water	Dry	Total	Wheat	Barley	Oats	Alfalfa	Pasture	Canola	Potato	Sprinkler	Gravity	Sub-irrig
			SE	11,31			15	15					15					
1S	20E	7	SW	20,25	111			111		111						111		
		15	NE	27,26		75		75		75						75		
		16	SW	24,27	71	89		160					89		71	71	89	
			SE	25,27	12	30	20	62		30			20		12	42		
		17	NE	23,26		27		27					27			27		
			NW	22,26			140	140					140					
			SW	22,27		95		95					95			95		
			SE	23,27	100			100					100				100	
		18	NE	21,26			110	110					110					
			NW	20,26	150			150		140		10				150		
			SW	20,27	160			160		155		5				160		
			SE	21,27		160		160				50	110			160		
		19	NE	21,28	100	60		160				160				160		
			NW	20,28		160		160		85			75			160		
			SW	20,29	69	82		151		41			110			41	28	82
			SE	21,29	136	18		154	65		18	71				154		
		20	NE	23,28		67	93	160				16	144			16	51	
			NW	22,28	80	78		158				158				158		
			SW	22,29	103	33		136				40	96			83	53	
			SE	23,29	60	75		135					135				135	
		21	NE	25,28	95		54	149					149				95	
			NW	24,28		65	90	155					155				65	
			SW	24,29	160			160					160				160	
			SE	25,29	160			160					160				160	
		22	NW	26,28	31	60		91		60			31			60	31	
			SW	26,29	143			143					143			13	130	
			SE	27,29		84	50	134					50		84	84		
		26	NW	28,36		32	21	53					21		32	32		
			SW	28,31	36	30		66		36		30				66		
		27	NE	27,30	103		33	136					136				103	
			NW	26,30	155			155					155				155	

Location				Node	Water Source				Acres Irrigated						Irrigation Method			
TN	RN	Sec.	Q.Sec	(i,j)	S.Water	G.Water	Dry	Total	Wheat	Barley	Oats	Alfalfa	Pasture	Canola	Potato	Sprinkler	Gravity	Sub-irrig
			SW	26,31	44			44					44			24	20	
			SE	27,31	22	73		95				73	22			95		
		28	NE	25,30	96			96		81						30	66	
			NW	24,30	130			130		80			50				130	
			SW	24,31	160			160		16			28		116	116	44	
			SE	25,31	90			90							90	90		
		29	NE	23,30	130			130					130				130	
			NW	22,30	160			160					160				160	
			SW	22,31			30	30					30					
			SE	23,31			120	120					120					
		30	NE	21,30	46	35		81		46	35					81		
			NW	20,30	70	20		90		25			20		45	70		20
			SW	20,31	35			35							35	35		
			SE	21,31	56			56							56	56		
		35	NE	29,32	75			75				45	30			75		
			NW	28,32	140			140		80		60				140		
			SE	29,33	105			105				105				105		
		36	NE	31,32	73			73					73			73		
			NW	30,32	100			100		40			60			100		
			SE	31,33	55			55					55			55		
			SW	30,33	90			90				90				90		
		31	SE	33,33	134			134					134			134		
			SW	32,33	0			0					0			0		
2S	21E	1	NE	31,34	80			80					80			80		
			NW	30,34	60			60			60					60		
		6	NE	33,34	90			90					90			90		
			NW	32,34	120			120					120			120		
			SE	33,35		82		82				82				82		
			SW	32,35	30			30				30				30		
				TOTA	13269	15178	6536	34983	413	10571	559	6824	15006	248	1372	21223	5865	1466
			Total Area			34983												
			total irrigated area			28447												
			Dry Area			6536												