

IN THE DISTRICT COURT OF THE FIFTH JUDICIAL DISTRICT OF THE STATE OF IDAHO,
IN AND FOR THE COUNTY OF TWIN FALLS

IN RE THE GENERAL ADJUDICATION
OF RIGHTS TO THE USE OF WATER FROM
THE SNAKE RIVER BASIN WATER SYSTEM.

CIVIL CASE NUMBER: 39576

Ident. Number: **A36-00069**
Date Received: 8/19/1988
Receipt No: S001554
Received By: _____

AMENDED

**NOTICE OF CLAIM TO A WATER RIGHT
ACQUIRED UNDER STATE LAW**

AMENDED

1. Name: DELORIS D JONES 208-837-4580
Address: PO BOX 265
HAGERMAN ID 83332

AND

Name: JOHN W JONES JR 208-837-4580
Address: PO BOX 265
HAGERMAN ID 83332

2. Date of Priority: FEB 1, 1888

3. Source: WEATHERBY SPRINGS Trib. to: BILLINGSLEY CREEK
HOAGLAND TUNNEL BILLINGSLEY CREEK

4. Point of Diversion:

Township	Range	Section	1/4 of	1/4 of	1/4	Lot	County
07S	14E	30	NE	SW			GOODING

5. Description of diverting works:
VIA HOAGLAND TUNNEL, HEADWORKS, CEMENT DITCH, 10" PIPE, 100HP PUMP

6. Water is used for the following purposes:

Purpose	From	To	C.F.S.	(or)	A.F.A.
IRRIGATION	03/15	11/15	1.000		
DOMESTIC	01/01	12/31	1.000		
STOCKWATER	01/01	12/31	1.000		
IRRIGATION	01/01	12/31	1.000		
FISH PROPAGATION	01/01	12/31	1.000		

7. Total Quantity Appropriated is:
1.000 C.F.S. (and/or) A.F.A.

8. Total consumptive use is Acre Feet Per Annum.

9. Non-irrigation uses:
DOMESTIC, 5 HOMES; STOCKWATER, 500 RANGE OR 10000 SHEEP

10. Place of Use:

Township	Range	Section	1/4	of	1/4	Lot	Use	Acres
07S	13E	25	NE		NE		IRR	40.0
			NW		NE		IRR	40.0
			SW		NE		IRR	40.0
			SE		NE		IRR	40.0
			NE		SE		IRR	40.0
			NW		SE		IRR	40.0
			SW		SE		IRR	29.0
			SE		SE		IRR	40.0
							Section Acres	309.0
	14E	30	NW		NW	1	IRR	32.0
			SW		NW	2	IRR	32.0
			NE		SW		IRR	40.0
			NE		SW		FISH	
			NW		SW	3	IRR	32.0
			SW		SW	4	IRR	32.0
			SE		SW		IRR	40.0
							Section Acres	208.0
							Total Acres	517.0

11. Place of use in counties: GOODING

12. Do you own the property listed above as place of use? YES

13. Other Water Rights Used:

A36-07071, A36-00068, A36-00070

14. Remarks:

IRRIG, STOCK, FISH PROP., & DOMESTIC USES THE SAME WATER FROM 4 DIFFERENT WATER RIGHTS WITH A TOTAL OF 87.05 CFS.

IRRIGATION USE YEAR ROUND FOR 1.0 CFS IS CLAIMED FOR IRRIGATION SYSTEM MAINTENANCE; CLAIM STATES THE 1.0 CFS MUST BE KEPT MOVING IN PIPE TO PREVENT DAMAGE TO THE SYSTEM & FREEZING.

15. Basis of Claim: DECREED

Case Number:

Court :

Decree date: / /

NEW INTERNATIONAL MORTGAGE BA
Decree Plaintiff

IDAHO POWER COMPANY
vs Decree Defendant

16. Signature(s)

(a.) By signing below, I/We acknowledge that I/We have received, read and understand the form entitled "How you will receive notice in the Snake River Basin Adjudication." (b.) I/We do _____ do not _____ wish to receive and pay a small annual fee for monthly copies of the docket sheet.

Number of attachments: _____

For Individuals:

I/We do solemnly swear or affirm that the statements contained in the foregoing document are true and correct.

Signature of Claimant(s): _____ Date: _____
_____ Date: _____

State of Idaho)
County of _____) SS.

Subscribed and sworn (or affirmed) before me this _____ day
of _____ 19 _____

Notary Public

Seal

Residing at _____

My Commission Expires _____

17. Notice of Appearance:

Notice is hereby given that I, _____ will be
Print Name
acting as attorney at law on behalf of the claimant signing above, and that all notices required by law to be mailed by the director to the claimant signing above should be mailed to me at the address listed below.

Signature _____

Address _____

Date _____

IN THE DISTRICT COURT OF THE FIFTH JUDICIAL DISTRICT OF THE
STATE OF IDAHO, IN AND FOR THE COUNTY OF TWIN FALLS

IN RE THE GENERAL ADJUDICATION
OF RIGHTS TO THE USE OF WATER FROM
THE SNAKE RIVER BASIN WATER SYSTEM

CIVIL CASE NUMBER: 39576

Ident. Number 36-00069

Date Received

Receipt Number 5020752 310

DEC 08 1997

Amended
NOTICE OF CLAIM
TO A

ORIGINAL

WATER RIGHT
ACQUIRED UNDER STATE LAW

Please type or print clearly

1. Name of Claimant (s) John W. Jones Jr and Deloris D Jones Phone (208) 837-4520Mailing Address P.O. Box 265 Hagerman, ID Zip 833322. Date of Priority (Only one (1) per claim) February 1, 18883. Source of water supply (a) Weatherby Springs / Hoagland Tunnel
which is tributary to (b) Billingsley Creek4. a. Location of existing point of diversion is: Township 7S Range 14E Section 30,
1/4 of NE 1/4 of SW 1/4, Govt. Lot, --- B.M., County of Gooding

Additional points of diversion if any: _____

b. If instream flow, beginning point of claimed instream flow is:

Township _____ Range _____ Section _____, _____ 1/4 of _____ 1/4 of _____ 1/4,

Govt. Lot _____ B.M., County of _____

ending point is: Township _____ Range _____ Section _____, _____ 1/4 of _____ 1/4 of _____ 1/4,

_____ 1/4, Govt. Lot _____ B.M., County of _____

5. Description of existing diversion works (Dams, Reservoirs, Ditches, Wells, Pumps, Pipelines, Headgates, Etc),
including the dates of any changes or enlargements in use, the dimensions of the diversion works as
constructed and as enlarged and the depth of each well.cement ditch & 10" pipelineHoagland Tunnel through head works,

6. Water is claimed for the following purposes:

(both dates are inclusive) (cfs) (acre feet)

For Irrigation purposes from Irrigation Season to amount 1.0 or

For Irrigation Maintenance purposes from 1/1 to 12/31 amount 1.0 or

For Domestic purposes from 1/1 to 12/31 amount 1.0 or

For Stockwater purposes from 1/1 to 12/31 amount 1.0 or

For fish propagation purposes from 1/1 to 12/31 amount 1.0 or

7. Total quantity claimed (a) 1.0 (cfs) and/or (b) 1.0 (acre feet)

8. Total consumptive use claimed is acre feet per annum.

9. Non-irrigation uses; describe fully (eg. Domestic: Give number of households served; Stockwater: Type and number of livestock Etc.) IM: the water must be kept moving in pipe to prevent damage to the system

10. Description of place of use: freezing. D: see IM: Stock use of 10,000 sheep or 500 cattle; FP: this water is used for fish prior to reaching the other uses (except domestic).

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 use (example: D for Domestic) in the corresponding place of use below. See instructions for standard symbols.

TWP	RNG	SEC	NE 1/4				NW 1/4				SW 1/4				SE 1/4				Totals
			NE1/4	NW1/4	SW1/4	SE1/4	NE1/4	NW1/4	SW1/4	SE1/4	NE1/4	NW1/4	SW1/4	SE1/4	NE1/4	NW1/4	SW1/4	SE1/4	
75	13E	25	40	40	40	40									40	40	29	40	309
75	14E	30						32	32		40	32	32	40					208
"	"	"									FP								

Total number of acres irrigated 517 Acres

11. In which county (ies) are lands listed above as place of use located? Gooding

12. Do you own the property listed above as place of use? Yes X No

If your answer is No, describe in Remarks below the authority you have to claim this water right.

13. Describe any other water rights used at the same place and for the same purposes as described above.

36-07071; 36-00068; 36-00070 or None ()

14. Remarks:

Jones

36-00069

Scale: 2 inches equals 1 mile

Last Name Jones

Ident No. 36-00069

Copies: White-State, Yellow-Claimant

15. Basis of Claim (check one) Beneficial Use _____ Posted Notice _____ License _____ Permit _____

Decree X

If applicable provide IDWR Water Right Number 36-00069

Court _____ Case Number _____ Decree Date 3/22/32

Plaintiff vs Defendant New Int'l Mortgage Bank v. Idaho Power Co.

16. Signature (s)

(a.) By signing below, I/We acknowledge that I/We have received, read, and understand the form entitled "How you will receive notice in the Snake River Basin Adjudication." (b.) I/We do _____ do not _____ wish to receive and pay a small annual fee for monthly copies of the docket sheet.

Number of attachments _____

For Individuals: I do solemnly swear or affirm that the statements contained in the foregoing document are true and correct.

Signature of Claimant (s) Patrick D. Brown for claimants Jones Date 12/3/97

Date _____

For Organizations: I do solemnly swear or affirm that I am _____

Title _____

of _____, that I have signed the foregoing

Organization

document in the space below as _____ of _____

Title

Organization

and that the statements contained in the foregoing document are true and correct.

Signature of Authorized Agent _____

Title and Organization _____ Date _____

State of Idaho/or _____)

County of Twin Falls) SS.

Subscribed and sworn (or affirmed) before me this 3rd day of December 19 97

SEAL

Notary Public Lillian L. McMillan

Residing at Jerome, Id

My Commission Expires 8/24/2001

Please Print Name

17. Notice of Appearance:

Notice is hereby given that I, Patrick D. Brown, Hepworth, Lezamis will be acting as attorney at law on behalf of the claimant signing above, and that all notices required by law to be mailed by the director to the claimant signing above should be mailed to me at the address listed below.

Signature Patrick D. Brown

Address 133 Shoshone St. N., P.O. Box 389, Twin Falls, ID 83303-0389

Date 12/3/97

Last Name Jones Ident. Number 36-00069



40MB
60-1

T7S
R14E

517 wing
acres



MICROFILMED

JAN 21 1993

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS:

That We, John W. Jones, Jr. and Deloris D. Jones, of Hagerman, County of Gooding, State of Idaho, have made, constituted and appointed and by these presents do make, constitute and appoint Patrick D. Brown of the law firm of Hepworth, Lezamiz & Hohnhorst, Chtd. of Twin Falls, Idaho, as power of attorney.

Said attorney is to act in our name, place and stead, and for our use and benefit in regard to all matters involving our ownership, or the adjudication thereof, of water rights pursuant to claim(s) filed in the Snake River Basin Adjudication, Civil Case No. 39576, Fifth Judicial District, State of Idaho.

My attorney is specifically authorized to execute all necessary or proper documents on my behalf in regard to the adjudication of the above mentioned water rights or claim(s), and to negotiate, compromise, or settle all matters relating to the Snake River Basin Adjudication.

This Power of Attorney shall remain in full force and effect until written notice of its revocation or notice of our death is received by any party relying upon this document.

This Power of Attorney shall be not be affected by our disability. It is our intent that this Power of Attorney shall continue in full force and effect in the event of our incapacity.

We further provide that photocopies of this Power of Attorney are to be given equal dignity, full affect, and recognition as if it were the original.

WITNESS my hand this 8 day of December, 1997.

John W. Jones Jr.
John W. Jones, Jr.

STATE OF IDAHO)
County of Twin Falls) ss.

On this 8th day of December, 1997, before me, the undersigned, a notary public in and for said county and state, personally appeared John W. Jones, Jr., known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that she executed the same.

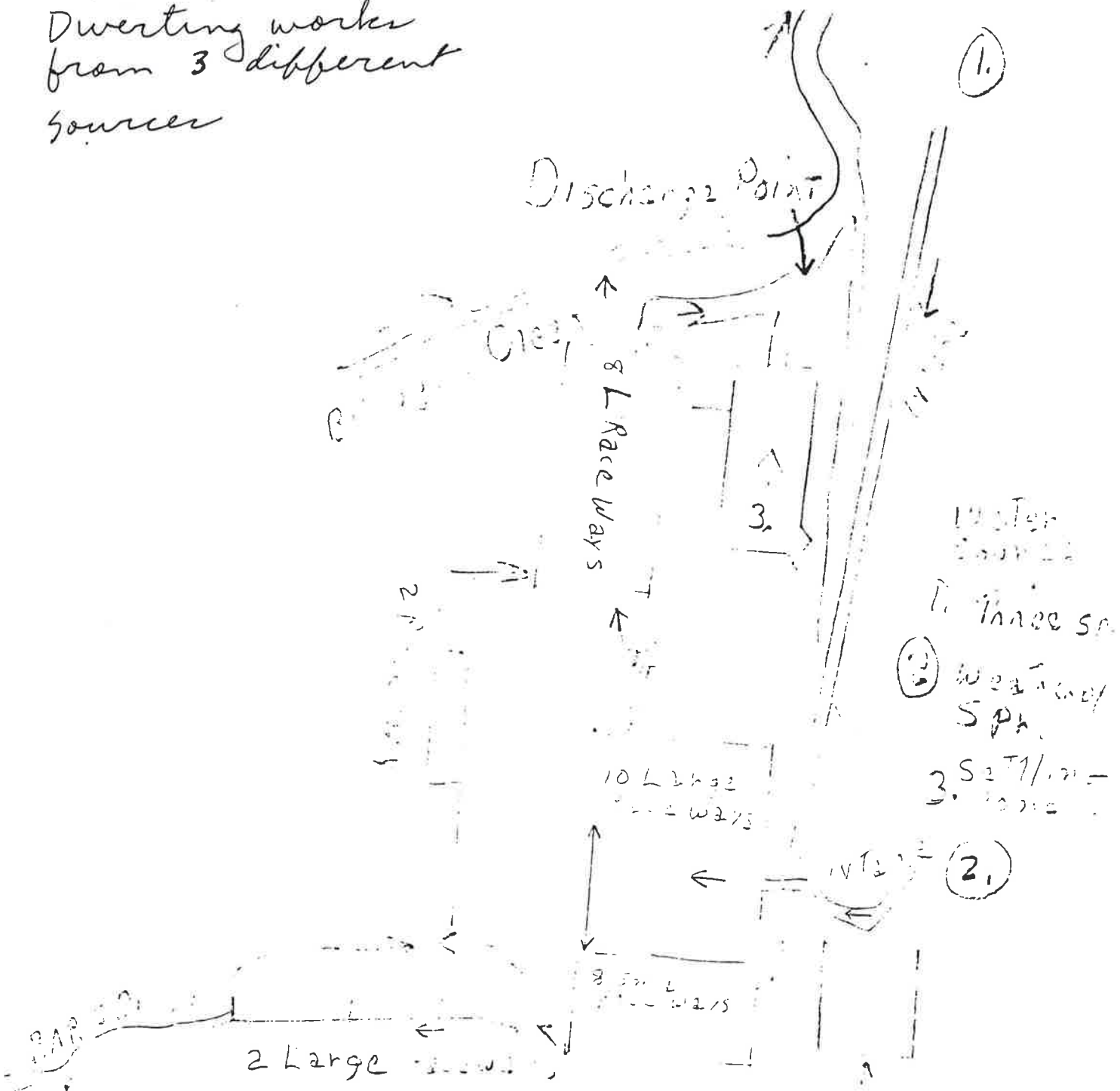
IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year in this certificate first above written.

Leann L. McMillan
NOTARY PUBLIC FOR IDAHO
Residing at: Jerome, Id
My Commission Expires: 8/24/2001

(51127poa.)llm

POOH ORIGINAL
POOH ORIGINAL

Diverting works
from 3 different
sources



MICROFILMED
OCT 12 1994

IN THE DISTRICT COURT OF THE FIFTH JUDICIAL DISTRICT OF THE STATE OF IDAHO,
IN AND FOR THE COUNTY OF TWIN FALLS

IN RE THE GENERAL ADJUDICATION
OF RIGHTS TO THE USE OF WATER FROM
THE SNAKE RIVER BASIN WATER SYSTEM.

CIVIL CASE NUMBER: 39576

Ident. Number: A36-00069
Date Received: 8/19/1988
Receipt No: S001554
Received By: lw

NOTICE OF CLAIM TO A WATER RIGHT
ACQUIRED UNDER STATE LAW

1. Name: JOHN W. JONES, JR. 208-837-4580
Address: BOX 265
HAGERMAN, ID 83332
AND/OR
Name: DELORIS D. JONES, JR. 208-837-4580
Address: BOX 265
HAGERMAN, ID 83332

2. Date of Priority: FEB 01, 1888

3. Source: WEATHERBY SPRINGS Trib. to: BILLINGSLEY CREEK

4. Point of Diversion:

Township	Range	Section	1/4 of	1/4 of	1/4 of	Lot	County
07S	14E	30	NE	SW			GOODING

5. Description of diverting works:
VIA HOAGLAND TUNNEL, HEADWORKS, CEMENT DITCH, 10" PIPE, 100HP PUMP

6. Water is used for the following purposes:

Purpose	From	To	C.F.S.	(or)	A.F.A.
IRRIGATION	03/15	11/15	1.000		
DOMESTIC	01/01	12/31	0.110		
STOCKWATER	01/01	12/31	0.120		

7. Total Quantity Appropriated is:
1.000 C.F.S. (and/or) A.F.A.

8. Total consumptive use is Acre Feet Per Annum.

9. Non-irrigation uses:
D/5 HOUSES, S/500 BEEF CATTLE

A36-00069

Page 1

Date: 08/19/88

MICROFILMED

OCT 12 1994

10. Place of Use:

Township	Range	Section	1/4 of	1/4	Lot	Use	Acres
07S	13E	25	NE	NE		IRR	40.0
			NW	NE		IRR	40.0
			SW	NE		IRR	40.0
			SE	NE		IRR	40.0
			NE	SE		IRR	40.0
			NW	SE		IRR	40.0
			SW	SE		IRR	29.0
			SE	SE		IRR	40.0
						Section Acres	309.0
14E	30	NW	NW	1	IRR	32.0	
		SW	NW	2	IRR	32.0	
		NE	SW		IRR	40.0	
		NW	SW	3	IRR	32.0	
		SW	SW	4	IRR	32.0	
		SE	SW		IRR	40.0	
						Total Acres	517.0

11. Place of use in counties: GOODING

12. Do you own the property listed above as place of use? YES

13. Other Water Rights Used:
A36-07071, A36-00068, A36-00070

14. Remarks:
IRRIG, STOCK, FISH PROP., & DOMESTIC USES THE SAME WATER FROM
4 DIFFERENT WATER RIGHTS WITH A TOTAL OF 87.05 CFS.

15. Basis of Claim: DECREED
Case Number:
Court :
Decree date:

NEW INTERNATIONAL MORTGAGE BAN
Decree Plaintiff

vs

IDAHO POWER COMPANY
Decree Defendant

16. Signature(s)

(a.) By signing below, I/We acknowledge that I/We have received, read and understand the form entitled "How you will receive notice in the Snake River Basin Adjudication." (b.) I/We do do not / wish to receive and pay a small annual fee for monthly copies of the docket sheet.

Number of attachments: 2

For Individuals:

I/We do solemnly swear or affirm that the statements contained in the foregoing document are true and correct.

Signature of Claimant(s): John W. Jones Jr. Date: Aug 19 1988
Date:

State of Idaho)
County of Twin Falls) SS.

Subscribed and sworn (or affirmed) before me this 19th day
of August 19 88

Roxanne Storey
Notary Public

Seal

Residing at Buhl, Id
My Commission Expires 6-30-94

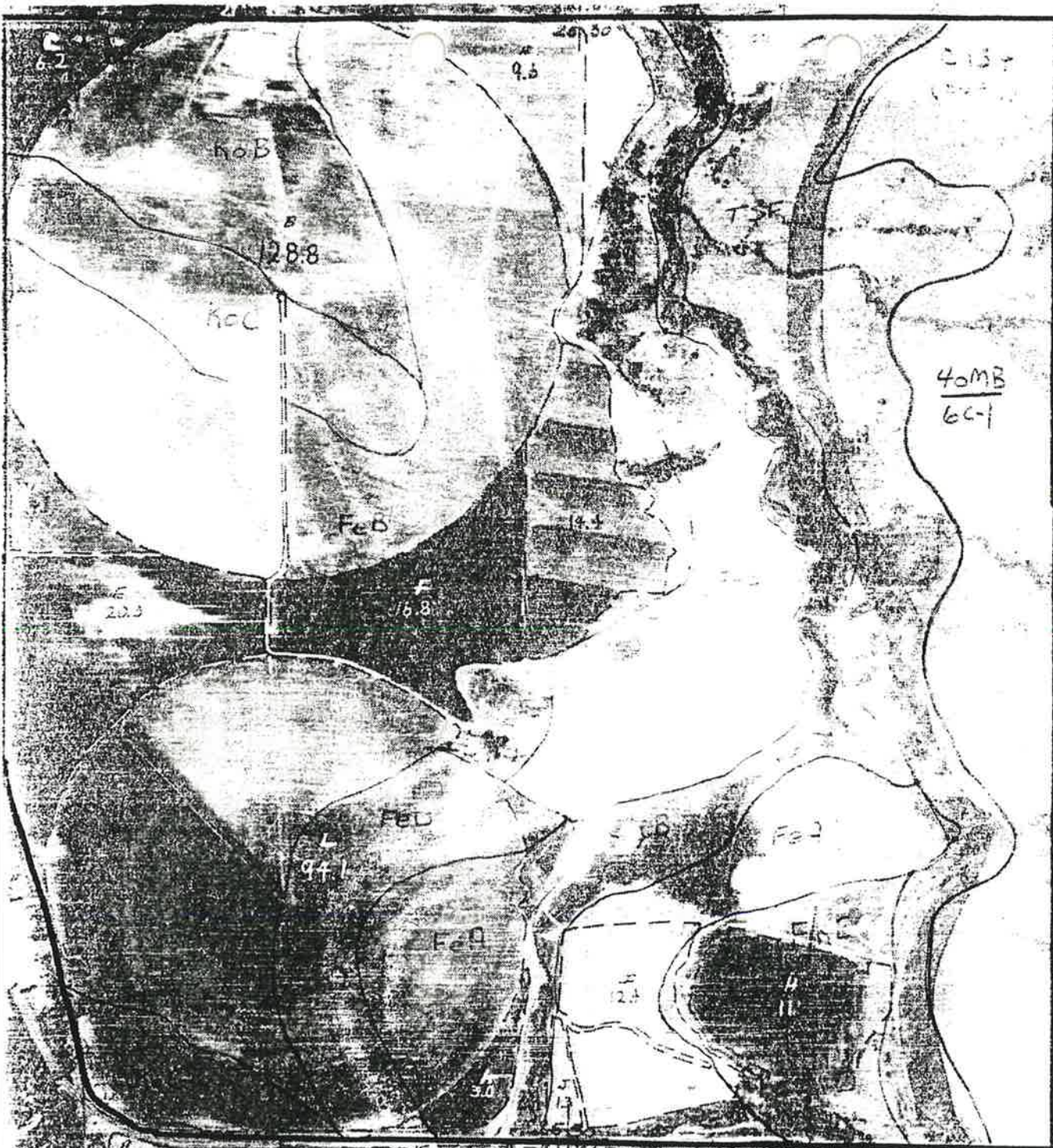
POOR ORIGINAL

N

T75
R14E

513 irrig
acres

40MB
6C-1



C227
4.4 (733)

C358
9.6

C277

C276
(5850)

MICROFILMED
MICROFILMED
OCT 12 1994

COPY

IN THE DISTRICT COURT OF THE FIFTH JUDICIAL DISTRICT OF THE
STATE OF IDAHO, IN AND FOR THE COUNTY OF TWIN FALLSIN RE THE GENERAL ADJUDICATION
OF RIGHTS TO THE USE OF WATER FROM
THE SNAKE RIVER BASIN WATER SYSTEM

CIVIL CASE NUMBER: 39576

Ident. Number 36-00069

Date Received

Receipt Number 502052 30

Amended
**NOTICE OF CLAIM
TO A
WATER RIGHT
ACQUIRED UNDER STATE LAW**

DEC 08 1997

Department of Water Resource
Southern Region

Please type or print clearly

1. Name of Claimant (s) John W. Jones, Jr and Deloris D Jones Phone (208) 837-4580Mailing Address PO Box 265 Hagerman, ID Zip 833322. Date of Priority (Only one (1) per claim) February 1, 18883. Source of water supply (a) Weatherby Springs / Hoagland Tunnel
which is tributary to (b) Billingsley Creek4. a. Location of existing point of diversion is: Township 7S Range 14E Section 30,
— 1/4 of NE 1/4 of SW 1/4, Govt. Lot, — B.M., County of Gooding

Additional points of diversion if any: _____

b. If instream flow, beginning point of claimed instream flow is:

Township _____ Range _____ Section _____, _____ 1/4 of _____ 1/4 of _____ 1/4,

Govt. Lot _____ B.M., County of _____

ending point is: Township _____ Range _____ Section _____, _____ 1/4 of _____ 1/4 of _____

_____ 1/4, Govt. Lot _____ B.M., County of _____

5. Description of existing diversion works (Dams, Reservoirs, Ditches, Wells, Pumps, Pipelines, Headgates, Etc),
including the dates of any changes or enlargements in use, the dimensions of the diversion works as
constructed and as enlarged and the depth of each well.cement ditch & 10" pipelineHoagland Tunnel through head works,

6. Water is claimed for the following purposes:

(both dates are inclusive) (cfs) (acre feet)

For Irrigation purposes from Irrigation Season to 12/31 amount 1.0 or _____

For Irrigation Maintenance purposes from 1/1 to 12/31 amount 1.0 or _____

For Domestic purposes from 1/1 to 12/31 amount 1.0 or _____

For Stockwater purposes from 1/1 to 12/31 amount 1.0 or _____

For fish propagation purposes from 1/1 to 12/31 amount 1.0 or _____

7. Total quantity claimed (a) 1.0 (cfs) and/or (b) 1.0 (acre feet)

8. Total consumptive use claimed is _____ acre feet per annum.

9. Non-irrigation uses; describe fully (eg. Domestic: Give number of households served; Stockwater: Type and number of livestock Etc.) IM: the water must be kept moving in pipe to prevent damage to the system

10. Description of place of use: is used for fish prior to reaching the other uses (except domestic),

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 use (example: D for Domestic) in the corresponding place of use below. See instructions for standard symbols.

TWP	RNG	SEC	NE 1/4				NW 1/4				SW 1/4				SE 1/4				Totals
			NE1/4	NW1/4	SW1/4	SE1/4	NE1/4	NW1/4	SW1/4	SE1/4	NE1/4	NW1/4	SW1/4	SE1/4	NE1/4	NW1/4	SW1/4	SE1/4	
75	13E	25	40	40	40	40									40	40	40	40	300
75	14E	30					32	32			40	32	32	40					208
"	"	"									FP								

Total number of acres irrigated 517 Acres

11. In which county (ies) are lands listed above as place of use located? Gooding

12. Do you own the property listed above as place of use? Yes X No _____

If your answer is No, describe in Remarks below the authority you have to claim this water right.

13. Describe any other water rights used at the same place and for the same purposes as described above.

36-07071; 36-00068; 36-00070 or None ()

14. Remarks:

Scale: 2 inches equals 1 mile *see attached.*

A large grid of 16 columns and 16 rows of squares. Each square contains a crosshair pattern of dashed lines, resembling a coordinate grid or graph paper. The grid is composed of 256 individual squares, each with a central crosshair formed by two perpendicular dashed lines. The grid is used for graphing or plotting data.

Copies: White-State, Yellow-Claimant

15. Basis of Claim (check one) Beneficial Use _____ Posted Notice _____ License _____ Permit _____
Decree X
If applicable provide IDWR Water Right Number 36-00069
Court _____ Case Number _____ Decree Date 3/22/32
Plaintiff vs Defendant New Int'l Mortgage Bank v. Idaho Power Co.

16. Signature (s)
(a.) By signing below, I/We acknowledge that I/We have received, read, and understand the form entitled
"How you will receive notice in the Snake River Basin Adjudication." (b.) I/We do _____ do not _____
wish to receive and pay a small annual fee for monthly copies of the docket sheet.
Number of attachments _____

For Individuals: I do solemnly swear or affirm that the statements contained in the foregoing document are true
and correct.

Signature of Claimant (s) ~~Patrick D. Brown~~ for claimants Jones Date 12/3/97

Date _____

For Organizations: I do solemnly swear or affirm that I am _____ Title _____
of _____, that I have signed the foregoing
Organization
document in the space below as _____ of _____
Title Organization
and that the statements contained in the foregoing document are true and correct.

Signature of Authorized Agent _____
Title and Organization _____ Date _____

State of Idaho/or _____)
County of Twin Falls) SS.

Subscribed and sworn (or affirmed) before me this 3rd day of December 19 97

SEAL

Notary Public Lellan L. McMillan
Residing at Jerome, Id
My Commission Expires 8/24/2001

Please Print Name

17. Notice of Appearance:
Notice is hereby given that I, Patrick D. Brown, Hepworth, Lezaniz will be acting as attorney at law on behalf
of the claimant signing above, and that all notices required by law to be mailed by the director to the claimant signing above
should be mailed to me at the address listed below.

Signature ~~Patrick D. Brown~~

Address 139 Shoshone St. N., P.O. Box 389, Twin Falls, ID 83303-0389

Date 12/3/97

Last Name Jones Ident. Number 36-00069

ROB
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1288

Feo

FeL

FeC

Fe

FeC

45MB
6c-1

T7S
R14E

517 mag
wco

C 277

C 358

C 227
4.4 (733)

5.2

C 276
(5852)

MICROFILMED

JAN 27 1993

A36-00003B	A36-00003C	A36-00003E	A36-00003F	A36-00003G	A36-00003J	A36-00006	A36-00007	A36-00008	A36-00021B
A36-00022	A36-00023	A36-00033F	A36-00034B	A36-00035J	A36-00039C	A36-00039D	A36-00039E	A36-00039J	A36-00039M
A36-00039N	A36-00041A	A36-00041C	A36-00042A	A36-00048A	A36-00049	A36-00050D	A36-00051D	A36-00055AF	A36-00055BC
A36-00060	A36-00061	A36-00062	A36-00063	A36-00064B	A36-00068	A36-00069	A36-00070	A36-00071A	A36-00075
A36-00077C	A36-00079	A36-00086C	A36-00089A	A36-00090A	A36-00090F	A36-00092	A36-00094A	A36-00096A	A36-00097
A36-00098	A36-00099	A36-00100	A36-00101	A36-00103C	A36-00103F	A36-00106	A36-00108A	A36-00108B	A36-00110A
A36-00110B	A36-00111A	A36-00111B	A36-00112A	A36-00112B	A36-00113H	A36-00113J	A36-00119	A36-00120	A36-00121
A36-00123A	A36-00123E	A36-00133	A36-00134A	A36-00134C	A36-00135B	A36-00135C	A36-00141	A36-00192	A36-02002
A36-02038	A36-02169	A36-04091	A36-04142	A36-04260	A36-07071	A36-07081	A36-07089	A36-07092A	A36-07142
A36-07142A	A36-07172	A36-07229	A36-07233	A36-07346	A36-07658	A36-07875	A36-08099	A36-08317	A36-10055
A36-10119	A36-10120	A36-10140	A36-10141	A36-10168	A36-10231	A36-10249	A36-10283	A36-10283B	A36-10405
A36-10520	A36-10906	A36-15166	A36-15168	A36-15240	A36-15463				

TOTAL RECORDS IN SELECTION FILE: 116

MICROFILMED
OCT 12 1994

RECEIVED
FEB 10 1993
Department of Water Resources

1 HEPWORTH, NUNGESTER & LEZAMIZ,
2 CHARTERED
3 133 Shoshone St. North
4 P.O. Box 389
5 Twin Falls, ID 83303-0389
6 Telephone: (208)734-7510
7 Attorneys for Claimant
8 (PPK\HAGERMAN.NOA\lmr)

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IN THE DISTRICT COURT OF THE FIFTH JUDICIAL DISTRICT OF THE
STATE OF IDAHO, IN AND FOR THE COUNTY OF TWIN FALLS

* * * * *

10 In Re the General Adjudication)
11 of Rights to the Use of Water)
12 from the Snake River Basin)
13 Water System)

Case No. 39576

14 The State of Idaho, ex rel.
15 R. Keith Higginson in his
16 official capacity as director
17 of the Idaho Department of
18 Water Resources,

NOTICE OF APPEARANCE

Petitioner,

vs.

17 United States; State of Idaho;
18 and all claimants to the use
19 of water from the Snake River
20 Basin Water System,

Respondents.

* * * * *

PLEASE BE NOTIFIED that the firm of Hepworth, Nungester
& Lezamiz, Chartered, hereby appears on behalf of Hagerman Water



Hepworth,
Nungester,
& Lezamiz

NOTICE OF APPEARANCE - 1

MICROFILMED
OCT 12 1994

1	Users, Inc. and its individual members:	
2	Anderson, Anita G.	A36-00050D
	Babington Lynn J. & Kathy	A36-00003C
3	Banbury Pipe Co., Inc.	A36-10906
	Banbury Pipe Co., Inc.	A36-02038
	Big Bend Irrigation & Mining Co.	A36-00192
4	Big Bend Irrigation & Mining Co.	A36-00133
	Big Spring Water User's Assoc.	A36-00022
5	Big Springs Water User's Assoc.	A36-00023
	Big Springs Water User's Assoc.	A36-15166
6	Blastock, Alma E.	A36-00108B
	Bolduc, Mark E.	A36-00103C
7	Boyer, Dale E. & Elaine M.	A36-00079
	Brailsford, Robert H.	A36-04260
	Brooks, Allen L. & Andree	A35-00060
8	Brooks, Allen L. & Andree	A36-07346
	Bybee, Gertrude B. Owsley	A36-00042A
9	Bybee, Gertrude B. Owsley	A36-00041C
	Candy, Walter W. & Margaret	A36-00135B
10	Candy, Walter W. & Margaret	A36-00134A
	Clouser, Doris H. & John F.	A36-00090A
11	Clouser, Doris H. & John F.	A36-00089A
	Crandlemire, Roger C. & George C.	A36-00113H
12	Crandlemire, Roger C. & George C.	A36-00112B
	Crandlemire, Roger C. & George C.	A36-00111B
	Crandlemire, Roger C. & George C.	A36-00113J
13	Crandlemire, Roger C. & George C.	A36-00110B
	Crandlemire, Roger C.	A36-00134C
14	Crandlemire, Roger C.	A36-00135C
	Crandlemire, Roger C.	A36-10140
15	Crandlemire, Roger C.	A36-10141
	DeVries, Abraham & Hermina	A36-00055AF
16	Dice, Philip F. & Judith A.	A36-00041A
	Dice, Philip F. & Judith A.	A36-10405
	Erwin, Frank C. & Peggy	A36-00092
17	Fleming, Michael J. & Paul F.	A36-00064B
	Flint, William E. and Vera C.	A36-00110A
18	Flint, William E. and Vera C.	A36-00111A
	Flint, William E. and Vera C.	A36-00112A
19	Flint, William E. and Vera C.	A36-10168
	Fuell, Keith L. & Jolene	A36-00086C
20	Gardner, Barbara & Robert B.	A36-00003B
	Gardner, Barbara	A36-00003J
21	Gisler, Harry R.	A36-00021B
	Gisler, Bradley	A36-00077C
	Glauner, Frank L. & Joan	A36-00039E
22	Grigg, Mattie P. & Golden T.	A36-10283B
	Gustafson Family Trust/Gustafson	A36-00033F
23	Ivan J. & Lucille co-trustees	
	Hagerman Gun Club	A36-00100



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1	Hagerman Gun Club	A36-00099
	Hagerman Gun Club	A36-07233
2	Hagerman Gun Club	A36-07172
	Hagerman Gun Club	A36-10249
3	Hagerman Water Users Assoc.	A36-15168
	Jensen, Alice	A36-00055BC
	Johnson, Ira L. & Huguette M.	A36-07142
4	Joint Hagerman School Dist 233	A36-15463
	Jones, John W., Jr.	A36-00068
5	Jones, John W., Jr.	A36-00069
	Jones, John W., Jr.	A36-07071
6	Jones, John W., Jr.	A36-00070
	Kipp, Rudy B. & Elberta M.	A36-10119
7	Kipp, Rudy B. & Elberta M.	A36-10120
	Kipp, Rudy B. & Elberta M.	A36-07658
	Kiser, John & Karl Woodall & Sons, Inc	A36-00071A
8	Kiser, John & Karl Woodall & Sons, Inc	A36-00075
	Korbis, George J. & Nellie W.	A36-00039N
9	Laughlin, Craig J. & Rita D.	A36-7089
	Laughlin, Craig J. & Rita D.	A36-00051D
10	Littlefair, Larry & Tara	A36-0121
	Littlefair, Larry & Tara	A36-10055
11	Littlefair, Larry & Tara	A36-00119
	Littlefair, Larry & Tara	A36-00120
12	Lloyd, Cleave C.	A36-04142
	Lloyd, Cleave C.	A36-00003G
	McFaddan, Dan H. & Irma R.	A36-2169
13	McFaddan, Dan H. & Irma R.	A36-00048A
	McFaddan, Dan H. & Irma R.	A36-00049
14	Morris, Howard & Rhonda	A36-00063
	Morris, Howard & Rhonda	A36-00061
15	Morris, Howard & Rhonda	A36-00062
	Mueller, Manfred	A36-00035J
16	Norwood Subdivision/	A36-15240
	Ruby Springs Water Company	A36-07092A
	Potter, Mark B. & Susan H.	A36-00039J
17	Rawson, Frank S. & Carol A.	A36-00123A
	Reese, Bruce W. & LaRose A.	A36-04091
18	Reese, Bruce W. & LaRose A.	A36-10231
	Rue, James O. & Beverly Jane	A36-07142A
19	Shaffer, Roger	A36-00034B
	Simcoe, Doyt H. & Roxie J.	A36-00003F
20	Simpson, Michael, on behalf of	A36-0123E
	Josephine Simpson Estate	
21	Simpson, Michael, on behalf of	A36-0096A
	Josephine Simpson Estate	
	Strange, Wm. (Penelope Turner-remainder man)	A36-00006
22	Strange, Wm. (Penelope Turner-remainder man)	A36-00007
	Strange, Wm. (Penelope Turner-remainder man)	A36-00008
23	Veenendaal, Dick J.	A36-00108A
	Veenendaal, Dick J.	A36-00039C



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Nungester,
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OCT 12 1994

1	Vernon, Edith L.	A36-00003E
	Walmsley, Fred J. & Susan K.	A36-00039D
2	Ward, John P. & Rush, Ruth E.	A36-00094-A
	Ward, John P. & Rush, Ruth E.	A36-00090F
3	Watkins, Paul E. & Inez S.	A36-00106
	Watkins, Paul E. & Inez S.	A36-08099
4	Wiens, M.J., Jr.	A36-07229
	Wiens, M.J., Jr.	A36-07081
	Wiens, M.J., Jr.	A36-80317
5	Wiens, M.J., Jr.	A36-00098
	Wiens, M.J., Jr.	A36-00097
6	Wiens, M.J., Jr.	A36-02002
	Wiens, M.J., Jr.	A36-00101
7	Wiens, M.J., Jr.	A36-00141
	Wiens, M.J., Jr.	A36-10520
8	Woolley, Max J. & Blanche	A36-00039M
	Ya-Ta-Hay Investments, Inc.	A36-10283A
	Ya-Ta-Hay Investments, Inc.	A36-07875
9	Zink, Basil Lester & Myrle Hyde	A36-00103F

10 the respondents in the above-entitled action, as counsel of record
 11 for said Hagerman Water Users, Inc. and said individuals.

12 DATED This 9 day of February, 1993.

13 HEPWORTH, NUNGESTER & LEZAMIZ

14
 15 By 
 16 PATRICK D. BROWN
 Attorneys for Respondents

17
 18 CERTIFICATE OF MAILING

19 The undersigned, a resident attorney of the State of
 20 Idaho, with offices at 133 Shoshone St. North, P.O. Box 389, Twin
 21 Falls, Idaho 83303, and one of the attorneys for the respondents
 22 in this matter, certifies that she caused to be mailed a copy of
 23 the above and foregoing NOTICE OF APPEARANCE on the 9 day of



Hepworth,
 Nungester,
 & Lezamiz

1 February, 1993, to:

2 Snake River Adjudication
3 District Court
4 P.O. Box 27070
5 Twin Falls, ID 83303-0126

6 Clive Strong
7 Chief Natural Resources Division
8 Office of Attorney General
9 Statehouse
10 Room 210
11 Boise, Idaho 83720

12 David Shaw
13 Adjudications Bureau Chief
14 Department of Water Resources
15 1301 North Orchard
16 Boise, Idaho 83706

17 United States Department of Justice
18 Environment and Natural Resources Division
19 550 West Fort Street, Box 33
20 Boise, ID 83734

21 
22 Patrick D. Brown



Hepworth,
Nungester,
& Lezamiz

MICROFILMED
OCT 12 1994



State of Idaho

DEPARTMENT OF WATER RESOURCES

1301 North Orchard Street, Statehouse Mail, Boise, Idaho 83720-9000

Phone: (208) 327-7900 FAX: (208) 327-7866

CECIL D. ANDRUS
GOVERNOR

R. KEITH HIGGINSON
DIRECTOR

March 1, 1993

Patrick D. Brown
Hepworth, Nungester and Lezamiz
133 Shoshone St. N.
P.O. Box 389
Twin Falls, ID 83303-0389

Re: Notice of Appearance

Dear Mr. Brown:

We received your Notice of Appearance on behalf of Hagerman Water Owners, Inc. and its individual members on February 10, 1993. The records listed on the notice were updated with some exceptions.

Claim numbers with "A" prefixes identify claims filed in the SRBA. Claim numbers without prefixes identify recommendations in the Director's Report. The following table identifies claimants for which you filed a notice of appearance, but the number you referred to is actually the identification of the recommendation. They have been updated with the notice information.

Claimant's Name	Recommendation No. (no "A" prefix)
Bybee, Gertrude B. Owsley	36-00042A 36-00041C
Candy, Walter W. & Margaret	36-00135B
Crandlemire, Roger C.	36-00134C 36-00135C
Gustafson Family Trust/Gustafson, Ivan J. & Lucille co-trustees	36-00033F
McFaddan, Dan H. & Irma R.	36-00048A
Muller, Manfred	36-00035J
Zink, Basil Lester & Myrle Hyde	36-00103F

MICROFILMED

OCT 12 1994

The following is a list of claims that have been updated with the notice information, however, there is a discrepancy between IDWR records and the notice list (see third column).

Claimant's Name as listed on Notice of Appearance	As Claimed/ As Recommended	Claim No. or Claimant's Name in IDWR's Records
Anderson, Anita G.	A36-00050D/36-00050D	Andersen (name spelling is different)
Brailsford, Robert H.	A36-04260/36-04260	A36-04260B/36-04260B (claim was split--"B" suffix)
Brooks, Allen L. & Andree	A35-00060	A36-00060/36-00060 (Basin 36 instead of Basin 35)
Crandlemire, Roger C. & George C.	A36-00113J/36-00113J	Crandlemire, Roger C. (George C. not listed as claimant)
Gisler, Harry R.	A36-00021B/36-00021B	A36-00021/36-00021 (claim was renumbered)
Glauner, Frank L. & Joan	A36-00039E/36-00039E	Jean instead of Joan
Gustafson Family Trust/Gustafson, Ivan J. & Lucille co-trustees	A36-00011C/36-00033F	Gustafson, Ivan J. (not listed as a trust)
Johnson, Ira L. & Huguette M.	A36-07142/36-07142	Johnson, Ira L. (Huguette M. not listed as claimant)
Joint Hagerman School Dist. 233	A36-15463/36-15463	Original claim & IDWR records show school dist. as #3.
Jones, John W., Jr.	A36-00068/36-00068 A36-00069/36-00069 A36-07071/36-07071 A36-00070/36-00070	Jones, John W. Jr. & Deloris D. (Deloris D. is included as a claimant)

MICROFILMED

OCT 12 1994

Claimant's Name as listed on Notice of Appearance	As Claimed/ As Recommended	Claim No. or Claimant's Name in IDWR's Records
Mueller, Manfred	A36-00034D/36-00035J	Muller (name spelling is different in IDWR records)
Strange, Wm. (Penelope Turn- er-remainder man)	A36-00006/36-00006 A36-00007/36-00007 A36-00008/36-00008	Strange, Wm. & Louise (Louise is included as a claimant, Penelope Turner is not in records)
Veenendaal, Dick J.	A36-00108A/36-00108A A36-00039C/36-00039C	Veenendaal, Dick J. & Sigrid E. (Sigrid E. is included as a claimant)
Wiens, M. J., Jr.	A36-80317	A36-08317/36-08317 (no. was transposed on notice)
Wiens, M. J., Jr.	A36-00098/36-15384	36-15384 (claim was combined with no. 36-00141 into no. 36- 15384)
Wiens, M. J., Jr.	A36-00141/36-15384	36-15384 (claim was combined with no. 36-00098 into no. 36- 15384)

The following claims have not been updated with the notice information because of the discrepancies listed in the third column.

Claimant's Name	Claim No. as listed on Notice of Appearance	Discrepancy Between Notice of Appearance and IDWR Records
Hagerman Gun Club	A36-00100/36-00100 A36-00099/36-00099 A36-07233/36-07233 A36-07172/36-07172 A36-10249/36-10249	Owners are listed as Bob Porter and Fred Surbaugh

MICROFILMED
OCT 12 1994

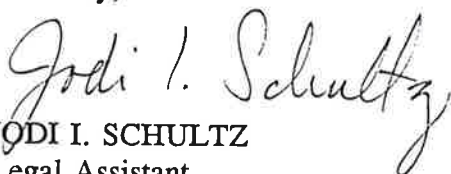
Mr. Patrick D. Brown
March 1, 1993
Page 4

Claimant's Name	Claim No. as listed on Notice of Appearance	Discrepancy Between Notice of Appearance and IDWR Records
Ya-Ta-Hay Investments, Inc.	A36-07875/36-07875	No record of this claim no., nor any other claim no. for claimant other than A36- 10283A/36-10283A (as listed)

Please review the claimants and claim numbers and let me know if you have any questions or problems with the claims as listed in IDWR's records. Also, please review the claims in the last table. We need to solve these discrepancies before IDWR's records are updated with the notice information. My phone number is 327-5444.

Please note we have received your supplemental and second supplemental notices of appearance and are currently working to update those records. We will inform you if there are any discrepancies.

Sincerely,



JODI I. SCHULTZ

Legal Assistant

Idaho Department of Water Resources

cc: IDWR Southern Region

MICROFILMED
OCT 12 1994

03/06/2002

IDAHO DEPARTMENT OF WATER RESOURCES
PRELIMINARY RECOMMENDATION OF WATER RIGHTS ACQUIRED UNDER STATE LAW

RIGHT NUMBER: 36-69

NAME AND ADDRESS: DELORIS D JONES
PO BOX 265
HAGERMAN ID 83332

JOHN W JONES JR
PO BOX 265
HAGERMAN ID 83332

SOURCE: HOAGLAND TUNNEL

TRIBUTARY: BILLINGSLEY CREEK

QUANTITY: 1.00 CFS

USE OF THIS RIGHT WITH RIGHT NO. 36-00068 IS LIMITED TO A TOTAL COMBINED DIVERSION RATE OF 10.74 CFS. THE PORTION OF COMBINED WATER RIGHT NOS. 36-00068 AND 36-00069 IN EXCESS OF A TOTAL COMBINED DIVERSION RATE OF 8.51 CFS IS SUBORDINATED TO ALL GROUND WATER AND SURFACE WATER RIGHTS WITH PRIORITY DATES BEFORE DECEMBER 31, 1999.

THE APPROPRIATOR IS ENTITLED TO THE QUANTITY OF WATER DESCRIBED FOR STOCK WATER PURPOSES AT A POINT OF MEASUREMENT WHERE THE DELIVERY DITCH ENTERS THE PLACE OF USE DESCRIBED, SO LONG AS THE QUANTITY DIVERTED AT THE POINT OF DIVERSION DOES NOT CONSTITUTE UNREASONABLE WASTE.

THE QUANTITY OF WATER UNDER THIS RIGHT FOR STOCKWATER USE SHALL NOT EXCEED 13,000 GALLONS PER DAY.

PRIORITY DATE: 02/01/1888

POINT OF DIVERSION:

T07S R14E S30 SENESW Within GOODING County

PURPOSE AND
PERIOD OF USE:

<u>PURPOSE OF USE</u>	<u>PERIOD OF USE</u>	<u>QUANTITY</u>
IRRIGATION	2/15 11/30	1.000 CFS
STOCKWATER	1/01 12/31	0.120 CFS

PLACE OF USE: IRRIGATION Within GOODING County

T07S R13E S25	NENE	40.0	T07S R13E S25	NWNE	40.0
T07S R13E S25	SWNE	40.0	T07S R13E S25	SENE	40.0
T07S R13E S25	NESE	38.0	T07S R13E S25	NWSE	38.0
T07S R13E S25	SWSE	30.0	T07S R13E S25	SESE	36.0
T07S R14E S30 Lot 1	NWNW	18.0	T07S R14E S30 Lot 2	SWNW	25.0
T07S R14E S30	NESW	5.0	T07S R14E S30 Lot 3	NWSW	26.0
T07S R14E S30 Lot 4	SWSW	27.0	T07S R14E S30	SESW	11.0

STOCKWATER Within GOODING County

T07S R13E S25	NESE	T07S R14E S30 Lot 3	NWSW
---------------	------	---------------------	------

414 ACRES TOTAL

USE OF THIS RIGHT WITH RIGHT NO. 36-00068 IS LIMITED TO THE IRRIGATION OF A COMBINED TOTAL OF 414 ACRES IN A SINGLE IRRIGATION SEASON.

OTHER PROVISIONS NECESSARY FOR DEFINITION OR ADMINISTRATION OF THIS WATER RIGHT:

IDAHO DEPARTMENT OF WATER RESOURCES
PRELIMINARY RECOMMENDATION OF WATER RIGHTS ACQUIRED UNDER STATE LAW

THE SUBORDINATED PORTION OF THIS WATER RIGHT SHALL NOT BE ASSERTED, DELIVERED, HONORED, USED, ENFORCED, EFFECTIVE OR OTHERWISE RECOGNIZED AS VALID IF IT WOULD CAUSE OR REQUIRE EITHER DIRECTLY OR INDIRECTLY, CURTAILMENT OF, INJURY TO, OR MITIGATION FROM ANY WATER RIGHTS WITH PRIORITY DATES EARLIER THAN DECEMBER 31, 1999. THE SUBORDINATION SHALL RUN WITH AND BE PERPETUAL SERVITUDES UPON THIS WATER RIGHT AND WATER RIGHT 36-00068 AND THE ASSOCIATED LANDS, INCLUDING ANY NEW LANDS TO WHICH ALL OR ANY PORTIONS OF THESE TWO WATER RIGHTS ARE TRANSFERRED.

THIS PARTIAL DECREE IS SUBJECT TO SUCH GENERAL PROVISIONS NECESSARY FOR THE DEFINITION OF THE RIGHTS OR FOR THE EFFICIENT ADMINISTRATION OF THE WATER RIGHTS AS MAY BE ULTIMATELY DETERMINED BY THE COURT AT A POINT IN TIME NO LATER THAN THE ENTRY OF A FINAL UNIFIED DECREE. SECTION 42-1412(6), IDAHO CODE.

THE QUANTITY OF WATER DECREED FOR THIS WATER RIGHT FOR STOCKWATER USE IS NOT A DETERMINATION OF HISTORICAL BENEFICIAL USE.

EXPLANATORY MATERIAL: Decreed

IN THE DISTRICT COURT OF THE FIFTH JUDICIAL DISTRICT OF THE
STATE OF IDAHO, IN AND FOR THE COUNTY OF TWIN FALLS

In Re SRBA

Case No. 39576

PARTIAL DECREE PURSUANT TO
I.R.C.P. 54(b) FOR

Water Right 36-00069

200 NOV 27 PM 2:38

FILED

NAME AND ADDRESS: JOHN W JONES JR
JONES, DELORIS D.
PO BOX 265
HAGERMAN, ID 83332

SOURCE: HOAGLAND TUNNEL

TRIBUTARY: BILLINGSLEY CREEK

QUANTITY: 1.00 CFS

✓ THE APPROPRIATOR IS ENTITLED TO THE QUANTITY OF WATER
DESCRIBED FOR STOCKWATER PURPOSES AT A POINT IN MEASUREMENT
WHERE THE DELIVERY DITCH ENTERS THE PLACE OF USE DESCRIBED.
✓ THE QUANTITY OF WATER UNDER THIS RIGHT FOR STOCKWATER USE
SHALL NOT EXCEED 13,000 GALLONS PER DAY.

USE OF THIS RIGHT WITH RIGHT 36-00068 IS LIMITED TO A TOTAL
COMBINED DIVERSION RATE OF 10.74 CFS. THE PORTION OF COMBINED
WATER RIGHTS 36-00068 AND 36-00069 IN EXCESS OF A TOTAL COMBINED
DIVERSION RATE OF 8.51 CFS IS SUBORDINATED TO ALL GROUND WATER
AND SURFACE WATER RIGHTS WITH PRIORITY DATES BEFORE DECEMBER 31,
1999.

PRIORITY DATE: 02/01/1888

POINT OF DIVERSION: T07S R14E S30 SENESW Within Gooding County

PURPOSE AND PERIOD OF USE:	PURPOSE OF USE	PERIOD OF USE	QUANTITY
	Irrigation	02-15 TO 11-30	1.00 CFS
	Stockwater	01-01 TO 12-31	0.12 CFS

PLACE OF USE:	Irrigation	Within Gooding County
	T07S R13E S25	NWNE 40.0
		SENE 40.0
		NWSE 38.0
		SESE 36.0
	R14E S30 LOT 01 (NWNW)18.0	LOT 02 (SWNW)25.0
		LOT 03 (NWSW)26.0
		SESW 11.0
	LOT 04 (SWSW)27.0	
	414.0 Acres Total	

Stockwater	Within Gooding County
T07S R13E S25	NESE
R14E S30 LOT 03 (NWSW)	

✓ USE OF THIS RIGHT WITH RIGHT 36-00068 IS LIMITED TO THE
IRRIGATION OF A COMBINED TOTAL OF 414 ACRES IN A SINGLE
IRRIGATION SEASON.

OTHER PROVISIONS NECESSARY FOR DEFINITION OR ADMINISTRATION OF THIS WATER RIGHT:

✓ THE QUANTITY OF WATER DECREED UNDER THIS RIGHT FOR STOCKWATER
USE IS NOT A DETERMINATION OF HISTORICAL BENEFICIAL USE.
THE SUBORDINATED PORTIONS OF THIS WATER RIGHT SHALL NOT BE
ASSERTED, DELIVERED, HONORED, USED, ENFORCED, EFFECTIVE OR
OTHERWISE RECOGNIZED AS VALID IF IT WOULD CAUSE OR REQUIRE EITHER
DIRECTLY OR INDIRECTLY, CURTAILMENT OF, INJURY TO, OR MITIGATION
FROM ANY WATER RIGHTS WITH PRIORITY DATES EARLIER THAN
DECEMBER 31, 1999. THE SUBORDINATIONS SHALL RUN WITH AND BE

SRBA Partial Decree Pursuant to I.R.C.P. 54(b) (continued)

OTHER PROVISIONS (continued)

PERPETUAL SERVITUDES UPON THIS WATER RIGHT AND WATER RIGHT 36-00068 AND UPON THE ASSOCIATED LANDS, INCLUDING ANY NEW LANDS TO WHICH ALL OR ANY PORTIONS OF THESE TWO WATER RIGHTS ARE TRANSFERRED.

THIS PARTIAL DECREE IS SUBJECT TO SUCH GENERAL PROVISIONS NECESSARY FOR THE DEFINITION OF THE RIGHTS OR FOR THE EFFICIENT ADMINISTRATION OF THE WATER RIGHTS AS MAY BE ULTIMATELY DETERMINED BY THE COURT AT A POINT IN TIME NO LATER THAN THE ENTRY OF A FINAL UNIFIED DECREE. I.C. SECTION 42-1412(6).

RULE 54(b) CERTIFICATE

With respect to the issues determined by the above judgment or order, it is hereby CERTIFIED, in accordance with Rule 54(b), I.R.C.P., that the court has determined that there is no just reason for delay of the entry of a final judgment and that the court has and does hereby direct that the above judgment or order shall be a final judgment upon which execution may issue and an appeal may be taken as provided by the Idaho Appellate Rules.



Barry Wood
Administrative District Judge
Presiding Judge of the
Snake River Basin Adjudication

RECEIVED

NOV 28 2000

Department of Water Resources

270 NOV 27 PM 2:37

IT-3R2A
TWIN FALLS CO., IDAHO
FILED

IN THE DISTRICT COURT OF THE FIFTH JUDICIAL DISTRICT OF THE
STATE OF IDAHO, IN AND FOR THE COUNTY OF TWIN FALLS

In Re SRBA

Case No. 39576

ORDER OF PARTIAL DECREE

For Water Right 36-00069

On November 1, 2000, a *Special Master's Report and Recommendation* was filed for the above water right. No Challenges were filed to the *Special Master's Report and Recommendation* and the time for filing Challenges has now expired.

Pursuant to I.R.C.P. 53(e)(2) and *SRBA Administrative Order 1*, Section 13f, this Court has reviewed the Findings of Fact and Conclusions of Law contained in the *Special Master's Report* and wholly adopts them as its own.

On August 2, 1999, in response to the Idaho Supreme Court decision in *A&B Irrigation District v. Idaho Conservation League*, 131 Idaho 411, 423, 958 P.2d 568, 580 (1998), IDWR filed a *Supplemental Director's Report, Reporting Area 3, IDWR Basin 36, Regarding Revision of Period of Use (For Irrigation Water Uses) and Conjunctive Management General Provisions* which included a recommendation for the irrigation season of use for this water right. No objections to this Supplemental Report were filed and the time period for filing objections has now expired.

Therefore, IT IS ORDERED that water right 36-00069 is hereby **decreed** as set forth in the attached *Partial Decree Pursuant to I.R.C.P. 54(b)*.

DATED November 27, 2000.



BARRY WOOD
Administrative District Judge and
Presiding Judge of the
Snake River Basin Adjudication

RECEIVED

AUG 14 2001

Department of Water Resources

2001 AUG 13 AM 10:28

FILED T-SRBA
TWIN FALLS, IDAHO
FILED *M*

**IN THE DISTRICT COURT OF THE FIFTH JUDICIAL DISTRICT OF THE
STATE OF IDAHO, IN AND FOR THE COUNTY OF TWIN FALLS**

In Re SRBA

Case No. 39576

**ORDER STRIKING ORDER OF PARTIAL
DECREE**

For Water Right 36-00069

On August 9, 2001, this Court erroneously entered an *Order of Partial Decree* for the above-captioned water right, which is attached hereto.

Therefore, IT IS ORDERED that the *Order of Partial Decree* for water right 36-00069 entered on August 9, 2001, is hereby **stricken** from the record.

DATED August 13 2001.

R. S. Burdick

ROGER S. BURDICK

- Presiding Judge
Snake River Basin Adjudication

COPY

2001 AUG -9 PM 4: 19

DISTRICT COURT - SRBA
TWIN FALLS, IDAHO
FILED *M*

IN THE DISTRICT COURT OF THE FIFTH JUDICIAL DISTRICT OF THE
STATE OF IDAHO, IN AND FOR THE COUNTY OF TWIN FALLS

In Re SRBA

Case No. 39576

)
)
)
)
ORDER OF PARTIAL DECREE

For Water Right 36-00069

On June 15, 2001, a *Special Master's Report and Recommendation* was filed for the above water right. No Challenges were filed to the *Special Master's Report and Recommendation* and the time for filing Challenges has now expired.

Pursuant to I.R.C.P. 53(e)(2) and *SRBA Administrative Order 1*, Section 13f, this Court has reviewed the Findings of Fact and Conclusions of Law contained in the *Special Master's Report* and wholly adopts them as its own.

On August 2, 1999, in response to the Idaho Supreme Court decision in *A&B Irrigation District v. Idaho Conservation League*, 131 Idaho 411, 423, 958 P.2d 568, 580 (1998), IDWR filed a *Supplemental Director's Report, Reporting Area 3, IDWR Basin 36, Regarding Revision of Period of Use (For Irrigation Water Uses) and Conjunctive Management General Provisions* which included a recommendation for the irrigation season of use for this water right. No objections to this Supplemental Report were filed and the time period for filing objections has now expired.

Therefore, IT IS ORDERED that water right 36-00069 is hereby decreed as set forth in the attached *Partial Decree Pursuant to I.R.C.P. 54(b)*.

DATED 8-9-, 2001.

R. Burdick

ROGER S. BURDICK

Presiding Judge

Snake River Basin Adjudication

CERTIFICATE OF MAILING

I certify that a true and correct copy of the ORDER STRIKING ORDER OF PARTIAL DECREE was mailed on August 13, 2001 with sufficient first-class postage to the following:

IDWR Document Depository
PO Box 83720
Boise, ID 83720-0098

United States Department of Justice
Environment & Nat'l Resources Div
550 W Fort Street, MSC 033
Boise, ID 83724

Chief, Natural Resources Division
Office of Attorney General
PO Box 44449
Boise, ID 83711-4449

John W. Jones, Jr.
Deloris D. Jones
PO Box 265
Hagerman, ID 83332


Deputy Clerk

IN THE DISTRICT COURT OF THE FIFTH JUDICIAL DISTRICT OF THE
STATE OF IDAHO, IN AND FOR THE COUNTY OF TWIN FALLS

In Re SRBA

Subcase 36-00069

Case 89576

STANDARD FORM 5

This form is used to report the stipulated elements of one water right acquired under state law and/or a federal reserved water right. Submission of this form will not automatically result in the issuance of a partial decree. The Presiding Judge or Special Master will conduct any hearing necessary to determine whether the facts, data, expert opinions and law support the issuance of a partial decree for the water right.

The parties agree that the Snake River Basin Adjudication Court has jurisdiction of the parties and subject matter to enter a partial decree for this water right; that they have been served with sufficient process, according to the law; and that they have appeared, prosecuted, and defended their positions with regard to this water right dispute.

The parties and IDWR agree and stipulate that the elements of this water right should be described per the attached. The parties and IDWR have further indicated their concurrence by initialing each of the attached pages.

Date: 9/29, 2000

IDWR Concurrence

Patrick D. Brown, Attorney
for John W. and Deloris Jones

Josephine P. Beeman 9/28/00
Attorney for North Snake Ground
Water District

Michael C. Crum 9/28/00
Attorney for Crumley Bros, Kevin
Michaelson and Doug Grant

Deputy Attorney General for the Idaho
Department of Fish and Game

STANDARD FORM 5

IN THE DISTRICT COURT OF THE FIFTH JUDICIAL DISTRICT OF THE
STATE OF IDAHO, IN AND FOR THE COUNTY OF TWIN FALLS

In Re SRBA) Subcase 36-00669
Case 39576) STANDARD FORM 5

This form is used to report the stipulated elements of any water right acquired under state law and/or a federal reserved water right. Submission of this form will not automatically result in the issuance of a partial decree. The Presiding Judge or Special Master will conduct any hearing necessary to determine whether the facts, data, expert opinions and law support the issuance of a partial decree for the water right.

The parties agree that the Snake River Basin Adjudication Court has jurisdiction of the parties and subject matter to enter a partial decree for this water right, that they have been served with sufficient process, according to the law; and that they have appeared, prosecuted, and defended their positions with regard to this water right dispute.

The parties and IDWR agree and stipulate that the elements of this water right should be described per the attached. The parties and IDWR have further indicated their concurrence by initialing each of the attached pages.

Date: _____, 2000

D. R. Tuttle 10/2/00
IDWR Concurrence

Josephine P. Brennan 9/20/00
Attorney for North Snake Ground
Water District

Patrick D. Brown, Attorney
for John W. and Deloris Jones

Attorney for Cranney Bros, Kevin
Michaelson and Doug Grant

Deputy Attorney General for the Idaho
Department of Fish and Game

STANDARD FORM 5

IDAHO DEPARTMENT OF WATER RESOURCES
RECOMMENDED WATER RIGHTS ACQUIRED UNDER STATE LAW

DATE: SEP 28, 2000
PAGE: A-1

RIGHTS FROM: SOURCE: HOAGLUND TUNNEL TRIBUTARY: BILLINGSLEY CREEK

RIGHT NUMBER: 36-00069

NAME AND ADDRESS: DELORIS D. JONES
JOHN W. JONES, JR.
P. O. BOX 265
HAGERMAN, ID 83332

SOURCE: HOAGLUND TUNNEL TRIBUTARY: BILLINGSLEY CREEK

QUANTITY: 1.00 CFS

THE APPROPRIATOR IS ENTITLED TO THE QUANTITY OF WATER DESCRIBED FOR STOCK WATER PURPOSES AT A POINT OF MEASUREMENT WHERE THE DELIVERY DITCH ENTERS THE PLACE OF USE DESCRIBED, SO LONG AS THE QUANTITY DIVERTED AT THE POINT OF DIVERSION DOES NOT CONSTITUTE UNREASONABLE WASTE.

THE QUANTITY OF WATER UNDER THIS RIGHT FOR STOCKWATER USE SHALL NOT EXCEED 13,000 GALLONS PER DAY.

USE OF THIS RIGHT WITH RIGHT NO. 36-00068 IS LIMITED TO A TOTAL COMBINED DIVERSION RATE OF 10.74 CFS. THE PORTION OF COMBINED WATER RIGHT NOS. 36-00068 AND 36-00069 IN EXCESS OF A TOTAL COMBINED DIVERSION RATE OF 8.51 CFS IS SUBORDINATED TO ALL GROUND WATER AND SURFACE WATER RIGHTS WITH PRIORITY DATES BEFORE DECEMBER 31, 1999.

PRIORITY DATE: 02/01/1888

POINT OF DIVERSION: T07S R14E S30 SENESW Within GOODING County

PURPOSE AND PERIOD OF USE:	PURPOSE OF USE	PERIOD OF USE	QUANTITY
IRRIGATION	STOCKWATER	02-15 11-30	1.00 CFS
		01-01 12-31	0.12 CFS

PLACE OF USE:	IRRIGATION	Within GOODING County	STOCKWATER	Within GOODING County
T07S R13E S25	NENE 40	NENE 40	SENE 40	SENE 40
	NESE 38	NUSE 38	SUSE 30	SESE 36
R14E S30	LOT 1(NWNW) 18	LOT 2(SWNW) 25	NFSW 5	LOT 3(NWSW) 26
	LOT 4(SWSW) 27	SESW 11		

414 ACRES TOTAL

USE OF THIS RIGHT WITH RIGHT NO. 36-00068 IS LIMITED TO THE IRRIGATION OF A COMBINED TOTAL OF 414 ACRES IN A SINGLE IRRIGATION SEASON.

STOCKWATER	Within GOODING County
T07S R13E S25	NESE
R14E S30	LOT 3(NWSW)

OTHER PROVISIONS NECESSARY FOR DEFINITION OR ADMINISTRATION OF THIS WATER RIGHT:

THE SUBORDINATED PORTIONS OF THIS RIGHT AND WATER RIGHT NO. 36-00068 SHALL NOT BE ASSERTED, DELIVERED, HONORED, USED, ENFORCED, EFFECTIVE, OR OTHERWISE RECOGNIZED IF IT WOULD CAUSE OR REQUIRE, EITHER DIRECTLY OR INDIRECTLY, CURTAILMENT OF, INJURY TO, OR MITIGATION FROM ANY SURFACE OR GROUND WATER RIGHTS WITH PRIORITY DATES BEFORE DECEMBER 31, 1999. THE SUBORDINATIONS SHALL RUN WITH AND BE PERPETUAL SERVITUDES UPON THIS WATER RIGHT AND WATER RIGHT NO. 36-00068 AND UPON THE ASSOCIATED LANDS, INCLUDING ANY NEW LANDS TO WHICH ALL OR ANY PORTIONS OF THESE TWO WATER RIGHTS ARE TRANSFERRED.

STANDARD FORM 5

Handwritten: JPB 9/28/00
MCC 9/28/00
P. 10

OCT- 2-00 MON 13:48

SNAKE RIVER ADJUD

FAX NO. 208362 06

P. 11

IDAHO DEPARTMENT OF WATER RESOURCES
RECOMMENDED WATER RIGHTS ACQUIRED UNDER STATE LAW

DATE: SEP 28, 2000
PAGE: A-2

RIGHT NUMBER: 36-00069 (cont'd)

OTHER PROVISIONS NECESSARY FOR DEFINITION OR ADMINISTRATION OF THIS WATER RIGHT: (cont'd)

THE QUANTITY OF WATER DECREED FOR THIS WATER RIGHT FOR STOCKWATER USE IS NOT A DETERMINATION OF HISTORICAL BENEFICIAL USE.

THIS PARTIAL DECREE IS SUBJECT TO SUCH GENERAL PROVISIONS NECESSARY FOR THE DEFINITION OF THE RIGHTS OR FOR THE EFFICIENT ADMINISTRATION OF THE WATER RIGHTS AS MAY BE ULTIMATELY DETERMINED BY THE COURT AT A POINT IN TIME NO LATER THAN THE ENTRY OF A FINAL UNIFIED DECREE. SECTION 42-1412(6), IDAHO CODE.

EXPLANATORY MATERIAL: BASIS OF CLAIM - DECREE

JFB 9/28/00
MCT 9/28/00

BB 9/28/00

JFB

STANDARD FORM 5

OCT- 2-00 MON 13:47

SNAKE RIVER ADJUD

FAX NO. 208362 26

P. 12

SNAKE RIVER RESOURCES; 2083275400;

Oct-2-00 12PM;

Page 8/7

IDAHO DEPARTMENT OF WATER RESOURCES
RECOMMENDED WATER RIGHTS ACQUIRED UNDER STATE LAW

DATE: SEP 28, 2000
PAGE: 1

RIGHTS FROM: SOURCE: HOAGLAND TUNNEL TRIBUTARY: BILL FROST CREEK

RIGHT NUMBER: 36-00069

NAME AND ADDRESS: DELONIS D. JONES
JOHN W. JONES, JR.
P. O. BOX 269
MADISON, ID 83432

SOURCE: HOAGLAND TUNNEL TRIBUTARY: BILL FROST CREEK

QUANTITY: 1.00 CFS

THE APPROPRIATOR IS ENTITLED TO THE QUANTITY OF WATER DESCRIBED FOR STOCK WATER PURPOSES AT A POINT OF MEASUREMENT WHERE THE DELIVERY DITCH ENTERS THE PLACE OF USE DESCRIBED, SO LONG AS THE QUANTITY DIVERTED AT THE POINT OF DIVERSION DOES NOT CONSTITUTE UNREASONABLE WASTE.

THE QUANTITY OF WATER UNDER THIS RIGHT FOR STOCKWATER USE SHALL NOT EXCEED 13,000 GALLONS PER DAY.

USE OF THIS RIGHT WITH RIGHT NO. 36-00068 IS LIMITED TO A TOTAL COMBINED DIVERSION RATE OF 10.74 CFS. THE PORTION OF COMBINED WATER RIGHT NOS. 36-00068 AND 36-00069 IN EXCESS OF A TOTAL COMBINED DIVERSION RATE OF 8.31 CFS IS SUBORDINATED TO ALL GROUND WATER AND SURFACE WATER RIGHTS WITH PRIORITY DATES BEFORE DECEMBER 31, 1999.

PRIORITY DATE: 02/01/1888

POINT OF DIVERSION: T07S R14E S30 SEENEW WITHIN GOODING COUNTY

PURPOSE AND PERIOD OF USE:

PURPOSE OF USE
IRRIGATION
STOCKWATER

PERIOD OF USE
02-15 11-30
01-01 12-31

QUANTITY
1.00 CFS
0.12 CFS

PLACE OF USE:

IRRIGATION

WITHIN GOODING COUNTY

T07S R13E S25

SENE 40

SENE 40

SENE 40

SENE 40

SENE 30

SENE 30

SENE 30

SENE 30

R14E S30

LOT 1 (W/2) 18

LOT 2 (W/2) 25

SENE 5

LOT 3 (W/2) 26

LOT 4 (W/2) 27

SENE 11

414 ACRES TOTAL

USE OF THIS RIGHT WITH RIGHT NO. 36-00068 IS LIMITED TO THE IRRIGATION OF A COMBINED TOTAL OF 414 ACRES IN A SINGLE IRRIGATION SEASON.

STOCKWATER

WITHIN GOODING COUNTY

T07S R13E S25

SENE

R14E S30

LOT 3 (W/2)

OTHER PROVISIONS NECESSARY FOR DEFINITION OR ADMINISTRATION OF THIS WATER RIGHT:

THE SUBORDINATED PORTIONS OF THIS RIGHT AND WATER RIGHT NO. 36-00068 SHALL NOT BE ASSERTED, DELIVERED, FORWARDED, USED, ENFORCED, EFFECTIVE, OR OTHERWISE RECOGNIZED IF IT WOULD CAUSE OR REQUIRE, EITHER DIRECTLY OR INDIRECTLY, ENTAILMENT OF, INJURY TO, OR MITIGATION FROM ANY SURFACE OR GROUND WATER RIGHTS WITH PRIORITY DATES BEFORE DECEMBER 31, 1999. THE SUBORDINATIONS SHALL RUN WITH AND BE PERPETUAL SERVITUDES UPON THIS WATER RIGHT AND WATER RIGHT NO. 36-00068 AND UPON THE ASSOCIATED LANDS, INCLUDING ANY NEW LANDS TO WHICH ALL OR ANY PORTIONS OF THESE TWO WATER RIGHTS ARE TRANSFERRED.

STANDARD FORM 5

OCT-2-00 MON 13:48

SNAIL RIVER ADJUD

FAX NO. 2083E

26

P. 13

2083275400;

OCT-2-00 12PM;

Page 7/7

ISLAND DEPARTMENT OF WATER RESOURCES
RECOMMENDED WATER RIGHTS ACQUIRED UNDER STATE LAW

DATE: SEP 28, 2003
PAGE: A-Z

RIGHT NUMBER: 36-00069 (cont'd)

OTHER PROVISIONS NECESSARY FOR DEFINITION OR ADMINISTRATION OF THIS WATER RIGHT: (cont'd)

THE QUANTITY OF WATER DECREED FOR THIS WATER RIGHT FOR STOCKWATER USE IS NOT A DETERMINATION OF HISTORICAL MUNICIPAL USE.

THIS PARTIAL DECREE IS SUBJECT TO SUCH GENERAL PROVISIONS NECESSARY FOR THE DEFINITION OF THE RIGHTS OR FOR THE EFFICIENT ADMINISTRATION OF THE WATER RIGHTS AS MAY BE ULTIMATELY DETERMINED BY THE COURT AT A POINT IN TIME NO LATER THAN THE ENTRY OF A FINAL UNIFIED DECREE. SECTION 62-14126, ISLAND CODE.

EXPLANATORY MATERIAL: BASIS OF CLAIM - DECREE

JFB 9/28/00
D 10/2/00

STANDARD FORM 5

CERTIFICATE OF SERVICE

I certify that on 10-2, 2000, I caused to be served true and correct copies of the Standard Form 5, to the following persons, in the manner indicated and addressed as follows:

1. Original to:

Clerk of the District Court
Snake River Basin Adjudication
253 Third Avenue North
P.O. Box 2707
Twin Falls, ID 83303-2707

☐ Overnight Mail
☐ Regular Mail
☐ Hand-Delivered
☒ Facsimile

2. Copies to:

IDWR Document Repository
P.O. Box 83720
Boise, ID 83720-0098

☐ Overnight Mail
☐ Regular Mail
☒ Hand-Delivered
☐ Facsimile

Patrick Brown
Law Offices
109 South Adams
Jerome, ID 83338

☐ Overnight Mail
☒ Regular Mail
☐ Hand-Delivered
☐ Facsimile

Jo Beeman
Beeman Hofstetter
P.O. Box 1427
Boise, ID 83701-1427

☐ Overnight Mail
☒ Regular Mail
☐ Hand-Delivered
☐ Facsimile

Michael Creamer
Givens Pursley
P.O. Box 2720
Boise, ID 83701-2720

☐ Overnight Mail
☒ Regular Mail
☐ Hand-Delivered
☐ Facsimile

Peter Ampe
Office of the Atty General
P.O. Box 83720
Boise, ID 83720-0010

☐ Overnight Mail
☐ Regular Mail
☒ Hand-Delivered
☐ Facsimile

STANDARD FORM 5

Sandy Egbert
Signature of person or attorney mailing the form

STANDARD FORM 5

Adjudication Recommendation Report 36-69 V2

<u>Owner Type</u>	<u>Name and Address</u>
Attorney	PATRICK D BROWN PARKER WARR & BROWN LLP 812 SHOSHONE ST E BUHL, ID 83316 (208)735-8812
Current Owner	DELORIS D JONES PO BOX 265 HAGERMAN, ID 83332 (208)837-4580
Current Owner	JOHN W JONES JR PO BOX 265 HAGERMAN, ID 83332 (208)837-4580

Status: Active

<u>Source</u>	<u>Tributary</u>
HOAGLAND TUNNEL	BILLINGSLEY CREEK

<u>Beneficial Use</u>	<u>From</u>	<u>To</u>	<u>Diversion Rate</u>	<u>Annual Volume</u>
IRRIGATION	2/15	to 11/30	1.000 CFS	
STOCKWATER	1/01	to 12/31	0.120 CFS	
		Total Diversion:	1.000 CFS	

<u>Location of Point(s) of Diversion</u>		
HOAGLAND TUNNEL	SE1/4NE1/4SW1/4	Sec. 30, Twp 07S, Rge 14E, B.M.
GOODING County		

Place of Use
IRRIGATION

Twp	Rge	Sec	<u>NE</u>				<u>NW</u>				<u>SW</u>				<u>SE</u>				<u>Totals</u>
			<u>NE</u>	<u>NW</u>	<u>SW</u>	<u>SE</u>	<u>NE</u>	<u>NW</u>	<u>SW</u>	<u>SE</u>	<u>NE</u>	<u>NW</u>	<u>SW</u>	<u>SE</u>	<u>NE</u>	<u>NW</u>	<u>SW</u>	<u>SE</u>	
07S	13E	25	40.0	40.0	40.0	40.0									38.0	38.0	30.0	36.0	302.0
07S	14E	30						18.0 L 1	25.0 L 2		5.0	26.0 L 3	27.0 L 4	11.0					112.0

STOCKWATER

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	

IDAHO DEPARTMENT OF WATER RESOURCES

Adjudication Recommendation Report 36-69 V2

07S 13E 25					X	
07S 14E 30			X			
			L 3			

Conditions of Approval:

1. ✓ C18 THIS PARTIAL DECREE IS SUBJECT TO SUCH GENERAL PROVISIONS NECESSARY FOR THE DEFINITION OF THE RIGHTS OR FOR THE EFFICIENT ADMINISTRATION OF THE WATER RIGHTS AS MAY BE ULTIMATELY DETERMINED BY THE COURT AT A POINT IN TIME NO LATER THAN THE ENTRY OF A FINAL UNIFIED DECREE. SECTION 42-1412(6), IDAHO CODE.
2. ✓ N01 THE APPROPRIATOR IS ENTITLED TO THE QUANTITY OF WATER DESCRIBED FOR STOCK WATER PURPOSES AT A POINT OF MEASUREMENT WHERE THE DELIVERY DITCH ENTERS THE PLACE OF USE DESCRIBED, SO LONG AS THE QUANTITY DIVERTED AT THE POINT OF DIVERSION DOES NOT CONSTITUTE UNREASONABLE WASTE.
3. ✓ N05 THE QUANTITY OF WATER UNDER THIS RIGHT FOR STOCKWATER USE SHALL NOT EXCEED 13,000 GALLONS PER DAY.
4. ✓ N08 THE QUANTITY OF WATER DECREED FOR THIS WATER RIGHT FOR STOCKWATER USE IS NOT A DETERMINATION OF HISTORICAL BENEFICIAL USE.

Remarks:

1. ✓ Quantity USE OF THIS RIGHT WITH RIGHT NO. 36-00068 IS LIMITED TO A TOTAL COMBINED DIVERSION RATE OF 10.74 CFS. *ADD*
2. ✓ Place of Use
- Irrigation USE OF THIS RIGHT WITH RIGHT NO. 36-00068 IS LIMITED TO THE IRRIGATION OF A COMBINED TOTAL OF 414 ACRES IN A SINGLE IRRIGATION SEASON.

Subordination Language

C-18

*Precedence
filed
11-27-2000*

IDAHO DEPARTMENT OF WATER RESOURCES
Adjudication Recommendation Report 36-69 V2

Comments:

1. BEDKE 3/8/1991 SCC-STAFF REVIEW

Comment:

2. CHRISTEN 8/7/1992 BASIS FOR RECOMMENDATION

Comment: REQUIRED WATER IS SUPPLIED BY 36-00068. THEREFORE THIS CLAIM IS NOT NECESSARY AS THEY ARE FROM THE SAME SOURCE. COPIED FROM REMARKS IRRIG, STOCK, FISH PROP., & DOMESTIC USES THE SAME WATER FROM 4 DIFFERENT WATER RIGHTS WITH A TOTAL OF 87.05 CFS.

3. SCHULTZ 9/24/1992 NOTICE OF ERROR (NOE)

Comment: NOE RECEIVED 9/23/92. CHANGED NOE FLAG FROM BLANK TO A. CLAIM VERIFIED 8/7/92. DID NOT REVERIFY ANY PART OF CLAIM.

4. CHRISTEN 10/14/1992 RESPONSE TO NOE

Comment: RESPONSE WAS STANDARD LETTER FORMAT "MULTIPLE RIGHTS, DECREED RIGHT DISALLOWED" COMBINED WITH OTHER ISSUES FOR OTHER CLAIMS HELD BY CLAIMANT. NO CHANGE IN THE RECOMMENDATION MADE AT THIS TIME. KKC 10-14-92.

5. SOUTH3 10/23/1992 RECOMMENDATION CHANGED

Comment: IT WAS DECIDED TO TREAT THE HOAGLAND TUNNEL AS A SEPARATE SOURCE FROM WEATHERBY SPRINGS. THIS RIGHT HAS BEEN RECOMMENDED TO DESCRIBE THE CLAIMANT'S USE OF THIS SOURCE. RMC

6. SCHULTZ 2/19/1993 ADDED NEW ATTORNEY

Comment: RECEIVED NOTICE OF APPEARANCE FROM HEPWORTH NUNGESTER LEZAMIZ 2/10/93.

7. SCELLAN 1/29/1998 REFORMAT UPDATE

Comment: ADDED ACRES PER GIS. STOCKWATER IS ADDED AND OVERLAPS WITH -0068, BUT ON DIFFERENT SOURCE. DOMESTIC IS NOT USED FROM HOAGLAND SOURCE.

8. SSHERMAN 4/24/1998 SUBSTITUTION OF COUNSEL

Comment: SUBSTITUTION OF COUNSEL REC'D 4/16/1998, PATRICK D BROWN OF PARKER WARR & BROWN LLP REPRESENTING JOHN W JONES JR.

Dates and Other Information:

Decreed Date:

Enlargement Use Priority Date:

Enlargement Statute Priority Date:

Defendant:

Plaintiff:

Civil Case Number:

Judicial District:

Notice of Error Flag: RECEIVED - RECOMMENDATION CHANGED

State or Federal: S

Owner Name Connector: AND

Water District Number: 36A

Generic Max Rate Per Acre:

Generic Max Volume Per Acre:

Swan Falls Trust or Nontrust:

Swan Falls Dismissed:

DLE Act Number:

Carey Act Number:

Mitigation Plan: False

IDAHO DEPARTMENT OF WATER RESOURCES
Adjudication Recommendation Report 36-69 V2

SubCase:

SubCase Number: 36-69

Class: 2

SF5 Filed Date:

Special Master Recom Signed Date: 11/1/2000

Attorney Assigned: NICHOLAS B SPENCER

Adjudication Agent:

Basis of Claim:

Date Filed: 7/31/1998 Objection Status: Active

Date Filed: 4/29/1993 Objection Status: Active

Date Filed: 7/17/2000 Objection Status: Active

Date Filed: 7/18/2000 Objection Status: Active

Date Filed: 7/18/2000 Objection Status: Active

Date Filed: 7/18/2000 Objection Status: Active

Date Filed: 7/18/2000 Objection Status: Active

RECEIVED

AUG 31 1998

Department of Water Resources
Southern Region

RECEIVED

AUG 26 1998

Department of Water Resources

36-00069 ^{3-UT#}
1998 AUG 24 PM 01:43
DISTRICT COURT - SRBA
TWIN FALLS CO., IDAHO
FILED

IN THE DISTRICT COURT OF THE FIFTH JUDICIAL DISTRICT OF THE
STATE OF IDAHO, IN AND FOR THE COUNTY OF TWIN FALLS

In Re SRBA	)	NOTICE SETTING SUBCASE
	)	FOR SCHEDULING CONFERENCE
Case No. 39576	)	
		) SUBCASE NOS: SEE ATTACHED EXHIBIT A

The Scheduling Conference for this subcase will be
held as follows:

MONDAY, SEPTEMBER 21, 1998 at 10:00 AM
SRBA
DISTRICT COURT
253 3RD AVENUE NORTH
TWIN FALLS, ID

Parties and their attorneys, if any, shall attend the
Scheduling Conference and shall be prepared to discuss the
following matters:

1. Claimant representation and alignment of the parties;
2. Identification of the issues;
3. Admissions of facts and documents;
4. Amendment of pleadings, if required;
5. Discovery and discovery cut-off dates;
6. Expert witnesses, if planned;
7. Pre-trial conference dates;
8. Motions;
9. Settlement/alternative dispute resolution; and
10. Firm trial date.

DIRECTOR OF IDWR
PO BOX 83720
BOISE, ID 83720-0098

Page 1 8/24/98

(continued)

The date for the scheduling conference will not be changed unless a Stipulation to Reset is received by the court fourteen (14) days before the date of the scheduling conference. Parties who wish to change the date of the scheduling conference must do the following:

1. Contact the clerk of the SRBA Court and obtain alternative dates and times (208-736-3011).
2. Contact each party to the subcase(s) or their attorney, if any, and reach an agreement on the alternative date(s) and time(s) provided by the clerk.
3. Prepare a Stipulation to Reset the hearing. The hearing must be reset on one of the dates and times provided by the clerk. The stipulation must specify the date(s) and time(s) agreed to and must contain a statement that you have contacted each party or their attorney and that all have agreed on the alternative date(s) and time(s). The court will send a notice resetting the hearing.
4. If the parties cannot agree on one of the alternative dates and times provided by the clerk, the party wishing to change the date and time must file an Expedited Motion to Reset with the court at least 21 days prior to the scheduled hearing.

Dated: AUGUST 24, 1998

/S/ DEBBIE LASH
Deputy Clerk
Snake River Basin Adjudication

CERTIFICATE OF MAILING

I Certify that a true and correct copy of the NOTICE SETTING SUBCASE FOR SCHEDULING CONFERENCE was mailed on AUGUST 24, 1998, with sufficient first-class postage to the following:

IDAHO DEPT OF FISH & GAME

Represented by:

AMPE, PETER J
DEPUTY ATTORNEY GENERAL
PO BOX 44449
BOISE, ID 83711-4449
Phone: 208-334-2400

STATE OF IDAHO

Represented by:

CLIVE STRONG
OFFICE OF ATTORNEY GENERAL
STATE OF IDAHO
PO BOX 44449
BOISE, ID 83711-4449
Phone: 208-334-2400

NORTH SNAKE GROUND WATER DIST

Represented by:

DANA L. HOFSTETTER
BEEMAN & HOFSTETTER
608 WEST FRANKLIN STREET
PO BOX 1427
BOISE, ID 83701-1427
Phone: 208-388-8900

CRANNEY BROS

CRANNEY BROS.

DOUG GRANT

KEVIN MICHAELSON

Represented by:

JEFFREY C. FEREDAY
PO BOX 2720
BOISE, ID 83701
Phone: 208-342-6571

NORTH SNAKE GROUND WATER DIST

Represented by:

JOSEPHINE P. BEEMAN
BEEMAN & HOFSTETTER
608 WEST FRANKLIN STREET
PO BOX 1427
BOISE, ID 83701-1427
Phone: 208-388-8900

BANBURY PIPE CO., INC.

BIG SPRINGS WATER USERS ASSN

BIG SPRINGS WATER USERS ASSOC.

BOB PORTER

BOB PORTER, FRED SURBAUGH,

C-CAN CORPORATION

C-CAN PARTNERS

JOHN W. & DELORIS D. JONES

JOHN W. JR. JONES

JOINT HAGERMAN SCHOOL DIST 233

JOINT HAGERMAN SCHOOL DIST.

PAUL E. WATKINS

PAUL WATKINS

WILLIAM E. NORRIS

WILLIAM STRANGE

Represented by:

PATRICK D. BROWN

812 SHOSHONE ST. EAST

TWIN FALLS, ID 83303

Phone: 208-735-8812

A & B IRRIGATION DISTRICT

Represented by:

ROGER D LING

PO BOX 396

RUPERT, ID 83350

Phone: 208-436-4717

DALE E. BOYER

BOYER, ELAINE M.

PO BOX 232

HAGERMAN, ID 83332

Phone: 208-352-1152

JOHN W. JR. JONES

JONES, DELORIS

PO BOX 265

HAGERMAN, ID 83332

WALTER II & JUDY BONNING

PO BOX 360

HAGERMAN, ID 83332

Phone: 208-837-4578

DIRECTOR OF IDWR

PO BOX 83720

BOISE, ID 83720-0098

(Notice Setting Scheduling Conference)

(Certificate of mailing continued)

ALMA BLASTOCK
ROUTE 1, BOX 442
HAGERMAN, ID 83332

Exhibit A

Subcase Nos:

36-00006
36-00007
36-00008
36-00022
36-00023
36-00047
36-00068
36-00069
36-00070
36-00079
36-00099
36-00100
36-00106
36-00108B
36-02038
36-08099
36-15463

RECEIVED

DEC 28 2000

Department of Water Resources
Southern Region

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DISTRICT COURT-SRBA
TWIN FALLS CO., IDAHO
FILED

IN THE DISTRICT COURT OF THE FIFTH JUDICIAL DISTRICT
OF THE STATE OF IDAHO, IN AND FOR TWIN FALLS COUNTY

In Re SRBA

Case No. 39576

) Subcase Nos. 36-00006, 36-00007,
) 36-00008, 36-00022, 36-00023,
) 36-00047, 36-00068, 36-00069,
) 36-00099, 36-00100, and 36-00106
)
)
)
)
)
)
)
)

**ORDER GRANTING IDAHO
DEPARTMENT OF FISH & GAME'S
MOTION TO SHORTEN TIME**

On February 12, 1999, the Court heard the *Idaho Department of Fish & Game's* Motion to Shorten Time. For good cause shown, IT IS ORDERED that the *Motion to Shorten Time* is hereby GRANTED.

IT IS FURTHER ORDERED that the following schedule shall apply to all pending Motions for Summary Judgment filed in the above-referenced subcases prior to February 12, 1999 and any Motions for Summary Judgment adopting these pending motions.

(1) **February 17, 1999, 5 p.m.** – Deadline to file motions adopting Motions for Summary Judgment pending as of February 12, 1999.

(2) **February 22, 1999, 5 p.m.** – Deadline for service of Respondents' Response Briefs. Respondents must serve their Response Briefs on the Claimants by

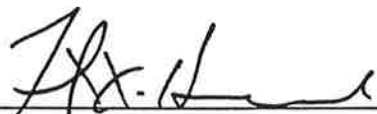
overnight mail delivery to ensure receipt by the Claimants no later than **5 p.m. on February 23, 1999.**

(3) **February 23, 1999, 5 p.m.** – Deadline for service of Claimants' Response Briefs. Claimants must serve their Response Briefs on all Respondents by overnight mail delivery to ensure receipt by the Respondents no later than **5 p.m. on February 24, 1999.**

(4) **March 1, 1999, 5 p.m.** – Deadline for service of all Reply Briefs.

(5) **March 8, 1999, 10 a.m.** – Hearing at the Snake River Basin Adjudication Courthouse in Twin Falls, Idaho on all summary judgment motions covered by this order.

ENTERED this 3 day of ^{March}~~February~~, 1999.



Special Master Fritz X. Haemmerle

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MAR 09 1999

Department of Water Resources

William Strange, Big Springs Water Users Assoc.,
C-CAN Partners, John W. Jones, Jr., Hagerman
Gun Club (Porter & Surbaugh), River Grove Farms, Inc.

PARKER, WARR & BROWN, LLP
Patrick D. Brown
812 Shoshone Street East
Twin Falls, ID 83301
Telephone: (208)735-8812

IN THE DISTRICT COURT OF THE FIFTH JUDICIAL DISTRICT OF THE
STATE OF IDAHO, IN AND FOR THE COUNTY OF TWIN FALLS

In Re SRBA	)	Subcase Nos. 36-00006, 36-00007,
	)	36-00008, 36-00022, 36-00023,
	)	36-00047, 36-00068, 36-00069,
Case No. 39576	)	36-00099, 36-00100, 36-00106,
	)	
	)	<u>MOTION TO COMPEL AND</u>
	)	<u>FOR SANCTIONS</u>
	)	

COME NOW, the Claimants in the above listed Subcases, and move the Court under I.R.C.P. 37(a) for Order Compelling Responses to Interrogatories and Requests for Production against each Respondent. The Claimants also move the Court for entry of an Order sanctioning the attorneys who signed the Interrogatory and Request for Production Responses pursuant to I.R.C.P. 11(a) and I.R.C.P. 37(a).

This Motion is supported by the Brief and the Affidavit of Counsel with the Interrogatory and Request for Production Responses being filed contemporaneously with this Motion.

COPY

Oral argument is requested.

Dated this 4th day of March, 1999.

PARKER, WARR & BROWN, LLP

By: 

Patrick D. Brown

CERTIFICATE OF SERVICE

The undersigned, a resident attorney of the State of Idaho, with offices at 812 Shoshone St. East, Twin Falls, Idaho 83301, and one of the attorneys for the claimants in this matter, certifies that on the 5th day of March, 1999, he served a true and correct copy of the foregoing document by the method indicated below, and addressed to the following:

Chief, Natural Resources
Office of the Attorney General
State of Idaho
P. O. Box 44449
Boise, ID 83711-4449

☒ U.S. Mail
☐ Hand Delivered
☐ Overnight Mail
☐ Telecopy (Fax)

Director of IDWR
P. O. Box 83720
Boise, ID 83701-2139

☒ U.S. Mail
☐ Hand Delivered
☐ Overnight Mail
☐ Telecopy (Fax)

Jeffrey Fereday
Givens Pursley, LLP
277 N. 6th St, Ste. 200
P. O. Box 2720
Boise, ID 83701-2720

☒ U.S. Mail
☐ Hand Delivered
☐ Overnight Mail
☐ Telecopy (Fax)

Josephine P. Beeman
Dana L. Hofstetter
Beeman & Hofstetter, P.C.
P.O. Box 1427
Boise, ID 83701-1427

☒ U.S. Mail
☐ Hand Delivered
☐ Overnight Mail
☐ Telecopy (Fax)

John W. Jr. & Deloris Jones

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JUL 28 2000

Department of Water Resources

PATRICK D. BROWN, P.C.
Law Offices
Patrick D. Brown, ISB #4413
109 South Adams
Jerome, ID 83338
Telephone: (208) 644-1967
Facsimile: (208) 633-1970

IN THE DISTRICT COURT OF THE FIFTH JUDICIAL DISTRICT OF THE
STATE OF IDAHO, IN AND FOR THE COUNTY OF TWIN FALLS

In Re SRBA	)	A. Subcase 36-00069
	)	
Case No. 39576	)	STANDARD FORM 2
	)	RESPONSE TO OBJECTION
	)	
	)	

B. NAME AND ADDRESS OF PERSON RESPONDING

Name: John W. Jones, Jr.
Deloris D. Jones
Address: P.O. Box 265
Hagerman, ID 83332-0265

Daytime Phone: (208) 837-4580

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SEP 01 2000
Department of Water Resources
Southern Region

Name & Address of attorney, if any:

Patrick D. Brown, P.C.
109 S. Adams St.
Jerome, Idaho 83338
ph: (208) 644-1967

C. NAME AND ADDRESS OF PERSON WHO FILED THE OBJECTION TO
WHICH YOU ARE RESPONDING:

Name: North Snake Ground Water District
Represented by Dana Hofstetter
Address: Beeman & Hofstetter, P.C.
608 West Franklin Street
P.O. Box 1427
Boise, ID 83701-1427

D. I am responding to the objections to the following elements. (Please check the appropriate box(es)).

1. Name and Address
2. Source
3. X Quantity
4. Priority Date
5. Point(s) of Diversion
6. Instream Flow Description
7. Purpose(s) of Use
8. Period of Year
9. X Place of Use
11. **Recommendation**

This water right should not exist.

This water right was not recommended, but should be recommended with the elements described above.

E. **COMMENTS**

This water right should be decreed as recommended by IDWR in its Amended Director's Report dated June 23, 2000.

F. **VERIFICATION (Must be Completed)**

STATE OF IDAHO)
: ss.
County of Jerome)

Patrick D. Brown, duly sworn, upon oath, deposes and says:

That I am the party/claimant filing this response, as defined by I.C. 42-1401A(1) and (6) or that I am the attorney for the party/claimant responding and that I have read this response, know its contents and believe that the statements are true to the best of my knowledge.

(Signature of person filing response)

(Attorney signing in representative capacity)



Subscribed and sworn to before me on: 7/27/00

Patricia J. Fahrenholz
Notary Public for Idaho

Residing at: Twin Falls

My Commission Expires: 11-09-2004

INSTRUCTIONS FOR MAILING

You must mail the response to the Clerk of the Court. **FAX filings will not be accepted.** You must also send a copy to all the parties listed below in the Certificate of Mailing.

G. CERTIFICATE OF MAILING

I certify that on July 27, 2000, I mailed the original and copies of this response, including all attachments, to the following persons:

1. Original to:

Clerk of the District Court
Snake River Basin Adjudication
253 Third Avenue North
PO Box 2707
Twin Falls, ID 83303-2707

2. One copy to the claimant of the water right at the following address:

Name: John W. Jones, Jr.
Deloris D. Jones
Address: P.O. Box 265
Hagerman, ID 83332-0265

3. One copy to the party who filed the objection at the following address:

Name: North Snake Ground Water District
Represented by Dana Hofstetter
Address: Beeman & Hofstetter, P.C.
608 West Franklin Street
P.O. Box 1427
Boise, ID 83701-1427

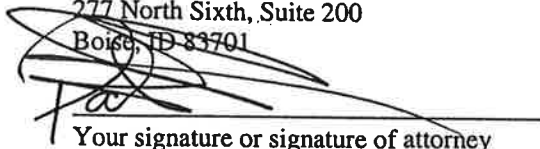
4. Copies to:

IDWR Document Depository
PO Box 83720
Boise, ID 83720-0098

United States Department of Justice
Environment and Natural Resource Division
5550 West Fort Street, MSC 033
Boise, ID 83724

Chief, Natural Resources Division
Office of the Attorney General
State of Idaho
PO Box 44449
Boise, ID 83711-4449

Michael Creamer
Givens Pursley, LLP
277 North Sixth, Suite 200
Boise, ID 83701



Your signature or signature of attorney
mailing on your behalf

John W. Jr. & Deloris Jones

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JUL 28 2000

Department of Water Resources

PATRICK D. BROWN, P.C.
Law Offices
Patrick D. Brown, ISB #4413
109 South Adams
Jerome, ID 83338
Telephone: (208) 644-1967
Facsimile: (208) 633-1970

**IN THE DISTRICT COURT OF THE FIFTH JUDICIAL DISTRICT OF THE
STATE OF IDAHO, IN AND FOR THE COUNTY OF TWIN FALLS**

In Re SRBA

Case No. 39576

)
)
)
)
)
)

A. Subcase 36-00069

**STANDARD FORM 2
RESPONSE TO OBJECTION**

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Department of Water Resources
Southern Region

B. NAME AND ADDRESS OF PERSON RESPONDING

Name: John W. Jones, Jr.
Deloris D. Jones
Address: P.O. Box 265
Hagerman, ID 83332-0265

Daytime Phone: (208) 837-4580

RECEIVED
SEP 01 2000
Department of Water Resources
Southern Region

Name & Address of attorney, if any:

Patrick D. Brown, P.C.
109 S. Adams St.
Jerome, Idaho 83338
ph: (208) 644-1967

**C. NAME AND ADDRESS OF PERSON WHO FILED THE OBJECTION TO
WHICH YOU ARE RESPONDING:**

Name: Cranney Bros.
Represented by Michael C. Creamer
Address: Givens Pursley, LLP
277 North Sixth, Suite 200
Boise, ID 83701

D. I am responding to the objections to the following elements. (Please check the appropriate box(es)).

1. Name and Address
2. Source
3. X Quantity
4. Priority Date
5. Point(s) of Diversion
6. Instream Flow Description
7. Purpose(s) of Use
8. Period of Year
9. X Place of Use

11. **Recommendation**

This water right should not exist.

This water right was not recommended, but should be recommended with the elements described above.

E. **COMMENTS.**

This water right should be decreed as recommended by IDWR in its Amended Director's Report dated June 23, 2000.

F. **VERIFICATION (Must be Completed)**

STATE OF IDAHO)
 : ss.
County of Jerome)

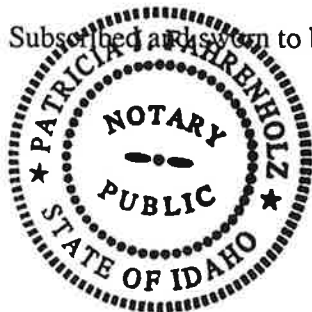
Patrick D. Brown, duly sworn, upon oath, deposes and says:

That I am the party/claimant filing this response, as defined by I.C. 42-1401A(1) and (6) or that I am the attorney for the party/claimant responding and that I have read this response, know its contents and believe that the statements are true to the best of my knowledge.

(Signature of person filing response)

(Attorney signing in representative capacity)

Subscribed and sworn to before me on: 7/27/00



Patricia J. Jahnke
Notary Public for Idaho
Residing at: twin Falls
My Commission Expires: 11-09-2004

INSTRUCTIONS FOR MAILING

You must mail the response to the Clerk of the Court. **FAX filings will not be accepted.** You must also send a copy to all the parties listed below in the Certificate of Mailing.

G. CERTIFICATE OF MAILING

I certify that on July 27, 2000, I mailed the original and copies of this response, including all attachments, to the following persons:

1. Original to:

Clerk of the District Court
Snake River Basin Adjudication
253 Third Avenue North
PO Box 2707
Twin Falls, ID 83303-2707

2. One copy to the claimant of the water right at the following address:

Name: John W. Jones, Jr.
Deloris D. Jones
Address: P.O. Box 265
Hagerman, ID 83332-0265

3. One copy to the party who filed the objection at the following address:

Name: Cranney Bros.
Represented by Michael C. Creamer
Address: Givens Pursley, LLP
277 North Sixth, Suite 200
Boise, ID 83701

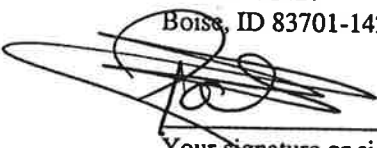
4. Copies to:

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PO Box 83720
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United States Department of Justice
Environment and Natural Resource Division
5550 West Fort Street, MSC 033
Boise, ID 83724

Chief, Natural Resources Division
Office of the Attorney General
State of Idaho
PO Box 44449
Boise, ID 83711-4449

Dana Hofstetter
Beeman & Hofstetter
608 West Franklin Street
P.O. Box 1427
Boise, ID 83701-1427



Your signature or signature of attorney
mailing on your behalf

John W. Jr. & Deloris Jones

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JUL 28 2000

PATRICK D. BROWN, P.C.

Law Offices

Patrick D. Brown, ISB #4413

109 South Adams

Jerome, ID 83338

Telephone: (208) 644-1967

Facsimile: (208) 633-1970

Department of Water Resources

**IN THE DISTRICT COURT OF THE FIFTH JUDICIAL DISTRICT OF THE
STATE OF IDAHO, IN AND FOR THE COUNTY OF TWIN FALLS**

In Re SRBA

)

A. Subcase 36-00069

)

Case No. 39576

)

STANDARD FORM 2

)

RESPONSE TO OBJECTION

)

)

B. NAME AND ADDRESS OF PERSON RESPONDING

Name: John W. Jones, Jr.
Deloris D. Jones
Address: P.O. Box 265
Hagerman, ID 83332-0265

Daytime Phone: (208) 837-4580

RECEIVED
SEP 01 2000
Department of Water Resources
Southern Region

Name & Address of attorney, if any:

Patrick D. Brown, P.C.
109 S. Adams St.
Jerome, Idaho 83338
ph: (208) 644-1967

**C. NAME AND ADDRESS OF PERSON WHO FILED THE OBJECTION TO
WHICH YOU ARE RESPONDING:**

Name: Kevin Michaelson
Represented by Michael C. Creamer
Address: Givens Pursley, LLP
277 North Sixth, Suite 200
Boise, ID 83701

D. I am responding to the objections to the following elements. (Please check the appropriate box(es)).

1. Name and Address
2. Source
3. X Quantity
4. Priority Date
5. Point(s) of Diversion
6. Instream Flow Description
7. Purpose(s) of Use
8. Period of Year
9. X Place of Use
11. Recommendation

This water right should not exist.

This water right was not recommended, but should be recommended with the elements described above.

E. COMMENTS.

This water right should be decreed as recommended by IDWR in its Amended Director's Report dated June 23, 2000.

F. VERIFICATION (Must be Completed)

STATE OF IDAHO)
: ss.
County of Jerome)

Patrick D. Brown, duly sworn, upon oath, deposes and says:

That I am the party/claimant filing this response, as defined by I.C. 42-1401A(1) and (6) or that I am the attorney for the party/claimant responding and that I have read this response, know its contents and believe that the statements are true to the best of my knowledge.

(Signature of person filing response)

(Attorney signing in representative capacity)



Subscribed and sworn to before me on:

7/27/00 Patricia J. Fahrenholz
Notary Public for Idaho
Residing at: Twin Falls
My Commission Expires: 11-09-2004

INSTRUCTIONS FOR MAILING

You must mail the response to the Clerk of the Court. **FAX filings will not be accepted.** You must also send a copy to all the parties listed below in the Certificate of Mailing.

G. CERTIFICATE OF MAILING

I certify that on July 22, 2000, I mailed the original and copies of this response, including all attachments, to the following persons:

1. Original to:

Clerk of the District Court
Snake River Basin Adjudication
253 Third Avenue North
PO Box 2707
Twin Falls, ID 83303-2707

2. One copy to the claimant of the water right at the following address:

Name: John W. Jones, Jr.
Deloris D. Jones
Address: P.O. Box 265
Hagerman, ID 83332-0265

3. One copy to the party who filed the objection at the following address:

Name: Kevin Michaelson
Represented by Michael C. Creamer
Address: Givens Pursley, LLP
277 North Sixth, Suite 200
Boise, ID 83701

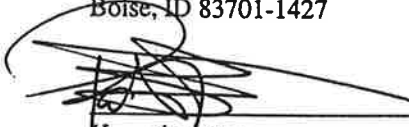
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Boise, ID 83724

Chief, Natural Resources Division
Office of the Attorney General
State of Idaho
PO Box 44449
Boise, ID 83711-4449

Dana Hofstetter
Beeman & Hofstetter
608 West Franklin Street
P.O. Box 1427
Boise, ID 83701-1427



Your signature or signature of attorney
mailing on your behalf

John W. Jr. & Deloris Jones

PATRICK D. BROWN, P.C.
Law Offices
Patrick D. Brown, ISB #4413
109 South Adams
Jerome, ID 83338
Telephone: (208) 644-1967
Facsimile: (208) 633-1970

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JUL 28 2000

Department of Water Resources

**IN THE DISTRICT COURT OF THE FIFTH JUDICIAL DISTRICT OF THE
STATE OF IDAHO, IN AND FOR THE COUNTY OF TWIN FALLS**

In Re SRBA	)	A. Subcase 36-00069
	)	
Case No. 39576	)	STANDARD FORM 2
	)	RESPONSE TO OBJECTION
	)	
	)	

B. NAME AND ADDRESS OF PERSON RESPONDING

Name: John W. Jones, Jr.
Deloris D. Jones
Address: P.O. Box 265
Hagerman, ID 83332-0265

Daytime Phone: (208) 837-4580

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SEP 01 2000
Department of Water Resources
Southern Region

Name & Address of attorney, if any:

Patrick D. Brown, P.C.
109 S. Adams St.
Jerome, Idaho 83338
ph: (208) 644-1967

**C. NAME AND ADDRESS OF PERSON WHO FILED THE OBJECTION TO
WHICH YOU ARE RESPONDING:**

Name: Doug Grant
Represented by Michael C. Creamer
Address: Givens Pursley, LLP
277 North Sixth, Suite 200
Boise, ID 83701

D. I am responding to the objections to the following elements. (Please check the appropriate box(es)).

1. Name and Address
2. Source
3. X Quantity
4. Priority Date
5. Point(s) of Diversion
6. Instream Flow Description
7. Purpose(s) of Use
8. Period of Year
9. X Place of Use

11. **Recommendation**

This water right should not exist.

This water right was not recommended, but should be recommended with the elements described above.

E. **COMMENTS.**

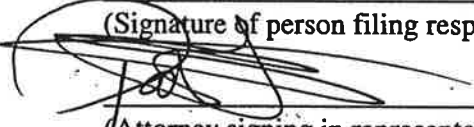
This water right should be decreed as recommended by IDWR in its Amended Director's Report dated June 23, 2000.

F. **VERIFICATION (Must be Completed)**

STATE OF IDAHO)
: ss.
County of Jerome)

Patrick D. Brown, duly sworn, upon oath, deposes and says:

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(Signature of person filing response)

(Attorney signing in representative capacity)
Subscribed and sworn to before me on: 7/27/00 Patricia J. Fahrenholz
Notary Public for Idaho
Residing at: Twin Falls
My Commission Expires: 11-09-2004



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253 Third Avenue North
PO Box 2707
Twin Falls, ID 83303-2707

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Name: John W. Jones, Jr.
Deloris D. Jones
Address: P.O. Box 265
Hagerman, ID 83332-0265

3. One copy to the party who filed the objection at the following address:

Name: Doug Grant
Represented by Michael C. Creamer
Address: Givens Pursley, LLP
277 North Sixth, Suite 200
Boise, ID 83701

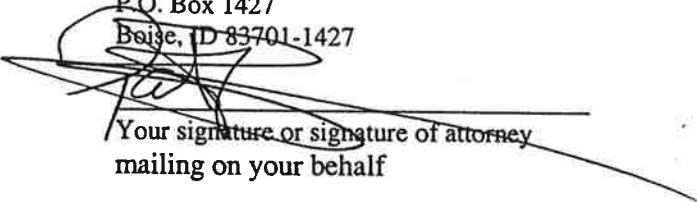
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United States Department of Justice
Environment and Natural Resource Division
5550 West Fort Street, MSC 033
Boise, ID 83724

Chief, Natural Resources Division
Office of the Attorney General
State of Idaho
PO Box 44449
Boise, ID 83711-4449

Dana Hofstetter
Beeman & Hofstetter, P.C.
608 West Franklin Street
P.O. Box 1427
Boise, ID 83701-1427


Your signature or signature of attorney
mailing on your behalf

In Re SRBA	)	A.	Subcase	<u>36-00069</u>
	)			(Insert water right number)
Case No. 39576	)			
	)			
	)			STANDARD FORM 1
	)			OBJECTION
	)			

Page 1

D. I object to the following elements as recommended in the Director's Report. (Please check the appropriate box(es)).

1. ☐ **Name and Address**
Should be: _____
2. ☐ **Source**
Should be: _____
3. ☒ **Quantity**
Should be: Less than 10.74 cfs in combination with 36-00068
4. ☐ **Priority Date**
Should be: _____
5. ☐ **Point(s) of Diversion**
Should be: _____
6. ☐ **Instream Flow Description**
Should be: _____
7. ☐ **Purpose(s) of Use**
Should be: _____
8. ☐ **Period of Year**
Should be: _____
9. ☒ **Place of Use**
Should be: No more than 338 acres
11. **I object because:**
 - ☐ This water right should not exist.
 - ☐ This water right was not recommended, but should be recommended with the elements described above.

E. REASONS SUPPORTING OBJECTION(S): Quantity is in excess of amount actually
beneficially used and amount necessary. Place of use for irrigation includes expansion acreage.

F. VERIFICATION (Must be Completed)

State of Idaho)
)ss.
County of Ada)

Dana L. Hofstetter, duly sworn, upon oath, deposes and says:
(Name of person filing objection)

That I am the party/claimant filing this objection, as defined by IC. §§ 42-1401A(i) and (6) or that I am the attorney for the party/claimant objecting and that I have read this objection, know its contents and believe that the statements are true to the best of my knowledge.

(Signature of person filing objection)

Dana Hofstetter
(Attorney signing in representative capacity)

Subscribed and sworn to before me on: July 18, 2000



Joyce E. Galt
Notary Public for the State of Idaho
Residing at: Boise, Idaho
My Commission Expires: 07-24-02

INSTRUCTIONS FOR MAILING

You must mail the objection, to the Clerk of the Court. **FAX filings will not be accepted.** You must also send a copy to all the parties listed below in the Certificate of Mailing.

G.

CERTIFICATE OF MAILING

I certify that on July 18, 2000, I mailed the original and copies of this objection, including all attachments, to the following persons:

1. Original to (via hand delivery):

Clerk of the District Court
Snake River Basin Adjudication
253 Third Avenue North
P.O. Box 2707
Twin Falls, ID 83303-2707

2. One copy to the claimant of the water right at the following address:

Name: John W. Jones, Jr.
Deloris D. Jones
Address: P.O. Box 265
Hagerman, ID 83332

Patrick D. Brown, Attorney (via Certified Mail)
109 S. Adams Street
Jerome, ID 83338

3. Copies to:

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PO Box 83720
Boise, ID 83720-0098

Chief, Natural Resources Division
Office of the Attorney General
State of Idaho
P. O. Box 44449
Boise, ID 83711-4449

United States Department of Justice
Environment and Natural Resource Division
550 West Fort Street, MSC 033
Boise, ID 83724



Signature of Objector or attorney
mailing on Objector's behalf

SRBA



IN THE DISTRICT COURT OF THE FIFTH JUDICIAL DISTRICT OF THE
STATE OF IDAHO, IN AND FOR THE COUNTY OF TWIN FALLS

In Re SRBA

A. Subcase 36-00069

(Insert water right number)

Case No. 39576

STANDARD FORM 1
OBJECTION

Please fill in the following information:

B. NAME AND ADDRESS OF PERSON OBJECTING

Name: Idaho Department of Fish and Game

Address: P.O. Box 25
Boise, Idaho 83707

Phone:

Name & Address of Attorney, if any:

ALAN G. LANCE
Attorney General
Clive J. Strong
Deputy Attorney General
Chief, Natural Resources Division
Peter J. Ampe
Deputy Attorney General
Office of the Attorney General
700 W. Jefferson, Room 210
P.O. Box 44449
Boise, ID 83711-4449
(208) 334-2400
Idaho State Bar # 5209 (Ampe)

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SEP 01 2000
Department of Water Resources
Southern Region

C. CLAIMANT OF THE WATER RIGHT AS LISTED IN DIRECTOR'S REPORT

Name: John W. Jones Jr.
Deloris D. Jones
Address: P.O. Box 265
Hagerman, ID 83332

D. I Object to the following elements as recommended in the Director's Report (Please check the appropriate box(es)).

1. ☐ **Name and Address**
Should be: _____
2. ☐ **Source**
Should be: _____
3. ☒ **Quantity**
Should be: Combined use should be limited to system capacity of approximately 7.8 cfs
4. ☐ **Priority Date**
Should be: _____
5. ☐ **Points of Diversion**
Should be: _____
6. ☐ **Instream Flow Description**
Should be: _____
7. ☐ **Purpose(s) of Use**
Should be: _____
8. ☐ **Period of Year**
Should be: _____
9. ☒ **Place of Use**
Should be: Should recognize an expansion of over 100 acres of irrigated ground after the claimant converted from flood irrigation to sprinkler.

11. I object because:

- ☐ This water right should not exist.
- ☐ This water right was not recommended, but should be recommended with the elements described above.

E. **REASONS SUPPORTING OBJECTION(S):** The evidence already submitted in this subcase shows that the total capacity for this irrigation system to be 7.8 cfs. This system has been in place since approximately 1976. The *Second Amended Director's Report*, Subcase Nos. 36-00068 and 36-00069 state that 304 acres were irrigated under the previous flood irrigation method. However, the recommendation is for 414 acres, with no mention of the obvious expansion in irrigated acres after the installation of the sprinkler irrigation system.

F. **VERIFICATION (Must be Completed)**

State of Idaho)
) ss.
County of Ada)

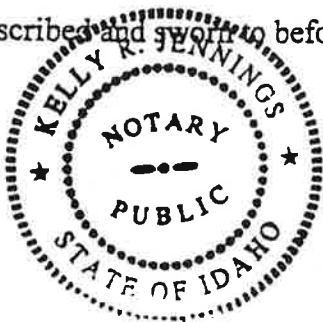
Peter J. Ampe, Deputy Attorney General, being first duly sworn, upon oath, deposes and says:

That the Department of Fish and Game, as a party to the Snake River Basin Adjudication, is filing this objection and that I am a Deputy Attorney General authorized to represent the State of Idaho, which is a party/claimant in this proceeding, as defined by I.C. § 42-1401A(1) and (7), and I have read this objection, know its contents and that the statements are true to the best of my knowledge and belief.

ALAN G. LANCE
Attorney General
CLIVE J. STRONG
Deputy Attorney General
Chief, Natural Resources Division
PETER J. AMPE
Deputy Attorney General


By Attorney signing in representative capacity

Subscribed and sworn to before me on: July 14, 2000
(Insert Date)




Notary Public for IDAHO
Residing at: BOISE, ID
My commission expires: May 9, 2002

CERTIFICATE OF MAILING

I certify that on July 14, 2000, I mailed the original and copies of the foregoing objection, including all attachments, to the following persons by mailing the original and/or copies, postage prepaid and addressed as follows:

1. Original to:

Clerk of the District Court
Snake River Basin Adjudication
253 Third Avenue North
P.O. Box 2707
Twin Falls, Idaho 83303-2707

2. One copy to the claimant of the water right at the following address:

Name: John Jones
c/o Patrick D. Brown
109 S. Adams St.
Jerome, ID 83338

3. copies to:

IDWR Document Depository
PO Box 83720
Boise, ID 83720-0098

Michael Creamer
Givens Pursley LLP
P.O. Box 2720
Boise, ID 83701-1427

Dana Hofstetter
Beeman & Hofstetter
P.O. Box 1427
Boise, ID 83701-1427

United States Department of Justice
Environment and Natural Resource Division
550 West Fort Street, MSC 033
Boise, Idaho 83724



Signature of Objector or attorney
mailing on Objector's behalf

RECEIVED

JUL 18 2000

Department of Water Resources

IN THE DISTRICT COURT OF THE FIFTH JUDICIAL DISTRICT OF THE
STATE OF IDAHO, IN AND FOR THE COUNTY OF TWIN FALLS

In Re SRBA

Case No. 39576

A. Subcase 36-00069

**STANDARD FORM 1
OBJECTION**

Please **print or type** the following information:

B. NAME AND ADDRESS OF PERSON OBJECTING

Name: Doug Grant
Address: 600 N. 707 E.
Rupert, ID 83350
Daytime Phone: 208-531-5149

RECEIVED
SEP 01 2000
Department of Water Resources
Southern Region

Name & Address of Attorney, if any:

Jeffrey C. Fereday
Michael C. Creamer
John M. Marshall
Givens Pursley, LLP
277 N. Sixth, Suite 200
Boise, ID 83701
Phone (208) 388-1200
Fax (208) 388-1300

C. CLAIMANT OF WATER RIGHT AS LISTED IN DIRECTOR'S REPORT

Name: John W. Jones, Jr. and Deloris D. Jones
Address: P.O. Box 265
Hagerman, ID 83332

D. I object to the following elements. (Please check the appropriate box(es)).

1. ☐ **Name and Address**

Should be _____

2. ☐ **Source**

Should be _____

3. ☒ **Quantity**

Should be 7.8 cfs

4. ☐ **Priority Date**

Should be _____

5. ☐ **Point(s) of Diversion**

Should be _____

6. ☐ **Instream Flow Description**

Should be _____

7. ☐ **Purpose(s) of Use**

Should be _____

8. ☐ **Period of Year**

Should be _____

9. ☒ **Place of Use**

Should be 312.5 acres

11. **Recommendation**

☐ This water right should not exist.

☐ This water right was not recommended, but should be recommended with the elements described above.

E. **REASONS SUPPORTING OBJECTION(S):**

That portion of the recommended quantity in excess of 7.8 cfs has been forfeited or abandoned. The place of use recommended contains approximately 100 enlargement acres.

F. VERIFICATION (Must be Completed)

State of Idaho)
)ss.
County of Ada)

Michael C. Creamer

(Name of person filing response)

, duly sworn, upon oath deposes and says:

That I am the party/claimant filing this response as defined by I.C. §§ 42-1401A(1) and (6) or that I am the attorney for the party/claimant responding and that I have read this response, know its contents and believe that the statements are true to the best of my knowledge.

(Signature of person filing response)

Michael C. Creamer

Michael C. Creamer, of Givens Pursley, LLP

(Attorney signing in representative capacity)

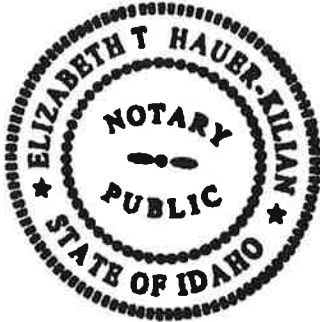
Subscribed and sworn to before me on:

July 17, 2000
Elizabeth Hauer-Kilian

Notary Public for Idaho

Residing at: Boise

My Commission Expires: 1-21-06



CERTIFICATE OF MAILING

I certify that on July 17, 2000 I mailed copies of this response, including all attachments, to the following persons:

1. One copy to the claimant of the water right at the following address:

John W. Jones, Jr. and Deloris D. Jones
P.O. Box 265
Hagerman, ID 83332

2. Copies to:

IDWR Document Depository
P.O. Box 83720
Boise, ID 83720-0098

Chief, Natural Resources Division
Office of the Attorney General
State of Idaho
P.O. Box 44449
Boise, ID 83711-4449

United States Department of Justice
Environment and Natural Resource
Division
550 West Fort Street, MSC 033
Boise, ID 83724

Patrick Brown
109 S. Adams St.
Jerome, ID 83338

Dana Hofstetter
Beeman & Hofstetter
P.O. Box 1427
Boise, ID 83701-1427

Peter Ampe
Deputy Attorney General
State of Idaho
P.O. Box 44449
Boise, ID 83711-4449


Michael C. Creamer

RECEIVED

JUL 18 2000

Department of Water Resources

IN THE DISTRICT COURT OF THE FIFTH JUDICIAL DISTRICT OF THE
STATE OF IDAHO, IN AND FOR THE COUNTY OF TWIN FALLS

In Re SRBA

Case No. 39576

A. Subcase 36-00069

**STANDARD FORM 1
OBJECTION**

Please **print or type** the following information:

B. NAME AND ADDRESS OF PERSON OBJECTING

Name: Kevin Michaelson

Address: 2590 Quigley Road

American Falls, ID 83211

Daytime Phone: 208-226-7203

Name & Address of Attorney, if any:

Jeffrey C. Fereday

Michael C. Creamer

John M. Marshall

Givens Pursley, LLP

277 N. Sixth, Suite 200

Boise, ID 83701

Phone (208) 388-1200

Fax (208) 388-1300

C. CLAIMANT OF WATER RIGHT AS LISTED IN DIRECTOR'S REPORT

Name: John W. Jones, Jr. and Deloris D. Jones

Address: P.O. Box 265

Hagerman, ID 83332

RECEIVED
SEP 01 2000
Department of Water Resources
Southern Region

D. I object to the following elements. (Please check the appropriate box(es)).

1. ☐ **Name and Address**

Should be _____

2. ☐ **Source**

Should be _____

3. ☒ **Quantity**

Should be 7.8 cfs

4. ☐ **Priority Date**

Should be _____

5. ☐ **Point(s) of Diversion**

Should be _____

6. ☐ **Instream Flow Description**

Should be _____

7. ☐ **Purpose(s) of Use**

Should be _____

8. ☐ **Period of Year**

Should be _____

9. ☒ **Place of Use**

Should be 312.5 acres

11. **Recommendation**

☐ This water right should not exist.

☐ This water right was not recommended, but should be recommended with the elements described above.

E. **REASONS SUPPORTING OBJECTION(S):**

That portion of the recommended quantity in excess of 7.8 cfs has been forfeited or abandoned. The place of use recommended contains approximately 100 enlargement acres.

F. VERIFICATION (Must be Completed)

State of Idaho)
)ss.
County of Ada)

Michael C. Creamer, duly sworn, upon oath deposes and says:
(Name of person filing response)

That I am the party/claimant filing this response as defined by I.C. §§ 42-1401A(1) and (6) or that I am the attorney for the party/claimant responding and that I have read this response, know its contents and believe that the statements are true to the best of my knowledge.

(Signature of person filing response)

Michael C. Creamer

Michael C. Creamer, of Givens Pursley, LLP
(Attorney signing in representative capacity)

Subscribed and sworn to before me on:

July 17, 2000
Elizabeth T. Hauber-Kilian

Notary Public for Idaho

Residing at: Boise

My Commission Expires: 1-21-06



CERTIFICATE OF MAILING

I certify that on July 17, 2000 I mailed copies of this response, including all attachments, to the following persons:

1. One copy to the claimant of the water right at the following address:

John W. Jones, Jr. and Deloris D. Jones
P.O. Box 265
Hagerman, ID 83332

2. Copies to:

IDWR Document Depository
P.O. Box 83720
Boise, ID 83720-0098

Chief, Natural Resources Division
Office of the Attorney General
State of Idaho
P.O. Box 44449
Boise, ID 83711-4449

United States Department of Justice
Environment and Natural Resource
Division
550 West Fort Street, MSC 033
Boise, ID 83724

Patrick Brown
109 S. Adams St.
Jerome, ID 83338

Dana Hofstetter
Beeman & Hofstetter
P.O. Box 1427
Boise, ID 83701-1427

Peter Ampe
Deputy Attorney General
State of Idaho
P.O. Box 44449
Boise, ID 83711-4449


Michael C. Creamer

RECEIVED

JUL 18 2000

Department of Water Resources

**IN THE DISTRICT COURT OF THE FIFTH JUDICIAL DISTRICT OF THE
STATE OF IDAHO, IN AND FOR THE COUNTY OF TWIN FALLS**

In Re SRBA

Case No. 39576

A. Subcase 36-00069

**STANDARD FORM 1
OBJECTION**

Please **print or type** the following information:

B. NAME AND ADDRESS OF PERSON OBJECTING

Name: Cranney Bros.
Address: c/o Mike Cranney
Box 44A
Oakley, ID 83346
Daytime Phone: 208-862-3480

Name & Address of Attorney, if any:

Jeffrey C. Fereday
Michael C. Creamer
John M. Marshall
Givens Pursley, LLP
277 N. Sixth, Suite 200
Boise, ID 83701
Phone (208) 388-1200
Fax (208) 388-1300

RECEIVED
SEP 01 2000
Department of Water Resources
Southern Region

C. CLAIMANT OF WATER RIGHT AS LISTED IN DIRECTOR'S REPORT

Name: John W. Jones, Jr. and Deloris D. Jones
Address: P.O. Box 265
Hagerman, ID 83332

D. I object to the following elements. (Please check the appropriate box(es)).

1. ☐ **Name and Address**
Should be _____
2. ☐ **Source**
Should be _____
3. ☒ **Quantity**
Should be 7.8 cfs
4. ☐ **Priority Date**
Should be _____
5. ☐ **Point(s) of Diversion**
Should be _____
6. ☐ **Instream Flow Description**
Should be _____
7. ☐ **Purpose(s) of Use**
Should be _____
8. ☐ **Period of Year**
Should be _____
9. ☒ **Place of Use**
Should be 312.5 acres
11. **Recommendation**
 - ☐ This water right should not exist.
 - ☐ This water right was not recommended, but should be recommended with the elements described above.

E. **REASONS SUPPORTING OBJECTION(S):**

That portion of the recommended quantity in excess of 7.8 cfs has been forfeited or abandoned. The place of use recommended contains approximately 100 enlargement acres.

F. VERIFICATION (Must be Completed)

State of Idaho)
)ss.
County of Ada)

Michael C. Creamer, duly sworn, upon oath deposes and says:
(Name of person filing response)

That I am the party/claimant filing this response as defined by I.C. §§ 42-1401A(1) and (6) or that I am the attorney for the party/claimant responding and that I have read this response, know its contents and believe that the statements are true to the best of my knowledge.

(Signature of person filing response)

Michael C. Creamer

Michael C. Creamer, of Givens Pursley, LLP
(Attorney signing in representative capacity)

Subscribed and sworn to before me on:

July 17, 2000
Elizabeth Hauer-Kilian

Notary Public for Idaho

Residing at: Bolse

My Commission Expires: 1-21-06



CERTIFICATE OF MAILING

I certify that on July 17, 2000 I mailed copies of this response, including all attachments, to the following persons:

1. One copy to the claimant of the water right at the following address:

John W. Jones, Jr. and Deloris D. Jones
P.O. Box 265
Hagerman, ID 83332

2. Copies to:

IDWR Document Depository
P.O. Box 83720
Boise, ID 83720-0098

Chief, Natural Resources Division
Office of the Attorney General
State of Idaho
P.O. Box 44449
Boise, ID 83711-4449

United States Department of Justice
Environment and Natural Resource
Division
550 West Fort Street, MSC 033
Boise, ID 83724

Patrick Brown
109 S. Adams St.
Jerome, ID 83338

Dana Hofstetter
Beeman & Hofstetter
P.O. Box 1427
Boise, ID 83701-1427

Peter Ampe
Deputy Attorney General
State of Idaho
P.O. Box 44449
Boise, ID 83711-4449


Michael C. Creamer

COPY

SECOND AMENDED DIRECTOR'S REPORT

Subcase Nos. 36-00068 and 36-00069

In Re SRBA

Twin Falls County Civil Case No. 39576

RECEIVED

JUN 28 2000

**Department of Water Resources
Southern Region**

Report to the SRBA District Court

**Prepared by the Idaho Department of Water Resources
Karl J. Dreher, Director
David R. Tuthill, Jr., Adjudication Bureau Chief**

June 23, 2000

DESCRIPTIVE SUMMARY

This is a Second Amended Director's Report submitted by the Director of the Idaho Department of Water Resources.

DISCUSSION

Pursuant to Special Master Cushman's *2nd Amended Trial Scheduling Order* of June 12, 2000, the Director submits for filing with the Court, a Second Amended Director's Report for the aforementioned subcases.

Respectfully submitted this 23rd day of June, 2000.

A handwritten signature in dark ink, appearing to read "David R. Tuthill, Jr.", is written over a horizontal line.

DAVID R. TUTHILL, JR.
Adjudication Bureau Chief

RIGHTS FROM: SOURCE: WEATHERBY SPRINGS TRIBUTARY: BILLINGSLEY CREEK

RIGHT NUMBER: 36-00068

NAME AND ADDRESS: JOHN W JONES JR
DELORIS D JONES
PO BOX 265
HAGERMAN ID 83332

SOURCE: WEATHERBY SPRINGS TRIBUTARY: BILLINGSLEY CREEK

QUANTITY: 10.74 CFS
8/28 078

THE QUANTITY FOR NON/IRRIGATION USE IS LIMITED TO THE AMOUNT BENEFICIARILY
USED FOR DOMESTIC, 5 HOMES, STOCKWATER, 900 RANGE

THE APPROPRIATOR IS ENTITLED TO THE QUANTITY OF WATER
DESCRIBED FOR STOCK WATER PURPOSES AT A POINT OF MEASUREMENT
WHERE THE DELIVERY DITCH ENTERS THE PLACE OF USE DESCRIBED, SO
LONG AS THE QUANTITY DIVERTED AT THE POINT OF DIVERSION DOES NOT
CONSTITUTE UNREASONABLE WASTE.

THE APPROPRIATOR IS ENTITLED TO THE AMOUNT OF WATER DESCRIBED
FOR DOMESTIC PURPOSES AT A POINT OF MEASUREMENT WHERE THE
DELIVERY DITCH ENTERS THE PLACE OF USE DESCRIBED, SO LONG AS THE
QUANTITY DIVERTED AT THE POINT OF DIVERSION DOES NOT CONSTITUTE
UNREASONABLE WASTE.

THE QUANTITY OF WATER UNDER THIS RIGHT FOR DOMESTIC AND
STOCKWATER USES SHALL NOT EXCEED 13,000 GALLONS PER DAY.

USE OF THIS RIGHT WITH RIGHT NO. 36-00069 IS LIMITED TO A
TOTAL COMBINED DIVERSION RATE OF 10.74 CFS.

PRIORITY DATE: 02/01/1888

POINT OF DIVERSION: T07S R14E S30 SENESW Within GOODING County

PURPOSE AND

PERIOD OF USE:	PURPOSE OF USE	PERIOD OF USE	QUANTITY
	IRRIGATION	02-15 11-30	10.51 CFS
		03/13 11/13	8/02 078
	STOCKWATER	01-01 12-31	0.12 CFS
	DOMESTIC 5 HOMES	01-01 12-31	0.11 CFS

PLACE OF USE: IRRIGATION Within GOODING County
T07S R13E S25 NENE 40 NWNE 40 SWNE 40 SENE 40

36-00068 (CONT.)

		<u>NESE 38</u>	<u>NWSE 38</u>	<u>SWSE 30</u>	<u>SESE 36</u>
		<u>NESE 37</u>		<u>SWSE 29</u>	<u>SESE 38</u>
R14E S30	Lot 1 (NWNW)18	Lot 2 (SWNW)25		<u>NESW 5</u>	Lot 3 (NWSW)26
	<u>Lot 1 (NWNW)18</u>	<u>Lot 2 (SWNW)27</u>		<u>NESW 4</u>	<u>Lot 3 (NWSW)28</u>
	Lot 4 (SWSW)27	<u>SESW 11</u>			
		<u>SESW 12</u>			

414 ACRES TOTAL

401 ACRES TOTAL

USE OF THIS RIGHT WITH RIGHT NO. 36-00069 IS LIMITED TO
TO THE IRRIGATION OF A COMBINED TOTAL OF 414 ACRES IN A SINGLE
IRRIGATION SEASON.

STOCKWATER	Within GOODING County
T07S R14E S25	NESE
S30	Lot 3 (NWSW)

DOMESTIC	Within GOODING County
T07S R14E S25	NESE

OTHER PROVISIONS NECESSARY FOR DEFINITION OR ADMINISTRATION OF THIS WATER RIGHT:

THE QUANTITY OF WATER DECREED FOR THIS WATER RIGHT FOR
DOMESTIC USE AND STOCKWATER USE IS NOT A DETERMINATION OF
HISTORICAL BENEFICIAL USE.

THIS PARTIAL DECREE IS SUBJECT TO SUCH GENERAL PROVISIONS
NECESSARY FOR THE DEFINITION OF THE RIGHTS OR FOR THE EFFICIENT
ADMINISTRATION OF THE WATER RIGHTS AS MAY BE ULTIMATELY
DETERMINED BY THE COURT AT A POINT IN TIME NO LATER THAN THE
ENTRY OF A FINAL UNIFIED DECREE. SECTION 42-1412(6), IDAHO CODE.

USE OF THIS RIGHT WITH RIGHT NO. 36-00069 IS LIMITED TO A
TOTAL COMBINED DIVERSION RATE OF 8.25 CFS, A TOTAL COMBINED
ANNUAL CONSUMPTIVE USE VOLUME OF 1203 AF, AND TO THE IRRIGATION
OF A COMBINED TOTAL OF 401 ACRES IN A SINGLE IRRIGATION SEASON.

EXPLANATORY MATERIAL: BASIS OF CLAIM - DECREE

IDAHO DEPARTMENT OF WATER RESOURCES
RECOMMENDED WATER RIGHTS ACQUIRED UNDER STATE LAW

DATE: JUN-22-2000
PAGE: A-1

RIGHTS FROM: SOURCE: HOAGLAND TUNNEL TRIBUTARY: BILLINGSLEY CREEK

RIGHT NUMBER: 36-00069

NAME AND ADDRESS: DELORIS D JONES
JOHN W JONES JR
PO BOX 265
HAGERMAN ID 83332

SOURCE: HOAGLAND TUNNEL TRIBUTARY: BILLINGSLEY CREEK

QUANTITY: 1.00 CFS

THE APPROPRIATOR IS ENTITLED TO THE QUANTITY OF WATER DESCRIBED FOR STOCK WATER PURPOSES AT A POINT OF MEASUREMENT WHERE THE DELIVERY DITCH ENTERS THE PLACE OF USE DESCRIBED, SO LONG AS THE QUANTITY DIVERTED AT THE POINT OF DIVERSION DOES NOT CONSTITUTE UNREASONABLE WASTE.

THE QUANTITY OF WATER UNDER THIS RIGHT FOR STOCKWATER USE SHALL NOT EXCEED 13,000 GALLONS PER DAY.

USE OF THIS RIGHT WITH RIGHT NO. 36-00068 IS LIMITED TO A TOTAL COMBINED DIVERSION RATE OF 10.74 CFS.

PRIORITY DATE: 02/01/1888

POINT OF DIVERSION: T07S R14E S30 SENESW Within GOODING County

PURPOSE AND

PERIOD OF USE:	PURPOSE OF USE	PERIOD OF USE	QUANTITY
	IRRIGATION	02-15 11-30	1.00 CFS
		03-15 11-15	
	STOCKWATER	01-01 12-31	0.12 CFS

PLACE OF USE:

IRRIGATION	Within GOODING County		
T07S R13E S25	NENE 40	NWNE 40	SWNE 40
	NESE 38	NWSE 38	SWSE 30
	NESE 37		SWSE 29
R14E S30	Lot 1 (NWNW)18	Lot 2 (SWNW)25	NESW 5
	Lot 1 (NWNW)18	Lot 2 (SWNW)27	NESW 4
	Lot 4 (SWSW)27	SESW 11	Lot 3 (NWSW)26
		SESW 12	Lot 1 (NWSW)23

414 ACRES TOTAL
~~401 ACRES TOTAL~~

USE OF THIS RIGHT WITH RIGHT NO. 36-00068 IS LIMITED TO THE IRRIGATION OF A COMBINED TOTAL OF 414 ACRES IN A SINGLE

IDAHO DEPARTMENT OF WATER RESOURCES
RECOMMENDED WATER RIGHTS ACQUIRED UNDER STATE LAW

DATE: JUN-22-2000

PAGE: A-2

5-00069 (CONT.)

IRRIGATION SEASON.STOCKWATERWithin GOODING CountyT07S R13E S25NESER14E S30Lot 3 (NWSW)

OTHER PROVISIONS NECESSARY FOR DEFINITION OR ADMINISTRATION OF THIS WATER RIGHT:

THE QUANTITY OF WATER DECREED FOR THIS WATER RIGHT FOR STOCKWATER USE IS NOT A DETERMINATION OF HISTORICAL BENEFICIAL USE.

THIS PARTIAL DECREE IS SUBJECT TO SUCH GENERAL PROVISIONS NECESSARY FOR THE DEFINITION OF THE RIGHTS OR FOR THE EFFICIENT ADMINISTRATION OF THE WATER RIGHTS AS MAY BE ULTIMATELY DETERMINED BY THE COURT AT A POINT IN TIME NO LATER THAN THE ENTRY OF A FINAL UNIFIED DECREE. SECTION 42-1412(6), IDAHO CODE.

USE OF THIS RIGHT WITH RIGHT NO. 36100008 IS LIMITED TO A TOTAL COMBINED DIVERSION RATE OF 8.25 CFS, A TOTAL COMBINED ANNUAL CONSUMPTIVE USE VOLUME OF 1203 AF, AND TO THE IRRIGATION OF A COMBINED TOTAL OF 401 ACRES IN A SINGLE IRRIGATION SEASON.

PLANATORY MATERIAL: BASIS OF CLAIM - DECREE

CERTIFICATE OF MAILING

I certify that on 6-23, 2000, I mailed and/or delivered the original and copies of this form, including all attachments, to the following interested parties, in the manner indicated:

1. Original to:

Clerk of the District Court
Snake River Basin Adjudication
253 Third Avenue North
P.O. Box 2707
Twin Falls, ID 83303-2707

☐ Overnight Mail
☐ Regular Mail
☐ Hand-Delivered
☒ Facsimile

2. Copies to:

Chief, Natural Resources
Office of the Attorney General
P.O. Box 44449
Boise, ID 83711-4449

☐ Overnight Mail
☒ Regular Mail
☐ Hand-Delivered
☐ Facsimile

United States Department of Justice
Environment & Natural Resources Div.
550 West Fort Street MSC 033
Boise, ID 83724

☐ Overnight Mail
☒ Regular Mail
☐ Hand-Delivered
☐ Facsimile

Gooding County Clerk
624 Main Street
Gooding, ID 83330

☐ Overnight Mail
☒ Regular Mail
☐ Hand-Delivered
☐ Facsimile

Patrick D. Brown
109 S. Adams St.
Jerome, ID 83338

☐ Overnight Mail
☒ Regular Mail
☐ Hand-Delivered
☐ Facsimile

Michael Creamer
Givens Pursley LLP
P.O. Box 2720
Boise, ID 83701-1427

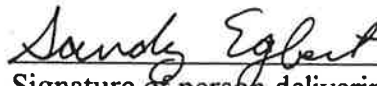
☐ Overnight Mail
☒ Regular Mail
☐ Hand-Delivered
☐ Facsimile

Dana Hofstetter
Beeman & Hofstetter
P.O. Box 1427
Boise, ID 83701-1427

☐ Overnight Mail
☒ Regular Mail
☐ Hand-Delivered
☐ Facsimile

Peter Ampe
Deputy Attorney General
State of Idaho
P.O. Box 44449
Boise, ID 83711-4449

☐ Overnight Mail
☒ Regular Mail
☐ Hand-Delivered
☐ Facsimile



Signature of person delivering form

Memorandum

To: Nick Spencer

From: Marci Pape

Date: 6/16/00

Re: Irrigation Diversion Rate Analysis – Water Rights 36-00068 & 36-00069

I have completed the irrigation diversion rate analysis for the water rights listed above. Below is a summary of the information on which I based my calculations, any assumptions that were made, and the results of the analysis.

CALCULATIONS

The individual field boundaries were determined by using the same 1969 SCS photo that Chuck Brockway used in his April 25, 1999 expert witness report for these rights. My estimation of the total acreage being irrigated at the time of that photo (which was before the conversion to sprinklers) was 304.4 acres. Brockway's report lists two different acreage totals. He gave a total of 326.5 acres within the text of the report, but the acreage total listed in the attachments was 312.5 acres. Brockway has since acknowledged that there was an error in the report that, if corrected, would reduce the total by 10 acres. Terry Scanlan also produced a report for these water rights, in which he estimated the total acreage to be 338 acres at the time of the 1969 photo.

Slopes and furrow lengths were determined using ArcView and digital topographic maps. I used the same furrow directions as those shown on the map attached to Brockway's report. However, the flow direction was not clear on the photo for a few fields. For those fields, I assumed the direction of flow. Three of the fields, Fields B, C, and O, were split for the purpose of the analysis. Each of those fields had furrow lengths that varied significantly throughout the field. Therefore, the fields were split with each portion then being evaluated separately. I assumed furrow spacings of 2 ft for pasture and grain, 2.5 ft for alfalfa hay, and 3 ft for corn. The corn spacing is based on information given in Figure A-6 of the Hubble Report, and the other spacings are based on standards given in Jeff Peppersack's "Report Regarding Evaluation of Irrigation Diversion Rates" (January 14, 1999).

I requested a crop history for each individual field, but did not receive that. Instead, Chuck Brockway supplied crop distributions for the property as a whole. He supplied two different distributions, the first of which is the one used in his 1999 report: 50% alfalfa, 20% corn, 15% pasture, and 15% grain. I spoke with Brockway on June 2, 2000, at which time he gave me a new distribution provided to him by the claimant: 51% alfalfa, 5% corn, 34% pasture, and 10% grain. With this limited information, it was necessary to choose which fields I would analyze using which crops. Starting with pasture, I studied the aerial photos and chose those fields that looked as if they had always contained pasture (ex. - more uneven appearance, steep slopes, unusual field shapes). I then distributed the different crops between the other fields, matching acreage distributions as closely

June 16, 2000

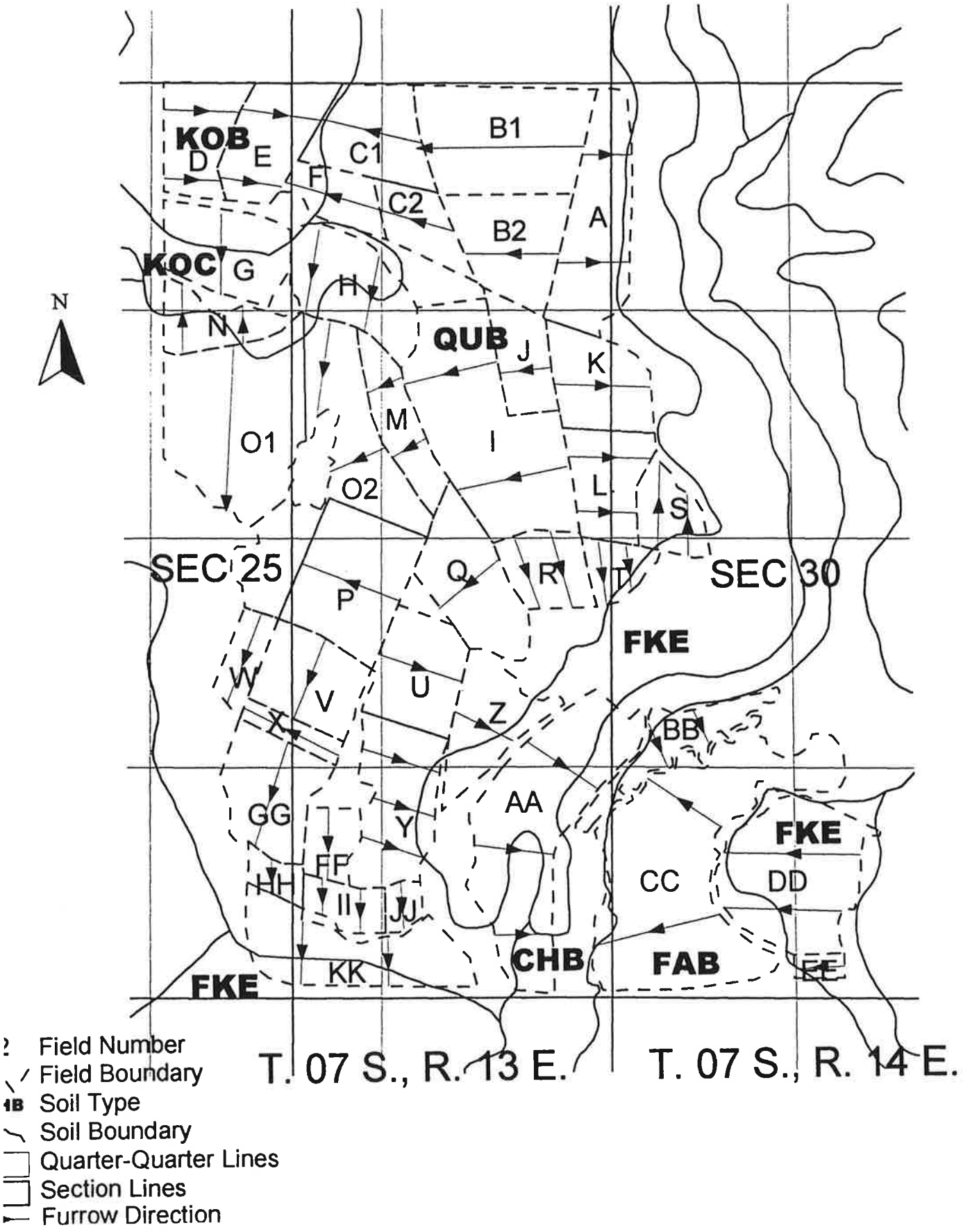
as possible. I attempted to distribute crops so that there would be a variety of slopes, furrow lengths, and acreages for each crop type to account for the lack of exact cropping information.

Because I was given two different crop distributions, it was necessary to analyze some fields using two different crops. Only seven of the fields were affected by the change in crop distribution. Those fields are: GG, II, A, H, I, K, and L. I have attached a detailed description of which fields were analyzed using each of the four crops.

RESULTS

Using the original crop distribution given in Brockway's report, I calculated a total diversion rate of **9.53 cfs** for 304.4 acres, or **0.031 cfs per acre**. Using the new crop distribution, the total diversion rate was slightly higher: **10.51 cfs** for 304.4 acres, or **0.035 cfs per acre**. Assuming that both distributions have historically been used on the property, I suggest that we amend our recommendation to 10.51 cfs for 304.4 acres or to 0.035 cfs per acre for whatever acres have been agreed upon by the parties involved.

Water Right Nos. 36-00068 & 36-00069



FIELD IRRIGATION REQUIREMENT

initials: MP Claimant = Jones - Fields AA-JJ using Brockway's latest crop distribution

date: 06/11/00 Weather Station = Bliss/Hagerman

d no.	crop	acres	irrig. system	eff. (%)	Monthly ET (mm/day)								AVE IR season (mm/yr)	net irrig. app. (in)	ET ratio	irrig. freq. (days)	Gross Irrigation Application (peak period ET/eff. in mm/day)								season (mm/yr)
					mar	apr	may	jun	jul	aug	sep	oct					mar	apr	may	jun	jul	aug	sep	oct	
1A	alfh	18.6	cor	69		6.14	7.68	9.33	9.22	7.87	6.32	4.36		2.85	1.09	7.1		6.00	9.35	11.33	11.20	9.56	7.71	5.32	
1B	sgn	4.8	cor	33		1.92	5.78	9.31	7.61	1.61				2.28	1.10	5.7		6.40	19.27	31.03	25.37	5.37			
C	alfh	25.5	cor	67		6.14	7.68	9.33	9.22	7.87	6.32	4.36		2.85	1.09	7.1		9.99	12.49	15.18	15.00	12.80	10.28	7.09	
D	alfh	13.4	cor	66		6.14	7.68	9.33	9.22	7.87	6.32	4.36		2.85	1.09	7.1		10.14	12.68	15.41	15.23	13.00	10.44	7.20	
E	past	0.9	cor	30		3.8	5.92	7.17	7.09	6.05	4.88	3.37		1.71	1.12	5.4		14.19	22.10	26.77	26.47	22.59	18.22	12.58	
F	alfh	2.7	cor	65		6.14	7.68	9.33	9.22	7.87	6.32	4.36		3.00	1.09	7.5		10.30	12.88	15.65	15.46	13.20	10.60	7.31	
G	past	7.6	cor	34		3.8	5.92	7.17	7.09	6.05	4.88	3.37		1.80	1.12	5.7		12.52	19.50	23.62	23.36	19.93	16.08	11.10	
1H	alfh	1.6	cor	43		6.14	7.68	9.33	9.22	7.87	6.32	4.36		3.00	1.09	7.5		15.56	19.47	23.65	23.37	19.95	16.02	11.05	
I	alfh	2.6	cor	54		6.14	7.68	9.33	9.22	7.87	6.32	4.36		3.00	1.09	7.5		12.39	15.50	18.83	18.61	15.89	12.76	8.80	
J	alfh	1.2	cor	65		6.14	7.68	9.33	9.22	7.87	6.32	4.36		3.00	1.09	7.5		10.30	12.88	15.65	15.46	13.20	10.60	7.31	
	Summary	78.9																9.36	13.24	16.53	16.02	12.68	9.94	6.86	
	Peak Gross Irrigation Application (mm/day) =													16.53											
	On-Farm Irrigation Requirement (cfs/acre) =													0.027											
	Total On-Farm Irrigation Requirement (cfs) =													2.16											
	Irrigation Diversion Volume (ft/yr) =													0.00											
	Total Irrigation Diversion Volume (ac-ft/yr) =													0											

$$\text{Total On-Farm Irrigation Requirement} = (2.16 + 3.32 + 3.56 + 1.47) \text{ cfs} \\ = 10.51 \text{ cfs}$$

$$\text{Total acres} = (78.9 + 92.8 + 81.2 + 51.5) \text{ ac} \\ = 304.4 \text{ ac.}$$

FIELD IRRIGATION REQUIREMENT

initials: MP

Claimant = Jones - Fields KK-I using Brockway's latest crop distribution

date: 06/11/00

Weather Station = Bliss/Hagerman

id no.	crop	acres	irrig. system	eff. (%)	Monthly ET (mm/day)								AVE IR season (mm/yr)	net irrig. app. (in)	ET ratio	irrig. freq. (days)	Gross Irrigation Application (peak period ET/eff. in mm/day)								season (mm/yr)
					mar	apr	may	jun	jul	aug	sep	oct					mar	apr	may	jun	jul	aug	sep	oct	
<K	alfh	10.1	cor	62		6.14	7.68	9.33	9.22	7.87	6.32	4.36		2.85	1.09	7.1		10.79	13.50	16.40	16.21	13.84	11.11	7.67	
A	past	10.9	cor	31		3.8	5.92	7.17	7.09	6.05	4.88	3.37		1.80	1.12	5.7		13.73	21.39	25.90	25.62	21.86	17.63	12.18	
B1	sgm	13.3	cor	37		1.92	5.78	9.31	7.61	1.61				2.40	1.10	6.0		5.71	17.18	27.68	22.62	4.79			
B2	sgm	8	cor	38		1.92	5.78	9.31	7.61	1.61				2.40	1.10	6.0		5.56	16.73	26.95	22.03	4.66			
D	alfh	5.9	cor	70		6.14	7.68	9.33	9.22	7.87	6.32	4.36		2.89	1.09	7.2		9.56	11.96	14.53	14.36	12.25	9.84	6.79	
E	alfh	6.9	cor	70		6.14	7.68	9.33	9.22	7.87	6.32	4.36		2.89	1.09	7.2		9.56	11.96	14.53	14.36	12.25	9.84	6.79	
F	alfh	3.5	cor	65		6.14	7.68	9.33	9.22	7.87	6.32	4.36		3.00	1.09	7.5		10.30	12.88	15.65	15.46	13.20	10.60	7.31	
G	corn	7.5	fur	48			2.31	4.06	8.3	7.26	4.73	1.22		2.44	1.10	6.8			5.29	9.30	19.02	16.64	10.84	2.80	
H	past	8.3	cor	35		3.8	5.92	7.17	7.09	6.05	4.88	3.37		1.80	1.12	5.7		12.16	18.94	22.94	22.69	19.36	15.62	10.78	
I	past	18.4	cor	31		3.8	5.92	7.17	7.09	6.05	4.88	3.37		1.80	1.12	5.7		13.73	21.39	25.90	25.62	21.86	17.63	12.18	
	Summary	92.8																9.60	16.39	21.65	21.12	14.76	10.81	7.08	

Peak Gross Irrigation Application (mm/day) = 21.65
 On-Farm Irrigation Requirement (cfs/acre) = 0.036
 Total On-Farm Irrigation Requirement (cfs) = 3.32
 Irrigation Diversion Volume (ft/yr) = 0.00
 Total Irrigation Diversion Volume (ac-ft/yr) = 0

FIELD IRRIGATION REQUIREMENT

Initials: MP Claimant = Jones - Fields J-R using Brockway's latest crop distribution
 date: 06/13/00 Weather Station = Bliss/Hagerman

id no.	crop	acres	irrig. system	eff. (%)	Monthly ET (mm/day)								AVE IR season (mm/yr)	net irrig. app. (in)	ET ratio	irrig. freq. (days)	Gross Irrigation Application (peak period ET/eff. in mm/day)								season (mm/yr)
					mar	apr	may	jun	jul	aug	sep	oct					mar	apr	may	jun	jul	aug	sep	oct	
J	alfh	4.5	cor	65		6.14	7.68	9.33	9.22	7.87	6.32	4.36		3.00	1.09	7.5		6.37	9.93	12.02	11.89	10.15	8.18	5.65	
K	past	6.9	cor	31		3.8	5.92	7.17	7.09	6.05	4.88	3.37		1.80	1.12	5.7		13.73	21.39	25.90	25.62	21.86	17.63	12.18	
L	past	6	cor	31		3.8	5.92	7.17	7.09	6.05	4.88	3.37		1.80	1.12	5.7		13.73	21.39	25.90	25.62	21.86	17.63	12.18	
M	alfh	5	cor	54		6.14	7.68	9.33	9.22	7.87	6.32	4.36		3.00	1.09	7.5		12.39	15.50	18.83	18.61	15.89	12.76	8.80	
N	past	4	cor	31		3.8	5.92	7.17	7.09	6.05	4.88	3.37		1.80	1.12	5.7		13.73	21.39	25.90	25.62	21.86	17.63	12.18	
O1	past	16.4	cor	16		3.8	5.92	7.17	7.09	6.05	4.88	3.37		1.80	1.12	5.7		26.60	41.44	50.19	49.63	42.35	34.16	23.59	
O2	past	14.6	cor	31		3.8	5.92	7.17	7.09	6.05	4.88	3.37		1.80	1.12	5.7		13.73	21.39	25.90	25.62	21.86	17.63	12.18	
P	alfh	10.8	cor	65		6.14	7.68	9.33	9.22	7.87	6.32	4.36		3.00	1.09	7.5		10.30	12.88	15.65	15.46	13.20	10.60	7.31	
Q	alfh	8.3	cor	70		6.14	7.68	9.33	9.22	7.87	6.32	4.36		3.00	1.09	7.5		9.56	11.96	14.53	14.36	12.25	9.84	6.79	
R	alfh	4.7	cor	65		6.14	7.68	9.33	9.22	7.87	6.32	4.36		3.00	1.09	7.5		10.30	12.88	15.65	15.46	13.20	10.60	7.31	
	Summary	81.2																14.76	21.85	26.48	26.18	22.35	18.01	12.43	

Peak Gross Irrigation Application (mm/day) = 26.48
 On-Farm Irrigation Requirement (cts/acre) = 0.044
 Total On-Farm Irrigation Requirement (cts) = 3.56
 Irrigation Diversion Volume (ft/yr) = 0.00
 Total Irrigation Diversion Volume (ac-ft/yr) = 0

FIELD IRRIGATION REQUIREMENT

initials: MP

date: 06/07/00

Claimant = Jones - Fields S-Z & C using crop distribution in Brockway's 4/99 report

Weather Station = Bliss/Hagerman

None of the fields listed here changed with the new distribution, so a new FIR sheet wasn't necessary.

J C / Z C 12	crop	acres	Irrig. system	eff. (%)	Monthly ET (mm/day)								AVE IR season (mm/yr)	net Irrig. app. (in)	ET ratio	Irrig. freq. (days)	Gross Irrigation Application (peak period ET/eff. in mm/day)								season (mm/yr)
					mar	apr	may	jun	jul	aug	sep	oct					mar	apr	may	jun	jul	aug	sep	oct	
	sgm	3.8	cor	39		1.92	5.78	9.31	7.61	1.61			2.28	1.10	5.7	10.72	16.70	20.22	20.00	17.06	13.76	9.51			
	alfh	2.6	cor	70		6.14	7.68	9.33	9.22	7.87	6.32	4.36	2.85	1.09	7.1	9.56	11.96	14.53	14.36	12.25	9.84	6.79			
	alfh	7.1	cor	65		6.14	7.68	9.33	9.22	7.87	6.32	4.36	3.00	1.09	7.5	10.30	12.88	15.65	15.46	13.20	10.60	7.31			
	corn	6.7	tur	62			2.31	4.06	8.3	7.26	4.73	1.22	2.40	1.10	6.7		4.10	7.20	14.73	12.88	8.39	2.16			
	past	2.6	cor	31		3.8	5.92	7.17	7.09	6.05	4.88	3.37	1.80	1.12	5.7	13.73	21.39	25.90	25.62	21.86	17.63	12.18			
	corn	1.9	tur	68			2.31	4.06	8.3	7.26	4.73	1.22	2.40	1.10	6.7		3.74	6.57	13.43	11.74	7.65	1.97			
	alfh	9.1	cor	62		6.14	7.68	9.33	9.22	7.87	6.32	4.36	2.85	1.09	7.1	10.79	13.50	16.40	16.21	13.84	11.11	7.67			
	past	6.4	cor	35		3.8	5.92	7.17	7.09	6.05	4.88	3.37	1.71	1.12	5.4	12.16	18.94	22.94	22.69	19.36	15.62	10.78			
	alfh	7.4	cor	65		6.14	7.68	9.33	9.22	7.87	6.32	4.36	3.00	1.09	7.5	10.30	12.88	15.65	15.46	13.20	10.60	7.31			
	alfh	3.9	cor	58		6.14	7.68	9.33	9.22	7.87	6.32	4.36	3.00	1.09	7.5	11.54	14.43	17.53	17.33	14.79	11.88	8.19			
	Summary	51.5														9.16	13.05	16.20	17.25	14.78	11.56	7.39			

Peak Gross Irrigation Application (mm/day) =

17.25

On-Farm Irrigation Requirement (cfs/acre) =

0.029

Total On-Farm Irrigation Requirement (cfs) =

1.47

Irrigation Diversion Volume (ft/yr) =

0.00

Total Irrigation Diversion Volume (ac-ft/yr) =

0

FIELD IRRIGATION REQUIREMENT

initials: MP Claimant = Jones - Fields AA-JJ using crop distribution in Brockway's 4/99 report
 date: 06/07/00 Weather Station = Bliss/Hagerman

f no.	crop	acres	irrig. system	eff. (%)	Monthly ET (mm/day)								AVE IR season (mm/yr)	net irrig. app. (in)	ET ratio	irrig. freq. (days)	Gross Irrigation Application (peak period ET/eff. in mm/day)								season (mm/yr)
					mar	apr	may	jun	jul	aug	sep	oct					mar	apr	may	jun	jul	aug	sep	oct	
J B J B J B J B J B J B J B	alfh	18.6	cor	69		6.14	7.68	9.33	9.22	7.87	6.32	4.36	2.85	1.09	7.1		6.00	9.35	11.33	11.20	9.56	7.71	5.32		
	sgm	4.8	cor	33		1.92	5.78	9.31	7.61	1.61			2.28	1.10	5.7		6.40	19.27	31.03	25.37	5.37				
	alfh	25.5	cor	67		6.14	7.68	9.33	9.22	7.87	6.32	4.36	2.85	1.09	7.1		9.99	12.49	15.18	15.00	12.80	10.28	7.09		
	alfh	13.4	cor	66		6.14	7.68	9.33	9.22	7.87	6.32	4.36	2.85	1.09	7.1		10.14	12.68	15.41	15.23	13.00	10.44	7.20		
	past	0.9	cor	30		3.8	5.92	7.17	7.09	6.05	4.88	3.37	1.71	1.12	5.4		14.19	22.10	26.77	26.47	22.59	18.22	12.58		
	alfh	2.7	cor	65		6.14	7.68	9.33	9.22	7.87	6.32	4.36	3.00	1.09	7.5		10.30	12.88	15.65	15.46	13.20	10.60	7.31		
	corn	7.6	tur	62			2.31	4.06	8.3	7.26	4.73	1.22	2.40	1.10	6.7			4.10	7.20	14.73	12.88	8.39	2.16		
	alfh	1.6	cor	43		6.14	7.68	9.33	9.22	7.87	6.32	4.36	3.00	1.09	7.5		15.56	19.47	23.65	23.37	19.95	16.02	11.05		
	sgm	2.6	cor	35		1.92	5.78	9.31	7.61	1.61			2.40	1.10	6.0		6.03	18.17	29.26	23.92	5.06				
	alfh	1.2	cor	65		6.14	7.68	9.33	9.22	7.87	6.32	4.36	3.00	1.09	7.5		10.30	12.88	15.65	15.46	13.20	10.60	7.31		
	Summary	78.9															7.94	11.85	15.30	15.36	11.65	8.78	5.71		
	Peak Gross Irrigation Application (mm/day) =								15.36																
	On-Farm Irrigation Requirement (cfs/acre) =								0.025																
	Total On-Farm Irrigation Requirement (cfs) =								2.00																
	Irrigation Diversion Volume (ft/yr) =								0.00																
	Total Irrigation Diversion Volume (ac-ft/yr) =								0																

$$\text{Total On-Farm Irrigation Requirement} = (2.00 + 2.54 + 3.52 + 1.47) \text{ cfs} \\ = \underline{\underline{9.53 \text{ cfs}}}$$

$$\text{Total Acres} = (78.9 + 92.8 + 81.2 + 51.5) \text{ ac} \\ = 304.4 \text{ ac.}$$

FIELD IRRIGATION REQUIREMENT

initials: MP Claimant = Jones - Fields KK-I using crop distribution in Brockway's 4/99 report

date: 06/07/00 Weather Station = Bliss/Hagerman

no.	crop	acres	irrig. system	eff. (%)	Monthly ET (mm/day)								AVE IR season (mm/yr)	net irrig. app. (in)	ET ratio	irrig. freq. (days)	Gross Irrigation Application (peak period ET/eff. in mm/day)								season (mm/yr)
					mar	apr	may	jun	jul	aug	sep	oct					mar	apr	may	jun	jul	aug	sep	oct	
	alfh	10.1	cor	62		6.14	7.68	9.33	9.22	7.87	6.32	4.36		2.85	1.09	7.1		10.79	13.50	16.40	16.21	13.84	11.11	7.67	
	corn	10.9	fur	70			2.31	4.06	8.3	7.26	4.73	1.22		2.40	1.10	6.7			3.63	6.38	13.04	11.41	7.43	1.92	
	sgm	13.3	cor	37		1.92	5.78	9.31	7.61	1.61				2.40	1.10	6.0		5.71	17.18	27.68	22.62	4.79			
	sgm	8	cor	38		1.92	5.78	9.31	7.61	1.61				2.40	1.10	6.0		5.56	16.73	26.95	22.03	4.66			
	alfh	5.9	cor	70		6.14	7.68	9.33	9.22	7.87	6.32	4.36		2.89	1.09	7.2		9.56	11.96	14.53	14.36	12.25	9.84	6.79	
	alfh	6.9	cor	70		6.14	7.68	9.33	9.22	7.87	6.32	4.36		2.89	1.09	7.2		9.56	11.96	14.53	14.36	12.25	9.84	6.79	
	alfh	3.5	cor	65		6.14	7.68	9.33	9.22	7.87	6.32	4.36		3.00	1.09	7.5		10.30	12.88	15.65	15.46	13.20	10.60	7.31	
	corn	7.5	fur	48			2.31	4.06	8.3	7.26	4.73	1.22		2.44	1.10	6.8			5.29	9.30	19.02	16.64	10.84	2.80	
	corn	8.3	fur	57			2.31	4.06	8.3	7.26	4.73	1.22		2.44	1.10	6.8			4.46	7.84	16.02	14.01	9.13	2.35	
	corn	18.4	fur	70			2.31	4.06	8.3	7.26	4.73	1.22		2.40	1.10	6.7			3.63	6.38	13.04	11.41	7.43	1.92	
	Summary	92.8																4.18	9.48	14.14	16.56	10.98	7.01	3.09	

Peak Gross Irrigation Application (mm/day) = 16.56
On-Farm Irrigation Requirement (cfs/acre) = 0.027
Total On-Farm Irrigation Requirement (cfs) = 2.54
Irrigation Diversion Volume (ft/yr) = 0.00
Total Irrigation Diversion Volume (ac-ft/yr) = 0

initials: MP Claimant = Jones - Fields J-R using crop distribution in Brockway's 4/99 report
date: 06/13/00 Weather Station = Bliss/Hagerman

ID no.	crop	acres	Irrig. system	eff. (%)	Monthly ET (mm/day)								AVE IR season (mm/yr)	net irrig. app. (in)	ET ratio	Irrig. freq. (days)	Gross Irrigation Application (peak period ET/eff. in mm/day)							season (mm/yr)
					mar	apr	may	jun	jul	aug	sep	oct					mar	apr	may	jun	jul	aug	sep	
0000-000000	alfh	4.5	cor	65		6.14	7.68	9.33	9.22	7.87	6.32	4.36		3.00	1.09	7.5		6.37	9.93	12.02	11.89	10.15	8.18	5.65
	sgm	6.9	cor	42		1.92	5.78	9.31	7.61	1.61				2.40	1.10	6.0		5.03	15.14	24.38	19.93	4.22		
	sgm	6	cor	42		1.92	5.78	9.31	7.61	1.61				2.40	1.10	6.0		5.03	15.14	24.38	19.93	4.22		
	alfh	5	cor	54		6.14	7.68	9.33	9.22	7.87	6.32	4.36		3.00	1.09	7.5		12.39	15.50	18.83	18.61	15.89	12.76	8.80
	past	4	cor	31		3.8	5.92	7.17	7.09	6.05	4.88	3.37		1.80	1.12	5.7		13.73	21.39	25.90	25.62	21.86	17.63	12.18
	past	16.4	cor	16		3.8	5.92	7.17	7.09	6.05	4.88	3.37		1.80	1.12	5.7		26.60	41.44	50.19	49.63	42.35	34.16	23.59
	past	14.6	cor	31		3.8	5.92	7.17	7.09	6.05	4.88	3.37		1.80	1.12	5.7		13.73	21.39	25.90	25.62	21.86	17.63	12.18
	alfh	10.8	cor	65		6.14	7.68	9.33	9.22	7.87	6.32	4.36		3.00	1.09	7.5		10.30	12.88	15.65	15.46	13.20	10.60	7.31
	alfh	8.3	cor	70		6.14	7.68	9.33	9.22	7.87	6.32	4.36		3.00	1.09	7.5		9.56	11.96	14.53	14.36	12.25	9.84	6.79
	alfh	4.7	cor	65		6.14	7.68	9.33	9.22	7.87	6.32	4.36		3.00	1.09	7.5		10.30	12.88	15.65	15.46	13.20	10.60	7.31
	Summary	81.2																13.38	20.86	26.24	25.28	19.54	15.21	10.50

Peak Gross Irrigation Application (mm/day) =	26.24
On-Farm Irrigation Requirement (cfs/acre) =	0.043
Total On-Farm Irrigation Requirement (cfs) =	3.52
Irrigation Diversion Volume (ft ³ /yr) =	0.00
Total Irrigation Diversion Volume (ac-ft/yr) =	0

FIELD IRRIGATION REQUIREMENT

Initials: MP Claimant = Jones - Fields S-Z & C using crop distribution in Brockway's 4/99 report
 date: 06/07/00 Weather Station = Bliss/Hagerman

ld	no.	crop	acres	Irrig. system	eff. (%)	Monthly ET (mm/day)								AVE IR season (mm/yr)	net irrig. app. (in)	ET ratio	irrig. freq. (days)	Gross Irrigation Application (peak period ET/eff. in mm/day)								season (mm/yr)
						mar	apr	may	jun	jul	aug	sep	oct					mar	apr	may	jun	jul	aug	sep	oct	
pump	sgm	3.8	cor	39		1.92	5.78	9.31	7.61	1.61				2.28	1.10	5.7	10.72	16.70	20.22	20.00	17.06	13.76	9.51			
	alfh	2.6	cor	70		6.14	7.68	9.33	9.22	7.87	6.32	4.36		2.85	1.09	7.1	9.56	11.96	14.53	14.36	12.25	9.84	6.79			
	alfh	7.1	cor	65		6.14	7.68	9.33	9.22	7.87	6.32	4.36		3.00	1.09	7.5	10.30	12.88	15.65	15.46	13.20	10.60	7.31			
	corn	6.7	fur	62			2.31	4.06	8.3	7.26	4.73	1.22		2.40	1.10	6.7		4.10	7.20	14.73	12.88	8.39	2.16			
	past	2.6	cor	31		3.8	5.92	7.17	7.09	6.05	4.88	3.37		1.80	1.12	5.7	13.73	21.39	25.90	25.62	21.86	17.63	12.18			
	corn	1.9	fur	68			2.31	4.06	8.3	7.26	4.73	1.22		2.40	1.10	6.7		3.74	6.57	13.43	11.74	7.65	1.97			
	alfh	9.1	cor	62		6.14	7.68	9.33	9.22	7.87	6.32	4.36		2.85	1.09	7.1	10.79	13.50	16.40	16.21	13.84	11.11	7.67			
	past	6.4	cor	35		3.8	5.92	7.17	7.09	6.05	4.88	3.37		1.71	1.12	5.4	12.16	18.94	22.94	22.69	19.36	15.62	10.78			
	alfh	7.4	cor	65		6.14	7.68	9.33	9.22	7.87	6.32	4.36		3.00	1.09	7.5	10.30	12.88	15.65	15.46	13.20	10.60	7.31			
	alfh	3.9	cor	58		6.14	7.68	9.33	9.22	7.87	6.32	4.36		3.00	1.09	7.5	11.54	14.43	17.53	17.33	14.79	11.88	8.19			
	Summary	51.5																9.16	13.05	16.20	17.25	14.78	11.56	7.39		

Peak Gross Irrigation Application (mm/day) = 17.25
 On-Farm Irrigation Requirement (cfs/acre) = 0.029
 Total On-Farm Irrigation Requirement (cfs) = 1.47
 Irrigation Diversion Volume (ft/yr) = 0.00
 Total Irrigation Diversion Volume (ac-ft/yr) = 0

IRRIGATION DIVERSION RATE ANALYSIS

CLAIM NO(S):	36-00068 & 36-00069
FIELD ID NO:	AA
TOTAL ACRES:	18.6 AC
FIELD SLOPE:	2.1 %
FURROW LENGTH:	450 FT

ANALYSIS COMPLETED BY:		MARCI PAPE	
DATE OF ANALYSIS:		6/7/00	
Qmax PER FURROW:		Qmin PER FURROW:	
For corrugates:	10.0 gpm	For both:	3.0 gpm
For furrows:	4.8 gpm		

[illegible]

TOTAL AC	TOTAL %	CFS/AC FOR
18.6	100	EACH CROP:

TOTAL CFS FOR FIELD :

FIELD ID NO:	BB
TOTAL ACRES:	4.8 AC
FIELD SLOPE:	3.4 %
FURROW LENGTH:	250 FT

DATE OF ANALYSIS: 6/7/00

Q_{max} PER FURROW: Q_{min} PER FURROW:
For corrugates: 10.0 gpm For both: 3.0 gpm
For furrows: 2.9 gpm

[illegible]

TOTAL AC	TOTAL %	CFS/AC FOR EACH CROP:
4.8	100	

TOTAL CFS FOR FIELD :

	INTAKE FAMILY	DESIGN APPLIC. Inches	FURROW SLOPE Ft/Ft	FURROW SPACING Feet	FURROW LENGTH Feet	INFLOW RATE G	APPROXIMATE INFLOW TIME Hours	ADVANCE TIME Minutes	IRRIGATION APPLICATION Inches	IRRIGATION APPLICATION In	RUNOFF Inches	DEEP PERC. In.	IRRIGATION EFFICIENCY %
II	0.85	4.10	.021	2.50	450	10.0	12	27.8	10.27	5.08	4.49	1.68	39.94
	0.85	4.10	.021	2.50	450	5.0	12	48.4	5.13	4.92	0.05	0.99	79.87
	0.85	4.10	.021	2.50	450	10.0	24	27.8	20.53	9.77	10.68	5.75	19.97
	0.85	4.10	.021	2.50	450	4.5	24	54.8	9.24	8.38	0.69	4.45	44.37
III	0.70	2.85	.021	2.50	450	10.0	12	26.7	10.27	4.76	5.43	1.99	27.76
	0.70	2.85	.021	2.50	450	4.0	12	54.9	4.11	3.95	0.00	1.25	69.40
	0.70	2.85	.021	2.50	450	10.0	24	26.7	20.53	8.10	12.37	5.32	13.88
	0.70	2.85	.021	2.50	450	3.5	24	65.2	7.19	6.65	0.38	3.96	39.66

$Q_{max} = 10 \text{ gpm}$

$Q_{min} = 3 \text{ gpm}$

Field AA - using alfalfa hay

INTAKE FAMILY	DESIGN APPLIC. Inches	FURROW SLOPE Ft/Ft	FURROW SPACING Feet	FURROW LENGTH Feet	I. RATE Gpm	APPROXIMATE INFLOW TIME Hours	ADVANCE TIME Minutes	GROSS IRRIGATION APPLICATION Inches	NET ON APPLICATION Inches	RUNOFF Inches	DEEP PERC. In.	IRRIGATION EFFICIENCY %
0.85	3.29	.034	2.00	250	10.0	12	11.3	23.10	6.91	16.14	3.67	14.24
0.85	3.29	.034	2.00	250	3.0	12	19.9	6.93	5.68	1.17	2.47	47.48
0.85	3.29	.034	2.00	250	10.0	24	11.3	46.20	11.78	34.38	8.53	7.12
0.85	3.29	.034	2.00	250	3.0	24	19.9	13.86	9.73	4.06	6.51	23.74
0.70	2.28	.034	2.00	250	10.0	12	11.3	23.10	5.78	17.28	3.54	9.87
0.70	2.28	.034	2.00	250	3.0	12	18.4	6.93	4.76	2.11	2.54	32.90
0.70	2.28	.034	2.00	250	10.0	24	11.3	46.20	9.76	36.40	7.51	4.94
0.70	2.28	.034	2.00	250	3.0	24	18.4	13.86	8.07	5.74	5.84	16.45

$Q_{max} = 10 \text{ gpm}$

$Q_{min} = 3 \text{ gpm}$

Field BB - using grain

6/7/00

Qmin PER FURROW:

8.3 gpm

3.0 gpm

2.1 gpm

[illegible]

TOTAL AC	TOTAL %
25.5	100

CFS/AC FOR EACH CROP:

TOTAL CFS FOR FIELD:

FIELD ID NO:	DD
TOTAL ACRES:	13.4 AC
FIELD SLOPE:	5.2 %
FURROW LENGTH:	700 FT

DATE OF ANALYSIS:

6/7/00

Q_{max} PER FURROW:

Qmin PER FURROW:

For corrugates:

7.7 gpm

For both:

3.0 gpm

For furrows:

1.9 gpm

[illegible]

TOTAL AC	TOTAL %
13.4	100

CFS/AC FOR
EACH CROP:

TOTAL CFS FOR FIELD :

INTAKE FAMILY	DESIGN APPLIC. Inches	FURROW SLOPE Ft/Ft	FURROW SPACING Feet	FURROW LENGTH Feet	IRRI RATE Gpm	APPROXIMATE INFLOW TIME Hours	ADVANCE TIME Minutes	GROSS IRRIGATION APPLICATION Inches	NET ON APPLICATION Inches	RUNOFF Inches	DEEP PERC. In.	IRRIGATION EFFICIENCY %
0.70	2.85	.048	2.50	650	8.5	12	40.9	6.04	4.23	1.70	1.49	47.18
0.70	2.85	.048	2.50	650	6.0	12	51.2	4.26	3.96	0.17	1.24	66.83
0.70	2.85	.048	2.50	650	8.5	24	40.9	12.08	7.26	4.73	4.50	23.59
0.70	2.85	.048	2.50	650	5.0	24	59.7	7.11	6.62	0.36	3.90	40.10

$Q_{max} = 8.5 \text{ gpm}$

$Q_{min} = 3 \text{ gpm}$

Field CC - using alfalfa hay

INTAKE FAMILY	DESIGN APPLIC. Inches	FURROW SLOPE Ft/Ft	FURROW SPACING Feet	FURROW LENGTH Feet	INFLOW RATE Gpm	APPROXIMATE INFLOW TIME Hours	ADVANCE TIME Minutes	GROSS IRRIGATION APPLICATION Inches	NE. IRRIGATION APPLICATION Inches	RUNOFF Inches	DEEP PERC. In.	IRRIGATION EFFICIENCY %
0.70	2.85	.052	2.50	700	7.5	12	48.3	4.95	4.08	0.74	1.36	57.58
0.70	2.85	.052	2.50	700	6.5	12	53.3	4.29	3.97	0.18	1.26	66.44
0.70	2.85	.052	2.50	700	7.5	24	48.3	9.90	7.04	2.76	4.29	28.79
0.70	2.85	.052	2.50	700	5.5	24	60.9	7.26	6.67	0.46	3.95	39.26

$Q_{max} = 7.5 \text{ gpm}$

$Q_{min} = 3 \text{ gpm}$

Field DD - using alfalfa hay

INTAKE FAMILY	DESIGN APPLIC. Inches	FURROW SLOPE Ft/Ft	FURROW SPACING Feet	FURROW LENGTH Feet	INFLOW RATE Gpm	APPROXIMATE INFLOW TIME Hours	ADVANCE TIME Minutes	GROSS IRRIGATION APPLICATION Inches	NET IRRIGATION APPLICATION Inches	RUNOFF Inches	DEEP PERC. In.	IRRIGATION EFFICIENCY %
0.70	1.71	.078	2.00	300	5.0	12	15.3	9.62	4.84	4.74	3.17	17.77
0.70	1.71	.078	2.00	300	3.0	12	19.1	5.77	4.52	1.20	2.87	29.61
0.70	1.71	.078	2.00	300	5.0	24	15.3	19.25	8.19	11.02	6.52	8.88
0.70	1.71	.078	2.00	300	3.0	24	19.1	11.55	7.67	3.83	6.01	14.81

$Q_{max} = 5 \text{ gpm}$

$Q_{min} = 3 \text{ gpm}$

Field EE - using pasture

INTAKE FAMILY	DESIGN APPLIC. Inches	FURROW SLOPE Ft/Ft	FURROW SPACING Feet	FURROW LENGTH Feet	INFLOW RATE Gpm	APPROXIMATE INFLOW TIME Hours	ADVANCE TIME Minutes	GROSS IRRIGATION APPLICATION Inches	Net IRRIGATION APPLICATION Inches	RUNOFF Inches	DEEP PERC. In.	IRRIGATION EFFICIENCY %
0.70	3.00	.012	2.50	400	10.0	12	25.8	11.55	5.03	6.43	2.11	25.98
0.70	3.00	.012	2.50	400	4.0	12	60.3	4.62	4.10	0.34	1.28	64.94
0.70	3.00	.012	2.50	400	10.0	24	25.8	23.10	8.57	14.47	5.63	12.99
0.70	3.00	.012	2.50	400	3.0	24	96.6	6.93	6.66	0.02	3.91	43.29

$Q_{max} = 12 \text{ gpm}$

$Q_{min} = 3 \text{ gpm}$

Field FF - using alfalfa hay

DATE OF ANALYSIS:		6/7/00	
Qmax PER FURROW:		Qmin PER FURROW:	
For corrugates:	10.0 gpm	For both:	3.0 gpm
For furrows:	12.5 gpm		

[illegible]

CFS/AC FOR EACH CROP:

TOTAL CFS FOR FIELD :

DATE OF ANALYSIS:		6/7/00	
Qmax PER FURROW:		Qmin PER FURROW:	
For corrugates:	10.0 gpm	For both:	3.0 gpm
For furrows:	14.3 gpm		

[illegible]

CFS/AC FOR EACH CROP:

TOTAL CFS FOR FIELD :

See Fields C1 + C2 after Field Z

INTAKE FAMILY	DESIGN APPLIC. Inches	FURROW SLOPE Ft/Ft	FURROW SPACING Feet	FURROW LENGTH Feet	INFLOW RATE Gpm	APPROXIMATE INFLOW TIME Hours	ADVANCE TIME Minutes	GROSS IRRIGATION APPLICATION Inches	IRRIGATION APPLICATION Inches	RUNOFF Inches	DEEP PERC. In.	IRRIGATION EFFICIENCY %
0.70	2.40	.038	3.00	600	3.0	72	107.8	11.55	10.97	0.44	8.71	20.78
0.70	2.40	.038	3.00	300	3.0	12	24.3	3.85	2.83	0.98	0.47	62.34
0.70	2.40	.038	3.00	300	3.0	24	24.3	7.70	4.81	2.85	2.45	31.17

↑
 $Q_{max} = Q_{min} = 3 \text{ gpm}$

Field GG - using corn

72 hr. inflow time is not practical, so field was split to 300 ft lengths

INTAKE FAMILY	DESIGN APPLIC. Inches	FURROW SLOPE Ft/Ft	FURROW SPACING Feet	FURROW LENGTH Feet	INFLOW RATE Gpm	APPROXIMATE INFLOW TIME Hours	ADVANCE TIME Minutes	GROSS IRRIGATION APPLICATION Inches	NET IRRIGATION APPLICATION Inches	RUNOFF Inches	DEEP PERC. In.	IRRIGATION EFFICIENCY %
0.70	1.80	.038	2.00	600	10.0	12	35.4	9.62	5.58	3.92	3.90	18.70
0.70	1.80	.038	2.00	600	5.5	12	52.3	5.29	4.96	0.15	3.34	34.00
0.70	1.80	.038	2.00	600	10.0	24	35.4	19.25	9.54	9.60	7.85	9.35
0.70	1.80	.038	2.00	600	4.5	24	63.4	8.66	8.27	0.21	6.65	20.78

$Q_{max} = 10 \text{ gpm}$

$Q_{min} = 3 \text{ gpm}$

Field GG - using pasture

INTAKE FAMILY	DESIGN APPLIC. Inches	FURROW SLOPE Ft/Ft	FURROW SPACING Feet	FURROW LENGTH Feet	INFLOW RATE Gpm	APPROXIMATE INFLOW TIME Hours	ADVANCE TIME Minutes	GROSS IRRIGATION APPLICATION Inches	Net IRRIGATION APPLICATION Inches	RUNOFF Inches	DEEP PERC. In.	IRRIGATION EFFICIENCY %
0.70	3.00	.018	2.50	200	10.0	12	9.2	23.10	4.92	18.15	1.95	12.99
0.70	3.00	.018	2.50	200	3.0	12	15.8	6.93	3.99	2.90	1.03	43.29
0.70	3.00	.018	2.50	200	10.0	24	9.2	46.20	8.30	37.88	5.32	6.49
0.70	3.00	.018	2.50	200	3.0	24	15.8	13.86	6.75	7.07	3.79	21.65

$Q_{max} = 10 \text{ gpm}$

$Q_{min} = 3 \text{ gpm}$

Field HH - using alfalfa hay

TOTAL CFS FOR FIELD :

INTAKE FAMILY	DESIGN APPLIC. Inches	FURROW SLOPE Ft/Ft	FURROW SPACING Feet	FURROW LENGTH Feet	INFLOW RATE Gpm	APPROXIMATE INFLOW TIME Hours	ADVANCE TIME Minutes	GROSS IRRIGATION APPLICATION Inches	NET IRRIGATION APPLICATION Inches	RUNOFF Inches	DEEP PERC. In.	IRRIGATION EFFICIENCY %
0.70	2.40	.015	2.00	250	10.0	12	12.6	23.10	6.24	16.81	3.89	10.39
0.70	2.40	.015	2.00	250	3.0	12	26.3	6.93	5.00	1.84	2.69	34.63
0.70	2.40	.015	2.00	250	10.0	24	12.6	46.20	10.54	35.62	8.18	5.20
0.70	2.40	.015	2.00	250	3.0	24	26.3	13.86	8.51	5.28	6.18	17.32

$Q_{max} = 10 \text{ gpm}$

$Q_{min} = 3 \text{ gpm}$

Field II - using grain

INTAKE FAMILY	DESIGN APPLIC. Inches	FURROW SLOPE Ft/Ft	FURROW SPACING Feet	FURROW LENGTH Feet	INFLOW RATE Gpm	APPROXIMATE INFLOW TIME Hours	ADVANCE TIME Minutes	GROSS IRRIGATION APPLICATION Inches	NET IRRIGATION APPLICATION Inches	RUNOFF Inches	DEEP PERC. In.	IRRIGATION EFFICIENCY %
0.70	3.00	.015	2.50	250	10.0	12	12.6	18.48	4.99	13.45	2.03	16.23
0.70	3.00	.015	2.50	250	3.0	12	26.3	5.54	4.00	1.47	1.07	54.11
0.70	3.00	.015	2.50	250	10.0	24	12.6	36.96	8.43	28.49	5.47	8.12
0.70	3.00	.015	2.50	250	3.0	24	26.3	11.09	6.81	4.22	3.87	27.06

$Q_{max} = 10 \text{ gpm}$

$Q_{min} = 3 \text{ gpm}$

Field II - using alfalfa hay

INTAKE FAMILY	DESIGN APPLIC. Inches	FURROW SLOPE Ft/Ft	FURROW SPACING Feet	FURROW LENGTH Feet	W RATE Gpm	APPROXIMATE INFLOW TIME Hours	ADVANCE TIME Minutes	GROSS IRRIGATION APPLICATION Inches	IRRIGATION APPLICATION Inches	RUNOFF Inches	DEEP PERC. In.	IRRIGATION EFFICIENCY %
0.70	3.00	.013	2.50	300	10.0	12	16.5	15.40	5.04	10.31	2.09	19.48
0.70	3.00	.013	2.50	300	3.0	12	42.8	4.62	3.97	0.53	1.09	64.94
0.70	3.00	.013	2.50	300	10.0	24	16.5	30.80	8.54	22.22	5.58	9.74
0.70	3.00	.013	2.50	300	3.0	24	42.8	9.24	6.82	2.32	3.92	32.47

$Q_{max} = 10 \text{ gpm}$

$Q_{min} = 3 \text{ gpm}$

Field JJ - using alfalfa hay

6/7/00

Qmin PER FURROW:

For both:

7.7 gpm

[illegible]

TOTAL AC	TOTAL %
10.1	100

CFS/AC FOR EACH CROP:

TOTAL CFS FOR FIELD :

FIELD ID NO:	A
TOTAL ACRES:	10.9 AC
FIELD SLOPE:	0.7 %
FURROW LENGTH:	350 FT

DATE OF ANALYSIS:

6/7/00

Q_{max} PER FURROW:

Qmin PER FURROW:

For corrugates:

10.0 gpm

For both:

3.0 gpm

[illegible]

TOTAL AC	TOTAL %
10.9	100

CFS/AC FOR EACH CROP:

TOTAL CFS FOR FIELD :

INTAKE FAMILY	DESIGN APPLIC. Inches	FURROW SLOPE Ft/Ft	FURROW SPACING Feet	FURROW LENGTH Feet	INFLOW RATE Gpm	APPROXIMATE INFLOW TIME Hours	ADVANCE TIME Minutes	GROSS IRRIGATION APPLICATION Inches	NET IRRIGATION APPLICATION Inches	RUNOFF Inches	DEEP PERC. In.	IRRIGATION EFFICIENCY %
0.70	2.85	.013	2.50	350	10.0	12	20.6	13.20	5.02	8.12	2.23	21.59
0.70	2.85	.013	2.50	350	3.5	12	49.9	4.62	4.03	0.44	1.33	61.69
0.70	2.85	.013	2.50	350	10.0	24	20.6	26.40	8.52	17.83	5.72	10.80
0.70	2.85	.013	2.50	350	3.0	24	62.6	7.92	6.75	1.02	4.05	35.99

$Q_{max} = 10 \text{ gpm}$

$Q_{min} = 3 \text{ gpm}$

Field KK - using alfalfa hay

INTAKE FAMILY	DESIGN APPLIC. Inches	FURROW SLOPE Ft/Ft	FURROW SPACING Feet	FURROW LENGTH Feet	INFLOW RATE Gpm	APPROXIMATE INFLOW TIME Hours	ADVANCE TIME Minutes	GROSS IRRIGATION APPLICATION Inches	NET IRRIGATION APPLICATION Inches	RUNOFF Inches	DEEP PERC. In.	IRRIGATION EFFICIENCY %
0.70	2.40	.007	3.00	350	14.5	12	20.0	15.95	4.00	11.90	1.65	15.05
0.70	2.40	.007	3.00	350	3.0	12	111.3	3.30	2.81	0.21	0.69	72.73
0.70	2.40	.007	3.00	350	14.5	24	20.0	31.90	6.78	25.08	4.42	7.52
0.70	2.40	.007	3.00	350	3.0	24	111.3	6.60	5.03	1.34	2.86	36.37

$Q_{max} = 14.5 \text{ gpm}$
 $Q_{min} = 3 \text{ gpm}$

Field A - using corn

INTAKE FAMILY	DESIGN APPLIC. Inches	FURROW SLOPE Ft/Ft	FURROW SPACING Feet	FURROW LENGTH Feet	INFLOW RATE Gpm	APPROXIMATE INFLOW TIME Hours	ADVANCE TIME Minutes	GROSS IRRIGATION APPLICATION Inches	NET IRRIGATION APPLICATION Inches	RUNOFF Inches	DEEP PERC. In.	IRRIGATION EFFICIENCY %
0.70	1.80	.007	2.00	350	10.0	12	24.5	16.50	6.67	9.73	4.97	10.91
0.70	1.80	.007	2.00	350	3.5	12	81.7	5.77	5.11	0.32	3.65	31.17
0.70	1.80	.007	2.00	350	10.0	24	24.5	33.00	11.34	21.57	9.62	5.45
0.70	1.80	.007	2.00	350	3.0	24	111.3	9.90	8.61	0.90	7.20	18.18

$Q_{max} = 10 \text{ gpm}$

$Q_{min} = 3 \text{ gpm}$

Field A - using pasture

INTAKE FAMILY	DESIGN APPLIC. Inches	FURROW SLOPE Ft/Ft	FURROW SPACING Feet	FURROW LENGTH Feet	INFLOW RATE Gpm	APPROXIMATE INFLOW TIME Hours	ADVANCE TIME Minutes	GROSS IRRIGATION APPLICATION Inches	Net IRRIGATION APPLICATION Inches	RUNOFF Inches	DEEP PERC. In.	IRRIGATION EFFICIENCY %
0.70	2.40	.008	2.00	900	10.0	12	156.8	6.42	5.62	0.02	4.00	37.40
0.70	2.40	.008	2.00	900	10.0	24	156.8	12.83	10.38	1.81	8.63	18.70
0.70	2.40	.008	2.00	900	8.5	24	206.5	10.91	9.74	0.31	8.19	22.00

$Q_{max} = 10 \text{ gpm}$
 $Q_{min} = 3 \text{ gpm}$

Field B1 - using grain

9.5 gpm doesn't work at 12 hr. set time, so $Q_{max} = Q_{min}$ at 12 hr. set time.

INTAKE FAMILY	DESIGN APPLIC. Inches	FURROW SLOPE Ft/Ft	FURROW SPACING Feet	FURROW LENGTH Feet	INFLOW RATE Gpm	APPROXIMATE INFLOW TIME Hours	ADVANCE TIME Minutes	GROSS IRRIGATION APPLICATION Inches	NET IRRIGATION APPLICATION Inches	RUNOFF Inches	DEEP PERC. In.	IRRIGATION EFFICIENCY %
0.70	2.40	.007	2.00	550	10.0	12	55.8	10.50	6.44	3.80	4.30	22.86
0.70	2.40	.007	2.00	550	6.0	12	110.1	6.30	5.45	0.35	3.55	38.10
0.70	2.40	.007	2.00	550	10.0	24	55.8	21.00	11.15	9.64	8.96	11.43
0.70	2.40	.007	2.00	550	5.0	24	154.6	10.50	9.18	0.73	7.37	22.86

$Q_{max} = 10 \text{ gpm}$

$Q_{min} = 3 \text{ gpm}$

Field B2 - using grain

6/7/00

Qmin PER FURROW:

For both:

3.0 gpm

[illegible]

TOTAL AC	TOTAL %
5.9	100

CFS/AC FOR EACH CROP:

TOTAL CFS FOR FIELD :

FIELD ID NO:	E
TOTAL ACRES:	6.9 AC
FIELD SLOPE:	0.7 %
FURROW LENGTH:	400 FT

DATE OF ANALYSIS:

6/7/00

Q_{max} PER FURROW:

Qmin PER FURROW:

For corrugates:

10.0 gpm

For both:

3.0 gpm

[illegible]

TOTAL AC	TOTAL %
6.9	100

CFS/AC FOR EACH CROP:

TOTAL CFS FOR FIELD :

INTAKE FAMILY	DESIGN APPLIC. Inches	FURROW SLOPE Ft/Ft	FURROW SPACING Feet	FURROW LENGTH Feet	INFLOW RATE Gpm	APPROXIMATE INFLOW TIME Hours	ADVANCE TIME Minutes	GROSS IRRIGATION APPLICATION Inches	NET IRRIGATION APPLICATION Inches	RUNOFF Inches	DEEP PERC. In.	IRRIGATION EFFICIENCY %
0.55	2.89	.007	2.50	400	10.0	12	28.4	11.55	4.29	7.18	1.48	25.02
0.55	2.89	.007	2.50	400	3.0	12	122.8	3.46	3.08	0.07	0.51	83.41
0.55	2.89	.007	2.50	400	10.0	24	28.4	23.10	7.22	15.81	4.40	12.51
0.55	2.89	.007	2.50	400	3.0	24	122.8	6.93	5.47	1.19	2.85	41.70

$Q_{max} = 10 \text{ gpm}$
 $Q_{min} = 3 \text{ gpm}$

Field D - using alfalfa hay

INTAKE FAMILY	DESIGN APPLIC. Inches	FURROW SLOPE Ft/Ft	FURROW SPACING Feet	FURROW LENGTH Feet	INFLOW RATE Gpm	APPROXIMATE INFLOW TIME Hours	ADVANCE TIME Minutes	GROSS IRRIGATION APPLICATION Inches	NET IRRIGATION APPLICATION Inches	RUNOFF Inches	DEEP PERC. In.	IRRIGATION EFFICIENCY %
0.55	2.89	.007	2.50	400	10.0	12	28.4	11.55	4.29	7.18	1.48	25.02
0.55	2.89	.007	2.50	400	3.0	12	122.8	3.46	3.08	0.07	0.51	83.41
0.55	2.89	.007	2.50	400	10.0	24	28.4	23.10	7.22	15.81	4.40	12.51
0.55	2.89	.007	2.50	400	3.0	24	122.8	6.93	5.47	1.19	2.85	41.70

$Q_{max} = 10 \text{ gpm}$

$Q_{min} = 3 \text{ gpm}$

Field E - using alfalfa hay

6/7/00

Qmin PER FURROW:

For both:

7.7 gpm

[illegible]

TOTAL AC	TOTAL %
3.5	100

CFS/AC FOR
EACH CROP:

TOTAL CFS FOR FIELD:

FIELD ID NO:	G
TOTAL ACRES:	7.5 AC
FIELD SLOPE:	3.4 %
FURROW LENGTH:	450 FT

DATE OF ANALYSIS:

6/7/00

Q_{max} PER FURROW:

Qmin PER FURROW:

For corrugates:

10.0 gpm

For both:

3.0 gpm

[illegible]

TOTAL AC	TOTAL %
7.5	100

CFS/AC FOR
EACH CROP:

TOTAL CFS FOR FIELD:

INTAKE FAMILY	DESIGN APPLIC. Inches	FURROW SLOPE Ft/Ft	FURROW SPACING Feet	FURROW LENGTH Feet	INFLOW RATE Gpm	APPROXIMATE INFLOW TIME Hours	ADVANCE TIME Minutes	GROSS IRRIGATION APPLICATION Inches	NET IRRIGATION APPLICATION Inches	RUNOFF Inches	DEEP PERC. In.	IRRIGATION EFFICIENCY %
0.55	2.89	.013	2.50	550	10.0	12	39.2	8.40	3.98	4.32	1.18	34.41
0.55	2.89	.013	2.50	550	4.5	12	85.1	3.78	3.27	0.31	0.58	76.46
0.55	2.89	.013	2.50	550	10.0	24	39.2	16.80	6.73	9.98	3.92	17.20
0.55	2.89	.013	2.50	550	3.5	24	127.2	5.88	5.32	0.29	2.70	49.15
0.70	3.00	.013	2.50	550	10.0	12	42.5	8.40	4.90	3.36	2.04	35.72
0.70	3.00	.013	2.50	550	5.5	12	78.4	4.62	4.21	0.16	1.46	64.94
0.70	3.00	.013	2.50	550	10.0	24	42.5	16.80	8.42	8.26	5.54	17.86
0.70	3.00	.013	2.50	550	4.5	24	106.1	7.56	7.02	0.25	4.31	39.68

$Q_{max} = 10 \text{ gpm}$

$Q_{min} = 3 \text{ gpm}$

Field F - using alfalfa hay

INTAKE FAMILY	DESIGN APPLIC. Inches	FURROW SLOPE Ft/Ft	FURROW SPACING Feet	FURROW LENGTH Feet	INFLOW RATE Gpm	APPROXIMATE INFLOW TIME Hours	ADVANCE TIME Minutes	GROSS IRRIGATION APPLICATION Inches	NET IRRIGATION APPLICATION Inches	RUNOFF Inches	DEEP PERC. In.	IRRIGATION EFFICIENCY %
0.55	2.44	.034	3.00	450	3.0	24	49.6	5.13	3.81	1.26	1.43	47.53
0.55	2.44	.034	3.00	450	3.0	36	49.6	7.70	5.18	2.46	2.80	31.69

Qmax = Qmin = 3gpm

Field G - using corn

inflow time of 12 hrs. doesn't work with 3gpm inflow rate $\Rightarrow$ use 24 hrs. or
reater !

TOTAL CFS FOR FIELD :

INTAKE FAMILY	DESIGN APPLIC. Inches	FURROW SLOPE Ft/Ft	FURROW SPACING Feet	FURROW LENGTH Feet	INFLOW RATE Gpm	APPROXIMATE INFLOW TIME Hours	ADVANCE TIME Minutes	GROSS IRRIGATION APPLICATION Inches	NET IRRIGATION APPLICATION Inches	RUNOFF Inches	DEEP PERC. In.	IRRIGATION EFFICIENCY %
0.55	2.44	.021	3.00	450	5.0	12	38.5	4.28	2.46	1.76	0.08	57.04
0.55	2.44	.021	3.00	450	5.0	24	38.5	8.56	4.16	4.34	1.77	28.52
0.55	2.44	.021	3.00	450	3.0	24	66.3	5.13	3.87	1.17	1.52	47.53
0.70	2.40	.021	3.00	450	5.0	12	43.2	4.28	3.03	1.16	0.72	56.11
0.70	2.40	.021	3.00	450	3.5	12	65.2	2.99	2.83	0.02	0.57	80.15
0.70	2.40	.021	3.00	450	5.0	24	43.2	8.56	5.20	3.28	2.88	28.05
0.70	2.40	.021	3.00	450	3.0	24	82.0	5.13	4.80	0.18	2.55	46.76

$Q_{max} = 5.0 \text{ gpm}$

$Q_{min} = 3 \text{ gpm}$

Field H - using corn

for soil KOB/KOC at 12 hr. set time, 5.0 gpm is lowest inflow rate that works, so $Q_{max} = Q_{min}$ for 12 hr. set time.

INTAKE FAMILY	DESIGN APPLIC. Inches	FURROW SLOPE Ft/Ft	FURROW SPACING Feet	FURROW LENGTH Feet	INFLOW RATE Gpm	APPROXIMATE INFLOW TIME Hours	ADVANCE TIME Minutes	GROSS IRRIGATION APPLICATION Inches	NET IRRIGATION APPLICATION Inches	RUNOFF Inches	DEEP PERC. In.	IRRIGATION EFFICIENCY %
0.55	1.99	.021	2.00	450	10.0	12	25.6	12.83	4.81	7.95	2.89	15.51
0.55	1.99	.021	2.00	450	3.5	12	54.6	4.49	3.91	0.43	2.07	44.31
0.55	1.99	.021	2.00	450	10.0	24	25.6	25.67	8.09	17.52	6.16	7.75
0.55	1.99	.021	2.00	450	3.0	24	66.3	7.70	6.49	1.06	4.65	25.85
0.70	1.80	.021	2.00	450	10.0	12	26.7	12.83	5.95	6.79	4.25	14.03
0.70	1.80	.021	2.00	450	4.0	12	54.9	5.13	4.93	0.01	3.33	35.07
0.70	1.80	.021	2.00	450	10.0	24	26.7	25.67	10.13	15.46	8.41	7.01
0.70	1.80	.021	2.00	450	3.5	24	65.2	8.98	8.31	0.47	6.71	20.04

$Q_{max} = 10 \text{ gpm}$

$Q_{min} = 3 \text{ gpm}$

Field H - using pasture

INTAKE FAMILY	DESIGN APPLIC. Inches	FURROW SLOPE Ft/Ft	FURROW SPACING Feet	FURROW LENGTH Feet	INFLOW RATE Gpm	APPROXIMATE INFLOW TIME Hours	ADVANCE TIME Minutes	GROSS IRRIGATION APPLICATION Inches	NET IRRIGATION APPLICATION Inches	RUNOFF Inches	DEEP PERC. In.	IRRIGATION EFFICIENCY %
0.70	1.80	.011	2.00	550	10.0	12	45.4	10.50	6.22	4.10	4.60	17.14
0.70	1.80	.011	2.00	550	5.5	12	88.3	5.77	5.28	0.13	3.84	31.17
0.70	1.80	.011	2.00	550	10.0	24	45.4	21.00	10.69	10.15	9.05	8.57
0.70	1.80	.011	2.00	550	4.5	24	122.6	9.45	8.82	0.20	7.45	19.05

$Q_{max} = 10 \text{ gpm}$

$Q_{min} = 3 \text{ gpm}$

Field K - using pasture

DATE OF ANALYSIS:		6/7/00	
Qmax PER FURROW:		Qmin PER FURROW:	
For corrugates:	10.0 gpm	For both:	3.0 gpm
For furrows:	5.6 gpm		

[illegible]

**CFS/AC FOR
EACH CROP:**

TOTAL CFS FOR FIELD :

DATE OF ANALYSIS: 6/7/00

Qmax PER FURROW: Qmin PER FURROW:
For corrugates: 10.0 gpm For both: 3.0 gpm
For furrows: 3.1 gpm

[illegible]

CFS/AC FOR EACH CROP:

TOTAL CFS FOR FIELD:

INTAKE FAMILY	DESIGN APPLIC. Inches	FURROW SLOPE Ft/Ft	FURROW SPACING Feet	FURROW LENGTH Feet	INFLOW RATE Gpm	APPROXIMATE INFLOW TIME Hours	ADVANCE TIME Minutes	GROSS IRRIGATION APPLICATION Inches	NET IRRIGATION APPLICATION Inches	RUNOFF Inches	DEEP PERC. In.	IRRIGATION EFFICIENCY %
0.70	2.40	.018	2.00	400	10.0	12	23.3	14.44	6.06	8.29	3.75	16.62
0.70	2.40	.018	2.00	400	4.0	12	46.5	5.77	5.04	0.57	2.80	41.56
0.70	2.40	.018	2.00	400	10.0	24	23.3	28.87	10.30	18.50	7.97	8.31
0.70	2.40	.018	2.00	400	3.0	24	68.3	8.66	8.21	0.25	6.02	27.71

$Q_{max} = 10 \text{ gpm}$

$Q_{min} = 3 \text{ gpm}$

Field L - using grain

INTAKE FAMILY	DESIGN APPLIC.	FURROW SLOPE	FURROW SPACING	FURROW LENGTH	INFLOW RATE	APPROXIMATE INFLOW TIME	ADVANCE TIME	GROSS IRRIGATION APPLICATION	NET IRRIGATION APPLICATION	RUNOFF	DEEP PERC.	IRRIGATION EFFICIENCY
	Inches	Ft/Ft	Feet	Feet	Gpm	Hours	Minutes	Inches	Inches	Inches	In.	%
0.70	1.80	.018	2.00	400	10.0	12	23.3	14.44	6.06	8.29	4.35	12.47
0.70	1.80	.018	2.00	400	4.0	12	46.5	5.77	5.04	0.57	3.40	31.17
0.70	1.80	.018	2.00	400	10.0	24	23.3	28.87	10.30	18.50	8.57	6.23
0.70	1.80	.018	2.00	400	3.0	24	68.3	8.66	8.21	0.25	6.62	20.78

$Q_{max} = 10 \text{ gpm}$

$Q_{min} = 3 \text{ gpm}$

Field L - using pasture

INTAKE FAMILY	DESIGN APPLIC. Inches	FURROW SLOPE Ft/Ft	FURROW SPACING Feet	FURROW LENGTH Feet	INFLOW RATE Gpm	APPROXIMATE INFLOW TIME Hours	ADVANCE TIME Minutes	GROSS IRRIGATION APPLICATION Inches	NET IRRIGATION APPLICATION Inches	RUNOFF Inches	DEEP PERC. In.	IRRIGATION EFFICIENCY %
0.70	3.00	.032	2.50	250	10.0	12	11.4	18.48	4.65	13.80	1.68	16.23
0.70	3.00	.032	2.50	250	3.0	12	18.8	5.54	3.82	1.67	0.87	54.11
0.70	3.00	.032	2.50	250	10.0	24	11.4	36.96	7.85	29.08	4.88	8.12
0.70	3.00	.032	2.50	250	3.0	24	18.8	11.09	6.48	4.57	3.52	27.06

$Q_{max} = 10 \text{ gpm}$

$Q_{min} = 3 \text{ gpm}$

Field M - using alfalfa hay

DATE OF ANALYSIS:		6/15/00	
Qmax PER FURROW:		Qmin PER FURROW:	
For corrugates:	10.0 gpm	For both:	3.0 gpm
For furrows:	16.7 gpm		

TOTAL CFS FOR FIELD:

DATE OF ANALYSIS: 6/15/00

Qmax PER FURROW: Qmin PER FURROW:
For corrugates: 10.0 gpm For both: 3.0 gpm
For furrows: 10.0 gpm

TOTAL CFS FOR FIELD :

INTAKE FAMILY	DESIGN APPLIC. Inches	FURROW SLOPE Ft/Ft	FURROW SPACING Feet	FURROW LENGTH Feet	INFLOW RATE Gpm	APPROXIMATE INFLOW TIME Hours	ADVANCE TIME Minutes	GROSS IRRIGATION APPLICATION Inches	NET IRRIGATION APPLICATION Inches	RUNOFF Inches	DEEP PERC. In.	IRRIGATION EFFICIENCY %
0.70	1.80	.006	2.00	300	10.0	12	20.0	19.25	6.81	12.35	5.10	9.35
0.70	1.80	.006	2.00	300	3.0	12	81.3	5.77	5.05	0.39	3.59	31.17
0.70	1.80	.006	2.00	300	10.0	24	20.0	38.50	11.56	26.87	9.83	4.68
0.70	1.80	.006	2.00	300	3.0	24	81.3	11.55	8.87	2.40	7.35	15.59

$Q_{max} = 10 \text{ gpm}$

$Q_{min} = 3 \text{ gpm}$

Field N - using pasture

INTAKE FAMILY	DESIGN APPLIC. Inches	FURROW SLOPE Ft/Ft	FURROW SPACING Feet	FURROW LENGTH Feet	INFLOW RATE Gpm	APPROXIMATE INFLOW TIME Hours	ADVANCE TIME Minutes	GROSS IRRIGATION APPLICATION Inches	IRRIGATION APPLICATION Inches	RUNOFF Inches	DEEP PERC. In.	IRRIGATION EFFICIENCY %
0.70	1.80	.010	2.00	950	10.0	24	151.7	12.16	10.17	1.38	8.97	14.81
0.70	1.80	.010	2.00	950	9.0	24	178.6	10.94	9.80	0.43	8.71	16.45
0.70	1.80	.010	2.00	950	10.0	36	151.7	18.24	14.21	3.48	12.95	9.87
0.70	1.80	.010	2.00	950	8.0	36	219.2	14.59	13.23	0.57	12.22	12.34

$Q_{max} = 10 \text{ gpm}$

$Q_{min} = 3 \text{ gpm}$

Field 01 - using pasture

Inflow time of 12 hrs. doesn't work with 10 gpm inflow rate $\Rightarrow$ use 24 hrs. or greater!

TOTAL CFS FOR FIELD :

INTAKE FAMILY	DESIGN APPLIC. Inches	FURROW SLOPE Ft/Ft	FURROW SPACING Feet	FURROW LENGTH Feet	INFLOW RATE Gpm	APPROXIMATE INFLOW TIME Hours	ADVANCE TIME Minutes	GROSS IRRIGATION APPLICATION Inches	NET IRRIGATION APPLICATION Inches	RUNOFF Inches	DEEP PERC. In.	IRRIGATION EFFICIENCY %
0.70	1.80	.010	2.00	450	10.0	12	33.1	12.83	6.36	6.34	4.70	14.03
0.70	1.80	.010	2.00	450	4.5	12	77.6	5.77	5.20	0.26	3.72	31.17
0.70	1.80	.010	2.00	450	10.0	24	33.1	25.67	10.87	14.68	9.18	7.01
0.70	1.80	.010	2.00	450	3.5	24	120.9	8.98	8.53	0.03	7.15	20.04

Q_{max} = 10 gpm
Q_{min} = 3 gpm

Field 02 - using pasture

Qmax PER FURROW:		Qmin PER FURROW:	
For corrugates:	10.0 gpm	For both:	3.0 gpm
For furrows:	9.1 gpm		

[illegible]

TOTAL CFS FOR FIELD:

Qmax PER FURROW:		Qmin PER FURROW:	
For corrugates:	10.0 gpm	For both:	3.0 gpm
For furrows:	4.2 gpm		

[illegible]

TOTAL CFS FOR FIELD :

INTAKE FAMILY	DESIGN APPLIC. Inches	FURROW SLOPE Ft/Ft	FURROW SPACING Feet	FURROW LENGTH Feet	INFLOW RATE Gpm	APPROXIMATE INFLOW TIME Hours	ADVANCE TIME Minutes	GROSS IRRIGATION APPLICATION Inches	NET IRRIGATION APPLICATION Inches	RUNOFF Inches	DEEP PERC. In.	IRRIGATION EFFICIENCY %
0.70	3.00	.011	2.50	600	10.0	12	53.3	7.70	4.93	2.59	2.11	38.96
0.70	3.00	.011	2.50	600	6.0	12	96.3	4.62	4.25	0.05	1.57	64.94
0.70	3.00	.011	2.50	600	10.0	24	53.3	15.40	8.52	6.73	5.67	19.48
0.70	3.00	.011	2.50	600	5.0	24	129.4	7.70	7.15	0.18	4.52	38.96

$Q_{max} = 10 \text{ gpm}$

$Q_{min} = 3 \text{ gpm}$

Field P-using alfalfa hay

INTAKE FAMILY	DESIGN APPLIC. Inches	FURROW SLOPE Ft/Ft	FURROW SPACING Feet	FURROW LENGTH Feet	INFLOW RATE Gpm	APPROXIMATE INFLOW TIME Hours	ADVANCE TIME Minutes	GROSS IRRIGATION APPLICATION Inches	NET IRRIGATION APPLICATION Inches	RUNOFF Inches	DEEP PERC. In.	IRRIGATION EFFICIENCY %
0.70	3.00	.024	2.50	450	10.0	12	25.8	10.27	4.70	5.49	1.78	29.22
0.70	3.00	.024	2.50	450	4.0	12	50.8	4.11	3.92	0.04	1.07	73.05 → 41.75
0.70	3.00	.024	2.50	450	10.0	24	25.8	20.53	8.00	12.47	5.07	14.61
0.70	3.00	.024	2.50	450	3.5	24	59.6	7.19	6.61	0.44	3.75	41.75

Q_{max} = 10 gpm

Q_{min} = 3 gpm

Field Q - using alfalfa hay

DATE OF ANALYSIS: 6/7/00

Qmax PER FURROW: Qmin PER FURROW:
For corrugates: 10.0 gpm For both: 3.0 gpm
For furrows: 12.5 gpm

[illegible]

TOTAL CFS FOR FIELD:

DATE OF ANALYSIS: 6/7/00

Qmax PER FURROW: Qmin PER FURROW:
For corrugates: 10.0 gpm For both: 3.0 gpm
For furrows: 10.0 gpm

[illegible]

TOTAL CFS FOR FIELD :

INTAKE FAMILY	DESIGN APPLIC. Inches	FURROW SLOPE Ft/Ft	FURROW SPACING Feet	FURROW LENGTH Feet	INFLOW RATE Gpm	APPROXIMATE INFLOW TIME Hours	ADVANCE TIME Minutes	GROSS IRRIGATION APPLICATION Inches	NET IRRIGATION APPLICATION Inches	RUNOFF Inches	DEEP PERC. In.	IRRIGATION EFFICIENCY %
0.70	3.00	.008	2.50	450	10.0	12	35.9	10.27	5.19	4.95	2.32	29.22
0.70	3.00	.008	2.50	450	4.5	12	93.2	4.62	4.17	0.14	1.48	64.94
0.70	3.00	.008	2.50	450	10.0	24	35.9	20.53	8.89	11.54	5.99	14.61
0.70	3.00	.008	2.50	450	4.0	24	115.8	8.21	7.13	0.75	4.46	36.53

Q max = 10 gpm
Q min = 3 gpm

Field R - using alfalfa hay

INTAKE FAMILY	DESIGN APPLIC. Inches	FURROW SLOPE Ft/Ft	FURROW SPACING Feet	FURROW LENGTH Feet	INFLOW RATE Gpm	APPROXIMATE INFLOW TIME Hours	ADVANCE TIME Minutes	GROSS IRRIGATION APPLICATION Inches	NET IRRIGATION APPLICATION Inches	RUNOFF Inches	DEEP PERC. In.	IRRIGATION EFFICIENCY %
0.70	2.28	.010	2.00	450	10.0	12	33.1	12.83	6.36	6.34	4.22	17.77
0.70	2.28	.010	2.00	450	4.5	12	77.6	5.77	5.20	0.26	3.24	39.48
0.70	2.28	.010	2.00	450	10.0	24	33.1	25.67	10.87	14.68	8.70	8.88
0.70	2.28	.010	2.00	450	3.5	24	120.9	8.98	8.53	0.03	6.67	25.38

$Q_{max} = 10 \text{ gpm}$

$Q_{min} = 3 \text{ gpm}$

Field S - using grain

TOTAL CFS FOR FIELD :

INTAKE FAMILY	DESIGN APPLIC. Inches	FURROW SLOPE Ft/Ft	FURROW SPACING Feet	FURROW LENGTH Feet	INFLOW RATE Gpm	APPROXIMATE INFLOW TIME Hours	ADVANCE TIME Minutes	GROSS IRRIGATION APPLICATION Inches	NET IRRIGATION APPLICATION Inches	RUNOFF Inches	DEEP PERC. In.	IRRIGATION EFFICIENCY %
0.70	2.85	.022	2.50	350	10.0	12	18.5	13.20	4.78	8.37	1.98	21.59
0.70	2.85	.022	2.50	350	3.0	12	43.4	3.96	3.82	0.02	1.09	71.97
0.70	2.85	.022	2.50	350	10.0	24	18.5	26.40	8.10	18.25	5.30	10.80
0.70	2.85	.022	2.50	350	3.0	24	43.4	7.92	6.56	1.26	3.81	35.99

$Q_{max} = 10 \text{ gpm}$

$Q_{min} = 3 \text{ gpm}$

Field T - using alfalfa hay

INTAKE FAMILY	DESIGN APPLIC. Inches	FURROW SLOPE Ft/Ft	FURROW SPACING Feet	FURROW LENGTH Feet	INFLOW RATE Gpm	APPROXIMATE INFLOW TIME Hours	ADVANCE TIME Minutes	GROSS IRRIGATION APPLICATION Inches	NET IRRIGATION APPLICATION Inches	RUNOFF Inches	DEEP PERC. In.	IRRIGATION EFFICIENCY %
0.70	3.00	.008	2.50	500	10.0	12	43.5	9.24	5.15	3.94	2.30	32.47
0.70	3.00	.008	2.50	500	5.0	12	103.6	4.62	4.19	0.07	1.55	64.94
0.70	3.00	.008	2.50	500	10.0	24	43.5	18.48	8.85	9.50	5.98	16.23
0.70	3.00	.008	2.50	500	4.5	24	125.6	8.32	7.24	0.71	4.61	36.08

$Q_{max} = 10 \text{ gpm}$

$Q_{min} = 3 \text{ gpm}$

Field U - using alfalfa hay

6/7/00

Qmin PER FURROW:

For both:

33.3 gpm

[illegible]

TOTAL AC	TOTAL %
6.7	100

CFS/AC FOR EACH CROP:

TOTAL CFS FOR FIELD:

FIELD ID NO:	W
TOTAL ACRES:	2.6 AC
FIELD SLOPE:	1.1 %
FURROW LENGTH:	550 FT

DATE OF ANALYSIS:

6/7/00

Qmax PER FURROW:

Qmin PER FURROW:

For corrugates:

10.0 gpm

For both:

For furrows:

9.1 gpm

[illegible]

TOTAL AC	TOTAL %
26	100

CFS/AC FOR EACH CROP:

TOTAL CFS FOR FIELD :

INTAKE FAMILY	DESIGN APPLIC. Inches	FURROW SLOPE Ft/Ft	FURROW SPACING Feet	FURROW LENGTH Feet	INFLOW RATE Gpm	APPROXIMATE INFLOW TIME Hours	ADVANCE TIME Minutes	GROSS IRRIGATION APPLICATION Inches	NET IRRIGATION APPLICATION Inches	RUNOFF Inches	DEEP PERC. In.	IRRIGATION EFFICIENCY %
0.70	2.40	.003	3.00	500	33.5	12	27.9	25.79	5.23	20.48	2.92	9.30
0.70	2.40	.003	3.00	500	5.0	12	310.3	3.85	2.41	0.48	0.97	62.34
0.70	2.40	.003	3.00	500	33.5	24	27.9	51.59	8.91	42.61	6.58	4.65
0.70	2.40	.003	3.00	500	4.0	24	629.7	6.16	3.84	0.66	3.10	38.96

$Q_{max} = 33.5 \text{ gpm}$

$Q_{min} = 3 \text{ gpm}$

Field V - using corn

INTAKE FAMILY	DESIGN APPLIC. Inches	FURROW SLOPE Ft/Ft	FURROW SPACING Feet	FURROW LENGTH Feet	INFLOW RATE Gpm	APPROXIMATE INFLOW TIME Hours	ADVANCE TIME Minutes	GROSS IRRIGATION APPLICATION Inches	NET IRRIGATION APPLICATION Inches	RUNOFF Inches	DEEP PERC. In.	IRRIGATION EFFICIENCY %
0.70	1.80	.011	2.00	550	10.0	12	45.4	10.50	6.22	4.10	4.60	17.14
0.70	1.80	.011	2.00	550	5.5	12	88.3	5.77	5.28	0.13	3.84	31.17
0.70	1.80	.011	2.00	550	10.0	24	45.4	21.00	10.69	10.15	9.05	8.57
0.70	1.80	.011	2.00	550	4.5	24	122.6	9.45	8.82	0.20	7.45	19.05

$Q_{max} = 10 \text{ gpm}$

$Q_{min} = 3 \text{ gpm}$

Field W - using pasture

6/7/00

Qmin PER FURROW:

For both:

20.0 gpm

[illegible]

TOTAL AC	TOTAL %
1.9	100

CFS/AC FOR EACH CROP:

TOTAL CFS FOR FIELD :

FIELD ID NO:	Y
TOTAL ACRES:	9.1 AC
FIELD SLOPE:	1.7 %
FURROW LENGTH:	400 FT

6/7/00

Qmin PER FURROW:

10.0 gpm

5.9 gpm

[illegible]

TOTAL AC	TOTAL %
9.1	100

**CFS/AC FOR
EACH CROP:**

TOTAL CFS FOR FIELD :

INTAKE FAMILY	DESIGN APPLIC. Inches	FURROW SLOPE Ft/Ft	FURROW SPACING Feet	FURROW LENGTH Feet	INFLOW RATE Gpm	APPROXIMATE INFLOW TIME Hours	ADVANCE TIME Minutes	GROSS IRRIGATION APPLICATION Inches	Net IRRIGATION APPLICATION Inches	RUNOFF Inches	DEEP PERC. In.	IRRIGATION EFFICIENCY %
0.70	2.40	.005	3.00	600	20.0	12	42.4	12.83	4.31	8.41	2.03	18.70
0.70	2.40	.005	3.00	600	5.5	12	240.1	3.53	2.63	0.21	0.92	68.01
0.70	2.40	.005	3.00	600	20.0	24	42.4	25.67	7.40	18.17	5.10	9.35
0.70	2.40	.005	3.00	600	4.5	24	408.6	5.77	4.50	0.28	3.10	41.56

$Q_{max} = 200 \text{ gpm}$

$Q_{min} = 39 \text{ gpm}$

Field X - using corn

INTAKE FAMILY	DESIGN APPLIC. Inches	FURROW SLOPE Ft/Ft	FURROW SPACING Feet	FURROW LENGTH Feet	INFLOW RATE Gpm	APPROXIMATE INFLOW TIME Hours	ADVANCE TIME Minutes	GROSS IRRIGATION APPLICATION Inches	NET IRRIGATION APPLICATION Inches	RUNOFF Inches	DEEP PERC. In.	IRRIGATION EFFICIENCY %
0.70	2.85	.017	2.50	400	10.0	12	23.6	11.55	4.87	6.61	2.09	24.68
0.70	2.85	.017	2.50	400	4.0	12	48.1	4.62	4.04	0.44	1.33	61.69
0.70	2.85	.017	2.50	400	10.0	24	23.6	23.10	8.28	14.76	5.49	12.34
0.70	2.85	.017	2.50	400	3.0	24	71.5	6.93	6.58	0.17	3.91	41.13

$Q_{max} = 10 \text{ gpm}$

$Q_{min} = 3 \text{ gpm}$

Field Y - using alfalfa hay

6/7/00

Qmin PER FURROW:
For both: 3.0 gpm

[illegible]

TOTAL AC	TOTAL %
6.4	100

CFS/AC FOR EACH CROP:

TOTAL CFS FOR FIELD :

FIELD ID NO:	C1
TOTAL ACRES:	7.4 AC
FIELD SLOPE:	1.4 %
FURROW LENGTH:	800 FT

DATE OF ANALYSIS:

6/7/00

Qmax PER FURROW:
For corrugates:
For furrows:

Qmin PER FURROW:
For both: 3.0 gpm

[illegible]

TOTAL AC	TOTAL %
7.4	100

CFS/AC FOR EACH CROP:

TOTAL CFS FOR FIELD :

INTAKE FAMILY	DESIGN APPLIC. Inches	FURROW SLOPE Ft/Ft	FURROW SPACING Feet	FURROW LENGTH Feet	INFLOW RATE Gpm	APPROXIMATE INFLOW TIME Hours	ADVANCE TIME Minutes	GROSS IRRIGATION APPLICATION Inches	NET IRRIGATION APPLICATION Inches	RUNOFF Inches	DEEP PERC. In.	IRRIGATION EFFICIENCY %
0.70	1.71	.082	2.00	350	5.0	12	18.7	8.25	4.81	3.39	3.15	20.73
0.70	1.71	.082	2.00	350	3.0	12	24.1	4.95	4.49	0.39	2.85	34.55
0.70	1.71	.082	2.00	350	5.0	24	18.7	16.50	8.15	8.31	6.48	10.36
0.70	1.71	.082	2.00	350	3.0	24	24.1	9.90	7.63	2.21	5.98	17.27

$Q_{max} = 5 \text{ gpm}$
 $Q_{min} = 3 \text{ gpm}$

Field Z - using pasture

INTAKE FAMILY	DESIGN APPLIC. Inches	FURROW SLOPE Ft/Ft	FURROW SPACING Feet	FURROW LENGTH Feet	INFLOW RATE Gpm	APPROXIMATE INFLOW TIME Hours	ADVANCE TIME Minutes	GROSS IRRIGATION APPLICATION Inches	NET IRRIGATION APPLICATION Inches	RUNOFF Inches	DEEP PERC. In.	IRRIGATION EFFICIENCY %
0.70	3.00	.014	2.50	600	10.0	12	48.2	7.70	4.84	2.71	1.99	38.96
0.70	3.00	.014	2.50	600	6.0	12	81.4	4.62	4.23	0.13	1.49	64.94
0.70	3.00	.014	2.50	600	10.0	24	48.2	15.40	8.33	6.93	5.46	19.48
0.70	3.00	.014	2.50	600	5.0	24	105.8	7.70	7.10	0.31	4.39	38.96

$Q_{max} = 12 \text{ gpm}$

$Q_{min} = 3 \text{ gpm}$

Field C1 - using alfalfa hay

TOTAL CFS FOR FIELD :

INTAKE FAMILY	DESIGN APPLIC. Inches	FURROW SLOPE Ft/Ft	FURROW SPACING Feet	FURROW LENGTH Feet	INFLOW RATE Gpm	APPROXIMATE INFLOW TIME Hours	ADVANCE TIME Minutes	GROSS IRRIGATION APPLICATION Inches	IRRIGATION APPLICATION Inches	RUNOFF Inches	DEEP PERC. In.	IRRIGATION EFFICIENCY %
0.70	3.00	.005	2.50	450	10.0	12	44.2	10.27	5.42	4.68	2.58	29.22
0.70	3.00	.005	2.50	450	5.0	12	118.5	5.13	4.30	0.39	1.74	58.44
0.70	3.00	.005	2.50	450	10.0	24	44.2	20.53	9.31	11.08	6.45	14.61
0.70	3.00	.005	2.50	450	4.0	24	194.1	8.21	7.10	0.50	4.71	36.53

$Q_{max} = 10 \text{ gpm}$

$Q_{min} = 3 \text{ gpm}$

Field C2 - using alfalfa hay

Crop Distributions

Total acres = 304.4

First

Distribution: 50% alfalfa = 152.2 ac.

20% corn = 60.9 ac.

15% pasture = 45.65 ac.

15% grain = 45.65 ac

Based on appearance in photos, slopes, etc., Fields N, O, Z, EE, ^{4.0}_{3.9} ^{2.9}_{2.6} ^{6.4}_{5.9} ^{0.7}_{0.6} were probably only in pasture.

All soils but one have very similar soil characteristics, & that one soil is only found in two fields $\therefore$ Distribute crops between fields using crop distribution in Brockway's report & choose the worst soil within that field for all fields but the 2 with c&e. For distribution choose fields with wide variety of slopes & length within each crop type.

Pasture: Fields N, O, Z, EE, & W

 $\Sigma = 44.8$ ac.
^{4.0}_{3.9} ^{2.9}_{2.6} ^{6.4}_{5.9} ^{0.7}_{0.6}
Slopes $\rightarrow 0.7-8.2\%$ Length $\rightarrow 200-550$ ft

Corn: Fields G, H, I, V, X, GG, A

 $\Sigma = 61.3$ ac.
^{2.3}_{2.3} ^{2.3}_{2.3} ^{2.3}_{2.3} ^{6.3}_{6.3} ^{1.9}_{1.9} ^{2.6}_{2.6} ^{10.9}_{10.9}
Slopes $\rightarrow 0.3-3.8\%$ Length $\rightarrow 300-650$ ft

Grain: Fields B, K, L, S, BB, II

 $\Sigma = 45.4$ ac.
^{2.3}_{2.3} ^{6.9}_{6.9} ^{6.0}_{6.0} ^{3.2}_{3.2} ^{4.2}_{4.2} ^{2.6}_{2.6}
Slopes $\rightarrow 0.7-3.5\%$ Length $\rightarrow 300-700$ ftAlfalfa: Fields C, D, E, F, J, M, P, Q, R, T, U, $\Sigma = 152.8$ ac.Y, AA, CC, DD, FF, HH, JJ, KK. Slopes $\rightarrow 0.4-5.3\%$ Length $\rightarrow 200-800$ ft

• 2/2 •

New Distribution: 51% alfalfa = 155.2 ac.
 5% corn = 15.2 ac
 34% pasture = 103.5 ac
 10% grain = 30.4 ac.

Pasture: Fields N, O, Z, EE, W, GG, A, H, I $\Sigma = 102.9$ ac.

K, L
 6.9 6.0

Slopes $\rightarrow 0.7-8.2\%$ Length $\rightarrow 200-600'$

Corn: Fields G, V, X
 2.5 6.0 1.9

$\Sigma = 16.1$ ac.

Slopes $\rightarrow 0.3-3.4\%$ Length $\rightarrow 450-600'$

Grain: Fields B, S, BB
 2.3 3.2 4.8

$\Sigma = 29.9$ ac.

Slopes $\rightarrow 0.7-3.4\%$ Length $\rightarrow 250-900'$

Alfalfa: Fields C, D, E, F, J, M, P, Q, R, T, U, Y, $\Sigma = 155.4$ ac.

AA, CC, DD, FF, HH, II, JJ, KK

Slopes $\rightarrow 0.4-5.8\%$ Length $\rightarrow 200-800'$

80th Percentile values of monthly ET estimated for
the Hagerman Valley adjusted from the Bliss Station
(mm/day)

	MO	ETR	ALFH.	BEANS	F.CRN	SILGE	S.CRN	PEAS	POTAT	SBEET	SGRAN	WGRA	PAST.	VEGES
AVE ET	4	5.28	3.30					1.60	1.58	1.58	1.65	4.82	3.27	
TMP ADJ	4	5.68	3.55					1.72	1.70	1.70	1.77	5.18	3.52	
ALT ADJ	4	5.75	3.59					1.74	1.72	1.72	1.80	5.25	3.56	
STDD ET	4	0.47	0.29					0.14	0.14	0.14	0.15	0.43	0.29	
80PCT ET	4	6.14	3.84					1.86	1.84	1.84	1.92	5.61	3.80	
AVE ET	5	6.79	6.29	2.04	2.04	2.04	2.04	3.85	2.19	2.04	5.11	6.79	5.23	2.07
TMP ADJ	5	7.18	6.65	2.16	2.16	2.16	2.16	4.07	2.31	2.16	5.40	7.18	5.53	2.19
ALT ADJ	5	7.27	6.73	2.18	2.18	2.18	2.18	4.12	2.34	2.18	5.47	7.27	5.60	2.21
STDD ET	5	0.49	0.46	0.15	0.15	0.15	0.15	0.28	0.16	0.15	0.37	0.49	0.38	0.15
80PCT ET	5	7.68	7.12	2.31	2.31	2.31	2.31	4.36	2.48	2.31	5.78	7.68	5.92	2.34
AVE ET	6	8.41	7.32	3.26	3.66	3.66	3.53	6.82	5.77	3.91	8.39	8.41	6.47	4.40
TMP ADJ	6	8.82	7.68	3.42	3.84	3.84	3.70	7.15	6.05	4.10	8.80	8.82	6.79	4.62
ALT ADJ	6	8.93	7.77	3.46	3.89	3.89	3.75	7.24	6.13	4.15	8.91	8.93	6.87	4.67
STDD ET	6	0.47	0.41	0.18	0.21	0.21	0.20	0.38	0.32	0.22	0.47	0.47	0.36	0.25
80PCT ET	6	9.33	8.12	3.61	4.06	4.06	3.92	7.56	6.40	4.34	9.31	9.33	7.17	4.88
AVE ET	7	8.54	6.94	7.37	7.68	7.68	7.47	2.99	7.17	8.14	7.05	6.80	6.57	6.57
TMP ADJ	7	8.89	7.22	7.67	7.99	7.99	7.78	3.11	7.46	8.47	7.34	7.08	6.84	6.84
ALT ADJ	7	9.00	7.31	7.77	8.09	8.09	7.87	3.15	7.56	8.58	7.43	7.17	6.92	6.92
STDD ET	7	0.26	0.21	0.23	0.24	0.24	0.23	0.09	0.22	0.25	0.22	0.21	0.20	0.20
80PCT ET	7	9.22	7.49	7.96	8.30	8.30	8.07	3.23	7.74	8.79	7.61	7.34	7.09	7.09
AVE ET	8	7.18	5.41	4.97	6.63	6.63	6.38		5.57	7.06	1.47	1.32	5.53	5.72
TMP ADJ	8	7.50	5.65	5.19	6.92	6.92	6.66		5.82	7.37	1.53	1.38	5.77	5.97
ALT ADJ	8	7.59	5.72	5.25	7.01	7.01	6.74		5.89	7.46	1.55	1.40	5.84	6.05
STDD ET	8	0.33	0.25	0.23	0.30	0.30	0.29		0.26	0.32	0.07	0.06	0.25	0.26
80PCT ET	8	7.87	5.93	5.45	7.26	7.26	6.99		6.11	7.73	1.61	1.45	6.05	6.26
AVE ET	9	5.60	3.67	0.77	4.19	4.19			3.29	4.86			4.32	3.83
TMP ADJ	9	5.90	3.87	0.81	4.42	4.42			3.47	5.12			4.55	4.04
ALT ADJ	9	5.97	3.92	0.82	4.47	4.47			3.51	5.19			4.61	4.09
STDD ET	9	0.41	0.27	0.06	0.31	0.31			0.24	0.36			0.32	0.28
80PCT ET	9	6.32	4.14	0.87	4.73	4.73			3.71	5.49			4.88	4.32
AVE ET	10	3.73	1.26		1.04					2.48			2.88	
TMP ADJ	10	4.02	1.36		1.12					2.67			3.10	
ALT ADJ	10	4.07	1.37		1.13					2.70			3.14	
STDD ET	10	0.35	0.12		0.10					0.24			0.27	
80PCT ET	10	4.36	1.47		1.22					2.91			3.37	

ET and standard deviation data (AVE ET and STDD ET) for Bliss weather station taken from Appendix E (unpublished) of Brockway, C.E., and R.G. Allen, 1983, Estimating Consumptive Irrigation Requirements for Crops in Idaho, Idaho Water and Energy Resources Research Institute.

Temperature adjustment (TMP ADJ) based on temperature differences between Bliss and Hagerman and temperature sensitivity of ET estimates given in Brockway, C.E., G.S. Johnson, J.L. Wright, and A.L. Coiner, 1985, Remote Sensing for Irrigated Crop Water Use - Phase 1, Water Resources Research Institute, pp. 101-107.

Altitude adjustment (ALT ADJ) based on Doorenbos, J., and W.O. Pruitt, 1977, Crop Water Requirements, Food and Agriculture Organization of the United Nations, p. 59.

80th percentile ET values (80PCT ET) calculated based on Walpole, R.E., and R.H. Meyers, 1985, third edition, PROBABILITY AND STATISTICS FOR ENGINEERS AND SCIENTISTS, New York: Macmillan Publishing Company, pp. 132-144 and 574.

SOIL CHARACTERISTICS

initials: mp

date: 12/20/99

Soil Type = CHB

Source of Soils Data = NRCS - Gooding

soil depth (inches)		AWC (in/in)		PH		organic (%)		soil depth (ft)	AWC (inches)	intake family	
lower	upper	lower	upper	lower	upper	lower	upper			flood	furrow
0	7	0.14	0.16	6.6	7.3	20	30	1	1.73	4	0.85
7	60	0.1	0.17					2	3.35		
								3	4.97		
								4	6.58	alternate	
								5	8.20	method	
										#N/A	#N/A

Management Allowed Deficit (MAD)

crop	root depth (ft)	stress point	MAD (inches)
alfalfa (hay or seed)	5	0.5	4.10
corn (field or silage)	4	0.5	3.29
grain (winter or spring)	4	0.5	3.29
pasture (or grass hay)	3	0.5	2.48
other (enter below)			
turf grass	2	0.5	1.67
melons	5	0.5	4.10
potatoes	3	0.35	1.74
beans	2	0.4	1.34

SOIL CHARACTERISTICS

initials: mp

date: 12/20/99

Soil Type = FAB

Source of Soils Data = NRCS - Gooding

soil depth (inches)		AWC (in/in)		PH		organic (%)		soil depth (ft)	AWC (inches)	intake family	
lower	upper	lower	upper	lower	upper	lower	upper			flood	furrow
0	7	0.09	0.1	7.9	8.4	0.6	0.9	1	1.14	3	0.7
7	61	0.09	0.1					2	2.28		
								3	3.42		
								4	4.56	alternate	
								5	5.70	method	
										3	0.7

Management Allowed Deficit (MAD)

crop	root depth (ft)	stress point	MAD (inches)
alfalfa (hay or seed)	5	0.5	2.85
corn (field or silage)	4	0.5	2.28
grain (winter or spring)	4	0.5	2.28
pasture (or grass hay)	3	0.5	1.71
other (enter below)			
turf grass	2	0.5	1.14
melons	5	0.5	2.85
potatoes	3	0.35	1.20
beans	2	0.4	0.91

SOIL CHARACTERISTICS

initials: mp

date: 11/17/99

Soil Type = FKE

Source of Soils Data = NRCS - Gooding

soil depth (inches)		AWC (in/in)		PH		organic (%)		soil depth (ft)	AWC (inches)	intake family	
lower	upper	lower	upper	lower	upper	lower	upper			flood	furrow
0	7	0.09	0.1	7.9	8.4	0.6	0.9	1	1.14	3	0.7
7	61	0.09	0.1					2	2.28		
								3	3.42		
								4	4.56	alternate	
								5	5.70	method	
										3	0.7

Management Allowed Deficit (MAD)

crop	root depth (ft)	stress point	MAD (inches)
alfalfa (hay or seed)	5	0.5	2.85
corn (field or silage)	4	0.5	2.28
grain (winter or spring)	4	0.5	2.28
pasture (or grass hay)	3	0.5	1.71
other (enter below)			
turf grass	2	0.5	1.14

SOIL CHARACTERISTICS

initials: mp

date: 11/17/99

Soil Type = KOB/KOC

Source of Soils Data = NRCS - Gooding

soil depth (inches)		AWC (in/in)		PH		organic (%)		soil depth (ft)	AWC (inches)	intake family	
lower	upper	lower	upper	lower	upper	lower	upper			flood	furrow
0	9	0.12	0.14	7.4	8.4	1	2	1	1.59	2	0.55
9	21	0.13	0.15					2	3.08		
21	60	0.03	0.12					3	3.98		
								4	4.88	alternate	
								5	5.78	method	
										2	0.55

Management Allowed Deficit (MAD)

crop	root depth (ft)	stress point	MAD (inches)
alfalfa (hay or seed)	5	0.5	2.89
corn (field or silage)	4	0.5	2.44
grain (winter or spring)	4	0.5	2.44
pasture (or grass hay)	3	0.5	1.99
other (enter below)			
turf grass	2	0.5	1.54
onions	1	0.35	0.56
tomatoes	5	0.5	2.89
beans	2	0.4	1.23

SOIL CHARACTERISTICS

initials: mp

date: 11/17/99

Soil Type = QUB

Source of Soils Data = NRCS - Gooding

soil depth (inches)		AWC (in/in)		PH		organic (%)		soil depth (ft)	AWC (inches)	intake family	
lower	upper	lower	upper	lower	upper	lower	upper			flood	furrow
0	2	0.08	0.11	6.1	8.4	0.5	1	1	1.19	3	0.7
2	61	0.08	0.12					2	2.39		
								3	3.59		
								4	4.79	alternate	
								5	5.99	method	
										#N/A	#N/A

Management Allowed Deficit (MAD)

crop	root depth (ft)	stress point	MAD (inches)
alfalfa (hay or seed)	5	0.5	3.00
corn (field or silage)	4	0.5	2.40
grain (winter or spring)	4	0.5	2.40
pasture (or grass hay)	3	0.5	1.80
other (enter below)			
turf grass	2	0.5	1.20
potatoes	3	0.35	1.26
beans	2	0.4	0.96

PATRICK D. BROWN, P.C.
LAW OFFICES

October 11, 1999

RECEIVED

OCT 13 1999

Department of Water Resources
Southern Region

Mr. David Tuthill
Idaho Department of Water Resources
1341 Fillmore Street, suite 200
Twin Falls, ID 83301-3380

RE: SUBCASES NO. 36-00068 and 36-00069, JOHN W. JONES

Dear Mr. Tuthill:

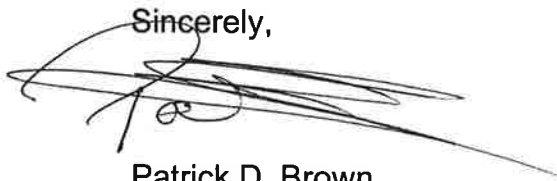
According to testimony you gave at the August 11, 1999 trial in subcase No. 36-00039D it is, and has been since 1998, IDWR's statewide policy to recommend quantities based on gravity irrigation, not on sprinkler irrigation, if the right was established by gravity irrigation.

My understanding is the recommendation in this subcase was based on a sprinkler analysis. I ask that you amend the Director's Report to reflect the quantity of water IDWR believes reasonable and necessary for flood irrigation, as of the time the right was established.

Please let me know immediately if you will amend the Director's Report accordingly or if you need any information from my client in order to do so.

Also, if for some reason you cannot or will not amend the Director's Report, please let me know, including any reasons. I look forward to hearing from you.

Sincerely,



Patrick D. Brown
Attorney at Law

pdb/tf

Bill Jones

36-00068

36-00069

Expert Witness Report

SRBA Case No 39576

Subcases 36-00068, 37-00069

Bill Jones

March 26, 1999

C.E. Brockway P.E. PhD.

Brockway Engineering P.L.L.C.

The property owned by Bill Jones lies in the E1/2 Sec 25 T 7S R13E and the W1/2 Sec 30 T7S R 14E. It consists of parcels irrigated from the Weatherby Springs and Houghland tunnel. Examination of aerial photos including 1969 SCS Conservation Map Plan and 1987 aerial photos from the FSA, USDA NRCS soils maps and farm maps the minimum irrigated area prior to installation of sprinklers includes 326.5 acres.

Water supply from the springs was conveyed by contour earthen ditches. The ditch running north from Weatherby springs furnished water to a siphon which conveyed water across Billingsley Creek to the high point of the farm on the west side of the Creek.

From there water was conveyed in earthen ditches and a pipeline throughout the farm.

The 1969 map attached shows the ditch and field system in place at that time.

Soil permeability and infiltration rates are high, up to 20 in./hr. USDA NRCS soil classifications include Quincy fine sand (QUB), Kecko fine sandy loam (KOB), Fathom-Kudlac-Anchustequi complex (FKE), and Fathom loamy fine sand (FAB) soils.

Surface irrigation consisted of furrow application from ditches throughout the area. Field slopes and run lengths are highly variable.

Based on interviews with and data supplied by Mr. Jones, irrigation has historically utilized primarily 12 hour sets. Historically, control of furrow flows was accomplished with cutouts from earthen ditches and later from siphon tubes.

The duty of water on these lands is in excess of 0.02 cfs/acre (1 miner's inch/acre). In order to estimate the irrigation requirement for the farm, an analysis using procedures developed by Hubble Engineering for the Idaho Department of Water Resources was utilized. The procedures were incorporated in a computer program developed by C.W.

Robison P.E. which has been reviewed by IDWR and utilized previously in numerous "excess flow analyses". Input data sets and computer output for each analysis are included in Appendix A to this report. NRCS soils data are also included in Appendix A. Farm delivery requirement(duty of water) was calculated using set times and furrow flows as reported or appropriate for the run lengths (field length) and soil types. Project irrigation diversion requirements were calculated for the analysis period utilizing the Bliss weather data set modified for Hagerman and utilizing an 80% probability level of crop consumptive use. Calculations were also performed for the peak period consumptive use.

Estimated irrigation requirements using the Hubble approach or any other method are sensitive to irrigation management procedures. Irrigation efficiency and water requirements are very sensitive to the length of time water is left on the field (set time) and the discharge that is set in each furrow, either from siphon tubes or cutouts. Furrow infiltration rates are highly variable due to soil property variability, slope inconsistencies, antecedent moisture conditions, and crop litter in the furrow. Irrigator's judgement as to how long to leave water on the field or how 'strong' to set the tubes varies from person to person. Estimates of irrigation requirements are therefore best utilized to provide a guideline as to the range of expected requirements rather than to precisely determine what flows early irrigators should have used.

For the area irrigated (326.5 acres) the estimated base peak project diversion requirement is 2.31 inches/acre (15.11 cfs) and the analysis period (maximum monthly with 80% probability) project irrigation requirement is 2.01 inches/acre (13.13 cfs). This assumes approximately 50% alfalfa, 20% field corn, 15% pasture on steeper slopes, and 15% grain on the 36 fields.

The project irrigation requirement includes ditch losses from the springs to the property and the main ditch across the property which conveys water to other users west of the farm. It does not include on-farm ditches. Seepage losses were computed in the main ditches using the Worstell method with a coefficient of 1.5.

A sensitivity analysis was performed to show the effect on calculated irrigation water requirements if the irrigator chooses different set times or furrow flows. That analysis is shown in Appendix A. The furrow flow rates were varied from 80% to 160% of the base

furrow flow and the set time was calculated for 12, 18, and 2 hours. The table in Appendix A shows that the required peak project diversion rate from all sources could vary from 12.69 to 47.55 cfs or 1.94 to 7.28 miner' inches per acre.

The diversion from Weatherby spring to the Jones irrigated area earthen ditch through basalt rock talus slopes which flows north to the siphon inlet. The main ditch across the property was built in native sandy loam soil and was approximately 8 feet wide. Ditch losses computed by the Worstell method for the supply ditch and the main ditches were 0.36 cfs which is included in the estimated project irrigation requirement.

The irrigation system was converted from gravity surface irrigation to sprinkler irrigation after 1969. The SCS farm aerial photo of 1987 shows primarily sprinkler irrigation. Acres determined by the Idaho Department of Water Resources from GIS maps show 414 sprinkler irrigated acres.

Based on the irrigation requirements analysis, the historic duty of water under 37-00068 and 37-00069 including transmission loss in the supply ditches, is 2.31 in/acre(15.11 cfs); however, depending on irrigation management levels, crop selection, or local weather conditions, the irrigation requirement could as much as 7.28 in/acre. The SRBA claim of 12.5 cfs under 36-00068 and 1.0 cfs under 36-00069 for a total of 13.5 cfs is well within the expected range of irrigation diversion requirements.

APPENDIX A

Irrigation Water Requirements Analysis

Version 1.25

1999-03-26 @ 14:03:47

Bill Jones Excess Flow Analysis

Brockway Engineering and C. W. Robison

Ditch losses in Ditch 1, 2, 4, 9, and 10 only

PROJECT IRRIGATION DIVERSION REQUIREMENTS

SUMMARY

Total Irrigated Area: 326.50 acres

Based on analysis period irrigation requirement

Max Project Diversion: 13.13 cfs(2.011 mi/ac)

Based on analysis period peak consumptive use

Peak Project Diversion: 15.11 cfs(2.314 mi/ac)

Bill Jones Excess Flow Analysis
 Brockway Engineering and C. W. Robison
 Ditch losses in Ditch 1, 2, 4, 9, and 10 only

****SENSITIVITY ANALYSIS****

Run Date: 03-26-1999
 Base file: jones1.dat

PEAK PROJECT DIVERSION IN CFS
 Furrow flow in FRACTION OF BASE. Set time in HOURS.

		Set time	
F Flow	12	18	24
0.80	12.69	18.86	25.02
1.00	15.11	22.48	29.86
1.20	18.06	26.91	35.76
1.40	21.01	31.33	41.65
1.60	23.96	35.76	47.55

PEAK PROJECT DIVERSION IN MINER'S INCHES PER ACRE
 Furrow flow in FRACTION OF BASE. Set time in HOURS.

		Set time	
F Flow	12	18	24
0.80	1.94	2.89	3.83
1.00	2.31	3.44	4.57
1.20	2.77	4.12	5.48
1.40	3.22	4.80	6.38
1.60	3.67	5.48	7.28

Bill Jones Excess Flow Analysis
 Brockway Engineering and C. W. Robison
 Ditch losses in Ditch 1, 2, 4, 9, and 10 only
 hagerman.cir

	15	30	4	4	0	
0.8						
Ditch 10	2.	0.270	2.	2.	3.	1.50
Ditch 9	11.	0.078	2.	2.	3.	1.50
Ditch 13	4.	0.120	2.	2.	0.	0.00
Ditch 12	11.	0.380	0.	0.	0.	0.00
Ditch 11A	6.	0.130	2.	2.	0.	0.00
Ditch 11	11.	0.190	2.	2.	0.	0.00
Ditch 8	8.	0.190	8.	12.	0.	0.00
Ditch 7	9.	0.100	8.	12.	0.	0.00
Ditch 6	10.	0.085	8.	12.	0.	0.00
Ditch 5	11.	0.250	8.	12.	0.	0.00
Ditch 4	12.	0.130	8.	12.	3.	1.50
Ditch 3	13.	0.250	0.	0.	0.	0.00
Ditch 2	15.	0.200	8.	12.	3.	1.50
Ditch 1	15.	0.140	2.	2.	3.	1.50
Effective Div.	0.	0.000	0.	0	0.	0.00
FURROW FLD.A	48.	12.	3.0	370.	.007	
FURROW FLD.B	48.	12.	8.0	825.	.007	
FURROW FLD.C	48.	12.	4.0	410.	.007	
FURROW FLD.DE	48.	12.	6.0	410.	.004	
FURROW FLD.F	48.	12.	7.0	490.	.007	
FURROW FLD.GH	48.	12.	7.0	490.	.030	
FURROW FLD.I	48.	12.	6.0	580.	.018	
FURROW FLD.J	48.	12.	3.0	290.	.018	
FURROW FLD.KL	48.	12.	5.0	510.	.011	
FURROW FLD.M	48.	12.	3.0	200.	.030	
FURROW FLD.N	48.	12.	5.0	200.	.050	
FURROW FLD.O	48.	12.	10.0	990.	.012	
FURROW FLD.PU	48.	12.	5.0	530.	.008	
FURROW FLD.Q	48.	12.	4.0	370.	.043	
FURROW FLD.R	48.	12.	5.0	540.	.033	
FURROW FLD.S	48.	12.	4.0	370.	.025	
FURROW FLD.T	48.	12.	3.0	290.	.038	
FURROW FLD.V	48.	12.	5.0	490.	.010	
FURROW FLD.W	48.	12.	3.0	200.	.010	
FURROW FLD.X	48.	12.	6.0	580.	.009	
FURROW FLD.Y	48.	12.	4.0	410.	.022	
FURROW FLD.Z	48.	12.	6.0	370.	.100	
FURROW FLD.AA	48.	12.	7.0	540.	.017	
FURROW FLD.BB	48.	12.	7.0	200.	.043	
FURROW FLD.C&D	48.	12.	15.0	1200.	.060	
FURROW FLD.EE	48.	12.	5.0	120.	.140	
FURROW FLD.FF	48.	12.	4.0	410.	.015	
FURROW FLD.GG	48.	12.	7.0	660.	.025	
FURROW FLD.HIJ	48.	12.	3.0	160.	.015	
FURROW FLD.KK	48.	12.	3.0	330.	.015	
QUB	2.0	0.94	1.84	2.74	3.64	4.54
KOB	2.0	1.56	3.05	4.31	5.73	7.47
FKE	2.0	1.41	2.79	4.17	5.55	6.93
FAB	2.0	1.14	2.28	3.42	4.56	5.70
Alfalfa Hay	50.0	2.5	.10			
Pasture	50.0	2.5	.10			
Spring Grain	50.0	2.5	.10			
Field Corn	50.0	2.5	.10			
1						
Alfalfa Hay	5.4	10.6	5.5	0.0	0.0	0.0
	3.9	2.4	1.9	1.3	3.2	6.3
	1.4	3.9	2.6	5.0		
					4.9	2.0
					6.4	2.4
					0.0	0.0
					15.6	8.7
					0.0	0.0

Pasture	2.1	4.2	2.2	0.0	0.0	0.0	2.0	0.8	2.6	0.9	0.0	6.2	3.5
	1.6	0.9	0.8	0.5	1.3	2.5	0.4	1.8	0.0	0.0	0.0	0.0	0.0
	0.5	1.6	1.0	2.0									
Spring Grain	1.6	3.2	1.6	0.0	0.0	0.0	1.5	0.6	1.9	0.7	0.0	4.7	2.6
	1.2	0.7	0.6	0.4	1.0	1.9	0.3	1.4	0.0	0.0	0.0	0.0	0.0
	0.4	1.2	0.8	1.5									
Field Corn	1.6	3.2	1.6	0.0	0.0	0.0	1.5	0.6	1.9	0.7	0.0	4.7	2.6
	1.2	0.7	0.6	0.4	1.0	1.9	0.3	1.4	0.0	0.0	0.0	0.0	0.0
	0.4	1.2	0.8	1.5									
2													
Alfalfa Hay	0.0	0.0	0.0	6.5	1.7	7.8	4.9	0.0	0.0	0.0	2.1	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0									
Pasture	0.0	0.0	0.0	2.6	0.7	3.1	2.0	0.0	0.0	0.0	0.8	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0									
Spring Grain	0.0	0.0	0.0	1.9	0.5	2.3	1.5	0.0	0.0	0.0	0.6	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0									
Field Corn	0.0	0.0	0.0	1.9	0.5	2.3	1.5	0.0	0.0	0.0	0.6	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0									
3													
Alfalfa Hay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.2	9.5	2.4	6.4	0.5
	0.0	0.0	0.0	0.0									
Pasture	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	3.8	1.0	2.6	0.2
	0.0	0.0	0.0	0.0									
Spring Grain	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	2.9	0.7	1.9	0.2
	0.0	0.0	0.0	0.0									
Field Corn	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	2.9	0.7	1.9	0.2
	0.0	0.0	0.0	0.0									
4													
Alfalfa Hay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19.3	0.0
	0.0	0.0	0.0	0.0									
Pasture	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.7	0.0
	0.0	0.0	0.0	0.0									
Spring Grain	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.8	0.0
	0.0	0.0	0.0	0.0									
Field Corn	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.8	0.0
	0.0	0.0	0.0	0.0									
Ditch 10	.148	.129	0.0	0.0									
Ditch 9	.195	0.0	0.0	0.0									
Ditch 13	.072	0.0	0.0	0.0									
Ditch 12	.102	0.0	0.0	0.0									
Ditch 11A	0.0	0.0	.542	0.0									
Ditch 11	0.0	0.0	.144	0.0									
Ditch 8	0.0	.636	0.0	0.0									
Ditch 7	.020	.235	0.0	0.0									
Ditch 6	.052	0.0	0.0	0.0									
Ditch 5	.151	0.0	0.0	0.0									
Ditch 4	.244	0.0	0.0	0.0									
Ditch 3	.018	0.0	0.0	0.0									
Ditch 2	0.0	0.0	0.0	0.0									
Ditch 1	0.0	0.0	.314	1.0									
Effective Div.	0.0	0.0	0.0	0.0									

Irrigation Water Requirements Analysis
Version 1.25
1999-03-26 @ 14:03:47

Bill Jones Excess Flow Analysis
Brockway Engineering and C. W. Robison
Ditch losses in Ditch 1, 2, 4, 9, and 10 only

Canal/Lateral Discharge Summary
(cubic feet per second)

Canal/Lateral	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
Ditch 10	**** Seepage Rate: .20 cfs/mi or .05 cfs ****							
Based on analysis period irrigation requirement								
DS Delivery	.0	.0	.0	.0	.0	.0	.0	.0
On-Farm Div.	.0	.7	1.3	1.4	1.3	1.0	.7	.3
Seepage Loss	.0	.1	.1	.1	.1	.1	.1	.1
US Div. Req.	.0	.8	1.3	1.4	1.4	1.0	.7	.4
Based on analysis period peak consumptive use								
DS Delivery	.0	.0	.0	.0	.0	.0	.0	.0
On-Farm Div.	.0	.9	1.5	1.6	1.5	1.1	.8	.4
Seepage Loss	.0	.1	.1	.1	.1	.1	.1	.1
US Div. Req.	.0	.9	1.6	1.6	1.6	1.1	.8	.4
Ditch 9	**** Seepage Rate: .20 cfs/mi or .02 cfs ****							
Based on analysis period irrigation requirement								
DS Delivery	.0	.8	1.3	1.4	1.4	1.0	.7	.4
On-Farm Div.	.0	.8	1.4	1.5	1.5	1.1	.7	.3
Seepage Loss	.0	.0	.0	.0	.0	.0	.0	.0
US Div. Req.	.0	1.6	2.8	3.0	2.9	2.2	1.5	.7
Based on analysis period peak consumptive use								
DS Delivery	.0	.9	1.6	1.6	1.6	1.1	.8	.4
On-Farm Div.	.0	1.0	1.7	1.8	1.7	1.2	.9	.4
Seepage Loss	.0	.0	.0	.0	.0	.0	.0	.0
US Div. Req.	.0	2.0	3.4	3.4	3.3	2.4	1.7	.8
Ditch 13	**** Seepage Rate: .00 cfs/mi or .00 cfs ****							
Based on analysis period irrigation requirement								
DS Delivery	.0	.0	.0	.0	.0	.0	.0	.0
On-Farm Div.	.0	.3	.5	.6	.6	.4	.3	.1
Seepage Loss	.0	.0	.0	.0	.0	.0	.0	.0
US Div. Req.	.0	.3	.5	.6	.6	.4	.3	.1

Based on analysis period peak consumptive use

DS Delivery	.0	.0	.0	.0	.0	.0	.0	.0
On-Farm Div.	.0	.4	.6	.7	.6	.5	.3	.2
Seepage Loss	.0	.0	.0	.0	.0	.0	.0	.0
US Div. Req.	.0	.4	.6	.7	.6	.5	.3	.2

Ditch 12 **** Seepage Rate: .00 cfs/mi or .00 cfs ****

Based on analysis period irrigation requirement

DS Delivery	.0	.3	.5	.6	.6	.4	.3	.1
On-Farm Div.	.0	.4	.8	.8	.8	.6	.4	.2
Seepage Loss	.0	.0	.0	.0	.0	.0	.0	.0
US Div. Req.	.0	.7	1.3	1.4	1.3	1.0	.7	.3

Based on analysis period peak consumptive use

DS Delivery	.0	.4	.6	.7	.6	.5	.3	.2
On-Farm Div.	.0	.5	.9	.9	.9	.6	.4	.2
Seepage Loss	.0	.0	.0	.0	.0	.0	.0	.0
US Div. Req.	.0	.9	1.6	1.6	1.5	1.1	.8	.4

Ditch 11A **** Seepage Rate: .00 cfs/mi or .00 cfs ****

Based on analysis period irrigation requirement

DS Delivery	.0	.0	.0	.0	.0	.0	.0	.0
On-Farm Div.	.0	.5	.9	1.0	1.0	.7	.5	.2
Seepage Loss	.0	.0	.0	.0	.0	.0	.0	.0
US Div. Req.	.0	.5	.9	1.0	1.0	.7	.5	.2

Based on analysis period peak consumptive use

DS Delivery	.0	.0	.0	.0	.0	.0	.0	.0
On-Farm Div.	.0	.6	1.1	1.1	1.1	.8	.5	.3
Seepage Loss	.0	.0	.0	.0	.0	.0	.0	.0
US Div. Req.	.0	.6	1.1	1.1	1.1	.8	.5	.3

Ditch 11 **** Seepage Rate: .00 cfs/mi or .00 cfs ****

Based on analysis period irrigation requirement

DS Delivery	.0	.5	.9	1.0	1.0	.7	.5	.2
On-Farm Div.	.0	.1	.2	.3	.3	.2	.1	.1
Seepage Loss	.0	.0	.0	.0	.0	.0	.0	.0
US Div. Req.	.0	.7	1.2	1.2	1.2	.9	.6	.3

Based on analysis period peak consumptive use

DS Delivery	.0	.6	1.1	1.1	1.1	.8	.5	.3
On-Farm Div.	.0	.2	.3	.3	.3	.2	.1	.1
Seepage Loss	.0	.0	.0	.0	.0	.0	.0	.0
US Div. Req.	.0	.8	1.4	1.4	1.3	1.0	.7	.3

Ditch 8 **** Seepage Rate: .00 cfs/mi or .00 cfs ****

Based on analysis period irrigation requirement

DS Delivery	.0	.0	.0	.0	.0	.0	.0	.0
On-Farm Div.	.0	.5	.9	1.0	1.0	.7	.5	.2
Seepage Loss	.0	.0	.0	.0	.0	.0	.0	.0
US Div. Req.	.0	.5	.9	1.0	1.0	.7	.5	.2

Based on analysis period peak consumptive use

DS Delivery	.0	.0	.0	.0	.0	.0	.0	.0
On-Farm Div.	.0	.6	1.1	1.1	1.1	.8	.5	.3
Seepage Loss	.0	.0	.0	.0	.0	.0	.0	.0
US Div. Req.	.0	.6	1.1	1.1	1.1	.8	.5	.3

Ditch 7 **** Seepage Rate: .00 cfs/mi or .00 cfs ****

Based on analysis period irrigation requirement

DS Delivery	.0	.5	.9	1.0	1.0	.7	.5	.2
On-Farm Div.	.0	.3	.5	.5	.5	.4	.3	.1
Seepage Loss	.0	.0	.0	.0	.0	.0	.0	.0
US Div. Req.	.0	.8	1.4	1.5	1.5	1.1	.7	.3

Based on analysis period peak consumptive use

DS Delivery	.0	.6	1.1	1.1	1.1	.8	.5	.3
On-Farm Div.	.0	.3	.6	.6	.6	.4	.3	.1
Seepage Loss	.0	.0	.0	.0	.0	.0	.0	.0
US Div. Req.	.0	1.0	1.7	1.7	1.6	1.2	.8	.4

Ditch 6 **** Seepage Rate: .00 cfs/mi or .00 cfs ****

Based on analysis period irrigation requirement

DS Delivery	.0	.8	1.4	1.5	1.5	1.1	.7	.3
On-Farm Div.	.0	.2	.4	.4	.4	.3	.2	.1
Seepage Loss	.0	.0	.0	.0	.0	.0	.0	.0
US Div. Req.	.0	1.0	1.8	1.9	1.9	1.4	.9	.4

Based on analysis period peak consumptive use

DS Delivery	.0	1.0	1.7	1.7	1.6	1.2	.8	.4
On-Farm Div.	.0	.3	.5	.5	.5	.3	.2	.1
Seepage Loss	.0	.0	.0	.0	.0	.0	.0	.0
US Div. Req.	.0	1.2	2.1	2.2	2.1	1.5	1.0	.5

Ditch 5 **** Seepage Rate: .00 cfs/mi or .00 cfs ****

Based on analysis period irrigation requirement

DS Delivery	.0	1.0	1.8	1.9	1.9	1.4	.9	.4
On-Farm Div.	.0	.6	1.1	1.2	1.2	.9	.6	.3
Seepage Loss	.0	.0	.0	.0	.0	.0	.0	.0
US Div. Req.	.0	1.6	2.9	3.1	3.0	2.2	1.5	.7

Based on analysis period peak consumptive use

DS Delivery	.0	1.2	2.1	2.2	2.1	1.5	1.0	.5
On-Farm Div.	.0	.8	1.4	1.4	1.3	1.0	.7	.3
Seepage Loss	.0	.0	.0	.0	.0	.0	.0	.0
US Div. Req.	.0	2.0	3.5	3.6	3.4	2.5	1.7	.8

Ditch 4 **** Seepage Rate: .80 cfs/mi or .10 cfs ****

Based on analysis period irrigation requirement

DS Delivery	.0	4.6	8.1	8.7	8.5	6.3	4.3	2.0
On-Farm Div.	.0	1.0	1.8	1.9	1.9	1.4	.9	.4
Seepage Loss	.0	.1	.1	.1	.1	.1	.1	.1
US Div. Req.	.0	5.8	10.0	10.8	10.4	7.8	5.3	2.5

Based on analysis period peak consumptive use

DS Delivery	.0	5.7	9.8	10.1	9.5	6.9	4.8	2.3
On-Farm Div.	.0	1.3	2.2	2.2	2.1	1.5	1.1	.5
Seepage Loss	.0	.1	.1	.1	.1	.1	.1	.1
US Div. Req.	.0	7.0	12.1	12.4	11.7	8.5	6.0	3.0

Ditch 3 **** Seepage Rate: .00 cfs/mi or .00 cfs ****

Based on analysis period irrigation requirement

DS Delivery	.0	5.8	10.0	10.8	10.4	7.8	5.3	2.5
On-Farm Div.	.0	.1	.1	.1	.1	.1	.1	.0
Seepage Loss	.0	.0	.0	.0	.0	.0	.0	.0
US Div. Req.	.0	5.8	10.1	10.9	10.6	7.9	5.4	2.5

Based on analysis period peak consumptive use

DS Delivery	.0	7.0	12.1	12.4	11.7	8.5	6.0	3.0
On-Farm Div.	.0	.1	.2	.2	.2	.1	.1	.0
Seepage Loss	.0	.0	.0	.0	.0	.0	.0	.0
US Div. Req.	.0	7.1	12.2	12.6	11.9	8.7	6.1	3.0

Ditch 2 **** Seepage Rate: .80 cfs/mi or .16 cfs ****

Based on analysis period irrigation requirement

DS Delivery	.0	5.8	10.1	10.9	10.6	7.9	5.4	2.5
On-Farm Div.	.0	.0	.0	.0	.0	.0	.0	.0
Seepage Loss	.0	.2	.2	.2	.2	.2	.2	.2
US Div. Req.	.0	6.0	10.3	11.1	10.7	8.0	5.5	2.7

Based on analysis period peak consumptive use

DS Delivery	.0	7.1	12.2	12.6	11.9	8.7	6.1	3.0
On-Farm Div.	.0	.0	.0	.0	.0	.0	.0	.0
Seepage Loss	.0	.2	.2	.2	.2	.2	.2	.2
US Div. Req.	.0	7.3	12.4	12.7	12.0	8.8	6.2	3.1

Ditch 1 **** Seepage Rate: .20 cfs/mi or .03 cfs ****

Based on analysis period irrigation requirement

DS Delivery	.0	.0	.0	.0	.0	.0	.0	.0
On-Farm Div.	.0	1.1	1.9	2.0	2.0	1.5	1.0	.5
Seepage Loss	.0	.0	.0	.0	.0	.0	.0	.0
US Div. Req.	.0	1.1	1.9	2.1	2.0	1.5	1.0	.5

Based on analysis period peak consumptive use

DS Delivery	.0	.0	.0	.0	.0	.0	.0	.0
On-Farm Div.	.0	1.3	2.3	2.4	2.2	1.6	1.1	.5
Seepage Loss	.0	.0	.0	.0	.0	.0	.0	.0
US Div. Req.	.0	1.4	2.3	2.4	2.2	1.6	1.1	.6

Effective Div. **** Seepage Rate: .00 cfs/mi or .00 cfs ****

Based on analysis period irrigation requirement

DS Delivery	.0	7.1	12.2	13.1	12.8	9.5	6.5	3.2
On-Farm Div.	.0	.0	.0	.0	.0	.0	.0	.0
Seepage Loss	.0	.0	.0	.0	.0	.0	.0	.0
US Div. Req.	.0	7.1	12.2	13.1	12.8	9.5	6.5	3.2

Based on analysis period peak consumptive use

DS Delivery	.0	8.7	14.7	15.1	14.3	10.5	7.4	3.7
On-Farm Div.	.0	.0	.0	.0	.0	.0	.0	.0
Seepage Loss	.0	.0	.0	.0	.0	.0	.0	.0
US Div. Req.	.0	8.7	14.7	15.1	14.3	10.5	7.4	3.7

BILL JONES EXCESS FLOW ANALYSIS

Breakdown of irrigation system acres and soil type acreage

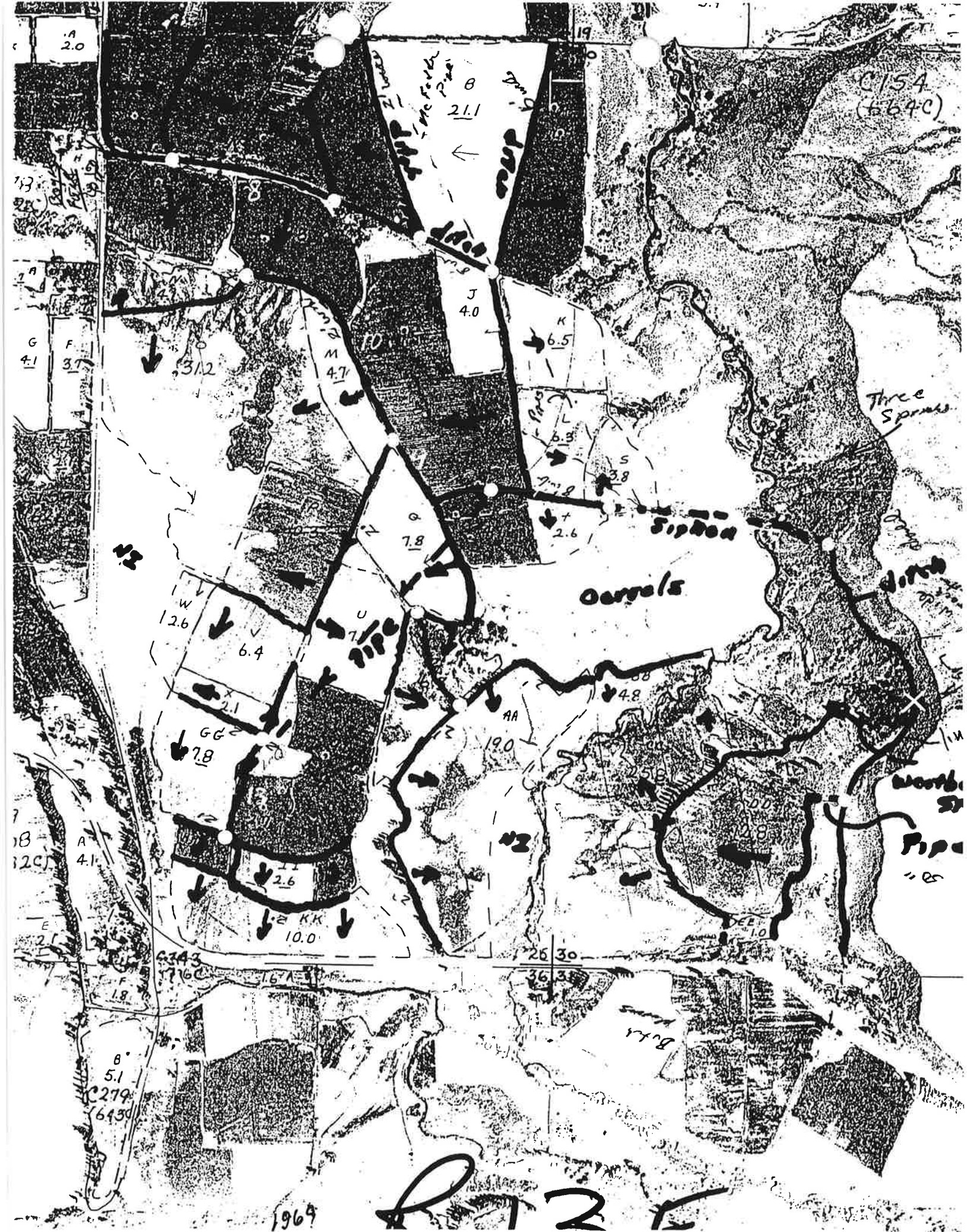
Brockway Engineering, PLLC 3/25/99

Irrig sys (field)	Acres	Soil	Acreage breakdown by soil type:				Acreage breakdown by crop			
			QUB	KOB	FKE	FAB	Alf (50%)	Past (20%)	SGrn (15%)	FCrn(15%)
A	10.7	QUB	10.7	0.0	0.0	0.0	5.4	2.1	1.6	1.6
B	21.1	QUB	21.1	0.0	0.0	0.0	10.6	4.2	3.2	3.2
C	10.9	QUB	10.9	0.0	0.0	0.0	5.5	2.2	1.6	1.6
DE	12.9	KOB	0.0	12.9	0.0	0.0	6.5	2.6	1.9	1.9
F	3.3	KOB	0.0	3.3	0.0	0.0	1.7	0.7	0.5	0.5
GH	15.6	KOB	0.0	15.6	0.0	0.0	7.8	3.1	2.3	2.3
I	19.5	QUB/KOB	9.8	9.8	0.0	0.0	9.8	3.9	2.9	2.9
J	4.0	QUB	4.0	0.0	0.0	0.0	2.0	0.8	0.6	0.6
KL	12.8	QUB	12.8	0.0	0.0	0.0	6.4	2.6	1.9	1.9
M	4.7	QUB	4.7	0.0	0.0	0.0	2.4	0.9	0.7	0.7
N	4.1	KOB	0.0	4.1	0.0	0.0	2.1	0.8	0.6	0.6
O	31.2	QUB	31.2	0.0	0.0	0.0	15.6	6.2	4.7	4.7
PU	17.4	QUB	17.4	0.0	0.0	0.0	8.7	3.5	2.6	2.6
Q	7.8	QUB	7.8	0.0	0.0	0.0	3.9	1.6	1.2	1.2
R	4.7	QUB	4.7	0.0	0.0	0.0	2.4	0.9	0.7	0.7
S	3.8	QUB	3.8	0.0	0.0	0.0	1.9	0.8	0.6	0.6
T	2.6	QUB	2.6	0.0	0.0	0.0	1.3	0.5	0.4	0.4
V	6.4	QUB	6.4	0.0	0.0	0.0	3.2	1.3	1.0	1.0
W	12.6	QUB	12.6	0.0	0.0	0.0	6.3	2.5	1.9	1.9
X	2.1	QUB	2.1	0.0	0.0	0.0	1.1	0.4	0.3	0.3
Y	9.0	QUB	9.0	0.0	0.0	0.0	4.5	1.8	1.4	1.4
Z	6.3	FKE	0.0	0.0	6.3	0.0	3.2	1.3	0.9	0.9
AA	19.0	FKE	0.0	0.0	19.0	0.0	9.5	3.8	2.9	2.9
BB	4.8	FKE	0.0	0.0	4.8	0.0	2.4	1.0	0.7	0.7
C&D	38.6	FAB/FKE	0.0	0.0	12.8	38.6	19.3	7.7	5.8	5.8
EE	1.0	FKE	0.0	0.0	1.0	0.0	0.5	0.2	0.2	0.2
FF	2.7	QUB	2.7	0.0	0.0	0.0	1.4	0.5	0.4	0.4
GG	7.8	QUB	7.8	0.0	0.0	0.0	3.9	1.6	1.2	1.2
HIJ	5.1	QUB	5.1	0.0	0.0	0.0	2.6	1.0	0.8	0.8
KK	10.0	QUB	10.0	0.0	0.0	0.0	5.0	2.0	1.5	1.5
TOTAL	312.5		197.2	45.7	43.9	38.6	156.3	62.5	46.9	46.9

BILL JONES EXCESS FLOW ANALYSIS

Acreage breakdown by crop applicable to each soil type for each irrigation system

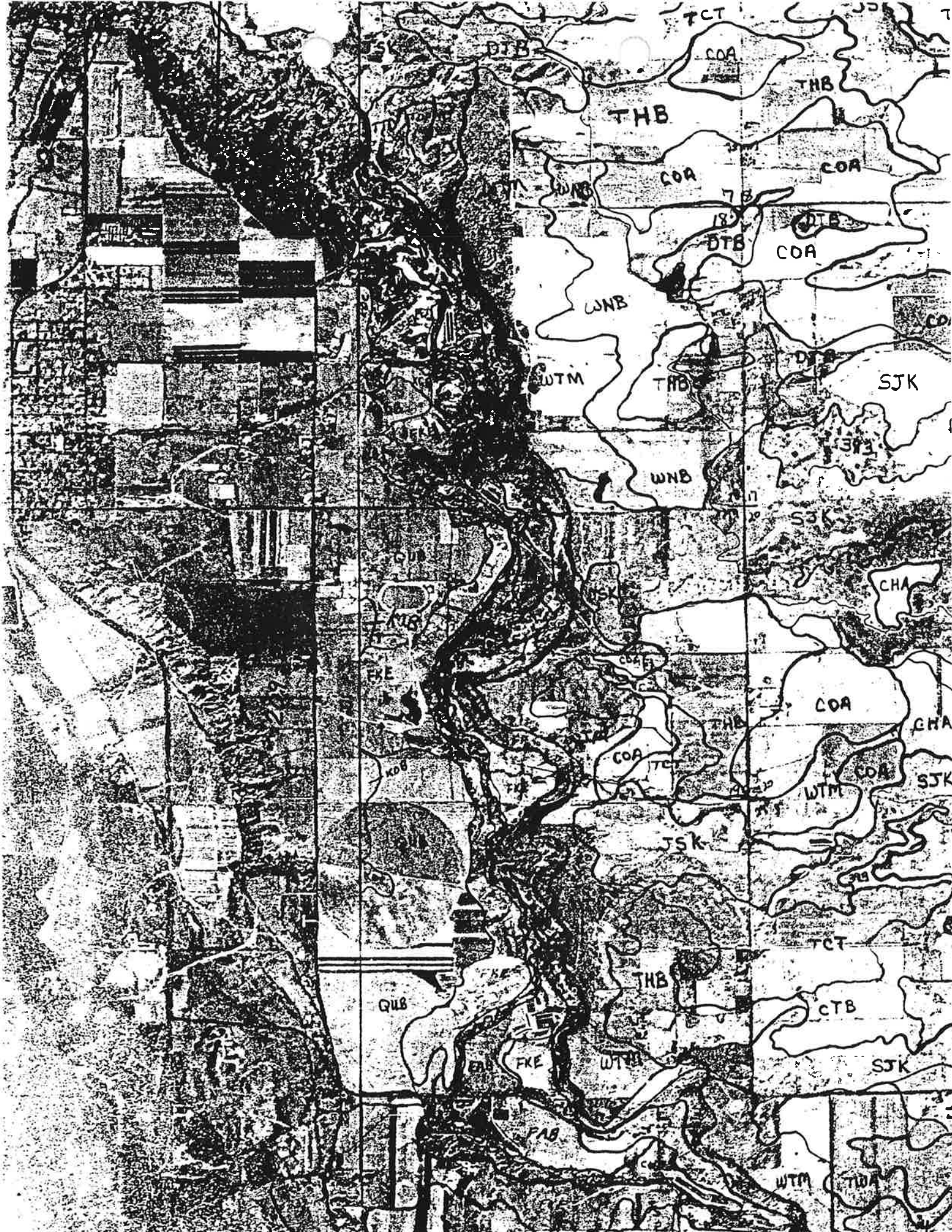
Irrig sys (field)	For soil QUB:				For soil KOB:			
	Alfalfa	Pasture	SGrain	FCorn	Alfalfa	Pasture	SGrain	FCorn
A	5.4	2.1	1.6	1.6	0.0	0.0	0.0	0.0
B	10.6	4.2	3.2	3.2	0.0	0.0	0.0	0.0
C	5.5	2.2	1.6	1.6	0.0	0.0	0.0	0.0
DE	0.0	0.0	0.0	0.0	6.5	2.6	1.9	1.9
F	0.0	0.0	0.0	0.0	1.7	0.7	0.5	0.5
GH	0.0	0.0	0.0	0.0	7.8	3.1	2.3	2.3
I	4.9	2.0	1.5	1.5	4.9	2.0	1.5	1.5
J	2.0	0.8	0.6	0.6	0.0	0.0	0.0	0.0
KL	6.4	2.6	1.9	1.9	0.0	0.0	0.0	0.0
M	2.4	0.9	0.7	0.7	0.0	0.0	0.0	0.0
N	0.0	0.0	0.0	0.0	2.1	0.8	0.6	0.6
O	15.6	6.2	4.7	4.7	0.0	0.0	0.0	0.0
PU	8.7	3.5	2.6	2.6	0.0	0.0	0.0	0.0
Q	3.9	1.6	1.2	1.2	0.0	0.0	0.0	0.0
R	2.4	0.9	0.7	0.7	0.0	0.0	0.0	0.0
S	1.9	0.8	0.6	0.6	0.0	0.0	0.0	0.0
T	1.3	0.5	0.4	0.4	0.0	0.0	0.0	0.0
V	3.2	1.3	1.0	1.0	0.0	0.0	0.0	0.0
W	6.3	2.5	1.9	1.9	0.0	0.0	0.0	0.0
X	1.1	0.4	0.3	0.3	0.0	0.0	0.0	0.0
Y	4.5	1.8	1.4	1.4	0.0	0.0	0.0	0.0
Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
AA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C&D	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
FF	1.4	0.5	0.4	0.4	0.0	0.0	0.0	0.0
GG	3.9	1.6	1.2	1.2	0.0	0.0	0.0	0.0
HIJ	2.6	1.0	0.8	0.8	0.0	0.0	0.0	0.0
KK	5.0	2.0	1.5	1.5	0.0	0.0	0.0	0.0



Guidelines for the Evaluation of Irrigation Diversion Rates

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PHYSICAL PROPERTIES OF SOILS

Endnote -- PHYSICAL PROPERTIES OF SOILS

This report shows estimates of some characteristics and features that affect soil behavior. These estimates are given for the major layers of each soil in the survey area. The estimates are based on field observations and on test data for these and similar soils.

CLAY as a soil separate consists of mineral soil particles that are less than 0.002 millimeter in diameter. In this report, the estimated clay content of each major soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter. The amount and kind of clay greatly affect the fertility and physical condition of the soil. They determine the ability of the soil to adsorb cations and to retain moisture. They influence shrink-swell potential, permeability, plasticity, the ease of soil dispersion, and other soil properties. The amount and kind of clay in a soil also affect tillage and earthmoving operations.

MOIST BULK DENSITY is the weight of soil (oven-dry) per unit volume. Volume is measured when the soil is at field moisture capacity, the moisture content at 1/3 bar moisture tension. Weight is determined after drying the soil at 105 degrees C. In this report, the estimated moist bulk density of each major soil horizon is expressed in grams per cubic centimeter of soil material that is less than 2 millimeters in diameter. Bulk density data are used to compute shrink-swell potential, available water capacity, total pore space, and other soil properties. The moist bulk density of a soil indicates the pore space available for water and roots. A bulk density of more than 1.6 can restrict water storage and root penetration. Moist bulk density is influenced by texture, kind of clay, content of organic matter, and soil structure.

PERMEABILITY refers to the ability of a soil to transmit water or air. The estimates indicate the rate of downward movement of water when the soil is saturated. They are based on soil characteristics observed in the field, particularly structure, porosity, and texture. Permeability is considered in the design of soil drainage systems, septic tank absorption fields, and construction where the rate of water movement under saturated conditions affects behavior.

AVAILABLE WATER CAPACITY refers to the quantity of water that the soil is capable of storing for use by plants. The capacity for water storage is given in inches of water per inch of soil for each major soil layer. The capacity varies, depending on soil properties that affect the retention of water and the depth of the root zone. The most important properties are the content of organic matter, soil texture, bulk density, and soil structure. Available water capacity is an important factor in the choice of plants or crops to be grown and in the design and management of irrigation systems. Available water capacity is not an estimate of the quantity of water actually available to plants at any given time.

SHRINK-SWELL POTENTIAL is the potential for volume change in a soil with a loss or gain of moisture. Volume change occurs mainly because of the interaction of clay minerals with water and varies with the amount and type of clay minerals in the soil. The size of the load on the soil and the magnitude of the change in soil moisture content influence the amount of swelling of soils in place. Laboratory measurements of swelling of undisturbed clods were made for many soils. For others, swelling was estimated on the basis of the kind and amount of clay minerals in the soil and on measurements of similar soils. If the shrink-swell potential is rated moderate to very high, shrinking and swelling can cause damage to buildings, roads, and other structures. Special design is often needed. Shrink-swell potential classes are based on the change in length of an unconfined clod as moisture content is increased from air-dry to field capacity. The change is based on the soil fraction less than 2 millimeters in diameter. The classes are "Low," a change of less than 3 percent; "Moderate," 3 to 6 percent; and "High," more than 6 percent. "Very high," greater than 9 percent, is sometimes used.

PHYSICAL PROPERTIES OF SOILS

Endnote -- PHYSICAL PROPERTIES OF SOILS--Continued

ORGANIC MATTER is the plant and animal residue in the soil at various stages of decomposition. In report J, the estimated content of organic matter is expressed as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter. The content of organic matter in a soil can be maintained or increased by returning crop residue to the soil. Organic matter affects the available water capacity, infiltration rate, and tilth. It is a source of nitrogen and other nutrients for crops.

EROSION FACTOR K indicates the susceptibility of the whole soil (including rocks and rock fragments) to sheet and rill erosion by water. Factor K is one of six factors used in the Universal Soil Loss Equation (USLE) to predict the average annual rate of soil loss by sheet and rill erosion in tons per acre per year. The estimates are based primarily on percentage of silt, sand, and organic matter (up to 4 percent) and on soil structure and permeability. Values of K range from 0.05 to 0.69. The higher the value, the more susceptible the soil is to sheet and rill erosion by water.

EROSION FACTOR K_f is like EROSION FACTOR K but it is for the fine-earth fraction of the soil. Rocks and rock fragments are not considered.

EROSION FACTOR T is an estimate of the maximum average annual rate of soil erosion by wind or water that can occur without affecting crop productivity over a sustained period. The rate is in tons per acre per year.

WIND ERODIBILITY GROUPS are made up of soils that have similar properties affecting their resistance to wind erosion in cultivated areas. The groups indicate the susceptibility of soil to wind erosion. Soils are grouped according to the following distinctions:

1. Coarse sands, sands, fine sands, and very fine sands. These soils are generally not suitable for crops. They are extremely erodible, and vegetation is difficult to establish.

2. Loamy coarse sands, loamy sands, loamy fine sands, loamy very fine sands, and sapric soil material. These soils are very highly erodible. Crops can be grown if intensive measures to control wind erosion are used.

3. Coarse sandy loams, sandy loams, fine sandy loams, and very fine sandy loams. These soils are highly erodible. Crops can be grown if intensive measures to control wind erosion are used.

4L. Calcareous loams, silt loams, clay loams, and silty clay loams. These soils are erodible. Crops can be grown if intensive measures to control wind erosion are used.

4. Clays, silty clays, noncalcareous clay loams, and silty clay loams that are more than 35 percent clay. These soils are moderately erodible. Crops can be grown if measures to control wind erosion are used.

PHYSICAL PROPERTIES OF SOILS

Endnote -- PHYSICAL PROPERTIES OF SOILS--Continued

5. Noncalcareous loams and silt loams that are less than 20 percent clay and sandy clay loams, sandy clays, and hemic soil material. These soils are slightly erodible. Crops can be grown if measures to control wind erosion are used.

6. Noncalcareous loams and silt loams that are more than 20 percent clay and noncalcareous clay loams that are less than 35 percent clay. These soils are very slightly erodible. Crops can be grown if ordinary measures to control wind erosion are used.

7. Silts, noncalcareous silty clay loams that are less than 35 percent clay, and fibric soil material. These soils are very slightly erodible. Crops can be grown if ordinary measures to control wind erosion are used.

8. Soils that are not subject to wind erosion because of coarse fragments on the surface or because of surface wetness.

The WIND ERODIBILITY INDEX is used in the wind erosion equation (WEQ). The index number indicates the amount of soil lost in tons per acre per year. The range of wind erodibility index numbers is 0 to 300.

PHYSICAL PROPERTIES OF SOILS
edit

(Entries under "Erosion factors--T" apply to the entire profile. Entries under "Wind erodibility group" and "Wind erodability index" apply only to the surface layer)

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility	Available water capacity	Shrink- swell potential	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
								K	Kf	T		
	In	Pct	g/cc	In/hr	In/in		Pct					
55: FA1B Pathom-----	0-7	0-5	1.40-1.60	6.00-20.00	0.09-0.10	Low	0.6-0.9	0.20	0.20	5	2	134
	7-61	0-5	1.40-1.60	6.00-20.00	0.09-0.10	Low	0.0-0.5	0.20	0.20			
59: FKE Pathom----- 50%	0-7	0-5	1.40-1.60	6.00-20.00	0.09-0.10	Low	0.6-0.9	0.20	0.20	5	2	134
	7-61	0-5	1.40-1.60	6.00-20.00	0.09-0.10	Low	0.0-0.5	0.20	0.20			
Kudlac----- 21%	0-3	20-25	1.15-1.25	0.20-0.60	0.14-0.16	Low	0.5-1.0	0.43	0.43	5	4L	86
	3-60	25-35	1.50-1.65	0.00-0.06	0.12-0.16	Moderate	0.0-0.5	0.43	0.43			
Anchustequi----- 10%	0-7	20-27	1.30-1.40	0.60-2.00	0.13-0.15	Low	1.0-2.0	0.43	0.43	5	6	48
	7-60	5-35	1.25-1.45	0.20-20.00	0.07-0.19	Moderate	0.0-1.0	0.37	0.37			
97: KOB Kecko-----	0-9	10-18	1.25-1.45	2.00-6.00	0.12-0.14	Low	1.0-2.0	0.24	0.24	5	3	86
	9-21	10-18	1.25-1.50	2.00-6.00	0.12-0.14	Low	0.0-0.5	0.24	0.24			
	21-44	3-18	1.25-1.60	2.00-6.00	0.08-0.13	Low	0.0-0.5	0.10	0.10			
	44-60	10-18	1.25-1.45	2.00-6.00	0.12-0.17	Low	0.0-0.5	0.10	0.10			
98: KOC Kecko-----	0-9	10-18	1.25-1.45	2.00-6.00	0.12-0.14	Low	1.0-2.0	0.24	0.24	5	3	86
	9-21	10-18	1.25-1.50	2.00-6.00	0.12-0.14	Low	0.0-0.5	0.24	0.24			
	21-44	3-18	1.25-1.60	2.00-6.00	0.08-0.13	Low	0.0-0.5	0.10	0.10			
	44-60	10-18	1.25-1.45	2.00-6.00	0.12-0.17	Low	0.0-0.5	0.10	0.10			
153: QMB Quincy-----	0-2	1-6	1.35-1.50	6.00-20.00	0.08-0.11	Low	0.5-1.0	0.15	0.15	5	1	310
	2-61	1-7	1.45-1.60	6.00-20.00	0.06-0.09	Low	0.5-1.0	0.28	0.28			

1'	2'	3'	4'	5'
1.14	2.28	3.42	4.56	5.70
1.71	3.39	5.07	6.75	8.43
1.63	3.14	4.71	6.31	7.87
1.41	2.79	4.17	5.55	6.93

NONT TECHNICAL SOILS DESCRIPTION REPORT
edit

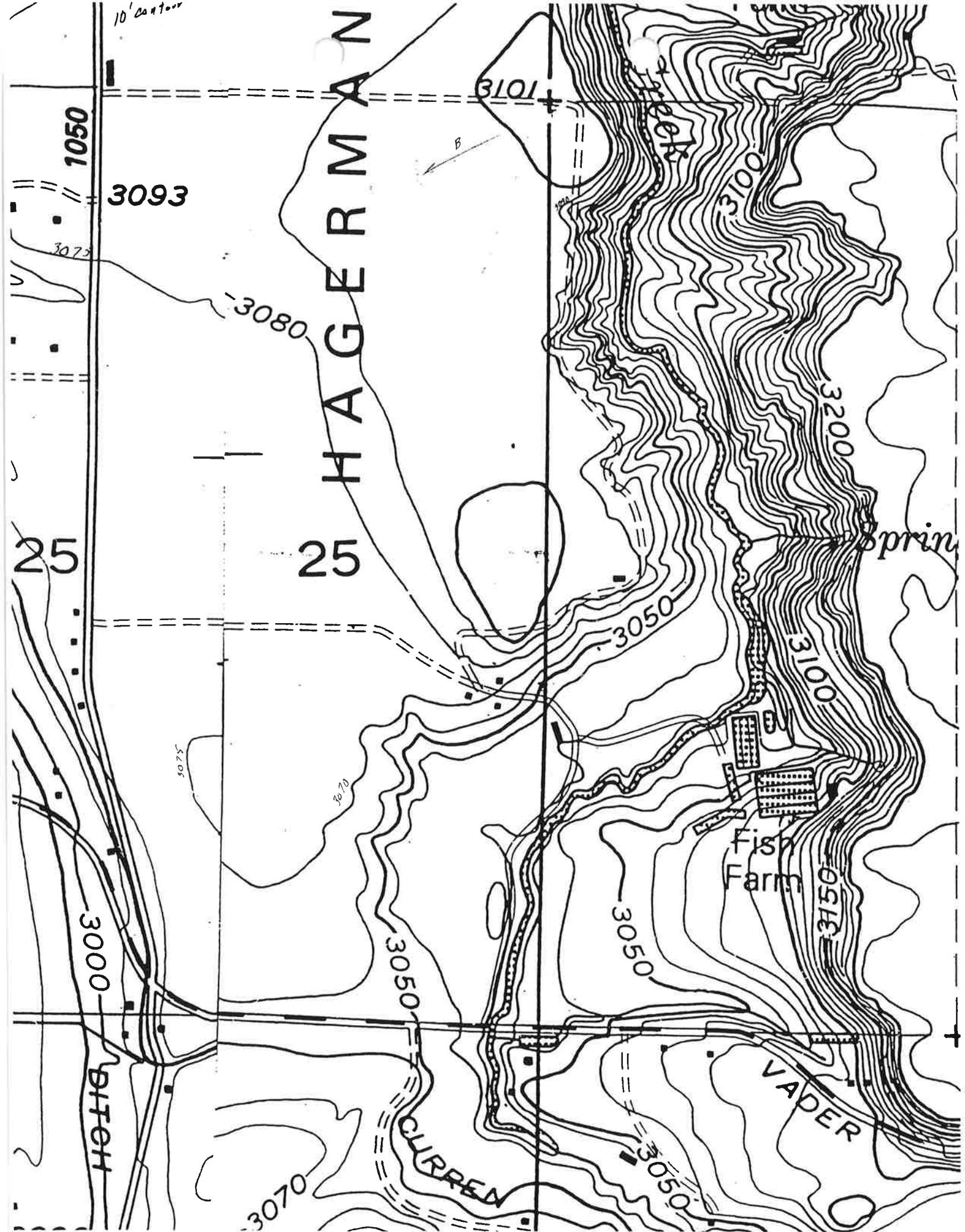
Map Symbol	Soil name and description
55 FAB	Fathom loamy fine sand, 1 to 4 percent slopes This soils is very deep and somewhat excessively drained. Slopes are 1 to 4 percent. Permeability is rapid, available water capacity is low, runoff is very slow and the hazard of erosion by water is none to slight and severe by wind. The surface texture is loamy fine sand about 7 inches thick. This soils is very deep and somewhat excessively drained. Slopes are 1 to 4 percent. Permeability is rapid, available water capacity is low, runoff is very slow and the hazard of erosion by water is none to slight and severe by wind. The surface texture is loamy fine sand about 7 inches thick.
59 FKE	Fathom-Kudlac-Anchustequi complex, 8 to 35 percent slopes This map unit is about 50 percent Fathom loamy fine sand, 20 percent Kudlac silt loam and 20 percent Anchustequi loam. Slopes are 8 to 35 percent. Runoff is rapid to very rapid and the hazard of erosion by water is severe and severe by wind. Fathom soils are very deep and somewhat excessively drained, have rapid permeability and low available water capacity. Kudlac and Anchustequi soils are very deep and well or somewhat poorly drained, have very slow or moderate permeability and high available water capacity. This map unit is about 50 percent Fathom loamy fine sand, 20 percent Kudlac silt loam and 20 percent Anchustequi loam. Slopes are 8 to 35 percent. Runoff is rapid to very rapid and the hazard of erosion by water is severe and severe by wind. Fathom soils are very deep and somewhat excessively drained, have rapid permeability and low available water capacity. Kudlac and Anchustequi soils are very deep and well or somewhat poorly drained, have very slow or moderate permeability and high available water capacity.
97 KOB	Kecko fine sandy loam, 2 to 4 percent slopes

NONTECHNICAL SOILS DESCRIPTION REPORT
edit

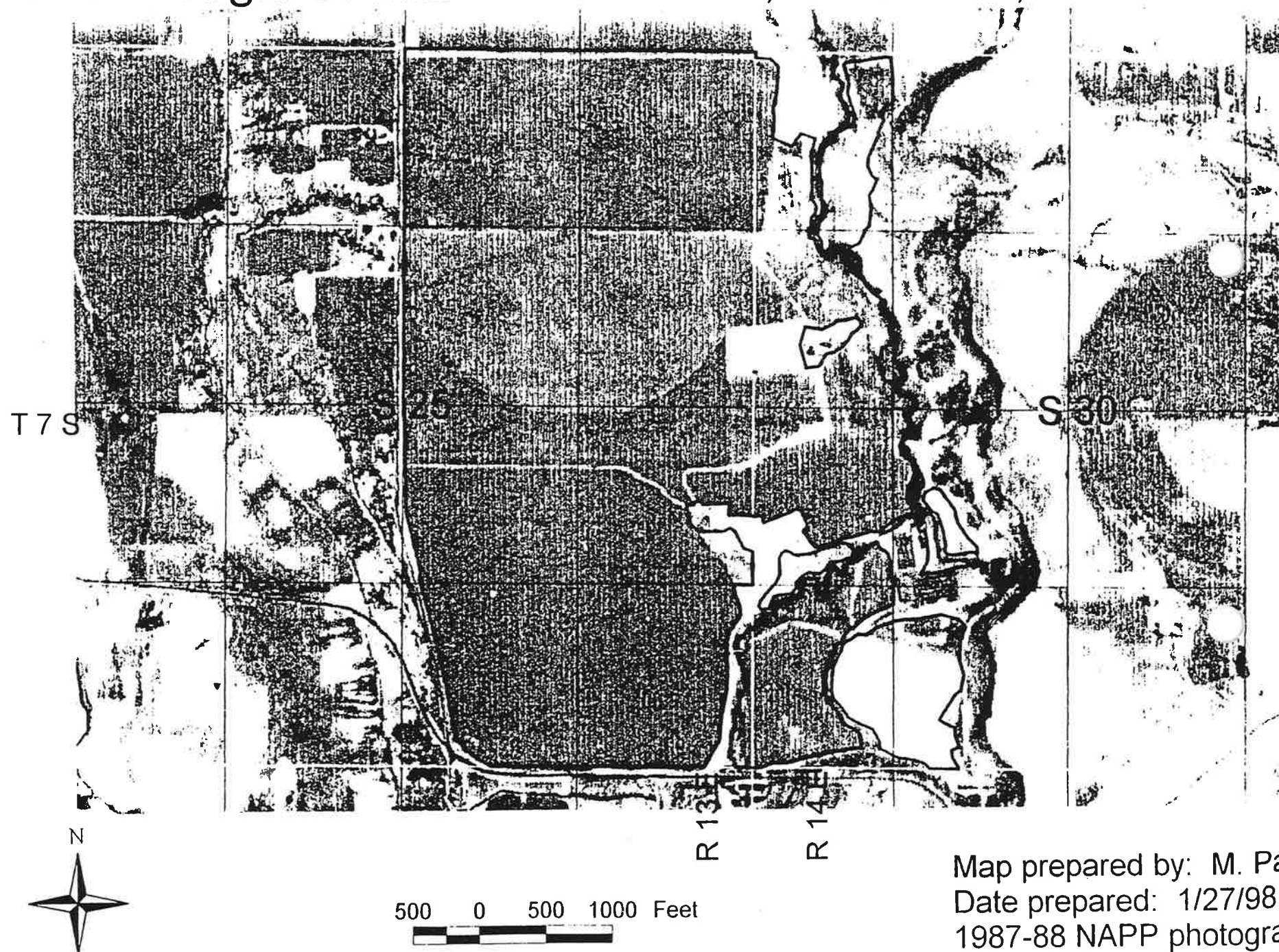
Map Symbol	Soil name and description
97 KOB	This soils is very deep and well drained. Slopes are 2 to 4 percent. Permeability is moderately rapid, available water capacity is moderate, runoff is slow and the hazard of erosion by water is slight and moderate by wind. The surface texture is fine sandy loam about 9 inches thick. This soils is very deep and well drained. Slopes are 2 to 4 percent. Permeability is moderately rapid, available water capacity is moderate, runoff is slow and the hazard of erosion by water is slight and moderate by wind. The surface texture is fine sandy loam about 9 inches thick.
98 KOC	Kecko fine sandy loam, 4 to 8 percent slopes This soils is very deep and well drained. Slopes are 4 to 8 percent. Permeability is moderately rapid, available water capacity is moderate, runoff is slow and the hazard of erosion by water is slight and moderate by wind. The surface texture is fine sandy loam about 9 inches thick. This soils is very deep and well drained. Slopes are 4 to 8 percent. Permeability is moderately rapid, available water capacity is moderate, runoff is slow and the hazard of erosion by water is slight and moderate by wind. The surface texture is fine sandy loam about 9 inches thick.
153 QUB	Quincy fine sand, 1 to 4 percent slopes This soils is very deep and excessively drained. Slopes are 1 to 4 percent. Permeability is rapid, available water capacity is low, runoff is very slow and the hazard of erosion by water is none to slight and very severe by wind. The surface texture is fine sand about 2 inches thick.

NONTECHNICAL SOILS DESCRIPTION REPORT
edit

Map Symbol	Soil name and description
	This soils is very deep and excessively drained. Slopes are 1 to 4 percent. Permeability is rapid, available water capacity is low, runoff is very slow and the hazard of erosion by water is none to slight and very severe by wind. The surface texture is fine sand about 2 inches thick.



Water Right Numbers 36-00068, 36-00069, & 36-00070



IRRIGATION WATER DIVERSION REQUIREMENTS PROGRAM

by
Clarence W. Robison

INTRODUCTION

The rate and volume water requirements for an irrigation diversion are driven by three aspects of crop production: crop consumptive use, leaching of soil salts, and frost protection. The primary aspect is to supply the crop's consumptive use requirements. Losses associated with the inefficiency of irrigation applications systems typically meet the leaching requirements. There have been many studies quantifying the amount of water consumed by individual crops and procedures for estimating the usage from weather or climatic data. These procedures are explained in many irrigation texts and engineering reference materials such as Jensen, et al.¹ The State of Idaho Department of Water Resources commissioned a study with the University of Idaho evaluated the methods of estimating consumptive use and irrigation requirements for the various agricultural crops produced in the state. The study recommended the FAO-Blaney-Criddle method for estimates of crop consumptive use for the state.² Utilization of the crop consumptive use estimates and the associated cropped areas will not yield the required diversion rate to irrigate those crops. The required diversion rates and volumes will depend on the soil characteristics, the irrigation application and delivery system, and system management.

For the purposes of water allocation, some have suggested that the crop with the highest annual consumptive irrigation requirement should determine the diversion rate and volume under a mono cropping assumption. This would yield conservative estimates of the potential diversion requirements; but, are unrealistic. For long term profitability, agriculture requires crop rotations to maintain land productivity and product quality. Secondly, mean consumptive use or irrigation requirement would reflect a diversion rate and volume that would be inadequate fifty percent of the time. Therefore, the program uses crop patterns in conjunction with soil and on farm management practices for project areas.

A computer program was developed to estimate the peak and annual diversion requirements for an irrigated area. The program computes rate and volume requirements for an irrigated area given information describing the area. The procedure requires information describing the irrigation and delivery systems, the soils, and the crops. The program does not estimate or compute crop consumptive use or irrigation requirement. The program uses this data in conjunction with soils and irrigation system information. The procedure used by the program is similar to that described by the Hubble Report, "Guidelines for the Evaluation of Irrigation Diversion Rates."³ The program consists of four major areas: water requirements, application requirements, system efficiencies, and distribution losses.

The following definitions are offered to assist in clarifying the procedures used in the program.

Consumptive Use (*cu*): The amount of water transpired by an activity growing crop plus the amount water evaporated from the soil surface and foliage occupying the area around the growing crop. Typically expressed as a depth per time (mm/day or in/day).

Consumptive Irrigation Requirement (*cir*): The amount of irrigation water required to meet the consumptive use of a crop after accounting for natural precipitation. It typically has the units of depth per time (in/day).

Available Water Holding Capacity (*awhc*): The amount of water held by the soil profile after draining. It typically has the units of depth per unit depth (in/foot).

Allowable Soil Moisture Depletion (*asmd*): The amount of soil moisture which can be depleted from the root zone before the crop suffers stress which would impact crop yield and quality. It typically is a percentage or fraction of the available water holding capacity.

Irrigation Application Depth (*iad*): The amount of water required to replenish the soil moisture in the crop root zone to holding capacity. (in)

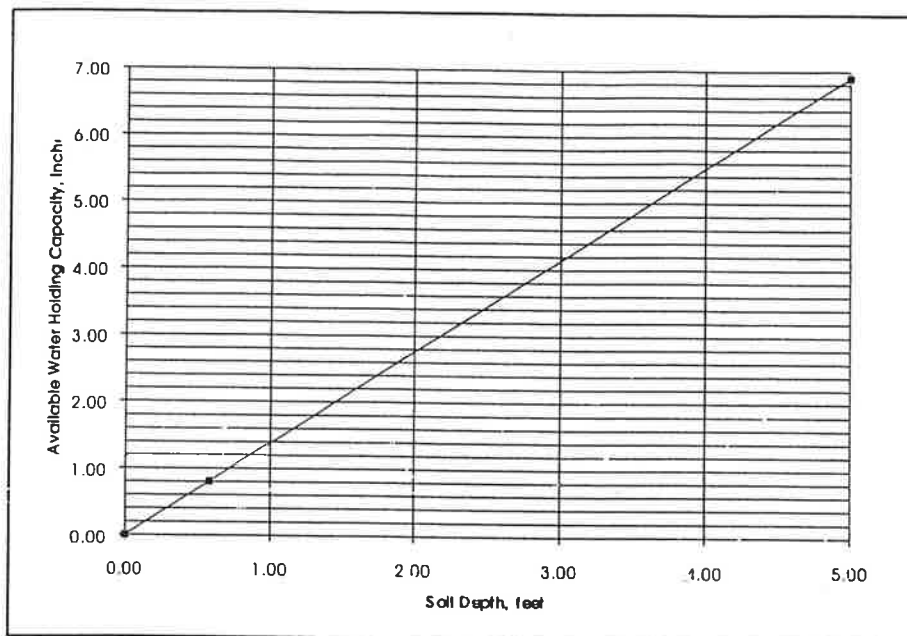


Figure 1. Available soil moisture versus for a Bruneau area soil.

Crop Water Requirements

The program requires crop consumptive use and irrigation requirement data inconjunction with a user specified probability level for meeting the crop needs. Allen and Brockway³ prepared consumptive irrigation requirements for various areas of the State of Idaho based upon the FAO Blaney-Criddle method of estimating crop evapotranspiration. The numbers in their report reflect the mean (average) consumptive irrigation requirements based upon the weather data available for the area. Thus, their published number reflects that fifty percent of the time the actual requirement will be greater than that published. In determination of an irrigation water right or permit, the mean requirement is probably not adequate. Irrigated farm operators would prefer an estimate that is met more than fifty percent of the time. The program combines the consumptive use and and irrigation requirement with the published standard deviations and a risk level specified by the user. The current version of the program assumes that the consumptive uses and irrigation requirements are normally distributed.

Peak Consumptive Use

The peak diversion rate for a system is associated with a peak daily consumptive use. The daily consumptive use is also associated with the irrigation return period or irrigation application depth. The higher the soil moisture holding capacity, longer irrigation return intervals, the peak consumptive use approaches the monthly consumptive use. In determining the peak consumptive for a crop, the monthly consumptive reported by Allen and Brockway³ is first adjusted for the level or risk assuming a normal distribution according to the following formula⁶:

$$cu_{crop} = \overline{cu_{crop}} + std_{cu} * z \dots\dots\dots [2]$$

where:

$\overline{cu_{crop}}$ Crop consumptive use associated with a level of risk.

cu_{crop} Published crompt monthly mean consumptive use.

std_{cu} Published standard deviation of the crop consumptive use.

Z Standardized normalized variate associated with a given probability.

The consumptive use is then adjusted for the irrigation return interval period by the irrigation application depth for the crop. The procedure use for adjusting the consumptive use is outlined in Jensen².

$$pcu_{crop\ soil} = cu_{crop} * f(iad_{crop\ soil}) \dots\dots\dots [3]$$

where:

$pcu_{crop\ soil}$ Peak crop consumptive use associated with a level of risk.

$f(iad_{crop\ soil})$ Function relating allowable soil moisture depletion for crop on a soil and monthly consumptive use to peak consumptive use, Figure 6.6, page 223, Jensen².

The function yields values of x.xx, x.xx, and x.xx for allowable depletions of x.xx, x.xx, and x.xx inches respectively.

Irrigation Requirement

The monthly and annual diversion requirement (volume) is based on the crop irrigation requirement. To adjust the published mean daily irrigation requirement for the level of risk the following formula is applied:

$$cir_{crop} = \overline{cir}_{crop} + std_{cr} * z \dots\dots\dots [4]$$

where:

cir_{crop} Consumptive irrigation requirement associated with a level of risk.

$\overline{cir}_{crop}$ Published mean consumptive irrigation requirement.

std_{cr} Published standard deviation of the consumptive irrigation requirement.

z Standardized normalized variate associated with a given probability.

For example, the mean alfalfa hay consumptive irrigation requirement for June is 0.25 inches per day⁷ in the Bruneau area with a standard deviation of 0.04. Thus, the requirement associated with the 80 percent risk level (is not exceeded eighty percent of time) is 0.28 inches per day (12 percent increase).

Soil Infiltration and Intake Families

The analysis of irrigation system efficiency requires an estimate of the infiltration rate for the soil. The methods that will be used to determine system efficiency are based on the USDA - NRCS (SCS) intake family infiltration. The cumulative infiltration function is expressed as:

$$F_n = aT_n^b + c \dots\dots\dots [5]$$

where:

T_n time for infiltration, minutes

F_n cumulative infiltration, inches, for time

a, b, c infiltration coefficients associated with an intake family.

There are two intake families. The first intake family is referred to as the flood intake family and the second is referred as the furrow intake family. The flood intake family is used in border irrigation system analysis and the second is used in furrow and corrugate irrigation systems analysis. The two families are related to each other by the following equation⁸:

$$frw_{family} = 0.28 + 0.14 * fld_{family} \dots\dots\dots [6]$$

where:

fld_{family} flood intake family

frw_{family} furrow intake family

Infiltration coefficients based on the intake family are computed based upon the standard equations published by the USDA-NRCS. The coefficients for the flood intake family are computed with the following equation:

$$a = \left(\frac{fld_{family} + 3.1877}{339.06} \right)^{0.71638} \dots\dots\dots [7]$$

$$b = \left(\frac{fld_{family} + 1.8572}{238.32} \right)^{0.06862} \quad \text{for } fld_{family} < 5.14 \dots\dots\dots [8]$$

$$b = \left(\frac{fld_{family} - 2.5696}{237890} \right)^{0.021171} \quad \text{for } fld_{family} \geq 5.14$$

The infiltration coefficients associated with the furrow intake family are computed with the following equations:

$$a = \left(\frac{frw_{family} + 0.166281}{47.467904} \right)^{0.716378} \dots\dots\dots [9]$$

$$b = \left(\frac{frw_{family} - 0.02}{33.364573} \right)^{0.06862} \quad \text{for } frw_{family} < 1.0 \dots\dots\dots [10]$$

$$b = \left(\frac{frw_{family} - 0.639737}{33304.67292} \right)^{0.021171} \quad \text{for } frw_{family} \geq 1.0$$

Also associated with the furrow intake families are coefficients describing the irrigation water advance through the furrow to the end of the field. These coefficients are usually determined with the following equations:

$$f = 2321 + 5.8653 * fwr_{family} \dots\dots\dots [11]$$

$$g = 4.4685 * 10^{-4} + 0.0015764 * fwr_{family} \dots\dots\dots [12]$$

Irrigation System Application Efficiency

The on farm irrigation diversion requirement has to reflect losses in the application of the irrigation water on the field where the crop is grown. There are many various methods of applying irrigation water: furrow, border, sprinkler, flood, etc. Each of the methods have their advantages and disadvantages and efficiencies. Typically, the largest factor influencing each application method efficiency is the irrigator which is difficult to quantify. The current version of the program has provisions to handle furrow irrigation, level border irrigation, handline - wheel-line sprinkler irrigation, center pivot irrigation, and contour ditch (wild flooding).

Contour Ditch

The program computes irrigation efficiencies for the contour ditch (wild flooding) method of irrigation by a simple mass balance. The user is expected to enter information regarding the length of run, typical flow rate and associated ditch length (field width) irrigated per set, and the time associated with set. The application efficiency is computed with the following equation:

$$AE = \frac{iad * fl * sw}{12 * Q * T_{set} * 3600} * 100 \dots\dots\dots [13]$$

where:

AE application efficiency, percent

Q typical flow rate, cfs.

T_{set} set time, hours.

fl field run length, feet

sw set width, feet

No checks are performed to applicability of the method, nor, adequate distribution. The user is advised to refer to local NRCS design guidelines for reasonable efficiencies. For example, on moderately smooth topography conditions and a net irrigation application depth of 3 inches, the USDA NRCS (SCS) has estimated efficiencies for contour ditch irrigation⁸ as shown in Table 2.

Table 2. Efficiency of Contour Ditch Irrigation, Percent

Flood Intake Family	Land Slope (Percent)				
	1 - 2	2 - 4	4 - 8	8 - 16	16 - 32
0.1	8	5	4	3	2
0.3	21	15	11	8	5
0.5	26	18	13	9	6
1.0	54	38	39	20	13
1.5	55	55	39	28	15
2.0	53	55	50	37	25
3.0	52	55	58	52	35

Furrow Irrigation

The program utilizes procedures outlined in Chapter 5, Section 15 Irrigation, of the USDA NRCS (SCS) National Engineering Handbook⁹ to evaluate the furrow irrigation system efficiency. The program does not attempt to determine the optimum furrow inflow; however, it attempts to estimate the efficiency of the system based on the supplied system management. The equations utilized are the equivalent intake depth equation and the time of advance equation.

$$AE = \frac{1039 \cdot iad \cdot fw \cdot fl}{q \cdot T_{set}} \quad [14]$$

where

AE irrigation application efficiency, percent
 iad gross irrigation application depth, inches
 fw furrow spacing, feet
 fl furrow spacing, feet
 q furrow inflow, gpm
 T_{set} set time, minutes

To evaluate the adequacy of the irrigation, the amount of water infiltrated at the end of the furrow must be determined. This requires computing the infiltration opportunity time at the end of the furrow and then computing the amount infiltrated.

$$T_o = T_{set} - T_{adv} \quad [15]$$

where

T_o infiltration opportunity time at end of furrow, minutes
 T_{adv} advance time for water to reach end of furrow, minutes

$$T_{adv} = \frac{fl}{f} e^{\frac{g \cdot n}{q \cdot S^{0.5}}} \quad [16]$$

where

f, g soil furrow intake family advance coefficients
 S furrow slope, feet/feet

If the opportunity time, T_o , is less than zero, then the end of field was not irrigated. If the opportunity time is greater than zero, then the amount infiltrated at the furrow end is estimated with the following equation:

$$F_o = \frac{[a \cdot T_o^b + c]}{fw} \left(0.269 \cdot \left(\frac{q \cdot n}{S^{0.5}} \right)^{0.425} + 0.746 \right) \quad [17]$$

where

F_o infiltrated depth at the furrow end, inches
 a, b, c soil furrow intake family infiltration coefficients
 n Manning's roughness coefficient for furrow or corrugation.

If the end of furrow infiltrated depth, F_o , is less than the desired irrigation application depth (iad), then the furrow end was not adequately irrigated.

Border Irrigation

Border irrigation systems consist of level or gradient borders with or without end stops. The current version of the program does compute efficiency for level and gradient borders without end stops. The equations for estimating border irrigation efficiency are based on inflow rates per unit width. The unit inflow rate is estimated from the following equation and assumes that the entire border is irrigated with the specified flow.

$$q_u = Q / W \quad [18]$$

where

q_u flowrate per unit width, ft²/sec

Q border inflow rate, cfs

W border width, feet

The program assumes that level borders have slopes less than 0.4 percent (0.004 ft/ft) while gradient borders have slopes 0.4 percent or greater. For level borders the recession time (lag time), T_L , is zero. For gradient borders the recession time is estimated from the following equation:

$$T_L = \frac{0.0897 q_u^{0.2} n^{1.2}}{S_o^{0.5}} \quad [19]$$

where

S_o border strip slope, ft/ft

n Mannings roughness coefficient

The time, T_n , required to infiltrate the desired application depth, iad , is estimated from the flood intake family infiltration function:

$$T_n = \left(\frac{iad - c}{a} \right)^{1/b} \quad [20]$$

where

T_n infiltration opportunity time, minutes

iad desired infiltration depth, inches

a, b, c flood intake family coefficients

The adequacy of border irrigation is determined by comparing the irrigation set with the time of application. The set time should be greater than or equal to the required application time. The required application time is estimated by:

$$T_s \geq T_a = T_n - T_L \quad [21]$$

where

T_s set (inflow) time, minutes

T_a required application time, minutes

The efficiency is estimated by the following equation:

$$AE = \frac{iad * L}{7.2 * q_u * T_s} \quad [22]$$

where

AE irrigation application efficiency, percent

L border length, feet

Sprinkler Irrigation

Irrigation efficiencies with sprinkler systems are usually between 60 and 90 percent. Table 3 shows typical efficiencies for various sprinkler systems. For center pivot and linear move systems efficiencies are not estimated, these are expected to be specified in the input dataset. For the other systems the program estimates the efficiency from lateral spacings and lengths (area), set time, and lateral flowrates using the following equation:

Table 3. Sprinkler System Irrigation Efficiencies

Sprinkler System Type	Efficiency Range
Hand Move	60 - 85%
Solid Set	60 - 90%
Side Roll	60 - 85%
Linear Move	80 - 90%
Center Pivot	75 - 88%

$$AE = \frac{1.039 * iad * L * W}{Q * T} \quad [23]$$

where

AE irrigation application efficiency, percent

Q lateral inflow rate, gallons per minute

T set time, hours

L lateral line length, feet

W spacing between lateral risers, feet

iad irrigation application depth, inches

Irrigation Delivery System Losses

There are losses associated with canals and laterals which delivery the irrigation water from the source to the farm, field, were it is applied. The are several methods for determining the seepage loss from a channel. These include field measurement of the loss or estimation with a seepage formula. Three estimation methods are incorporated into the program: the Mortiz, Etchverry, and Wortstell seepage formulas. These formulas are as follows:

$$S_m = 0.2 * C * \sqrt{Q/V} \quad [24]$$

where

S_m Mortiz seepage loss estimate, cfs/mile

C factor representing canal (lateral) seepage characteristic, ft/day

Q canal (lateral) discharge, cfs

V canal (lateral) velocity, ft/sec

$$S_e = K * i * \sqrt{Q/V} \quad [25]$$

where:

S_e Etchverry seepage loss estimate, cfs/mile

K canal shape constant

i canal (lateral) seepage intensity, ft/day

Q canal (lateral) discharge, cfs

V canal (lateral) velocity, ft/sec

$$S = 0.0667 * i * W \quad [26]$$

where:

S_w Wortstell seepage loss estimate, cfs/mile

i canal (lateral) seepage intensity, ft/day

W canal (lateral) water surface top width, ft

In the methods where a discharge is required for estimating the seepage loss, the downstream flow and any diversions are combined for the discharge. Regardless of how the seepage estimate is determined, the seepage loss for a canal, lateral, segment is computed by:

$$loss = S_l * length_l \quad [27]$$

where:

$loss_l$ conveyance loss for lateral (canal), cfs

S_l lateral (canal) seepage rate, cfs/mile

$length_l$ lateral (canal) segment length, miles

On Farm/Field Delivery Requirements

For each time step associated with the consumptive use data, the on farm, field, irrigation delivery requirement is determined from estimated irrigation system application efficiencies, crop requirements and areas of each crop, soil, and irrigation system combination. The peak delivery requirement is computed by:

$$ofpr_{crop,soil,system} = \frac{cu_{crop}}{AE_{crop,soil,system}} * area_{crop,soil,system} \quad [28]$$

where:

$ofpr$ on farm, field, peak delivery rate for given crop, soil, and irrigation system, ac-in/day

cu peak crop consumptive use for given risk level, inches/day

AE irrigation efficiency for given crop, soil, and irrigation system combination, percent

$area$ area associated with given crop, soil, and irrigation system, acres

The delivery volume for the time period associated with the crop water use data is determined from the following equation:

$$ofdr_{crop,soil,system} = \frac{cir_{crop}}{AE_{crop,soil,system}} * area_{crop,soil,system} \quad [29]$$

where:

$ofdr$ on farm, field, diversion volume for given crop, soil, and irrigation system, ac-in/day

cir crop irrigation requirement for given risk level, inches/day

AE irrigation efficiency for given crop, soil, and irrigation system combination, percent

$area$ area associated with given crop, soil, and irrigation system, acres

Aggregation

The program does not compute requirements on an individual field or farm basis. Instead, the program computes requirements on each combination of crop, soil, and irrigation system for each consumptive use time period. Once the on farm, field, requirement is determined; the program aggregates the peak diversion rate and period diversion volume based on the soil types for each time period.

$$fpr_{soil} = \sum_{crop,system} ofpr_{crop,soil,system} \quad [30]$$

where

$ofpr$ on farm, field, peak delivery rate for given crop, soil, and irrigation system, ac-in/day

fpr on farm, field, peak delivery rate for a soil classification, ac-in/day

$$fdr_{soil} = \sum_{crop,system} ofdr_{crop,soil,system} \quad [31]$$

where

$ofdr$ on farm, field, diversion volume for given crop, soil, and irrigation system, ac-in/day

fdr on farm, field, diversion volume for a soil classification, ac-in/day

To translate aggregated on farm, field, requirements to the point of diversion; the program expects for each defined lateral segment the percentage of each soil type served by it and the lateral segment which supplies it with water. A lateral segment is not required to serve any soil type or any down stream lateral segment. For example in figure x, lateral segments are shown as numbered line segments and soils are shown as lettered areas. Lateral segment number 1 only delivers water to lateral segment number 2. The area defined as soil a is serviced by lateral segments 2 and 3. Lateral segment 3 delivers water to two lateral segments in addition to delivering water to a portion of soil a. Lateral segment 6 delivers water to lateral segment 7 and delivers water to a portion of soils e and c and all of soil d. Starting with the downstream segments, the program applies the following formula to determine the inflow into each lateral segment.

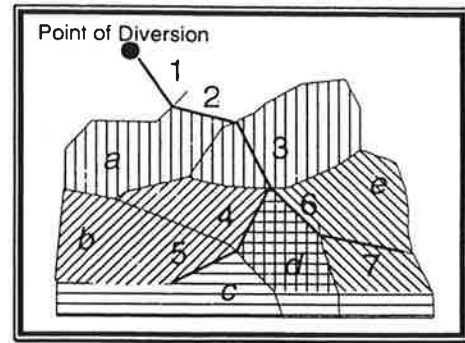


Figure x. Soils and Laterals Representation.

$$Q_i = \sum Q_d + \sum_{\text{soil}} psl_{i,\text{soil}} * fdr_{\text{soil}} h_{\text{loss}} \dots \dots \dots [32]$$

where

- Q_i require inflow into lateral segment i,
- Q_d downstream lateral delivery requirements for segment i
- $psl_{i,\text{soil}}$ percent of soil classification served by segment i.

PROGRAM IMPLEMENTATION

The methods describe in the preceeding section were implemented in a FORTRAN program. The listing of the program is found in Appendix A. The program uses dynamic allocation of array space and thus requirements for running the program will depend on the amount of detail required to describe the irrigated area. The program was compiled using the Microsoft FORTRAN PowerStation Version 1 compiler.

PROGRAM OPERATION

The program is configured to operate on matrixes describing the various cropping, soil, and irrigation system patterns for each consumptive use period. The program utilizes two input data files. The first data file is unique for the system, area, which irrigation diversion requirements are being determined for. The file contains crop, soil, and irrigation system mixtures and characteristics. Also, the file contains the data describing the delivery system network of canals and laterals. The second data file describes the crop water use data and rooting depth data as a function of time. This file is not unique to a system, it should describe the crop water use and rooting depths for a climatic region and may be used with other system analyses within the same climatic region. The two files are linked via the crop names found within the two files. The second file may contain more crops than the first file; however, each crop specified in the first file must be defined in the second file.

Regional Crop Water Use Data File

The regional crop water use data file is constructed from published information on crop water use such as Allen and Brockway³. The file contains several data areas of which five are repeated for each crop and vary throughout the irrigation season. The first area is simple documentation. The second area describes the relationship between the mean use value in the data set and an estimated peak use due soil moisture holding capacity. The five data areas specific to the crops are found next for each crop. Finally, the end of data is signal by a single record with the contents "END OF FILE" as the last record. The format of the data file is describe in Table x. The first record of the data file is an alphanumeric record for documenting the crop water use data. It suggested that the source of the data be included in the descriptive title. The next record indicates the number of points used to describe the mean to peak usage relationship. Record three contains irrigation application depths and record four contains peak to mean ratios associated with the depths. The fifth record identifies the water use periods that are represented by the data. Records 6 through 11 describe the data for a specific crop which is identified in record 6. An example data file is shown in Figure x.

System Definition File

Table x. Regional Crop Water Use Data File Format

Line	Format	Description
1	A80	Data set descriptive title
2	2I5	Number of mean to peak values followed by number of water use periods for the crops
3	10X,11F6.0	
4	10X,11F6.0	
5	10X,11A6	Water Use Period Descriptors
6	A15	Crop Name for next 5 records
7	15X,11F6.2	Crop rooting depth by period, feet
8	15X,11F6.2	Consumptive Use, in/day/period
9	15X,11F6.2	Irrig. Requirement, in/day/period
10	15X,11F6.2	Consumptive Use standard dev.
11	15X,11F6.2	Irrig. Requirement standard dev
Repeat Line 6 through 11 for remaining crops.		
LAST	A15	END-OF FILE

Bruneau Consumptive Use from Allen and Brockway 81											
11	8										
App.Depth	15.38	26.92	38.46	53.85	69.23	92.31	115.4	142.3	161.5	176.9	192.3
Peak Co H	1.154	1.138	1.123	1.108	1.092	1.077	1.061	1.046	1.038	1.031	1.023
	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Total		
Alfalfa Hay											
Root Depth	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00			
MEAN CU	2.72	6.08	7.23	6.98	5.36	3.43	1.20	1011.			
MEAN IR	2.18	5.62	6.39	6.79	5.16	3.17	0.94	926.0			
STDEV CU	0.26	0.66	0.44	0.28	0.25	0.27	0.10	29.0			
STDEV IR	0.48	0.66	0.98	0.32	0.64	0.44	0.31	57.0			
Alfalfa Seed											
Root Depth	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00			
MEAN CU	3.26	5.90	7.27	6.20	3.23	1.68	0.59	861.0			
MEAN IR	2.69	5.45	6.42	6.01	3.05	1.44	0.34	778.0			
STDEV CU	0.31	0.38	0.44	0.25	0.15	0.13	0.05	25.0			
STDEV IR	0.53	0.65	0.98	0.29	0.51	0.33	0.28	52.0			
Dry Beans											
Root Depth	0.00	0.50	1.00	1.75	2.50	0.00	0.00				
MEAN CU	1.97	4.39	7.93	3.22				541.0			
MEAN IR	1.67	3.79	7.75	3.13				505.0			
STDEV CU	0.13	0.26	0.32	0.15				17.0			
STDEV IR	0.34	0.68	0.34	0.45				35.0			
Field Corn											
Root Depth	0.00	0.75	1.50	3.00	3.00	3.00	3.00				
MEAN CU	1.97	3.61	7.72	6.58	4.05	1.05	767.0				
MEAN IR	1.64	2.96	7.52	6.37	3.79	0.80	709.0				
STDEV CU	0.13	0.22	0.31	0.30	0.31	0.08	23.0				
STDEV IR	0.37	0.68	0.34	0.70	0.48	0.08	42.0				
Silage Corn											
Root Depth	0.00	0.75	1.50	3.00	3.00	3.00	3.00				
MEAN CU	1.97	3.61	7.72	6.58	4.05			734.0			
MEAN IR	1.64	2.96	7.52	6.37	3.79			686.0			
STDEV CU	0.13	0.22	0.31	0.30	0.31			24.0			
STDEV IR	0.37	0.68	0.34	0.70	0.48			45.0			
Potatoes											
Root Depth	0.50	1.00	2.00	2.00	2.00	2.00	2.00				
MEAN CU	1.49	2.58	6.40	7.13	5.32	2.66		783.0			
MEAN IR	1.10	2.12	5.81	6.08	5.16	2.46		733.0			
STDEV CU	0.14	0.17	0.35	0.29	0.24	0.21		23.0			
STDEV IR	0.31	0.34	0.74	0.30	0.52	0.37		44.0			
Sugar Beets											
Root Depth	0.50	1.50	1.00	3.00	3.00	3.00	3.00				
MEAN CU	1.49	2.00	4.82	8.52	6.88	4.31	2.13	935.0			
MEAN IR	1.00	1.86	4.12	8.32	6.66	4.24	1.96	857.0			
STDEV CU	0.14	0.13	0.29	0.35	0.32	0.35	0.18	24.0			
STDEV IR	0.39	0.37	0.76	0.37	0.73	0.52	0.36	50.0			
Spring Grain											
Root Depth	0.50	1.00	1.00	3.00	3.00	3.00	3.00				
MEAN CU	1.14	2.14	5.38	6.28	5.42	1.02		713.0			
MEAN IR	0.94	1.32	5.38	7.43	5.41	1.00		645.0			
STDEV CU	0.14	0.14	0.35	0.35	0.35	0.05		25.0			
STDEV IR	0.39	0.37	0.59	0.57	0.55	0.34		48.0			
Winter Grain											
Root Depth	0.50	1.50	1.50	3.00	3.00	3.00	3.00				
MEAN CU	1.14	2.14	6.05	6.20	5.43	1.13		546.0			
MEAN IR	0.94	1.32	5.13	7.43	5.41	0.99		774.0			
STDEV CU	0.14	0.14	0.40	0.35	0.33	0.05					
STDEV IR	0.39	0.37	0.67	1.01	0.56	0.36		53.0			
Pasture											
Root Depth	1.00	2.00	2.00	2.00	2.00	2.00	2.00				
MEAN CU	1.84	5.05	5.10	5.41	5.49	4.16	2.50	1024.			
MEAN IR	1.17	4.64	5.60	6.43	5.25	3.90	2.51	944.0			
STDEV CU	0.17	0.33	0.38	0.27	0.25	0.32	0.23	26.0			
STDEV IR	0.48	0.57	0.88	0.30	0.63	0.49	0.40	53.0			
Orchard											
Root Depth	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
MEAN CU	3.16	4.31	6.85	7.30	6.06	4.43	2.10	1024.			
MEAN IR	1.66	3.92	6.06	7.11	5.86	4.17	2.03	943.0			
STDEV CU	0.21	0.28	0.41	0.30	0.28	0.34	0.19	27.0			
STDEV IR	0.43	0.52	0.92	0.33	0.66	0.51	0.36	54.0			
END_OF_FILE											

Figure x. Example Regional Crop Water Use Data File

The irrigated area system definition file defines the physical characteristics of the area and the irrigation management features, and the cropping information. The file contains several different data areas. The overall format specification for the individual records in the file are listed in Table xx and an example data file is shown in figure xx. The first data area is simple documentation of the data file. It consists of three alpha-numeric records. The second data area defines the number of irrigation systems, the number of crops, the number of soil types, and the number canal (lateral) segments and the risk level associated with the analysis.

The third data area of the file supplies the physical information concerning the canal -- lateral distribution system. For each later segment information describing the segment is given. The lateral segments must be entered starting at with the furthest downstream segment. The last segment entered should be the canal should be the one associated with the point of diversion. The numbering of the segments corresponds to the order they are entered in the data file. Currently, there are four options for seepage loss computations. The options are identified by numerical values of LMETHD. The first method associated with a value of 0 for LMETHD assumes a measured loss. This measured loss is entered as FAC1. The second method associated with a LMETHD value of 1 is based on the Moritz equation. The program uses the FAC1 value as the Moritz seepage coefficient C and assumes that it has the units of feet per day. The third method associated with a LMETHD value of 2 is based on the Etchverry formula. With this method, FAC1 is assumed to be i (ft/day) and FAC2 equals the Etchverry K value. The last method associated with a LMETHD value of 3 uses the Worstell method where LFAC1 equals the seepage factor i (ft/day). This data area starts with record 5 and ends when all the lateral segments have been defined. Line A shown in Table x.x describes the format associated with each lateral segment record.

The next data area describes the various irrigation systems used in the area of interest. For each irrigation system, a record with the format shown in Table x.x for line B should be found in the data area. The first three characters of the irrigation system name control how the program computes the application efficiency. Currently, the program handles furrow (FUR), gradient border (BOR), contour ditch (___), sprinkler (SPR), and center pivot (PIV) irrigation systems. The estimated efficiency is only used with the center pivot irrigation system. The remaining data elements depend on the type of irrigation system specified. For furrow irrigation systems the estimated

Table xx. System Definition File Format Specifications.

Line	Format	Description
1,2,3	A80	Dataset documentation, title, etc.
4	4I5,F5.0	NSEG,NSYS,NSOIL,NCROP,RISK
A	A15,7F5.2	Canal/Lateral Information Name -- 15 character identifier UPSEG -- Upstream segment number LENGTH -- Length of segment (miles) WIDTH -- Top width of segment (feet) XFAREA -- Cross sections flow area (sq. ft) LMETHD -- Method of seepage loss computation CFAC1 -- Factor associated with seepage comp. CFAC2 -- Facotr associated with seagee comp
B	A15,6F5.2	Irrigation System Information Name -- Irrigation System Name and Code ESTEFF -- Estimated system efficiency, % SETIME -- Set time, hours FLOW -- Inflow, gpm LENGTH -- length associated with system, feet SFAC1 -- System dependent factor SFAC2 -- System dependent factor
C	A15,7F5.2	Soil Information Name -- Soil Classification Identifier INFAM -- NRCS Flood Intake Family AWHC1 -- Water holding capacity 0 -- 1 ft, inches AWHC2 -- Water holding capacity 0 -- 2 ft, inches AWHC3 -- Water holding capacity 0 -- 3 ft, inches AWHC4 -- Water holding capacity 0 -- 4 ft, inches AWHC5 -- Water holding capacity 0 -- 5 ft, inches AWHC6 -- Water holding capacity 0 -- 6 ft, inches
D	A15,9F5.2	Crop Information Name -- Crop Identifier (Linkage to CU Data) ADEF -- Allowable soil moisture depletion, % FUR -- Furrow spacing, ft NROF -- Mannings roughness coefficient
E	A80	Consumptive Use File Descriptor
F.1	I5	Soil Classification Position (Section C)
F.2	A15,10F5.1 15X,10F5.1	Crop Area Mix for soil specified in F.1 CNAME -- Crop Identifier Area.1 -- Crop Area using Irrig.Sys. 1 for soil Area.2 -- Crop Area using Irrig.Sys. 2 for soil Area.3 -- Crop Area using Irrig.Sys. 3 for soil ... Area.N -- Crop Area using Irrig.Sys. N for soil
G	A15,10F5.1	Soil Classification service by lateral segments LName -- Lateral Segment Identifier Frac.1 -- Fraction of soil class 1 served by lateral Frac.2 -- Fraction of soil class 2 served by lateral Frac.3 -- Fraction of soil class 3 served by lateral ... Frac.N -- Fraction of soil class N served by lateral

efficiency is not used. The next three elements: SETIME, FLOW, and LENGTH, describe individual furrow characteristics of set time, furrow infow, and furrow length. The furrow slope is given as SFAC1. The data element identified as SFAC2 is not used for furrow systems. For gradient border irrigation systems, the first data element, ESTEFF, is not used. The next three elements (SETIME, FLOW, and LENGTH) describe the individual border strip characteristics of inflow time (set time), inflow rate, and border length. The data elements SFAC1 and SFAC2 describe the border width and border slope respectively. Contour ditch or wild flooding irrigation methods do not utilize the ESTEFF data element. The next three data elements refer to contour ditch characteristics based the length of ditch used during an irrigation set. For sprinkler irrigation systems which are not linear move or center pivots; the first data element is not used and the remaining element describe a sprinkler lateral line. The spacing between laterals is given as SFAC1. SFAC2 is not used. For center pivot and linear move systems, the program assumes that the application efficiency is readily known and is entered as the first data element.

Following the irrigation system specification, the next data area (Line C, Table x.x) characterizes the various soil classifications within the area of interest. For each soil class there should be a record corresponding to Line C in the data file and there should also be NSOIL records. Each soil classification should be given an identifier followed by the USDA-NRCS flood intake family number and the available water holding capacity of the soil in one foot intervals to 6 feet. If the soil depth is less than 6 feet the user should still enter values which reflect no additional water holding capacity.

The fifth data area which follows the soils information is the cropping information. For each crop grown in the area of interest there should be a record corresponding to Line D from Table x.x. The crop identifier used must be the same identifier used in the water requirements data file. The additional elements of allowable depletion, furrow spacing, and roughness coefficient should reflect local cropping practices.

The next data record specifies the water requirements data file descriptor. The data file descriptor may or may not contain the path specification depending on the users's installation and file storage procedures.

Up to this point, the data file has been defining the individual characteristics of lateral segments, soils, irrigation systems, and crops. The remainder of the data file specifies the mix of crops, irrigation systems, soils and how the lateral segments serve the irrigated area. First for each soil classification found in the fifth data area, the area for each crop under an irrigation system is specified in blocks. The first data record (Line F.1, Table x.x) of the block identifies the soil classification record position with the soils definition area. It is followed by a record (Line F.2, Table x.x) for each crop grown within the system identifying the number of acres grown under each irrigation system. The areas should correspond to the order in which the irrigation systems were

Bruneau Buckaroo Ditch Irrigation Water Diversion Requirements														
Brockway Engineering -- C.E. Brockway and C.W. Robison														
Dataset Created 12/29/94 -- Modified 4/20/96														
bruneau.dat														
	3	5	11	3										
	.80													
Hutch. to End	2.0	2.37	7.50	12.0	0.00	.784								
Jones to Hutch	3.0	4.53	9.00	13.0	0.00	.784								
Div. to Jones	0.0	4.57	10.0	14.5	0.00	.784								
SPRINKLER	80.0	24.0	165.1320	.50										
FURROW .5%	40.0	24.0	12.01320	.005										
FURROW 1%	40.0	24.0	12.01320	.010										
FURROW 2%	40.0	24.0	12.01320	.020										
FURROW 4%	40.0	24.0	12.01320	.040										
Map Unit 10	2.0	1.40	2.80	4.15	5.50	6.90	6.90							
Map Unit 11	2.0	1.30	2.92	4.04	5.50	7.00	7.00							
Map Unit 12	1.2	2.40	4.80	7.20	9.50	11.7	11.7							
Map Unit 50	1.9	1.75	3.55	4.30	4.85	5.40	5.40							
Map Unit 60	1.4	1.85	3.40	5.00	6.55	7.90	7.90							
Map Unit 65	1.5	2.22	4.40	6.60	8.65	10.8	10.8							
Map Unit 70	1.4	2.25	4.65	7.05	9.05	11.1	11.1							
Map Unit 71	1.5	2.30	4.50	6.60	8.80	10.8	10.8							
Map Unit 96	1.6	1.48	2.85	4.20	5.60	7.00	7.00							
Map Unit 100	2.0	1.50	2.90	4.30	5.80	7.40	7.40							
Map Unit 101	2.2	1.20	2.30	3.40	4.60	5.70	5.70							
Alfalfa Hay	60.0	2.50	0.10											
Silage Corn	50.0	2.50	0.04											
Spring Grain	50.0	2.50	0.04											
00001	Map Unit 10	--	205											
Alfalfa Hay	0.	0.	184.	0.	0.									
Silage Corn	0.	0.	8.	0.	0.									
Spring Grain	0.	0.	13.	0.	0.									
00002	Map Unit 11	--	832											
Alfalfa Hay	0.	0.	745.	0.	0.									
Silage Corn	0.	0.	35.	0.	0.									
Spring Grain	0.	0.	52.	0.	0.									
00003	Map Unit 12	--	144											
Alfalfa Hay	0.	129.	0.	0.	0.									
Silage Corn	0.	6.	0.	0.	0.									
Spring Grain	0.	9.	0.	0.	0.									
00004	Map Unit 50	--	76											
Alfalfa Hay	0.	0.	0.	68.	0.									
Silage Corn	0.	0.	0.	3.	0.									
Spring Grain	0.	0.	0.	5.	0.									
00005	Map Unit 50	--	545											
Alfalfa Hay	0.	488.	0.	0.	0.									
Silage Corn	0.	23.	0.	0.	0.									
Spring Grain	0.	34.	0.	0.	0.									
00006	Map Unit 65	--	650											
Alfalfa Hay	0.	0.	0.	582.	0.									
Silage Corn	0.	0.	0.	27.	0.									
Spring Grain	0.	0.	0.	41.	0.									
00007	Map Unit 70	--	183											
Alfalfa Hay	0.	0.	137.	0.	0.									
Silage Corn	0.	0.	6.	0.	0.									
Spring Grain	0.	0.	10.	0.	0.									
00008	Map Unit 71	--	117											
Alfalfa Hay	0.	0.	45.	0.	0.									
Silage Corn	0.	0.	5.	0.	0.									
Spring Grain	0.	0.	8.	0.	0.									
00009	Map Unit 96	--	85											
Alfalfa Hay	0.	0.	0.	0.	0.									
Silage Corn	0.	0.	0.	0.	0.									
Spring Grain	0.	0.	0.	0.	0.									
00010	Map Unit 100	--	330											
Alfalfa Hay	0.	0.	0.	295.	0.									
Silage Corn	0.	0.	0.	14.	0.									
Spring Grain	0.	0.	0.	21.	0.									
00011	Map Unit 101	--	11											
Alfalfa Hay	0.	0.	0.	0.	9.									
Silage Corn	0.	0.	0.	0.	1.									
Spring Grain	0.	0.	0.	0.	1.									
Hutch. to End	0.333	.333	.333	.333	.333	.333	.333	.333	.333	.333	.333	.333	.333	.333
Jones to Hutch	0.333	.333	.333	.333	.333	.333	.333	.333	.333	.333	.333	.333	.333	.333
Div. to Jones	0.334	.334	.334	.334	.334	.334	.334	.334	.334	.334	.334	.334	.334	.334

Figure xx. System Definition Data File

Figure xx. System Definition Data File

defined. If there are five irrigation systems defined there should be five areas specified for the crop. Again, the crop record is repeated until all the crop areas have been defined for the soil and the data block is repeated for all the soil types.

The last data area, identifies the irrigated areas served by each lateral segment. Each lateral segment requires a record corresponding to Line G in Table x.x in the data file. The sequence of the data records must correspond to the sequence in definition area. The record contains the lateral segment identifier followed by the percentage of each soil classification area served by the lateral segment. The percentages must be in the order which the soils were defined.

Program Output

The output from the program consists of the input data sets, the computed crop requirements based on the risk level specified, the on field (farm) application requirements for each crop, irrigation system, and soil type, a summary of the on field (farm) application requirements for the entire area, the flow and loss characteristics associated with each lateral segment for delivery of the on field (farm) application requirements, and a summary diversion requirements for the irrigated area including losses associated with the canal -- lateral distribution network.

¹Jensen, M. E., et al., 1980. Design and Operation of Farm Irrigation Systems, an ASAE Monograph. American Society of Agricultural Engineers, St. Joseph, Michigan 49085.

²Allen, R. G. and C. E. Brockway, 1983. "Estimating Consumptive Irrigation Requirements for Crops in Idaho", Research Technical Completion Report. Idaho Water and Energy Resources Research Institute, University of Idaho, Moscow, Idaho 83843.

³_____, 1991. "Guidelines for the Evaluation of Irrigation Diversion Rates", Hubble Engineering, Inc. and Associated Earth Sciences, 7025 Emerald, Boise, Idaho 83704.

⁴Trimmer, W. L. and H. J. Hansen, 1986. "Irrigation Scheduling", A Pacific Northwest Extension Publication, PNW 288. Oregon State University Extension Service, University of Idaho Cooperative Extension Service, and Washington State University Cooperative Extension Service.

⁵Larsen, Dorrel C. 1989. "Evapotranspiration Checkbook Method of Irrigation Scheduling for Surface Irrigators", in Proceedings 1989 Energy Efficient Irrigation Practices Handbook. University of Idaho Cooperative Extension Service, Moscow, Idaho 83843

⁶Kennedy, J. B. and A. M. Neville, 1976. Basic Statistical Methods for Engineers and Scientists, Second Edition. IEP, A Dun-Donnelley Publisher, New York, New York 10019.

⁷Allen, R. G. and C. E. Brockway, 1983. "Estimating Consumptive Irrigation Requirements for Crops in Idaho Appendix F", Research Technical Completion Report. Idaho Water and Energy Resources Research Institute, University of Idaho, Moscow, Idaho 83843.

⁸_____, 1970. Irrigation Guide for Southern and Southeastern Idaho. U. S. Department of Agriculture, Soil Conservation Service, Boise, Idaho.

⁹_____, 1984. National Engineering Handbook, Section 15 IRRIGATION. Chapter 5, Furrow Irrigation. United States Department of Agriculture, National Resource Conservation Service. Washington, D. C.

APPENDIX A

Project/Farm Irrigation Water Requirements Program
by Clarence W. Robison, PE
Initial Coding 15JUL84

Purpose: To compute the diversion volume and rate of water required to irrigate a specified crop distribution on a mix of soil types with various irrigation methods and delivery system at a specified probability level to meet crop water usage and leaching requirements

Methodology: The Hubble report, Guidelines for the evaluation irrigation diversion rates, is used as the basis for the program. The produce outline by Hubble Engineering involves the following processes

- Step 1 Collect agronomy data on crop soil-system distribution mix
- Step 2 Referencing Allen and Broadway collect CU/IR data for area
- Step 3 Apply level 4 risk probability based index of CU/IR
- Step 4 CU by ADAP Diagrams Figure 5

Version 1.00 Initial Development

- 1.20 Add Peak ET to Mean ET Ratio as a function of App Depth. Compute peak diversion requirements based on CU

Version 1.25 Added Contour Ditch Method Evaluation as outlined by the Hubble Report

```

PROGRAM      IRWTRREQ
INTEGER      NCANAL, NRSYS, NSOILS, NCROPS, NPERID
INTEGER      NP2R
CHARACTER*72 ATITLE(1), DUMTIT
CHARACTER*32 ANDATE, TSTAMP
CHARACTER*72 CUFIL
CHARACTER*15 CRNAME(15), SLNAME(15), ISNAME(15), CLNAME(15)
CHARACTER*15 CRNAME[ALLOCATABLE](15),
#            SLNAME[ALLOCATABLE](15),
#            ISNAME[ALLOCATABLE](15),
#            CLNAME[ALLOCATABLE](15)
CHARACTER*6  PRNAME(13)
CHARACTER*6  PRNAME[ALLOCATABLE](13)
REAL         CRDIST[ALLOCATABLE](15,15)
REAL         CRSOIL[ALLOCATABLE](15,15)
REAL         CRINFO[ALLOCATABLE](15,15)
REAL         ISINFO[ALLOCATABLE](15,15)
REAL         SLINFO[ALLOCATABLE](15,15)
REAL         CLINFO[ALLOCATABLE](15,15)
REAL         CRPUSE[ALLOCATABLE](15,15)
REAL         ETPAPP[ALLOCATABLE](15)
REAL         ETPRAT[ALLOCATABLE](15)
REAL         ETP2ND[ALLOCATABLE](15)
REAL         ADEFFT[ALLOCATABLE](15,15)
REAL         PEAKCU[ALLOCATABLE](15,15)
REAL         APPEFF[ALLOCATABLE](15,15)
REAL         DIVREQ[ALLOCATABLE](15,15)
REAL         PEAKRQ[ALLOCATABLE](15,15)
REAL         CRPSUM[ALLOCATABLE](15)
INTEGER      I, J, K, L, FORCE
INTEGER      ERR
INTEGER*2    FUREFF, BOREFF, SPREFF, CONEFF
LOGICAL      STRNCMP
REAL         CUPROB, X
EXTERNAL     TSTAMP

```

```

C *** Start things off with opening message.
WRITE(*,*) 'Project/Farm Irrig. Water Requirements'
WRITE(*,*) 'Clarence Robison, PE'
WRITE(*,*) 'Version 1.25'
WRITE(*,*) 'irwtrreq [-i:input] [-o:output]'
WRITE(*,*) 'CALL STARTS'

C *** Ok. Files have been opened -- time to proceed.
FORCE = 0
ANDATE = TSTAMP()
READ(5,10) ATITLE
WRITE(6,20) ' ',ANDATE,ATITLE

C *** Read in the filenames containing the cu/ir data
READ(5,10) CUFIL
OPEN(7,FILE=CUFIL,STATUS='OLD',IOSTAT=ERR)
IF (ERR.NE.0) THEN
    WRITE(6,999) 'I/O Error:',ERR,' Opening '//CUFIL
    WRITE(*,999) 'I/O Error:',ERR,' Opening '//CUFIL
    WRITE(*,10) 'Program terminating'
    STOP
ENDIF
READ(7,10) DUMTIT
READ(7,21) NP2R, NPERID
C ALLOCATE( PRNAME(NPERID+1), STAT=ERR )
READ(7,10) DUMTIT
READ(7,10) DUMTIT
READ(7,30) (PRNAME(I),I=1,NPERID)
CLOSE(7,STATUS='KEEP')

C *** Read control info -- Number of classifications
READ(5,21) NCANAL,NRSYS,NSOILS,NCROPS,FORCE
READ(5,22) CUPROB
WRITE(6,23) CUFIL,CUPROB*100.0,NCANAL,NRSYS,NSOILS,NCROPS,NPERID

C *** Now, allocate memory category names, info., and data
ALLOCATE(
C # CLNAME(NCANAL),
C # ISNAME(NRSYS),
C # SLNAME(NSOILS),
C # CRNAME(NCROPS),
C # CRPSUM(NCROPS),
C # ETPAPP(NP2R),
C # ETPRAT(NP2R),
C # ETP2ND(NP2R),
C # ISINFO(NRSYS,5),
C # SLINFO(NSOILS,6),
C # CRINFO(NCROPS,3),
C # CLINFO(NCANAL,9),
C # CRDIST(NRSYS,NCROPS,NSOILS),
C # CRSOIL(NCROPS,NSOILS),
C # CRPUSE(NCROPS,NPERID+1,3),
C # ADEFFT(NPERID,NCROPS,NSOILS),
C # DIVREQ(NPERID,NCROPS,NSOILS,NRSYS),
C # PEAKRQ(NPERID,NCROPS,NSOILS,NRSYS),
C # PEAKCU(NPERID,NCROPS,NSOILS),
C # APPEFF(NPERID,NCROPS,NSOILS,NRSYS),STAT=ERR)
IF (ERR.NE.0) THEN
    WRITE(*,13) 'MEM Error:',ERR,' allocating data space'
    GOTO 9000
ENDIF

C *** Read in category names and info -- same order as limits
C Canal/Lateral Info --
C name, upseg, length, width, area, type, fac1, fac2
DO 1000 I=1,NCANAL
    DO J=1,12
        CLINFO(I,J) = 0.0
    ENDDO
    1000 READ(5,25) CLNAME(I),(CLINFO(I,J),J=1,7)
C irrsys ass.eff set time flow.gpm length width slope

```

```

DO 1010 I=1,NIRSYS
1010 READ(5,25) ISNAME(I), (ISINFO(I,J),J=1,6)
C soil intake,fam awc,1 awc,2 awc,3 awc,4 awc,5
DO 1020 I=1,NSOILS
1020 READ(5,25) SLNAME(I), (SLINFO(I,J),J=1,6)
C crop all,def fur,spa fur,rough
DO 1030 I=1,NCROPS
1030 READ(5,25) CRNAME(I), (CRINFO(I,J),J=1,3)
C
C *** Write out Catagory Information
C Canal/Lateral Info
WRITE(6,32)
DO 1100 I=1, NCANAL
L = CLINFO(I,5)
K = CLINFO(I,1)
IF( L.EQ.0 ) WRITE(6,33) I,CLNAME(I),K, (CLINFO(I,J),J=2,4),
' Specified S=',CLINFO(I,6), 'cfs/mi'
IF( L.EQ.1 ) WRITE(6,33) I,CLNAME(I),K, (CLINFO(I,J),J=2,4),
' Moritz C=',CLINFO(I,6), 'ft/day'
IF( L.EQ.2 ) WRITE(6,33) I,CLNAME(I),K, (CLINFO(I,J),J=2,4),
' Etchverry is=',CLINFO(I,6), 'ft/day K='
CLINFO(I,7)
IF( L.EQ.3 ) WRITE(6,33) I,CLNAME(I),K, (CLINFO(I,J),J=2,4),
' Worsteli is=',CLINFO(I,6), 'ft/day'
IF( L.LT.0 OR L.GT.3 ) WRITE(6,13)CLNAME(I), I,
' Error: Unknown Deepage Method'
1100 CONTINUE
C
C *** Irrigation System Information
WRITE(6,35)
DO 1110 I=1,NIRSYS
IF( STRNCMP(ISNAME(I)(1:3), 'FT') ) THEN
K = 1
WRITE(6,37) ISNAME(I), (ISINFO(I,J),J=1,K)
ELSEIF( STRNCMP(ISNAME(I)(1:3), 'FUR') ) THEN
K = 5
WRITE(6,36) ISNAME(I), (ISINFO(I,J),J=1,K)
ELSEIF( STRNCMP(ISNAME(I)(1:3), 'CON') ) THEN
K = 5
WRITE(6,36) ISNAME(I), (ISINFO(I,J),J=1,K)
IF( ISINFO(I,3)/ISINFO(I,5)/4.488 .GT. 1.0 ) THEN
WRITE(6,11) ' Warning: Q >= 1cfs/100ft'
ENDIF
ELSE
K = 5
WRITE(6,37) ISNAME(I), (ISINFO(I,J),J=1,K)
ENDIF
1110 CONTINUE
WRITE(6,40)
DO 1120 I=1,NSOILS
1120 WRITE(6,42) SLNAME(I), (SLINFO(I,J),J=1,6)
WRITE(6,45)
DO 1130 I=1,NCROPS
1130 WRITE(6,46) CRNAME(I), (CRINFO(I,J),J=1,3)
C
C *** Read crop mix by soil by crop by system
DO 1200 K=1,NSOILS
READ(5,50) L
DO 1200 J=1,NCROPS
1200 READ(5,52) (CRDIST(I,J,L),I=1,NIRSYS)
C
C *** OUTPUT CROP DISTRIBUTION
DO J=1,NCROPS
CRFSUM(J)=0.0
ENDDO
WRITE(6,20) CHAR(12),ANDATE,ATITLE
DO 1210 K=1,NSOILS
WRITE(6,54) SLNAME(I), (SLINFO(I,J),J=1,6)
DO 1220 J=1,NCROPS
CRSOIL(J,K) = 0.0
DO 1210 I=1,NIRSYS
CRSOIL(J,K) = CRFSUM(I) * CRDIST(I,J,K)
CRFSUM(J) = CRFSUM(J) + CRSOIL(J,K)

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1220 WRITE(6,56) CRNAME(J),CRSOIL(J,K), (CRDIST(I,J,K),I=1,NIRSYS)
1230 WRITE(6,10) '
WRITE(6,57)
WRITE(6,58) (I,ISNAME(I),I=1,NIRSYS)
C
C *** Ok, crop irrig reqs data
CALL IRREQ(CRPUSE,CUFIL, CUPROB,CRNAME,NCROPS,PRNAME,NPERID,
NP2R,ETPAPP,ETPRAT)
C
C *** Ok, Now determine Allowable deficit for each crop and soil.
WRITE(6,20) CHAR(12),ANDATE,ATITLE
WRITE(6,60) 'Allowable Soil Water Deficit -- inches',CUPROB*100.0,
'IR'
DO 1400 K=1,NSOILS
WRITE(6,62) SLNAME(K), (PRNAME(I),I=1,NPERID)
CALL COMADF(NPERID,NCROPS,NSOILS,CRINFO,SLINFO,CRPUSE,
ADEFACT,K,CRNAME)
1400 CONTINUE
C
C *** Compute Peak Consumptive Use Requirement
WRITE(6,20) CHAR(12),ANDATE,ATITLE
WRITE(6,60) 'Peak Consumptive Use based on Peak:Mean(ASWD)',
CUPROB*100., 'CU'
C
C *** FIRST PERFORM SPLINE FIT ON THE PEAK ET TO APP.DEF CURVE
CALL SPLINE(ETPAPP,ETPRAT,NP2R,1.0E31,1.0E31,ETP2ND)
DO 1500 K=1,NSOILS
WRITE(6,62) SLNAME(K), (PRNAME(I),I=1,NPERID)
DO 1480 J=1,NCROPS
WRITE(6,65) CRNAME(J)
DO 1460 I=1,NPERID
IF(CRPUSE(J,I,2).LE.0) THEN
PEAKCU(I,J,K) = 0
WRITE(6,66) ' --'
ELSE
CALL SPLINT(ETPAPP,ETPRAT,ETP2ND,NP2R,ADEFACT(I,J,K),X)
PEAKCU(I,J,K) = CRPUSE(J,I,3)*X
WRITE(6,67) PEAKCU(I,J,K)
ENDIF
1460 CONTINUE
1480 WRITE(6,10) '
1500 CONTINUE
C
C *** Proceed with Irrigation Application Efficiency Analysis
DO 3000 L=1,NSOILS
DO 2000 K=1,NIRSYS
C *** Loop for excluding printouts associated with zero acres
zero = 0.0
DO J=1,NCROPS
zero = zero + crdist(k,j,1)
ENDDO
IF( zero .le. 0.001) goto 1900
WRITE(6,20) CHAR(12),ANDATE,ATITLE
WRITE(6,70) 'Irrigation System Analysis',SLNAME(L)
WRITE(6,72) ISNAME(K)
IF( ISNAME(K)(1:3).EQ.'FUR' ) THEN
WRITE(6,80) (ISINFO(K,J),J=2,5)
WRITE(6,79) 'CROP', (PRNAME(I),I=1,NPERID)
DO J=1,NCROPS
IF( CRDIST(K,J,L).LE.0.0 ) THEN ! No crop
ELSE
WRITE(6,65) CRNAME(J)
DO I=1,NPERID
IF( ADEFACT(I,J,L).GT.0.0 ) THEN
ERR=FUFEFF(ADEFACT(I,J,L), ISINFO(K,5), CRINFO(J,2),
ISINFO(K,4), ISINFO(K,3), CRINFO(J,3), ISINFO(K,2),
SLINFO(L,1), EFF )
IF( ERR.EQ.-1 ) THEN
WRITE(6,83) ' 000 '
APPEFF(I,J,L,K) = ISINFO(K,1)
ELSEIF( ERR.EQ.1 ) THEN
APPEFF(I,J,L,K) = EFF
WRITE(6,82) EFF, '

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ELSE
  APPEFF(I,J,L,K) = EFF
  WRITE(6,82) EFF
ENDIF
IF(FORCE.NE.0.AND.APPEFF(I,J,L,K).LE.ISINFO(K,1)) THEN
  DIVREQ(I,J,L,K)=CRDIST(K,J,L)/ISINFO(K,1)*100.0
  *CRPUSE(J,I,2)
  PEAKRQ(I,J,L,K)=CRDIST(K,J,L)/ISINFO(K,1)*100.0
  *PEAKCU(I,J,L)
ELSE
  DIVREQ(I,J,L,K)=CRDIST(K,J,L)/APPEFF(I,J,L,K)*100.0
  *CRPUSE(J,I,2)
  PEAKRQ(I,J,L,K)=CRDIST(K,J,L)/APPEFF(I,J,L,K)*100.0
  *PEAKCU(I,J,L)
ENDIF
ELSE
  APPEFF(I,J,L,K) = 0.0
  DIVREQ(I,J,L,K) = 0.0
  PEAKRQ(I,J,L,K) = 0.0
  WRITE(6,83)
ENDIF
ENDDO
WRITE(6,10)
ENDIF
ENDDO
WRITE(6,84)
* = Insufficient application
ELSEIF( ISNAME(K)(1:3).EQ.'BOR') THEN
  WRITE(6,85) (ISINFO(K,J),J=2,5)
  WRITE(6,79) '**CROP**' (PRNAME(I),I=1,NPERID)
DO J=1,NCROPS
  IF( CRDIST(K,J,L).LE.0.0 ) THEN ! No crop
  ELSE
    WRITE(6,65) CRNAME(J)
    DO I=1,NPERID
      IF( ADEFCT(I,J,L).GT.0.0 ) THEN
        ERR=BOREFF(ADEFCT(I,J,L),ISINFO(K,2),ISINFO(K,3),
          ISINFO(K,4),ISINFO(K,5),EFF )
        IF( ERR.EQ.1 ) THEN
          APPEFF(I,J,L,K) = EFF
          WRITE(6,82) EFF
        ELSE
          APPEFF(I,J,L,K) = EFF
          WRITE(6,82) EFF
        ENDIF
      IF(FORCE.NE.0.AND.APPEFF(I,J,L,K).LE.ISINFO(K,1)) THEN
        DIVREQ(I,J,L,K)=CRDIST(K,J,L)/ISINFO(K,1)*100.0
        *CRPUSE(J,I,2)
        PEAKRQ(I,J,L,K)=CRDIST(K,J,L)/ISINFO(K,1)*100.0
        *PEAKCU(I,J,L)
      ELSE
        DIVREQ(I,J,L,K)=CRDIST(K,J,L)/APPEFF(I,J,L,K)*100.0
        *CRPUSE(J,I,2)
        PEAKRQ(I,J,L,K)=CRDIST(K,J,L)/APPEFF(I,J,L,K)*100.0
        *PEAKCU(I,J,L)
      ENDIF
    ENDIF
  ENDIF
ENDDO
WRITE(6,10)
ENDIF
ENDDO
WRITE(6,84)
* = Insufficient application
ELSEIF( ISNAME(K)(1:3).EQ.'SPR') THEN
  WRITE(6,86) (ISINFO(K,J),J=2,5)
  WRITE(6,79) '**CROP**' (PRNAME(I),I=1,NPERID)
DO J=1,NCROPS
  IF( CRDIST(K,J,L).LE.0.0 ) THEN ! No crop
  ELSE
    WRITE(6,65) CRNAME(J)
    DO I=1,NPERID
      IF( ADEFCT(I,J,L).GT.0.0 ) THEN
        ERR=SPREFF(ADEFCT(I,J,L),ISINFO(K,2),ISINFO(K,3),
          ISINFO(K,4),ISINFO(K,5),EFF )
        IF( ERR.EQ.1 ) THEN
          APPEFF(I,J,L,K) = EFF
          WRITE(6,82) EFF
        ELSE
          APPEFF(I,J,L,K) = EFF
          WRITE(6,82) EFF
        ENDIF
      IF(FORCE.NE.0.AND.APPEFF(I,J,L,K).LE.ISINFO(K,1)) THEN
        DIVREQ(I,J,L,K)=CRDIST(K,J,L)/ISINFO(K,1)*100.0
        *CRPUSE(J,I,2)
        PEAKRQ(I,J,L,K)=CRDIST(K,J,L)/ISINFO(K,1)*100.0
        *PEAKCU(I,J,L)
      ELSE
        DIVREQ(I,J,L,K)=CRDIST(K,J,L)/APPEFF(I,J,L,K)*100.0
        *CRPUSE(J,I,2)
        PEAKRQ(I,J,L,K)=CRDIST(K,J,L)/APPEFF(I,J,L,K)*100.0
        *PEAKCU(I,J,L)
      ENDIF
    ENDIF
  ENDIF
ENDDO
WRITE(6,10)
ENDIF
ENDDO
WRITE(6,84)
* = Insufficient application
ELSEIF( ISNAME(K)(1:3).EQ.'CON') THEN
  WRITE(6,87) (ISINFO(K,J),J=2,5)
  WRITE(6,79) '**CROP**' (PRNAME(I),I=1,NPERID)

```

```

DO J=1,NCROPS
  IF( CRDIST(K,J,L).LE.0.0 ) THEN ! No crop
  ELSE
    WRITE(6,65) CRNAME(J)
    DO I=1,NPERID
      IF( ADEFCT(I,J,L).GT.0.0 ) THEN
        ERR=CONEFF(ADEFCT(I,J,L),ISINFO(K,2),ISINFO(K,3),
          ISINFO(K,4),ISINFO(K,5),EFF )
        IF( ERR.EQ.1 ) THEN
          APPEFF(I,J,L,K) = EFF
          WRITE(6,82) EFF
        ELSE
          APPEFF(I,J,L,K) = EFF
          WRITE(6,82) EFF
        ENDIF
      IF(FORCE.NE.0.AND.APPEFF(I,J,L,K).LE.ISINFO(K,1)) THEN
        DIVREQ(I,J,L,K)=CRDIST(K,J,L)/ISINFO(K,1)*100.0
        *CRPUSE(J,I,2)
        PEAKRQ(I,J,L,K)=CRDIST(K,J,L)/ISINFO(K,1)*100.0
        *PEAKCU(I,J,L)
      ELSE
        DIVREQ(I,J,L,K)=CRDIST(K,J,L)/APPEFF(I,J,L,K)*100.0
        *CRPUSE(J,I,2)
        PEAKRQ(I,J,L,K)=CRDIST(K,J,L)/APPEFF(I,J,L,K)*100.0
        *PEAKCU(I,J,L)
      ENDIF
    ENDIF
  ENDIF
ENDDO
WRITE(6,10)
ENDIF
ENDDO
WRITE(6,84)
* = Insufficient application
ELSEIF( ISNAME(K)(1:3).EQ.'SPR') THEN
  WRITE(6,86) (ISINFO(K,J),J=2,5)
  WRITE(6,79) '**CROP**' (PRNAME(I),I=1,NPERID)
DO J=1,NCROPS
  IF( CRDIST(K,J,L).LE.0.0 ) THEN ! No crop
  ELSE
    WRITE(6,65) CRNAME(J)
    DO I=1,NPERID
      IF( ADEFCT(I,J,L).GT.0.0 ) THEN
        ERR=SPREFF(ADEFCT(I,J,L),ISINFO(K,2),ISINFO(K,3),
          ISINFO(K,4),ISINFO(K,5),EFF )
        IF( ERR.EQ.1 ) THEN
          APPEFF(I,J,L,K) = EFF
          WRITE(6,82) EFF
        ELSE
          APPEFF(I,J,L,K) = EFF
          WRITE(6,82) EFF
        ENDIF
      IF(FORCE.NE.0.AND.APPEFF(I,J,L,K).LE.ISINFO(K,1)) THEN
        DIVREQ(I,J,L,K)=CRDIST(K,J,L)/ISINFO(K,1)*100.0
        *CRPUSE(J,I,2)
        PEAKRQ(I,J,L,K)=CRDIST(K,J,L)/ISINFO(K,1)*100.0
        *PEAKCU(I,J,L)
      ELSE
        DIVREQ(I,J,L,K)=CRDIST(K,J,L)/APPEFF(I,J,L,K)*100.0
        *CRPUSE(J,I,2)
        PEAKRQ(I,J,L,K)=CRDIST(K,J,L)/APPEFF(I,J,L,K)*100.0
        *PEAKCU(I,J,L)
      ENDIF
    ENDIF
  ENDIF
ENDDO
WRITE(6,10)
ENDIF
ENDDO
WRITE(6,84)
* = Insufficient application
ELSEIF( ISNAME(K)(1:3).EQ.'CON') THEN
  WRITE(6,87) (ISINFO(K,J),J=2,5)
  WRITE(6,79) '**CROP**' (PRNAME(I),I=1,NPERID)

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```

435      ENDDO
436      WRITE(6,10)
437    ENDF
438  ENDDO
439  WRITE(6,10)
440  WRITE(6,84)
441  ELSEIF( ISNAME(K)(1:3).EQ.'PIV' ) THEN
442    WRITE(6,88)
443    WRITE(6,79) '**CROP**' , (PRNAME(I), I=1,NPERID)
444    DO J=1,NCROPS
445      IF( CRDIST(K,J,L).LE 0.0 ) THEN ! No crop
446        ELSE
447          WRITE(6,65) CRNAME(I,J)
448          DO I=1,NPERID
449            IF( ADEFT(I,J,L).GT.0.0 ) THEN
450              EFF=ISINFO(K,1)
451              APPEFF(I,J,L,K) = EFF
452              WRITE(6,82) EFF,
453              IF(FORCE.NE.0 AND APPEFF(I,J,L,K).LE ISINFO(K,1)) THEN
454                DIVREQ(I,J,L,K)=CRDIST(K,J,L)/ISINFO(K,1)*100.0
455                *CRPUSE(I,2)
456                PEAKPC(I,J,L,K)=CRDIST(K,J,L)/ISINFO(K,1)*100.0
457                *PEAKC(I,J,L)
458              ELSE
459                DIVREQ(I,J,L,K)=CRDIST(K,J,L)*APPEFF(I,J,L,K)*100.0
460                *CRPUSE(I,2)
461                PEAKPC(I,J,L,K)=CRDIST(K,J,L)*APPEFF(I,J,L,K)*100.0
462                *PEAKC(I,J,L)
463            ENDF
464          ELSE

```

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July 1998

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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 1955-59, B.S.-Civil Engineering, 1959

California Institute of Technology 1959-60, 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 this 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, 1974-78

University of Idaho - Assistant Research Professor, Civil Engineering, 1965-74

Boise College - Instructor in Engineering, 1961-63

Summary of other experience:

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, 1963-65
U.S. Bureau of Reclamation - Boise, Idaho - Hydraulic Engineer, 1961-63
Converse Foundation Engineering, Inc. - Pasadena, California - Foundation Engineer,
1960-61
California Institute of Technology - Pasadena, California - Assistant Project
Engineer, U.S. Public Health Service Research Project, 1959-60

Consultant:

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., Redding, California - 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.
Reynolds and West Reynolds Irrigation Districts - Irrigation water requirements,
systems analysis.
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

Registered Professional Engineer: Idaho and Colorado

Special Awards or Honors:

Recipient of Bausch & Lomb Science Award
Member - Phi Beta Sigma, Freshman honorary, University of Idaho
Outstanding Freshman Engineer Award - University of Idaho, 1955
Member and secretary of Sigma Tau, National Engineering Honorary
Member and Vice-president of ASCE student chapter, University of Idaho
University of Idaho undergraduate scholarship 1957-58, 1958-59
Honorary Membership ASTM, 1959

Special Awards, cont'd.

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, 1967-68
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

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, 1973-74

Chairman - Young Engineers Committee, 1975-77

Member - President's Committee on Board of Directors Organization, 1977

Member - Registration and Qualification for Practice Committee, 1979-81

Chairman - Registration and Qualification for Practice Committee, 1982-84

Member - Participating Organizations Liaison Committee to NCEE, 1982-84

Idaho Society of Professional Engineers

President, 1978

President, Magic Valley Chapter, 1970-71

Member - State Ethical Practices Committee, 1966, 1977

Member - State Intersociety Relations Committee, 1968

Member - State Nominating Committee, 1975-76

Offices Held, cont'd.

Member - Board of Directors, 1972-73

Member - Board of Directors, Past President Chairman - Nominating Committee, 1979

State Director - Representative for Idaho to NSPE, 1982-83

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, 1975-81

Chairman - Irrigation and Drainage Division, Operations and Maintenance Committee, 1977-79

Member - Water Quality Committee, Irrigation and Drainage Division, 1980-84

Chairman - Water Quality Committee, Irrigation and Drainage Division, 1982-84

Member - Task Committee on Water Measurement, 1980-83

Chairman - Task Committee on Guidelines for Erosion and Sediment Control in Irrigated Agriculture, 1984 - Present

Member - Publications Committee, 1985 - Present

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, 1990 - 1992

National Council of Engineering Examiners

Assistant Vice President, Western Zone

Member, Professional Examinations Advisory Committee

Member, Committee on Uniform Procedures and Legislative Guidelines, 1984

Member, Communications and Publications Committee, 1983

Member, Uniform Examinations and Qualifications Committee, 1984 - Present

Member, Committee on Examination Policies and Procedures, 1987 - Present

Member, Advisory Committee on Council Activities, 1986 - 1987

Assistant Vice President - Western Zone, 1986 - 1987

Member, Fundamentals Examination Review Committee, 1986 - Present

Scholarly and creative activity:

Research:

- Development of systems analysis procedures for optimization of irrigation system designs with environmental, physical, and social constraints.
- 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 groundwater-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 wasteways.
- 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 costs 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.
- 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 - 1976-79
- Member - Twin Falls City Planning and Zoning Commission 12/78-9/79
- Member - College of Southern Idaho Geothermal Energy Commission
- Member - Governor's Committee on Energy Use - 1980-81

Member - Idaho Technical Advisory Committee for Sediment in Surface Water
Chairman - Snake River Technical Advisory Committee - Idaho Legislative Council,
1983-85
Advisor - Governor's Snake River Advisory Committee - 1985
Member - Water Resources Foundation Board of Directors - 1985
Chairman - Idaho Technical Committee on Hydrology
Member - Idaho Department of Health & Welfare Sediment Criteria 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

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.
- 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.
- Bondurant, J.A., R.V. Worstell, and C.E. Brockway. 1972. Water Resources Management in the Upper Snake River Valley. Proceedings, Irrigation & Drainage Division, Specialty Conference, ASCE, Spokane, Washington.
- Nichols, C.R., C.G. Warnick, and C.E. Brockway. 1972. Geothermal Water and Power Resources Exploration and Development for Idaho. Research Technical Completion Report, University of Idaho, Idaho Water Resources Research Institute, Moscow, ID.
- Brockway, C.E. 1972. Estimating Irrigation Distribution System Operation and Maintenance Costs. Paper presented at the Annual Meeting, Pacific Northwest Region ASAE, Calgary, Alberta, Canada, October 10-12, 1972.
- Bondurant, J.A., R.V. Worstell, and C.E. Brockway. 1973. Implications of Changes in Water Management in the Upper Snake River Basin. Paper presented at the ASCE Water Resources Conference, Washington, D.C., January, 1973.
- Brockway, C.E. 1973. Investigation of Natural Sealing Effects in Irrigation Canals. Research Technical Completion Report, Project A-023-IDA, Idaho Water Resources Research Institute.
- Reese, D.L. and C.E. Brockway. Operation and Maintenance Costs on Irrigation Distribution Systems. Progress Report, University of Idaho, College of Engineering.

- de Sonnevile, Jos L.J. and C.E. Brockway. 1973. Systems Analysis of Irrigation Water Management in Eastern Idaho. Research Technical Completion Report, Project B-018-IDA. University of Idaho, Idaho Water Resources Research Institute, Moscow, ID.
- Reese, David L., H.F. Mayland, and C.E. Brockway. 1973. Alternative Methods of Estimating Snow Water Parameters. Water Resources Research, Vol. 9, No. 5.
- Bondurant, J.A. and C.E. Brockway. 1974. Operation and Maintenance Costs on Irrigation Distribution Systems. Proceedings, VIIIth International Congress of Agricultural Engineering, Flevohof, Netherlands.
- Bondurant, J.A. and C.E. Brockway. 1974. Sediment Ponds Clean Irrigation Runoff Water. Idaho Farmer.
- Brockway, C.E. 1974. Water Resources of the Upper Snake River Basin. Proceedings, National Environmental Research Park Symposium, Idaho Falls, Idaho.
- Watts, F.J., C.E. Brockway, and A.E. Oliver. 1974. Analyses and Design of Settling Basins for Irrigation Return Flow. Research Technical Completion Report, Project A-042-IDA. University of Idaho, Idaho Water Resources Research Institute, Moscow, ID.
- Warnick, C. and C.E. Brockway. 1974. Hydrology Support Study, A Case Study of Federal Expenditures on a Water and Related Land Resource Project. Boise Project, Idaho and Oregon Project C-4202. University of Idaho, Idaho Water Resources Research Institute, Moscow, ID.
- Brockway, C.E. 1975. Energy Plant Siting Position Paper. Idaho Society of Professional Engineers, February, 1975 (member of Committee on Energy Plant Siting).
- Bondurant, J.A., M.J. Brown, and C.E. Brockway. 1975. Some Aspects of Sedimentation Pond Design. Proceedings, National Symposium on Urban Hydrology and Sediment Control, Lexington, Kentucky.
- Brockway, C.E. 1975. Issues Involved in Peoples Choices in Resources-Water. Idaho Academy of Science, Caldwell, Idaho.
- Brockway, C.E. 1975. Science in Idaho's Future. Idaho Academy of Science, Panel Symposium.
- Claiborn, B.A. and C.E. Brockway. 1975. Impact of Changes in Irrigation Water Management in Eastern Idaho. Research Technical Completion Report, Project A-

- 040-IDA. University of Idaho, Idaho Water Resources Research Institute, Moscow, ID.
- Bondurant, J.A., C.E. Brockway, and M.J. Brown. 1976. Characterizing Irrigation Return Flow Streams. 7th U.S. Technical Conference and 10th ICID Congress.
- Brockway, C.E. 1977. Vegetative Buffer Strips for Sediment Retention in Irrigation Runoff. Proceedings, ASCE Irrigation and Drainage Division Specialty Conference on Water Management for Irrigation and Drainage, Reno, Nevada.
- Brockway, C.E. 1977. Sediment Ponds for Irrigation Return Flow and Potato Fresh Pack Effluent. Research Technical Completion Report, Project A-042-IDA. University of Idaho, Idaho Water Resources Research Institute, Moscow, ID.
- Fitzsimmons, D.W., G.C. Lewis, J.R. Busch, G. M. McMaster and C. W. Berg. 1977. On-Farm Methods for Controlling Sediment and Nutrient Losses. Proceedings, National Conference on Irrigation Return Flow Quality Management, Fort Collins, Colorado.
- Brockway, C.E. 1977. Investigation of Natural Sealing Effects in Irrigation Canals. Ph.D. Dissertation, Utah State University.
- Brockway, C.F. and K.P. Grover. 1977. Water Management and Groundwater in the Henry's Fork-Upper Snake River Basin of Idaho. Research Technical Completion Report, ASCE Henry's Fork Project, Idaho Water Resources Research Institute.
- Bondurant, J.A., M.J. Brown and C.E. Brockway. 1977. Predicting Irrigation Return Flow Rates. ASAE-SW-192.
- Claiborn, Brent and C.E. Brockway. 1977. Predicting Attainable Irrigation Efficiencies. ASCE.
- Grover, K.P. and C.E. Brockway. 1978. Evaluation of Urbanization and Changes in Land Use on the Water Resources of Mountain Valleys. Research Technical Completion Report. Project B-038-IDA. University of Idaho, Idaho Water Resources Research Institute, Moscow, ID.
- Robbins, C.W. and C.E. Brockway. 1978. Irrigation Water Salt Concentration Influences on Sediment Removal by Ponds. Soil Sci. Soc. Am. J. 42:478-481.
- Longley, T.S., C.E. Brockway, and E.C. Larsen. 1978. Low Energy Sprinkler Equipment. ASAE Annual Meeting, Spokane, Washington. PN-78-406.
- Brockway, C.E. 1978. Systems Analysis of Irrigation Water Use in Eastern Idaho. OWRT.

- Brockway, C.E. 1978. Alternative Irrigation Systems for Flood Damaged Irrigation Lands Below Teton Dam. Research Technical Completion Report, Idaho Water Resources Research Institute.
- Busch, J.R., R.G. Allen and C.E. Brockway. 1978. Irrigation Rehabilitation Plans in the Teton Flood Area. ASCE Convention and Exposition, Chicago, Illinois.
- Allen, R. G. , J. R. Busch, and C.E. Brockway. 1979. Optimal Irrigation Systems Subject to Available Resources Constraints. IX Congress CIGR 1979.
- Brockway, C.E. 1979. Relationship of Costs and Water-Use Efficiency for Irrigation Projects in Idaho. Research Technical Completion Report, University of Idaho, Idaho Water Resources Research Institute, Moscow, ID.
- Brockway, C.E. 1979. Effects of Changing Irrigation Efficiencies on Water Supplies. ASCE Irrigation and Drainage Division Specialty Conference. Albuquerque, New Mexico.
- Brockway, C.E. 1979. Snake Plain Aquifer Model Studies. Idaho's Water, September 1979. Vol. 6, No. 4.
- Brockway, C.E., editor. 1980. Manual on Operation and Maintenance of Irrigation and Drainage Districts, American Society of Civil Engineers, prepared by Committee on Operation and Maintenance of Irrigation and Drainage Division.
- Allen, R.G. and C.E. Brockway. 1980. Problems in Developing and Applying an Optimal Irrigation Plan. ASCE Journal of the Water Resources Planning and Management Division, Vol. 106, No. WR 1.
- Mayland, H.F. and C.E. Brockway. 1980. Frequency Analysis of Western Snow Data. Proceedings. 1980 ASCE Watershed Management Symposium, Boise, Idaho.
- Robison, C.W. and C.E. Brockway. 1980. Vegetal Filters for Controlling Sediment in Irrigation Return Runoff. Proceedings. 1980 ASCE Irrigation and Drainage Division Specialty Conference. Boise, Idaho.
- Busch, J.R. and C.E. Brockway. 1980. Systems Approach to Irrigation Planning Research. 1980 ASCE Irrigation and Drainage Specialty Conference, Boise, Idaho.
- Brown, M.J., C.E. Brockway, and J.A. Bondurant. 1981. Ponding Surface Drainage Water for Sediment and Phosphorus Removal. Transactions ASAE, Vol. 24, No. 6, pp. 1478-1481.

- Brockway, C.E. and R.G. Allen. 1982. Impact of the Energy Crisis on Irrigation and Drainage, Part IV: System Design and Management Practices to Reduce Energy Requirements and Consumption. Paper presented at the 9th Congress of the International Committee on Irrigation and Drainage, National Conference. Jackson, Mississippi.
- Everts, Chris and C.E. Brockway. 1982. Reducing Soil Losses with Filter Strips. Current Information Series No. 587. University of Idaho College of Agriculture. January 1982.
- Luttrell, S.P. and C.E. Brockway. 1982. Impacts of Individual on-site Sewage Disposal Facilities on Mountain Valleys - Phase I. Research Technical Completion Report. University of Idaho, Idaho Water Resources Research Institute, Moscow, ID.
- Weils, R., C.E. Brockway, and J. R. Busch. 1983. Management, Maintenance and Operation of Pump Supplied Irrigation Resources Projects. Research Technical Completion Report. University of Idaho, Idaho Water Resources Research Institute, Moscow, ID.
- Freeman, G., C.E. Brockway, and R.G. Allen. 1983. Management and Systems for Water and Energy Savings, Bruneau Proj, Idaho. Research Technical Completion Report. University of Idaho, Idaho Water Resources Research Institute, Moscow, ID.
- Allen, R.G., C.E. Brockway, and J.L. Wright. 1983. Weather Station Siting and Consumptive Use Estimates. Journal of the Water Resources Planning and Management Division, American Society of Civil Engineers.
- Allen, R.G. and C.E. Brockway. 1983. Estimating Consumptive Irrigation Requirements for Crops in Idaho. Research Technical Completion Report. University of Idaho, Idaho Water Resources Research Institute, Moscow, ID.
- Allen, R.G. and C.E. Brockway. 1983. Weather and Consumptive Use in the Bear River Basin, Idaho during 1982. Research Technical Completion Report. University of Idaho, Idaho Water Resources Research Institute, Moscow, ID.
- Allen, R.G. and cb31983. Operation and Maintenance Costs and Water Use by Idaho Irrigation Projects. Proceedings of the 1983 Specialty Conference, Irrigation and Drainage Division, American Society of Civil Engineers, Jackson Hole, Wyoming.
- Allen, R.G. and C.E. Brockway. 1983. Estimating Consumptive Use on a Statewide Basis. Proceedings of the 1983 Specialty Conference, Irrigation and Drainage Division, American Society of Civil Engineers, Jackson Hole, Wyoming.

- Johnson, G.S. and C.E. Brockway. 1983. Users Manual for University of Idaho Ground-Water Flow Model and Recharge Program. Completion Report. University of Idaho, Idaho Water Resources Research Institute, Moscow, ID.
- Johnson, G.S., C.E. Brockway, and S.P. Luttrell. 1984. Application of a Numerical Ground-Water Flow Model to the Mud Lake Area in Southeastern Idaho. Completion Report. University of Idaho, Idaho Water Resources Research Institute, Moscow, ID.
- Johnson, G.S., C.E. Brockway, and S. Ramseyer. 1984. Water Resource References for the Snake River Basin Above Swan Falls. University of Idaho, Idaho Water Resources Research Institute, Moscow, ID.
- Luttrell, S.P. and C.E. Brockway. 1984. Impacts of Individual On-Site Sewage Disposal Facilities on Mountain Valleys - Phase II - Water-Quality Considerations. University of Idaho, Idaho Water Resources Research Institute, Moscow, ID.
- Robison, C.W., C.E. Brockway, C.W. Robbins, and G. S. Johnson. 1984. Evaluation of Irrigation Management Procedures for Geothermal Effluent. Completion Report, University of Idaho, Idaho Water Resources Research Institute, Moscow, ID.
- Fitzsimmons, D.W. and C.E. Brockway. 1984. Irrigation Systems Management Research Design. Final report submitted to USAID/Pakistan under contract no. 391-0467-C-00-4028 prepared by Research Definition Team in cooperation with Washington State University and Development Alternatives, Inc. University of Idaho, Moscow, ID. 354 p.
- Johnson, G.S., C.E. Brockway, J.L. Wright, and A.L. Coiner. 1984. Remote Sensing for Irrigated Crop Water Use Phase I. Technical Completion Report, Idaho Water Resources Research Institute, submitted to NASA-Ames Research Center.
- Johnson, G.S., C.E. Brockway, and A.L. Coiner. 1985. Evaluation of Methods for Estimation of Aquifer Recharge from Precipitation on Semi Arid Lands. Research Technical Completion Report. University of Idaho, Idaho Water Resources Research Institute, Moscow, ID.
- Brockway, C.E. and G.S. Johnson. 1985. Calibration of the Snake Plain Aquifer ground-water flow model. Research Technical Completion Report. University of Idaho, Idaho Water Resources Research Institute, Moscow, ID.
- Johnson, G.S., C.E. Brockway, and S.P. Luttrell. 1985. Ground-water model calibration for the Henry's Fork Recharge Area. Research Technical Completion Report. University of Idaho, Idaho Water Resources Research Institute, Moscow, ID.

- Brockway, C.E. 1986. Remote sensing for crop water use. Presented at Idaho Potato School January 29, 1986, Pocatello, Idaho.
- Robison, C.W. and C.E. Brockway. 1986. Modelling erosion and sedimentation in irrigation. Presented at ASCE Water Forum '86, at Long Beach, CA, August, 1986.
- Brockway, C.E. 1987. Swan Falls Data and Research Program Status Report by Idaho Technical Committee on Hydrology. University of Idaho, Idaho Water Resources Research Institute, Moscow, ID.
- Brockway, C.E. and C.W. Robison. 1987. Evaluation of Closed Conduit Measuring Devices for Irrigation Diversions. Research Technical Completion Report. University of Idaho, Idaho Water Resources Research Institute, Moscow, ID.
- Brockway, C.E. and C.W. Robison. 1987. Pump System Evaluation Using Microprocessor-Based Monitors. American Society of Agricultural Engineers, Paper No. 87-3502. Presented at the ASAE International Winter Meeting December 15-18, 1987, Chicago, IL, December 1987.
- Brockway, C.E. 1987. Report on "Evaluation of the Idaho-USGS Cooperative Water Data Collection Program". A Report to Ken Dunn, Director of the Idaho Department of Water Resources from the Idaho Technical Committee on Hydrology.
- Hill, R.W., C.E. Brockway, et al. 1987. Duty of Water Under Bear Rive Compact: Field Verification of Empirical Methods. Summer 1987 Progress Report to the Bear River Commission.
- Robison, C.W. and C.E. Brockway. 1987. Demonstration of Monitors for Pumping Stations. Research Technical Completion Report for the Idaho Department of Water Resources, Contract No. DWR-86-03-21-704-37. University of Idaho, Idaho Water Resources Research Institute, Moscow, ID.
- France, K.E. and C.E. Brockway. 1987. Flow measurement using ramped broad crested weirs. Research Technical Completion Report. University of Idaho, Idaho Water Resources Research Institute, Moscow, ID.
- Robison, C.W. and C.E. Brockway. 1987. Demonstration of monitors for pumping stations. Research Technical Completion Report, contract no. DWR-86-03-21-704-37. University of Idaho, Idaho Water Resources Research Institute, Moscow, ID.
- Brockway, C.E. and C.W. Robison. 1988. Development and Demonstration of Pump Station and Surface Diversion Monitor Systems for Water and Energy Efficiency Improvements. Research Technical Completion Report. University of Idaho, Idaho Water Resources Research Institute, Moscow, ID.

- Brockway, C.E. and C.W. Robison. 1988. Water Resources Data and Management Model for Beaver Creek, Camas Creek and Mud Lake Area of Eastern Idaho. University of Idaho, Idaho Water Resources Research Institute, Moscow, ID.
- Hill, R.W., C.E. Brockway, R.D. Burman, L.N. Allen, and C.W. Robison. 1989. Field Verification of Empirical Methods for Estimating Depletion; Research Report 125; Utah Agricultural Experiment Station, Logan, Utah, Two Volumes.
- Brockway, C.E. 1989. Mud Lake Standing Operating Procedures. Draft operating procedures manual for Mud Lake Water Users and Water District 31.
- Robison, C.W., C.E. Brockway, T. Gray, and T. Henschied. 1990. Irrigation Water Allocation System for Bell Rapids Mutual Irrigation Company.
- Brockway, C.E., C.W. Robison and J.S. Kolar. 1991. Municipal Pump Monitor Demonstration Project. Final Report to the Idaho Department of Water Resources. University of Idaho, Idaho Water Resources Research Institute, Moscow, ID.
- Hamilton, B. and C.E. Brockway. 1991. Effects of Non-Continuous Turnout Operation on the Aberdeen-Springfield Canal System. Research Technical Completion Report. University of Idaho, Idaho Water Resources Research Institute, Moscow, ID.
- Sandoval, V.B. and C.E. Brockway. 1991. Ground-water Investigations for the Fremont-Madison Irrigation District, Southeastern Idaho. Research Technical Completion Report. University of Idaho, Idaho Water Resources Research Institute, Moscow, ID.
- Sandoval, V.B. and C.E. Brockway. 1992. Water Rights Accounting on the Upper Snake River, Water District 01, Southeastern Idaho. Research Technical Completion Report. University of Idaho, Idaho Water Resources Research Institute, Moscow, ID. In press.
- Brockway, C.E. and C.W. Robison. 1992. Middle Snake River Water Quality Study, Phase I: Final. Technical completion report submitted to Idaho Department of Health and Welfare, Division of Environmental Quality. University of Idaho, Idaho Water Resources Research Institute, Moscow, ID.
- Brockway, C.E., C.W. Robison, G.S. Johnson. 1992. Evaluation of Water Quality in Shallow Ground-water Systems. Final Report to the Division of Environmental Quality, Contract No. 82-600945. University of Idaho, Idaho Water Resources Research Institute, Moscow, ID.
- Robison, C.W. and C.E. Brockway. 1991. Operations Manual for Electronic Pumping System Monitors. Research Technical Completion Report. University of Idaho, Idaho Water Resources Research Institute, Moscow, ID.

- Robison, C.W. and C.E. Brockway. 1992. "Thinking about Post-Project Evaluation - START NOW!". In: Proceedings of the National RCWP Symposium - 10 Years of Controlling Agricultural Nonpoint Source Pollution: The RCWP Experience. Orlando, Florida. September 13-17, 1992. US-EPA Office of Research and Development Office of Water, Washington DC. EPA/625/R-92/006.
- Brockway, C.E., H. Neibling, C.W. Robison, S.J. Trundy, and A. Wetzstein. 1992. Water Quality Project, Twin Falls and North Side Canal Companies First Quarterly Report, June 1- September 30, 1992.
- Brockway, C.E., H. Neibling, C.W. Robison, S.J. Trundy, A. Wetzstein, and J.F. Hansen. 1992. Water Quality Project, Twin Falls and North Side Canal Companies Second Quarterly Report, October 1 through December 31, 1992.
- Brockway, C.E. and C.W. Robison. 1992. Middle Snake River Water Quality for Snake River at Star Falls. Submitted to B and C Energy. University of Idaho, Idaho Water Resources Research Institute, Moscow, ID.
- Brockway, C.E. and C.W. Robison. 1992. Middle Snake River Water Quality for Kanaka and Boulder Rapids. Submitted to L.B. Industries. University of Idaho, Idaho Water Resources Research Institute, Moscow, ID.
- Brockway, C.E., H. Neibling, and C.W. Robison. 1993. Water Quality Project, Twin Falls and North Side Canal Companies Third and Fourth Quarterly Report, January 1, 1993 to June 30, 1993.
- Brockway, C.E. et al. 1993. Proposed Nutrient Management Plan for Middle Snake Irrigated Agriculture. Submitted to Idaho Department of Health and Welfare Division of Environmental Quality by the Mid Snake Irrigation Water Quality Coordination Committee.
- Carter, D.L., C.E. Brockway, and K.K. Tanji. 1994. Controlling Erosion and Sediment Loss from Furrow-Irrigated Cropland. Journal of Irrigation and Drainage Engineering, American Society of Civil Engineers. 119(6):975-988.
- Brockway, C.E. and A. Kahlown. 1994. Big Wood River-Silver Creek Hydrology Study. Quarterly Reports.
- Brockway, C.E. and A. Kahlown. 1994. Hydrologic Evaluation of the Big Wood River and Silver Creek Watersheds, Phase I. Final Report. University of Idaho, Idaho Water Resources Research Institute, Moscow, ID.

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Department of Water Resources

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MAR 22 1999

Department of Water Resources
Southern Region

IN THE DISTRICT COURT OF THE FIFTH JUDICIAL DISTRICT OF THE
STATE OF IDAHO, IN AND FOR THE COUNTY OF TWIN FALLS

In Re SRBA

Case No. 39576

A. Subcase 36-00069

(Insert water right number
From the Objection Form)

**STANDARD FORM 2
RESPONSE TO AMENDED
OBJECTION**

Please **print or type** the following information:

B. NAME AND ADDRESS OF PERSON RESPONDING

Name: Cranney Bros.
Address: c/o Mike Cranney
Box 44A
Oakley, ID 83346

Daytime Phone: 208-862-3480

Name & Address of Attorney, if any:

Jeffrey C. Fereday
Michael C. Creamer
Karl T. Klein
Givens Pursley, LLP
277 N. Sixth, Suite 200
Boise, ID 83701
Phone (208) 388-1200
Fax (208) 388-1201

**C. NAME AND ADDRESS OF PERSON WHO FILED THE OBJECTION TO
WHICH YOU ARE RESPONDING**

Name: John W. Jones, Jr. and Deloris D. Jones
Address: P.O. Box 265
Hagerman, ID 83332

D. I am responding to the objections to the following elements. (Please check the appropriate box(es)).

1. ☐ **Name and Address**
2. ☒ **Source**
3. ☒ **Quantity**
4. ☐ **Priority Date**
5. ☒ **Point(s) of Diversion**
6. ☐ **Instream Flow Description**
7. ☒ **Purpose(s) of Use**
8. ☒ **Period of Year**
9. ☒ **Place of Use**

Other Basis for Response

Claimant failed to state any supporting reasons for objection as required by S.F.1 (E) and A01, Rule 4(c) ("The Court will not accept incorrect or incomplete forms"). Claimant has, therefore, waived any right to object and claimant's water right should be decreed as stated in the Director's Report.

11. **Recommendation**

- ☐ This water right should not exist.
- ☒ This water right was not recommended, but should be recommended with the elements described above. (That is, this right's elements should be recommended, if at all, as identified by the IDWR.)

E. **VERIFICATION** (Must be Completed)

State of Idaho)
)ss.
County of Ada)

Karl T. Klein, duly sworn, upon oath deposes and says:

(Name of person filing response)

That I am the party/claimant filing this response as defined by I.C. §§ 42-1401A(1) and (6) or that I am the attorney for the party/claimant responding and that I have read this response, know its contents and believe that the statements are true to the best of my knowledge.

(Signature of person filing response)

Karl T. Klein

Karl T. Klein, of Givens Pursley, LLP
(Attorney signing in representative capacity)

Subscribed and sworn to before me on: February 19, 1999

Carrine A. Wilson
Notary Public for Idaho
Residing at: Meridian, Idaho
My Commission Expires: 11/27/2003



CERTIFICATE OF MAILING

I certify that on February 19, 1999, I mailed the original and copies of this response, including all attachments, to the following persons:

1. Original to:

Clerk of the District Court
Snake River Basin Adjudication
253 Third Avenue North
P.O. Box 2707
Twin Falls, ID 83303-2707

2. One copy to the claimant of the water right at the following address:

John W. Jones, Jr. and Deloris D. Jones
P.O. Box 265
Hagerman, ID 83332

3. Copies to:

IDWR Document Depository
P.O. Box 83720
Boise, ID 83720-0098

Chief, Natural Resources Division
Office of the Attorney General
State of Idaho
P.O. Box 44449
Boise, ID 83711-4449

United States Department of Justice
Environment and Natural Resource Division
550 West Fort Street, MSC 033
Boise, ID 83724

Patrick Brown
Parker, Warr & Brown LLP
812 Shoshone Street East
Twin Falls, ID 83301



Karl T. Klein

RECEIVED

FEB 22 1999

Department of Water Resources

RECEIVED

MAR 22 1999

Department of Water Resources
Southern Region

IN THE DISTRICT COURT OF THE FIFTH JUDICIAL DISTRICT OF THE
STATE OF IDAHO, IN AND FOR THE COUNTY OF TWIN FALLS

In Re SRBA

Case No. 39576

A. Subcase 36-00069

(Insert water right number
From the Objection Form)

**STANDARD FORM 2
RESPONSE TO AMENDED
OBJECTION**

Please **print or type** the following information:

B. NAME AND ADDRESS OF PERSON RESPONDING

Name: Kevin Michaelson
Address: 2590 Quigley Road
American Falls, ID 83211
Daytime Phone: 208-226-7203

Name & Address of Attorney, if any:

Jeffrey C. Fereday
Michael C. Creamer
Karl T. Klein
Givens Pursley, LLP
277 N. Sixth, Suite 200
Boise, ID 83701
Phone (208) 388-1200
Fax (208) 388-1201

**C. NAME AND ADDRESS OF PERSON WHO FILED THE OBJECTION TO
WHICH YOU ARE RESPONDING**

Name: John W. Jones, Jr. and Deloris D. Jones
Address: P.O. Box 265
Hagerman, ID 83332

D. I am responding to the objections to the following elements. (Please check the appropriate box(es)).

1. ☐ Name and Address
2. ☒ Source
3. ☒ Quantity
4. ☐ Priority Date
5. ☒ Point(s) of Diversion
6. ☐ Instream Flow Description
7. ☒ Purpose(s) of Use
8. ☒ Period of Year
9. ☒ Place of Use

11. Recommendation

- ☐ This water right should not exist.
- ☒ This water right was not recommended, but should be recommended with the elements described above. (That is, this right's elements should be recommended, if at all, as identified by the IDWR.)

Other Basis for Response

Claimant failed to state any supporting reasons for objection as required by S.F. 1 (E) and A01, Rule 4(c) ("The Court will not accept incorrect or incomplete forms"). Claimant has, therefore, waived any right to object and claimant's water right should be decreed as stated in the Director's Report.

E. VERIFICATION (Must be Completed)

State of Idaho)
)ss.
County of Ada)

Karl T. Klein

(Name of person filing response)

, duly sworn, upon oath deposes and says:

That I am the party/claimant filing this response as defined by I.C. §§ 42-1401A(1) and (6) or that I am the attorney for the party/claimant responding and that I have read this response, know its contents and believe that the statements are true to the best of my knowledge.

(Signature of person filing response)

Karl T. Klein

Karl T. Klein, of Givens Pursley, LLP

(Attorney signing in representative capacity)

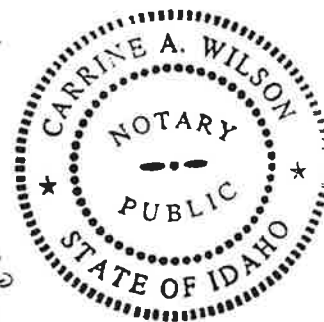
Subscribed and sworn to before me on:

February 19, 1999

Carrine A. Wilson
Notary Public for Idaho

Residing at: Meridian, Idaho

My Commission Expires: 11/27/2003



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Hagerman, ID 83332

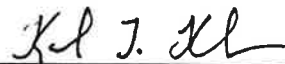
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Chief, Natural Resources Division
Office of the Attorney General
State of Idaho
P.O. Box 44449
Boise, ID 83711-4449

United States Department of Justice
Environment and Natural Resource Division
550 West Fort Street, MSC 033
Boise, ID 83724

Patrick Brown
Parker, Warr & Brown LLP
812 Shoshone Street East
Twin Falls, ID 83301



Karl T. Klein

RECEIVED

FEB 22 1999

Department of Water Resources

RECEIVED

MAR 22 1999

Department of Water Resources
Southern Region

IN THE DISTRICT COURT OF THE FIFTH JUDICIAL DISTRICT OF THE
STATE OF IDAHO, IN AND FOR THE COUNTY OF TWIN FALLS

In Re SRBA

Case No. 39576

A. Subcase 36-00069

(Insert water right number
From the Objection Form)

**STANDARD FORM 2
RESPONSE TO AMENDED
OBJECTION**

Please **print or type** the following information:

B. NAME AND ADDRESS OF PERSON RESPONDING

Name: Doug Grant

Address: 600 N. 707 E.

Rupert, ID 83211

Daytime Phone: 208-226-7203

Name & Address of Attorney, if any:

Jeffrey C. Fereday

Michael C. Creamer

Karl T. Klein

Givens Pursley, LLP

277 N. Sixth, Suite 200

Boise, ID 83701

Phone (208) 388-1200

Fax (208) 388-1201

**C. NAME AND ADDRESS OF PERSON WHO FILED THE OBJECTION TO
WHICH YOU ARE RESPONDING**

Name: John W. Jones, Jr. and Deloris D. Jones

Address: P.O. Box 265

Hagerman, ID 83332

D. I am responding to the objections to the following elements. (Please check the appropriate box(es)).

1. ☐ Name and Address
2. ☒ Source
3. ☒ Quantity
4. ☐ Priority Date
5. ☒ Point(s) of Diversion
6. ☐ Instream Flow Description
7. ☒ Purpose(s) of Use
8. ☒ Period of Year
9. ☒ Place of Use
11. Recommendation

Other Basis for Response

Claimant failed to state any supporting reasons for objection as required by S.F.1 (E) and A01, Rule 4(c) ("The Court will not accept incorrect or incomplete forms"). Claimant has, therefore, waived any right to object and claimant's water right should be decreed as stated in the Director's Report.

- ☐ This water right should not exist.
- ☒ This water right was not recommended, but should be recommended with the elements described above. (That is, this right's elements should be recommended, if at all, as identified by the IDWR.)

E. VERIFICATION (Must be Completed)

State of Idaho)
)ss.
County of Ada)

Karl T. Klein

(Name of person filing response)

That I am the party/claimant filing this response as defined by I.C. §§ 42-1401A(1) and (6) or that I am the attorney for the party/claimant responding and that I have read this response, know its contents and believe that the statements are true to the best of my knowledge.

(Signature of person filing response)

Karl T. Klein

Karl T. Klein, of Givens Pursley, LLP

(Attorney signing in representative capacity)

Subscribed and sworn to before me on: February 19, 1999

Carrine A. Wilson
Notary Public for Idaho

Residing at: Meridian, Idaho

My Commission Expires: 11/27/2003



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P.O. Box 265
Hagerman, ID 83332

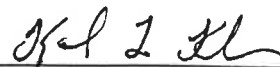
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United States Department of Justice
Environment and Natural Resource Division
550 West Fort Street, MSC 033
Boise, ID 83724

Patrick Brown
Parker, Warr & Brown LLP
812 Shoshone Street East
Twin Falls, ID 83301



Karl T. Klein

12/8/98
See

68-69 Jones

~~417~~ cfs ^{sprinkler} 417 AC.

(adjustment to Q)

(Est. 350 gravity acres)

claim is 1.62"/ac

478ac decreased max

Claim Stock: 0.20 cfs sub. + 4.5 cfs

Run analysis: ^{Sensitivity}
(woodhead)

limit to capacity or decrease

other pipe users: 86 series
McFadden
-002

99-100

Porter

History of Wildlife ponds per Dick Cook
gradual development over time.

possible transfer from - 7271
decreeing to wildlife. - 7233

6-7-8

→ parties will assess acreage then apply
Sensitivity Analysis.

possible view of one pond

→ irrig. analysis is the limit

**IN THE DISTRICT COURT OF THE FIFTH JUDICIAL DISTRICT OF THE
STATE OF IDAHO, IN AND FOR THE COUNTY OF TWIN FALLS**

In Re SRBA)

Case No. 39576)

A.

Subcase 36-00069

(Insert water right number
From the Objection Form)

**STANDARD FORM 2
RESPONSE TO AMENDED OBJECTION**

Please **print or type** the following information:

B. NAME AND ADDRESS OF PERSON RESPONDING

Name: North Snake Ground Water District, on behalf of its members, and
May Farms Ltd. and Faulkner Land & Livestock Company
Address: 2092 East 3600 South
Wendell, Idaho 83355
Daytime Phone: (208) 536-6553

Name & Address of Attorney, if any:

Josephine P. Beeman
Dana L. Hofstetter
Beeman & Hofstetter, P.C.
608 West Franklin Street
P. O. Box 1427
Boise, Idaho 83701-1427
(208) 388-8900 / Fax - (208) 388-8400

**C. NAME AND ADDRESS OF PERSON WHO FILED THE OBJECTION TO
WHICH YOU ARE RESPONDING**

Name: John W. Jones, Jr. and Deloris D. Jones
Address: P. O. Box 265
Hagerman, ID 83332
Daytime Phone: (208) 837-4580

1.	☐	Name and Address
2.	☐	Source
3.	☒	Quantity
4.	☐	Priority Date
5.	☐	Point(s) of Diversion
6.	☐	Instream Flow Description
7.	☒	Purpose(s) of Use
8.	☒	Period of Year
9.	☒	Place of Use
11.		Recommendation
	☐	This water right should not e
	☐	This water right was not reco elements described above.

State of Idaho)
County of Ada) ss:

That I am the party/claimant filing this response as defined by I.C. § 42-1401A(1) and (6) or that I am the attorney for the party/claimant responding and that I have read this response, know its contents and believe that the statements are true to the best of my knowledge.

[Signature]
(Attorney signing in representative capacity)

JOYCE B. ANGELL
NOTARY
PUBLIC
STATE OF IDAHO

SF.2 - Response to Objection
Amended 10/16/97

INSTRUCTIONS FOR MAILING

You must mail the response, including all attachments, to the Clerk of the Court. **FAX filings will not be accepted.** You must also send a copy to all the parties listed below in the Certificate of Mailing.

F

CERTIFICATE OF MAILING

I certify that on February 2, 1999, I mailed the original and copies of this response, including all attachments, to the following persons:

1. Original to:

Clerk of the District Court
Snake River Basin Adjudication
253 Third Avenue North
P. O. Box 2707
Twin Falls, ID 83303-2707

2. One copy to the claimant of the water right at the following address:

Name: John W. Jones, Jr. and Deloris D. Jones
Address: P. O. Box 265
Hagerman, ID 83332

3. One copy to the party who filed the objection at the following address:

Name: Patrick D. Brown
Parker, Warr & Brown
Address: 812 Shoshone Street East
Twin Falls, Idaho 83301

4. Copies to:

IDWR Document Depository
P. O. Box 83720
Boise, ID 83720-0098

Chief, Natural Resources Division
Office of the Attorney General.
State of Idaho
P. O. Box 44449
Boise, ID 83711-4449

United States Department of Justice
Environment & Natural Resource Div
550 West Fort Street, MSC 033
Boise, ID 83724

Michael C. Creamer
Givens Pursley LLP
P. O. Box 2720
Boise, ID 83701-2720

Peter Ampe
John Marshall
Attorney General's Office
P. O. Box 83720
Boise, ID 83720-0010



Your signature or signature of attorney
mailing on your behalf

RECEIVED

JAN 25 1999

Department of Water Resources
Southern Region

IN THE DISTRICT COURT OF THE FIFTH JUDICIAL DISTRICT OF THE
STATE OF IDAHO, IN AND FOR THE COUNTY OF TWIN FALLS

In Re SRBA

A. Subcase: 36-00069

Case No. 39576

STANDARD FORM 2
RESPONSE TO OBJECTION

Please print or type the following information:

B. NAME AND ADDRESS OF PERSON RESPONDING

Name: Idaho Department of Fish and Game
Address: 600 S. Walnut St.
Boise, Idaho 83707
Phone: (208) 334-3700

RECEIVED

JAN 19 1998

Department of Water Resources
Adjudication Bureau

Name & Address of Attorney if any

Attorney Name: ALAN G. LANCE
Attorney General
CLIVE J. STRONG
Deputy Attorney General
Chief, Natural Resources Division
JOHN M. MARSHALL
Deputy Attorney General
Attorney Address: Office of the Attorney General
700 W. Jefferson, Room 210
P.O. Box 44449
Boise, ID 83711-4449
Attorney Phone No. (208) 334-2400

C. NAME AND ADDRESS OF PERSON WHO FILED THE OBJECTION TO WHICH YOU
ARE RESPONDING

Name: John W. Jones, Jr. and Deloris D. Jones
Address: P.O. Box 265
Hagerman, Idaho 83332

D. I am responding to the objections to the following elements. (Please check the appropriate box(es))

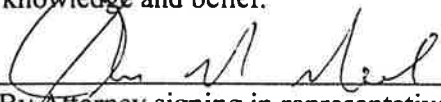
1. ☐ Name and Address
2. ☐ Source
3. ☐ Quantity
4. ☐ Priority Date
5. ☐ Points of Diversion
6. ☐ Instream Flow
7. ☒ Purpose(s) of Use
8. ☒ Period of Year
9. ☒ Place of Use
10. ☐ Other Provisions Necessary for Definition or Administration of this Water Right
11. Recommendation
 - ☐ This water right should not exist
 - ☐ This water right was not recommended, but should be recommended with the elements described above.

E. VERIFICATION (Must be Completed)

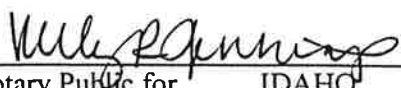
State of Idaho)
)ss.
County of Ada)

John M. Marshall, duly sworn, upon oath, deposes and says:

That I am the party/claimant filing this response as defined by I.C. § 42-1401A(1) and (6) or that I am the attorney for the party/claimant in this proceeding, and I have read this response, know its contents and that the statements are true to the best of my knowledge and belief.


By Attorney signing in representative capacity

Subscribed and sworn to before me on: 11/15/19
(Insert Date)


Notary Public for IDAHO
Residing at: BOISE, ID
My commission expires: 5/29/2023

INSTRUCTIONS FOR MAILING

You must mail the response, including all attachments, to the Clerk of the Court. **FAX filings will not be accepted.** You must also send a copy to all the parties listed below in the Certificate of Mailing.

F. CERTIFICATE OF MAILING

I certify that on January 15 1999, I mailed the original and copies of the foregoing response, including all attachments, to the following persons, by mailing the original and/or copies, postage prepaid and addressed as follows:

1. Original to:

Clerk of the District Court
Snake River Basin Adjudication
253 Third Avenue North
P.O. Box 2707
Twin Falls, Idaho 83303-2707

2. One copy to the claimant of the water right at the following address:

Patrick D. Brown
Parker, Warr & Brown, LLP
812 Shoshone St. E.
Twin Falls, ID 83301

3. One copy to the party who filed the objection at the following address:

Same as above.

4. Copies to:

IDWR Document Depository
PO Box 83720
Boise, ID 83720-0098

Chief of Natural Resource Division
Office of the Attorney General
State of Idaho
P.O. Box 44449
Boise, Idaho 83711-4449

(not applicable)

United States Department of Justice
Environment and Natural Resource Division
550 West Fort Street, MSC 033
Boise, Idaho 83724

Michael C. Creamer
Givens Pursley LLP
P.O. Box 2720
Boise, Idaho 83701-2720

Dana Hofstetter
Beeman & Hofstetter
P.O. Box 1427
Boise, Idaho 83701-1427



Signature of Respondent or attorney
mailing on Respondent's behalf

COPY

342 4-14
RECEIVED

APR 16 1998

Department of Water Resources

John W. Jones, Jr.

PARKER, WARR & BROWN, LLP
Patrick D. Brown
812 Shoshone St. East
Twin Falls, ID 83301
Telephone: (208)735-8812

RECEIVED

MAY 01 1998

Department of Water Resource
Southern Region

IN THE DISTRICT COURT OF THE FIFTH JUDICIAL DISTRICT OF THE
STATE OF IDAHO, IN AND FOR THE COUNTY OF TWIN FALLS

.....

*blank prefix records
modified 4-24-98*

In Re SRBA

Case No. 39576

)
) Subcase Nos. 36-00068, 36-00069
) and 36-00070
)

NOTICE OF SUBSTITUTION
OF COUNSEL

.....

TO: The above-entitled court and to the parties and their counsel:

YOU ARE HEREBY NOTIFIED that pursuant to the Rule 11(b)(1), I.R.C.P.,
Parker, Warr & Brown, LLP, 812 Shoshone Street East, Twin Falls, ID 83301, are hereby
substituted as counsel for Claimants, John W. Jones and Doris Jones, in place of the firm
of Hepworth, Lezamiz & Hohnhorst, Chtd.

AJ0749NP
No. R36-00069

IDAHO DEPARTMENT OF WATER RESOURCES
ADJUDICATION CLAIM PROFILE REPORT
(REGIONAL)

DATE: 01/29/98
PAGE: 1

OWNER CODE	NAME & ADDRESS	PRIORITY DATE	WATER USE	USE PERIOD FROM TO	DIVERSION RATE	DIVERSION VOLUME
C	JOHN W JONES JR	02/01/1888	IRRIGATION	03-15 11-15	1.00 CFS	
C	DELORIS D JONES		STOCKWATER	01-01 12-31	0.12 CFS	
	PO BOX 265					
	HAGERMAN ID 83332					
	(208) 837-4580			TOTAL DIVERSION:	1.00 CFS	

Water Source: HOAGLAND TUNNEL

Tributary to: BILLINGSLEY CREEK

Stage: DECREED

Point(s) of Diversion:

T07S R14E S30

SENESEW

GOODING County

Place of use Legal Description for: IRRIGATION

				NE				NW				SW				SE						
T	R	S	:	Lt	Ac	Lt	Ac	Lt	Ac	Lt	Ac	Lt	Ac	Lt	Ac	Lt	Ac	Lt	Ac	:	SUM	
07S	13E	25	:	40		40		40		40								38	38	30	36	302.0
07S	14E	30	:									01-18	02-25			05	03-26	04-27	11		112.0	
																				TOTAL ACRES	414.0	

Place of use Legal Description for: STOCKWATER

				NE				NW				SW				SE				
T	R	S	:	Lt	Ac	Lt	Ac	Lt	Ac	Lt	Ac	Lt	Ac	Lt	Ac	Lt	Ac	Lt	Ac	:
07S	13E	25	:															S		:
07S	14E	30	:											03-S						:

POU County: GOODING

Conditions of Approval:

- N01 - THE APPROPRIATOR IS ENTITLED TO THE QUANTITY OF WATER
- DESCRIBED FOR STOCK WATER PURPOSES AT A POINT OF MEASUREMENT
- WHERE THE DELIVERY DITCH ENTERS THE PLACE OF USE DESCRIBED, SO
- LONG AS THE QUANTITY DIVERTED AT THE POINT OF DIVERSION DOES NOT
- CONSTITUTE UNREASONABLE WASTE.
- N05 - THE QUANTITY OF WATER UNDER THIS RIGHT FOR STOCKWATER USE
- SHALL NOT EXCEED 13,000 GALLONS PER DAY.
- N08 - THE QUANTITY OF WATER DECREED FOR THIS WATER RIGHT FOR
- STOCKWATER USE IS NOT A DETERMINATION OF HISTORICAL BENEFICIAL
- USE.

Remarks: QNT USE OF THIS RIGHT WITH RIGHT NO. 36-00068 IS LIMITED TO A
TOTAL COMBINED DIVERSION RATE OF 8.48 CFS.

POU1 USE OF THIS RIGHT WITH RIGHT NO. 36-00068 IS LIMITED TO
THE IRRIGATION OF A COMBINED TOTAL OF 414 ACRES IN A SINGLE
IRRIGATION SEASON.

AJ0749NP
No. R36-00069

IDAHO DEPARTMENT OF WATER RESOURCES
ADJUDICATION CLAIM PROFILE REPORT
(REGIONAL)

DATE: 01/29/98
PAGE: 2

=====

Dates: Exam Made Date: Verified Date: Objection Filed Date:

Misc: Water District Number: 36A Field Inspection Flag:
Presumption Flag:

SRBA FIELD EXAM REPORT

SRBA CLAIM: A36-00068, 36-00069 & 36-00070
EXAM DATE: JANUARY 16, 1998
IDWR AGENT: STEVE CLELLAND
ACCOMPANIED BY CLAIMANT: BILL JONES

PURPOSE: This examination was made to investigate the amendments for additional uses filed by Pat Brown for the above named claimant and SRBA Claims.

OBSERVATIONS & FINDINGS: I met with Mr. Bill Jones at the ranch site; we originally had planned to meet at his home but I thought that was the home on the ranch. He drove out to meet me at about 5 pm. We traveled in Mr. Jones' pickup to a place out overlooking Billingsley Creek in the northeast corner of the ranch. From here he pointed out the location of the spring listed in 36-00070. He pointed to the canyon side to indicate where the ditch carried water from this spring to the pasture in the most northeastern corner of the farm. (11.0 acre piece as shown on the GIS map.) He told me he wished to re-affirm his claim to this unnamed spring. He said it has started to flow again after several years of being dried up. I told him the drought could account for the reduced flow. I may be able to recommend it as claimed since he had stated he didn't use it and now he does. Place of use would only be the small area across Billingsley Creek, the 11.0 acres mentioned above.

Mr. Jones and I met in the office about 10:30 am Friday, 16th, and discussed the need to investigate the amended portions of his claims. He had not heard of this from Pat Brown so I told him what I had been doing for other rights similarly amended. He told me he had not made claims for the same uses as the others and so no examination should be needed. We reviewed the amended uses and I agreed.

I asked Mr. Jones what was meant by the claim for Irrigation Maintenance. He did not know why that was included, he said Pat Brown insisted it be part of the amendment. Mr. Jones was told he needed this amount of water to insure he could get water to his house and stockwater through the Weatherby Springs pipeline if all the other users on the system were to stop using their rights. Mr. Jones said this would never happen. I told him we recommended the Domestic and Stockwater uses and we can add a remark that allows a flow rate necessary to deliver the water as recommended in the right. I gave him a copy of the N01 code remark to which I referred. We both agreed there was no need for Irrigation Maintenance for the irrigation use since the system is shut off during the non-irrigation season.

The Fish Propagation use was amended to this claim also. Mr. Jones said the water goes through the fish hatchery anyway. I stated that use is covered by the license 36-07071. I explained IDWR's position on the fish uses from decreed water rights; they did not exist at the time and are not being recommended.

He wanted to know why we had given an 1880's priority date for

the fish right to Donnie McFadden. I told him we tried to prevent that from happening and show a more realistic priority date, but, he and McFadden signed a stipulation agreeing to that description of the right and the SRBA court affirmed it. I told him he gave that to McFadden not IDWR. He does not like the outcome now.

We discussed the acreage as I had recommended. I told him this was as much as could be documented, in fact, the earlier maps show the area where the sheep pens used to be as not being irrigated before 1980. He told me ASCS had mapped out 404 acres, he offered to get me a copy of that map, which he did. I agreed to review what they had found and I would add in the areas in the northeast corner where he had shown some acres needed to be included. Original GIS acres were 402 and the revised shape file gives 414 acres. Initial recommendation was 401 acres. This acreage has expanded since the days of using a gravity system. In fact, many areas of what is currently irrigated cannot be irrigated without the use of sprinklers; this is due to steep slopes and erodible land along the creek. I do not have sufficient information to determine whether an enlargement is necessary for portions of the irrigated lands now being irrigated.

SUMMARY & RECOMMENDATIONS: Based upon these observations, discussions with Mr. Jones, and documentation previously stated in the SRBA claim file for this right, here are the proposed recommendations.

SRBA CLAIMS 36-00068 & 36-00069

IRRIGATION: Flow rate to remain at the estimated capacity of the pumping system, that of 8.25 cfs. The actual measured capacity was 7.25 cfs but we agreed with the aging of the pumps to allow 8.25 as suggested by the claimant. If allowance is made to give a pre-sprinkler rate for this right it should be based on the actual gravity irrigated acreage and not the acreage found here of 414 acres. The actual gravity system acres has not been determined. Allow acres at the current systems operation of 414 acres, unless it is found that some acres are to be part of an enlargement right.

IRRIGATION MAINTENANCE: There is no need for this in the Irrigation use. Any system maintenance needed for the D & S uses will be covered by the N01 and N02 type codes.

DOMESTIC & STOCKWATER: No change from previous report. Domestic rate is 0.11 cfs and Stockwater rate is 0.12 cfs.

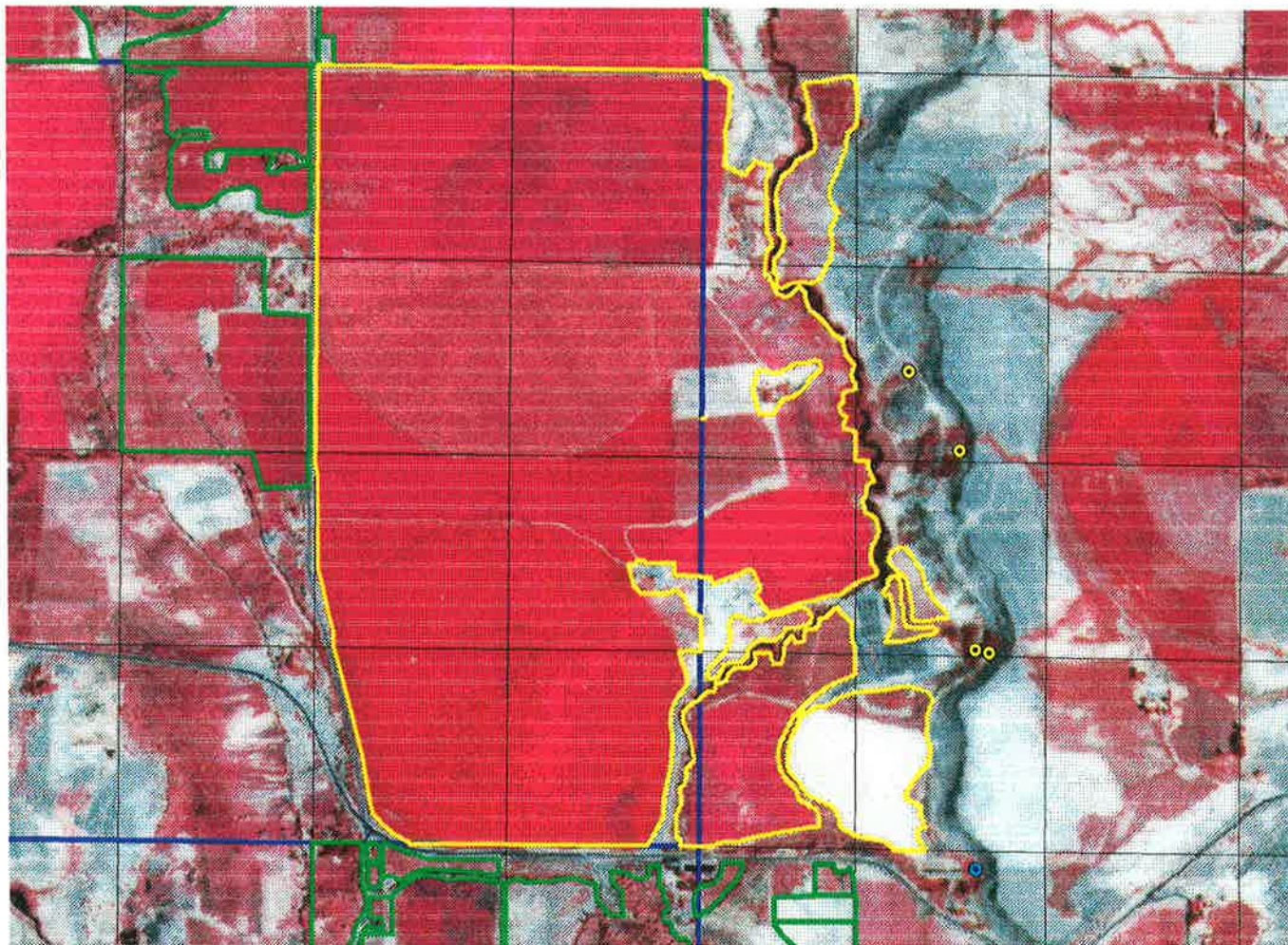
FISH PROPAGATION: Not recommended. Use is covered by license 36-07071. No evidence that fish use was present in 1932 at time of decree. Current facility was not constructed until about 1970.

TOTAL QUANTITY: Suggest total diversion be additive, therefore, $8.25 + 0.11 + 0.12 = 8.48$ cfs total.

Final recommendations will be described in the database record prepared after full legal review of my proposal is complete.

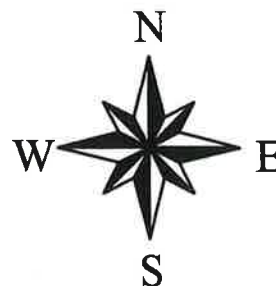
IDAHO DEPARTMENT OF WATER RESOURCES

36-00068, 36-00069, 36-00070
Bill Jones



660 0 660 Feet

TNS 7S, RNG 13E & R14E
SECS 25 & 30



⊙ **Recommended Point of Diversion**



RECOMMENDED Place of use



Section lines



Quarter/Quarter Lines

GIS PLACE OF USE PRESENTATION
1987 and/or 1988 NAPP PHOTOGRAPHY
DATE: JANUARY 23, 1998
BY: STEVE CLELLAND

6/9/94

COMMUNICATION DOCUMENTATION

Claim No. SEE BELOW

This form is to be used to document public record information requests regarding any SRBA claim or claims. The form may also be used to document IDWR communications requesting information regarding any SRBA claim or claims when the request is not made in writing or the claim verification report is not readily available to document the request. This form is to be filed in all relevant claim files or a central office file.

IDWR Employee/Agent Steve Clelland

January 12, 1998 11:45am

NAME:

PAT BROWN

CALLIN

RE:

EXAMS FOR AMENDMENTS

HE RETURNED CHARLIE'S CALL TO ME AND GAVE ME THE PHONE NUMBERS TO REACH HIS CLIENTS FOR SETTING THE EXAM TIMES THIS WEEK.

FOR 36-00006, 7, 8:

CALL PENNY TURNER AT 837-4767. PAT MENTIONED HE WAS CONCERNED ABOUT THE AMOUNT OF ACRES WE FOUND AT THE STRANGE POU AND SAID IT MAY HAVE BEEN THE YEAR MR. STRANGE WAS SICK AND DID NOT FARM.

FOR 36-00106, -08099:

CALL PAUL WATKINS AT 837-6283. WE DISCUSSED THE POWER AMENDMENT AND IT WAS INTENDED TO PROVIDE FLOW TO DELIVER THE 1.92 CFS TO THE PENSTOCK AS MEASURED IN THE LICENSE EXAM. I SUGGESTED WE ADD THE REMARK ABOUT NECESSARY FLOW TO DELIVER THE RIGHT TO POU WITHOUT WASTE AS WE HAVE ADDED TO SOME STOCK USES DOWN IN HAGERMAN. WE ALSO DISCUSSED THE SUBORDINATION REMARKS IN THE POWER LIC. HE INDICATED THE PERMIT PRE-DATED ALL THE DATES WHICH SET THE SUBORD. LANGUAGE INTO A PERMIT. WILL REFER THIS TO CHARLIE.

SET UP APPT FOR EXAM FOR 1/14/98, WED. 9 AM AT WATKINS HOME.

FOR 36-00047:

CALL DAVE CROPPER AT 788-4903. PAT SAID THE PLACE IS LOCKED UP DUE TO VANDALS. SET APPT WITH MR. CROPPER FOR 1/16/98 FRIDAY 2 PM AT THE FIELD.

FOR 36-00068, 69, 70:

PAT STILL HAS YET TO CONTACT MR. BILL JONES.

1998 JAN -5 PM 2:19

DISTRICT COURT - SRBA
TWIN FALLS CO., IDAHO

**IN THE DISTRICT COURT OF THE FIFTH JUDICIAL DISTRICT OF THE
STATE OF IDAHO, IN AND FOR THE COUNTY OF TWIN FALLS**

In Re SRBA

Case No. 39576

Water Rights: 36-00068, 36-00069

**NOTICE OF ADMINISTRATIVE
PROCEEDING**

IDWR has received an application for an Administrative Proceeding for the above water right(s).

The Administrative Proceeding contemplates a change in the water right(s) as indicated below:

☐ Substitution of Party (waiting for documentation)

☐ Substitution of Party/Split Water Right

☒ Amended Claim:

☐ point of diversion ☐ place of use

☒ period of use ☒ nature of use

IDWR projects the Administrative Proceeding shall be completed no later than: April 1, 1998.

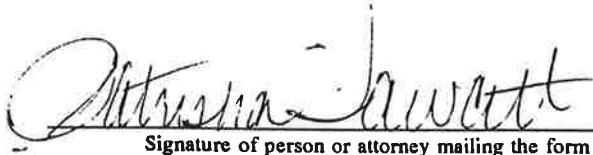
DATED: 1/2/98

Douglas
Signature of IDWR Representative

CERTIFICATE OF MAILING

I certify that on 1-5, 1998, I mailed the original and copies of this form to the following persons, postage prepaid and addressed as follows:

1. Original to:
Clerk of the District Court
Snake River Basin Adjudication
PO Box 2707
Twin Falls ID 83303-2707
2. One copy to:
Claimant or attorney of record:
Patrick D. Brown
Hepworth Lezamiz & Hohnhorst
PO Box 389
Twin Falls ID 83303-0389
3. One copy each to:
Chief Natural Resources Division
Office of the Attorney General
PO Box 44449
Boise ID 83711-4449
4. One Copy to:
United States Dept of Justice
Environment & Natural Resource Div
550 West Fort Street MSC 033
Boise ID 83724


Signature of person or attorney mailing the form



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

January 5, 1998

PHILIP E. BATT
GOVERNOR

KARL J. DREHER
DIRECTOR

PATRICK D BROWN
HEPWORTH LEZAMIZ AND HOHNHORST
PO BOX 389
TWIN FALLS ID 83303-0389

RE: SRBA Claim(s) 36-00006, 36-00007, 36-00008, 36-00022,
36-00023, 36-00047, 36-00068, 36-00069,
36-00106, 36-08099, 36-15463

Dear Mr. Brown:

Please find the enclosed copies of the Notices of Completed Administrative Proceeding which the department has filed with the SRBA Court regarding the above referenced claims. You have received this notice pursuant to SRBA Court Administrative Order 11 requiring IDWR to report to the court and interested parties any pending changes to adjudication claims in basins for which a Director's Report has been filed with the court.

Please contact this office if you have any questions about the notice or the administrative process.

Sincerely,

Trish Fawcett
Technical Records Specialist

/tf

cc: U.S. Dept. of Justice
Idaho Attorney General

L A W O F F I C E S

*Hepworth, Lezamiz
& Hohnhorst*

- Established 1952 -

December 5, 1997

TWIN FALLS OFFICE

John C. Hepworth
John T. Lezamiz
John C. Hohnhorst
Jeffrey J. Hepworth
Penelope Parker**
Eileen A. McDevitt*
Patrick D. Brown

Wm. L. Nungester
of Counsel

BOISE OFFICE

J. Charles Hepworth*
John J. Janis

*Member CA Bar
**Member UT Bar

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

RE: Amended Notices of Claims

Gentlemen:

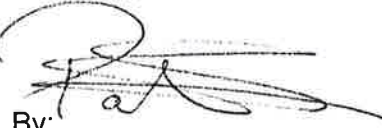
Enclosed please find this firm's check in the amount of \$6,410.00 in payment of fees assessed on the following claims:

Paul and Inez Watkins, Claim No. 36-00106	\$1,175.00
C-CAN Partners, Claim No. 36-00047	590.00
William Strange, Claim No. 36-00006	1,750.00
William Strange, Claim No. 36-00007	540.00
William Strange, Claim No. 36-00008	1,000.00
John W. and Deloris Jones, Claim No. 36-00068	1,045.00
John W. and Deloris Jones, Claim No. 36-00069	310.00
Total fees	\$6,410.00

While I do not interpret Idaho Code § 49-1414 to allow us to be assessed for additional uses of the same volume of water, we are hereby submitting these payments under protest because you will not allow filing of the amended claims without the fees. We reserve all rights to challenge your interpretation and to recover excess amounts being paid, and reserve right to show have you has miscalculated the amounts.

Very truly yours,

HEPWORTH, LEZAMIZ & HOHNHORST,
CHARTERED



By: _____
Patrick D. Brown

HLH
Chartered

TWIN FALLS OFFICE
208-734-7510
Blick Building
133 Shoshone St. N.
P.O. Box 389
Twin Falls, ID 83303-0389
FAX-208-734-4115

Boise Office
208-343-7510
537 West Bannock
P.O. Box 2582
Boise, ID 83701-2582
FAX: 208-342-2927

PDB/llm
Enclosure
/1205IDWR.llm

SUBCASE NO. 36-00069

	CLAIM (8/19/88)	AMENDED CLAIM	RECOMMENDATION	OBJECTION
NAME	John & Deloris Jones, Jr.	N/A	John & Deloris Jones, Jr.	John & Deloris Jones, Jr.
BASIS OF CLAIM	Decree		Decree	
SOURCE	Weatherby Springs		Hoagland Tunnel	
QUANTITY	1.0 cfs		1.0 cfs	XX as decreed
PRIORITY DATE	2/1/1888		2/1/1888	
PURPOSE OF USE	Irrigation Domestic Stockwater		Irrigation	XX add stockwater & domestic
PERIOD OF USE	Irr.: 3/15 - 11/15 Dom.: 1/1 - 12/31 S.W.: 1/1 - 12/31		3/15 - 11/15	XX year round for all uses
POINT OF DIVERSION	T07S R14E S30		T07S R14E S30	
PLACE OF USE	T07S R13E S25 T07S R14E S30 517.0 acres		T07S R13E S25 T07S R14E S30 401.0 acres	XX requests 517 acres as claimed
remarks	"Irrigation, stockwater, fish propagation, and domestic uses the same water from 4 different water rights with a total of 87.05 cfs."		"Use of this right with right no. 36-00068 is limited to a total combined diversion rate of 8.25 cfs, a total combined annual consumptive use volume of 1203 af, and to the irrigation of a combined total of 401 acres in a single irrigation season."	XX strike all remarks.

AJ5809NP
No. 36-00069

IDAHO DEPARTMENT OF WATER RESOURCES
ADJUDICATION CLAIM PROFILE REPORT

DATE: 10/09/97
PAGE: 1

OWNER CODE	NAME & ADDRESS	PRIORITY DATE	WATER USE	USE PERIOD FROM TO	DIVERSION RATE	DIVERSION VOLUME
C	JOHN W JONES JR	02/01/1888	IRRIGATION	03-15 11-15	1.00 CFS	
C	DELORIS D JONES					
TOTAL DIVERSION:					1.00 CFS	

Water Source: HOAGLAND TUNNEL

Tributary to: BILLINGSLEY CREEK

Stage: DECREED

Point(s) of Diversion: T07S R14E S30 SENESW

GOODING County

Place of use Legal Description for: IRRIGATION

										NE				NW				SW				SE												
										NENE		NWNE		SWNE		SENE		NENW		NWNW		SWNW		SESW		NESE		NWSE		SWSE		SESE		
T	R	S	:	Lt	Ac	Lt	Ac	Lt	Ac	Lt	Ac	Lt	Ac	Lt	Ac	Lt	Ac	Lt	Ac	Lt	Ac	Lt	Ac	Lt	Ac	Lt	Ac	Lt	Ac	Lt	Ac	SUM		
07S	13E	25	:	40		40		40		40															37		38		29		38	302.0		
07S	14E	30	:											01-10	02-21					04		03-25	04-27	12							99.0			
																TOTAL ACRES														401.0				

POU County: GOODING

Remarks: GEN USE OF THIS RIGHT WITH RIGHT NO. 36-00068 IS LIMITED TO A
TOTAL COMBINED DIVERSION RATE OF 8.25 CFS, A TOTAL COMBINED
ANNUAL CONSUMPTIVE USE VOLUME OF 1203 AF, AND TO THE IRRIGATION
OF A COMBINED TOTAL OF 401 ACRES IN A SINGLE IRRIGATION SEASON.

Dates: Exam Made Date: Verified Date: Objection Filed Date: 04/29/1993

Misc: Water District Number: 36A Field Inspection Flag:
Presumption Flag:

Comments: Date: 03/08/1991 User-ID: BEDKE Subject: SCC-STAFF REVIEW

Date: 08/07/1992 User-ID: CHRISTEN Subject: BASIS FOR RECOMMENDATION
REQUIRED WATER IS SUPPLIED BY 36-00068. THEREFORE THIS CLAIM IS
NOT NECESSARY AS THEY ARE FROM THE SAME SOURCE.

Date: 08/07/1992 User-ID: CHRISTEN Subject: COPIED FROM REMARKS
IRRIG, STOCK, FISH PROP., & DOMESTIC USES THE SAME WATER FROM
4 DIFFERENT WATER RIGHTS WITH A TOTAL OF 87.05 CFS.

Date: 09/24/1992 User-ID: SCHULTZ Subject: NOTICE OF ERROR (NOE)
NOE RECEIVED 9/23/92. CHANGED NOE FLAG FROM BLANK TO A.
CLAIM VERIFIED 8/7/92. DID NOT REVERIFY ANY PART OF CLAIM.

Date: 10/14/1992 User-ID: CHRISTEN Subject: RESPONSE TO NOE

AJ5809NP
No. 36-00069

IDAHO DEPARTMENT OF WATER RESOURCES
ADJUDICATION CLAIM PROFILE REPORT

DATE: 10/09/97
PAGE: 2

Comments: Date: 10/14/1992 User-ID: CHRISTEN Subject: RESPONSE TO NOE
RESPONSE WAS STANDARD LETTER FORMAT "MULTIPLE RIGHTS, DECREED
RIGHT DISALLOWED" COMBINED WITH OTHER ISSUES FOR OTHER CLAIMS
HELD BY CLAIMANT. NO CHANGE IN THE RECOMMENDATION MADE AT THIS
TIME. KKC 10-14-92.

Date: 10/23/1992 User-ID: SOUTH3 Subject: RECOMMENDATION CHANGED
IT WAS DECIDED TO TREAT THE HOAGLAND TUNNEL AS A SEPARATE
SOURCE FROM WEATHERBY SPRINGS. THIS RIGHT HAS BEEN
RECOMMENDED TO DESCRIBE THE CLAIMANT'S USE OF THIS SOURCE. RMC

Date: 02/19/1993 User-ID: SCHULTZ Subject: ADDED NEW ATTORNEY
RECEIVED NOTICE OF APPEARANCE FROM HEPWORTH NUNGESTER LEZAMIZ
2/10/93.

Audit: 03/08/91 BEDKE 07/10/92 CWJ-PROD 07/18/92 POST-STD 08/07/92 CHRISTEN
08/28/92 PR-PRODM 09/24/92 SCHULTZ 10/14/92 CHRISTEN 10/23/92 SOUTH3
11/02/92 CPSHAW 12/05/92 ADT-SHAW 02/19/93 SCHULTZ 06/16/93 CMDATFIX
09/17/93 UPD-SCHU 03/29/95 POST-STD

R PROOF

CVR

MAPS

PHOTOS

MISC

MICROFILMED

OCT 12 1994

IN THE DISTRICT COURT OF THE FIFTH JUDICIAL DISTRICT OF THE
STATE OF IDAHO, IN AND FOR THE COUNTY OF TWIN FALLS

In Re the General Adjudication
of the Rights to the Use of Water
from the Snake River Basin
Water System

Case No. 36-00069 -0001

The State of Idaho, ex rel.
R. Keith Higginson in his
official capacity as Director
of the Idaho Department of
Water Resources,

RESPONSE TO OBJECTION

Petitioner,

vs.

The United States; the State
of Idaho; and all Claimants to
the use of water from the Snake
River Basin Water System,

Respondents.

I. GENERAL INFORMATION

1. Person responding to objection:

Name: R. KEITH HIGGINSON, DIRECTOR

Address: IDAHO DEPARTMENT OF WATER RESOURCES
P.O. BOX 44449
BOISE, ID 83711-4449

Briefly describe your interest in this water right:

IDWR is required to file a response to an objection to part
I of the director's report pursuant to I.C. section 42-1412(2).

(Over)

MICROFILMED

OCT 12 1994

RECEIVED
JAN 17 1987

2. Person who filed objection:

Name: DELORIS & JOHN W JONES JR
Address: PO BOX 265
HAGERMAN ID 83332

3. If this response is filed by an attorney:

Attorney Name(s): NICHOLAS B. SPENCER

Attorney Address: DEPUTY ATTORNEY GENERAL(S)
IDAHO DEPARTMENT OF WATER RESOURCES
P.O. BOX 44449
BOISE, ID 83711-4449

Attorney Phone No.: (208) 327-7900

II. STATEMENT OF THE RESPONSE

3. ☒ Quantity: I respond to the objection concerning:
- 3a. ☒ The total quantity of water used in cubic feet per second.
7. ☒ Purposes of Use: I respond to the objection concerning the purpose(s) of use.
8. ☒ Period of Year: I respond to the objection concerning the period of year when water is used or is necessary for the purpose stated.
9. ☒ Place of Use: I respond to the objection concerning:
- 9a. ☒ The legal description of the place of use.
10. ☒ Consumptive Use: I respond to the objection concerning the annual volume of consumptive use.
11. ☒ Remarks: I respond to the objection concerning the "remarks" listed with the water right.

14. |X| Other: I respond to the objection concerning:

ALL MATTERS RAISED IN THE CLAIMANT'S ANSWER,
AFFIRMATIVE DEFENSES, AND PRAYER FOR RELIEF.

REASONS SUPPORTING EACH BOX CHECKED

In response to Statement of the Objection items 3 and 3.a, and all allegations of the objection regarding those items, IDWR responds as follows: (1) it recommended the amount of water it determined was being beneficially used; (2) the claimants are not entitled to any amount greater than that which is beneficially used (Idaho Code Secs. 42-104 and 42-1402); (3) the recommendation of the director to the SRBA Court as to how the right should be decreed does not constitute a taking because it is simply a recommendation and not a final determination of the right; and (4) the eventual decree by the SRBA Court of the amount of water beneficially used, even if less than the amount previously decreed, will not constitute a taking because the right is limited to that amount beneficially used. In further response to this objection item, IDWR responds that it recommended the quantity as claimed.

In response to Statement of the Objection item 7, and all allegations of the objection regarding that item, IDWR responds that it recommended the same purpose or purposes of use that were identified on the notice of claim and that were found when the claim was investigated.

In response to Statement of the Objection item 8, and all allegations of the objection regarding this item, IDWR responds as follows: The decree asserted by the claimant does not contain a period of use decreed for this water right. Idaho Code 42-1411(2)(g) requires the director to determine the period of use of each water right acquired under state law that is recommended in the director's report. IDWR has developed irrigation season of use standards for various climatic areas throughout the state based on a 75% chance of a 24 degree fahrenheit frost. The irrigation season of use cannot exceed the period in which water may be beneficially used. The period of the year during which this water right may be used is consistent with the standard irrigation season of use for the area in which the place of use of this water right is located. Water may be used for irrigation outside the standard season of use, subject to the conditions set

(Over)

forth in general provision 12b of the director's report. IDWR further responds that it recommended the same irrigation season of use as was claimed. By now seeking a year round irrigation season of use, the claimant improperly seeks to use the objection process to amend the claim. A claimant must obtain leave of the court to amend a claim after a director's report is filed, just as a party must obtain leave of the court to file a late claim after a director's report is filed. Once leave of the court is granted, IDWR can investigate the amended claim and make an appropriate recommendation to the court.

In response to Statement of the Objection 9 and 9.a, and all allegations of the objection regarding those items, IDWR responds that the recommended water right accurately describes the place of use of the right.

In response to Statement of the Objection item 10 and all allegations of the objection regarding this item, IDWR responds as follows: (1) The decree asserted by the claimants did not set an annual volume of consumptive use for this water right. (2) Idaho Code Sec. 42-1411(2)(i) requires the director to determine the annual volume of consumptive use for each water right acquired under state law and recommended in the director's report. (3) Idaho Code Sec. 42-1401A(2) provides that the quantification of consumptive use "is included as a rebuttable presumption in a decree only for the purpose of transfers pursuant to section 42-222, Idaho Code"; therefore, the consumptive use recommended for this water right is included solely for use in future transfer proceedings. (4) The annual volume of consumptive use recommended for this right is 3 acre feet per acre. This is the maximum volume of water consumed by the most water consumptive crop (pasture) that can be grown in the area during the period of year when water is used for irrigation, as provided for by Idaho Code Sec. 42-1401A(2). (5) The recommendation of the director to the SRBA Court as to how the right should be decreed does not constitute a taking because it is simply a recommendation and not a final determination of the right. (6) The eventual decree by the SRBA Court of the amount of water beneficially used, even if less than the amount previously decreed, will not constitute a taking because the right is limited to that amount beneficially used.

In response to Statement of the Objection item 11, and all allegations of the objection regarding that item, IDWR responds that it has authority pursuant to Idaho Code Sec. 42-1411(2)(j) to include in its recommendations of water rights acquired under

state law and recommended in the director's report "such other matters as are necessary to define the right." The remark or remarks objected to are necessary to adequately describe and define this water right.

In response to the sentence listed in Changes to the Director's Report, whereby the claimants attempt to "reserve the right to claim all purposes of use and quantities of use as shown by the evidence at trial," IDWR responds as follows: Insofar as this purported reservation of rights may constitute an attempt to reserve the right to amend at trial the claimants' notice of claim, the claimants improperly seek to use the objection process to amend the notice of claim. A claimant must obtain leave of court to amend a claim just as a party must obtain leave of court to file a late claim after the director's report is filed.

In response to Statement of the Objection item 14, and all allegations of the objection regarding that item, see attached "IDWR's Response to Answer Affirmative Defenses and Prayer for Relief of Claimant".

CHANGES TO THE DIRECTOR'S REPORT

The director proposes no changes to the description of this claim in the Director's Report.

☒ Check here if you are submitting documents. Please list each document by the title and number of pages. You may use additional pages if necessary:

	No. of Pages
Notice of Claim No. A36-00069	5
IDWR's Response to Answer, Affirmative Defenses, and Prayer for Relief	4

(Over)

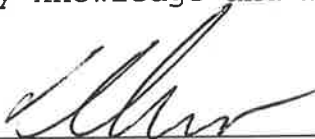
VERIFICATION (Must be Completed)

State of IDAHO

County of ADA

David B. Shaw, being first duly sworn, upon oath, deposes and says:

That R. Keith Higginson, in his official capacity as director of the Idaho Department of Water Resources, is a party to this proceeding, as defined by I.C. 42-1401A(1) and (7); that I am the Adjudication Bureau Chief for IDWR and am authorized by R. Keith Higginson, in his official capacity as director of IDWR, to verify this response; and that I have read the foregoing response, know its contents and that the statements contained therein are true to the best of my knowledge and belief.

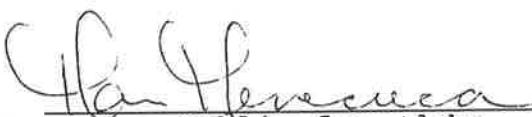

Signature of person filing response

By:


(Attorney signing in
representative capacity)

Subscribed and sworn to before me this 9th day of September,
1993.




Notary Public for Idaho

Residing at: Boise Idaho

My Commission expires: 6/25/1999

CERTIFICATE OF MAILING

I hereby certify that on the 10th day of September, 1993, I mailed the original and copies of the foregoing response, including all attachments, to the following persons, by mailing the original and/or true and correct copies, postage prepared and addressed as follows:

1. Original to:

Clerk of the District Court
Snake River Basin Adjudication
253 Third Avenue North
P.O. Box 2707
Twin Falls, Idaho 83303-2707

2. One copy to the owner of the water right, and you must fill in the following information:

See No. 3

3. One copy to the party who filed the objection, or if represented by an attorney, to their attorney; and you must fill in the following information:

Name: HEPWORTH NUNGESTER & LEZAMIZ
Address: PATRICK D BROWN
& PENELOPE PARKER
PO BOX 389
TWIN FALLS ID 83303

4. One copy to:

United States Department of Justice
Environment and Natural Resource Division
550 West Fort Street, Box 33
Boise, Idaho 83734



Signature of Respondent or attorney
mailing on Respondent's behalf

IN THE DISTRICT COURT OF THE FIFTH JUDICIAL DISTRICT OF THE STATE OF IDAHO,
IN AND FOR THE COUNTY OF TWIN FALLS

IN RE THE GENERAL ADJUDICATION
OF RIGHTS TO THE USE OF WATER FROM
THE SNAKE RIVER BASIN WATER SYSTEM.

CIVIL CASE NUMBER: 39576

Ident. Number: A36-00069
Date Received: 8/19/1988
Receipt No: S001554
Received By: lw

NOTICE OF CLAIM TO A WATER RIGHT
ACQUIRED UNDER STATE LAW

1. Name: JOHN W. JONES, JR. 208-837-4580
Address: BOX 265
HAGERMAN, ID 83332

AND/OR

Name: DELORIS D. JONES, JR. 208-837-4580
Address: BOX 265
HAGERMAN, ID 83332

2. Date of Priority: FEB 01, 1888

3. Source: WEATHERBY SPRINGS Trib. to: BILLINGSLEY CREEK

4. Point of Diversion:

Township	Range	Section	1/4 of	1/4 of	1/4 of	Lot	County
07S	14E	30	NE	SW			GOODING

5. Description of diverting works:
VIA HOAGLAND TUNNEL, HEADWORKS, CEMENT DITCH, 10" PIPE, 100HP PUMP

6. Water is used for the following purposes:

Purpose	From	To	C.F.S.	(or)	A.F.A.
IRRIGATION	03/15	11/15	1.000		
DOMESTIC	01/01	12/31	0.110		
STOCKWATER	01/01	12/31	0.120		

7. Total Quantity Appropriated is:
1.000 C.F.S. (and/or) A.F.A.

8. Total consumptive use is Acre Feet Per Annum.

9. Non-irrigation uses:
D/5 HOUSES, S/500 BEEF CATTLE

A36-00069

Page 1

Date: 08/19/88

MICROFILMED
JAN 21 1993
MICROFILMED
OCT 12 1994

10. Place of Use:

Township	Range	Section	1/4	of	1/4	Lot	Use	Acres
07S	13E	25	NE		NE		IRR	40.0
			NW		NE		IRR	40.0
			SW		NE		IRR	40.0
			SE		NE		IRR	40.0
			NE		SE		IRR	40.0
			NW		SE		IRR	40.0
			SW		SE		IRR	29.0
			SE		SE		IRR	40.0

Section Acres 309.0

14E	30	NW	NW	1	IRR	32.0
		SW	NW	2	IRR	32.0
		NE	SW		IRR	40.0
		NW	SW	3	IRR	32.0
		SW	SW	4	IRR	32.0
		SE	SW		IRR	40.0

Section Acres 208.0

Total Acres 517.0

11. Place of use in counties: GOODING

12. Do you own the property listed above as place of use? YES

13. Other Water Rights Used:

A36-07071, A36-00068, A36-00070

14. Remarks:

IRRIG, STOCK, FISH PROP., & DOMESTIC USES THE SAME WATER FROM
4 DIFFERENT WATER RIGHTS WITH A TOTAL OF 87.05 CFS.

15. Basis of Claim: DECREED

Case Number:

Court :

Decree date:

NEW INTERNATIONAL MORTGAGE BAN

Decree Plaintiff

vs

IDAHO POWER COMPANY

Decree Defendant

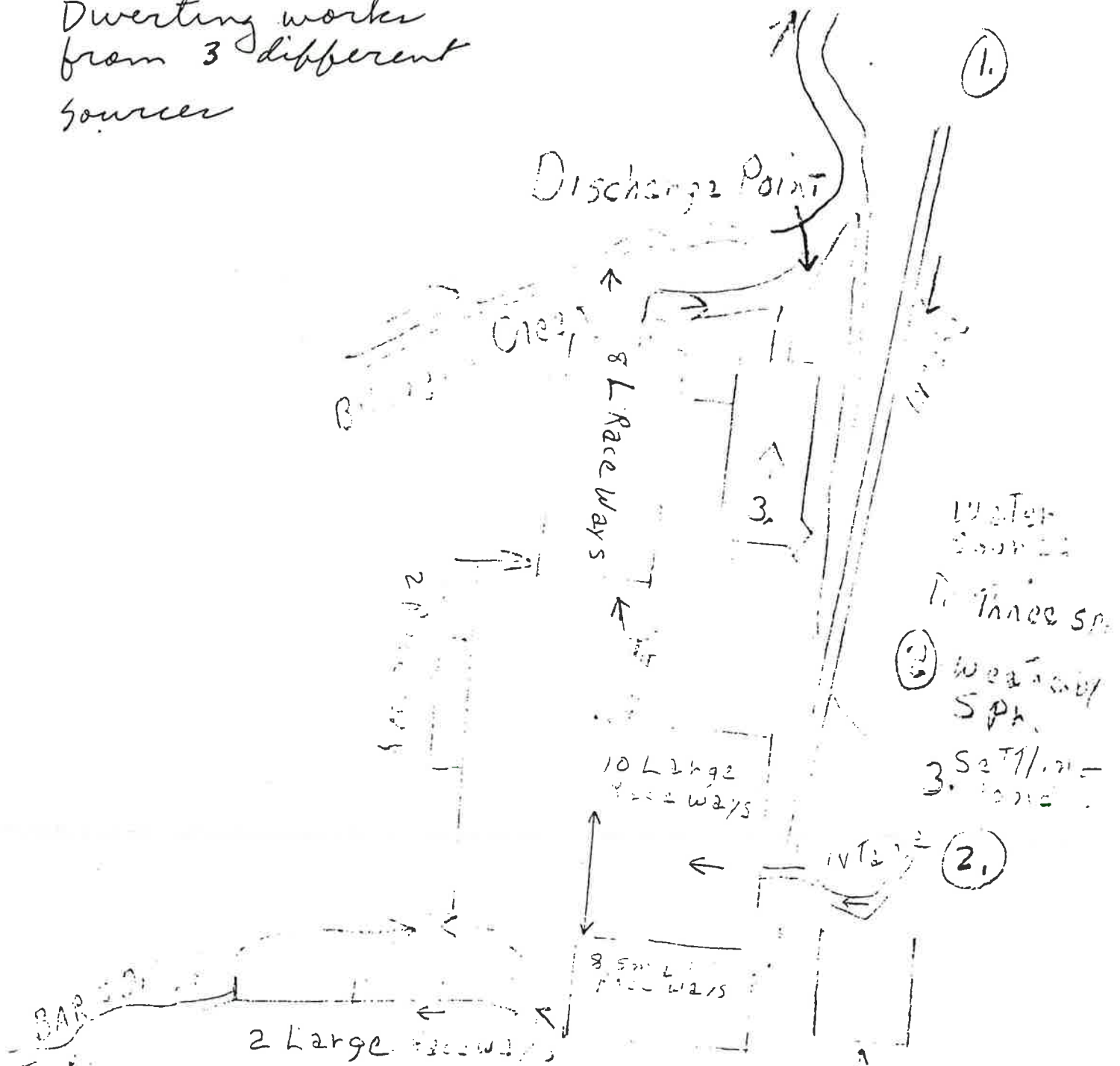
MICROFILMED
MICROFILMED
JAN 21 1993
OCT 12 1994

(a.) By signing below, I/We acknowledge that I/We have received, read and understand the form entitled "How you will receive notice in the Snake River Basin Adjudication." (b.) I/We do do not / wish to receive and pay a small annual fee for monthly copies of the docket sheet.

MICROFILMED
JAN 21 1993

POOR ORIGINAL

Diverting water
from 3 different
sources



ATCHER

MICROFILMED
JAN 21 1993
OCT 12 1993

IDWR'S RESPONSE TO ANSWER, AFFIRMATIVE DEFENSES AND PRAYER FOR
RELIEF OF CLAIMANT

This portion of the response addresses the multi-page attachment to the objection (hereinafter "the attachment"), wherein the claimant admits or denies all sections of Parts I, II, and III of the director's report, asserts 27 affirmative defenses, and alleges a prayer for relief. The attachment contains the following sections, corresponding to the various sections of the director's report:

- (1) I. GENERAL RESPONSE
- (2) II. DESCRIPTIVE SUMMARY, (first unnumbered page of Part I of the director's report)
- (3) III. TABLE OF CONTENTS (second and third unnumbered pages of Part I of the director's report)
- (4) IV. 1. INSTRUCTIONS FOR USING THIS REPORT PART I (page 1 of Part I of the director's report)
- (5) IV. 2. SCOPE OF THE ADJUDICATION (pages 1-3 of Part I of the director's report)
- (6) IV. 3. PURPOSE OF THIS REPORT PART I (pages 3-4 of Part I of the director's report)
- (7) V. 1. BOUNDARIES OF BASIN (pages 4-6 of Part I of the director's report)
- (8) V. 2. WATER SOURCES (page 6 of Part I of the director's report)
- (9) V. 3. DEVELOPMENT OF WATER USE (pages 6-9 of Part I of the director's report)
- (10) VI. GENERAL PROVISIONS 1-8 APPLY TO ALL WATER RIGHTS IN BASIN 36 (page 9 of Part I of the director's report)
- (11) VI. General Provision 1. EFFECT OF ADJUDICATION (page 9 of Part I of the director's report)
- (12) VI. General Provision 2. GENERAL ADMINISTRATIVE PROVISIONS (pages 9-10 of Part I of the director's report)
- (13) VI. General Provision 3. CONJUNCTIVE ADMINISTRATION (page 10 of Part I of the director's report)
- (13) VI. General Provision 4. ADMINISTRATION OF GROUND WATER RIGHTS (page 10 of Part I of the director's report)
- (14) VI. General Provision 5. ADMINISTRATION OF BASIN 36 RELATIVE TO THE SNAKE RIVER (page 10 of Part I of the director's report)
- (15) VI. General Provision 6. ADMINISTRATION OF SMALL DOMESTIC AND STOCK WATER RIGHTS (page 11 of Part I of the director's report)
- (16) VI. General Provision 7. MEASURING DEVICES AND CONTROL

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- WORKS (page 11 of Part I of the director's report)
- (17) VI. General Provision 8. FIRE FIGHTING PURPOSES (page 11 of Part I of the director's report)
 - (18) VI. General Provision 9. CONSUMPTIVE USE (page 12 of Part I of the director's report)
 - (19) VI. GENERAL PROVISION 10 APPLIES TO ALL WATER RIGHTS IN BASIN 36 SHOWN WITH DOMESTIC USE AS A PURPOSE OF USE (page 12 of Part I of the director's report)
 - (20) VI. General Provision 10. DOMESTIC USE (page 12 of Part I of the director's report)
 - (21) VI. GENERAL PROVISION 11 APPLIES TO ALL WATER RIGHTS IN BASIN 36 SHOWN WITH STOCK WATER USE AS A PURPOSE OF USE (page 13 of Part I of the director's report)
 - (22) VI. General Provision 11. STOCK WATER USE (page 13 of Part I of the director's report)
 - (23) VI. GENERAL PROVISIONS 12-16 APPLY TO ALL WATER RIGHTS IN BASIN 36 SHOWN WITH IRRIGATION AS A PURPOSE OF USE (page 13 of Part I of the director's report)
 - (24) VI. General Provision 12. IRRIGATION USE (pages 13-14 of Part I of the director's report)
 - (25) VI. General Provision 13. DIVERSION VOLUME FOR IRRIGATION (page 14 of Part I of the director's report)
 - (26) VI. General Provision 14. CONSUMPTIVE USE FOR IRRIGATION (pages 14-15 of Part I of the director's report)
 - (27) VI. General Provision 15. AMOUNT OF COMBINED WATER RIGHTS FOR IRRIGATION (page 15 of Part I of the director's report)
 - (28) VI. General Provision 16. DIVERSION RATES IN EXCESS OF .02 CFS PER ACRE (pages 15-16 of Part I of the director's report)
 - (30) VI. 17. INSTRUCTIONS FOR USE OF LIST OF RECOMMENDED WATER RIGHTS (pages A-i through A-iii of Part I of the director's report)
 - (31) VI. 18. IDAHO DEPARTMENT OF WATER RESOURCES RECOMMENDED WATER RIGHTS ACQUIRED UNDER STATE LAW (pages A-1 through B-25 of Part I of the director's report)
 - (32) DIRECTOR'S REPORT FOR REPORTING AREA 3 (BASIN 36), (DIRECTOR'S REPORT PART II)
 - (33) DIRECTOR'S REPORT FOR REPORTING AREA 3 (BASIN 36), (DIRECTOR'S REPORT PART III)

The attachment also contains part VIII, AFFIRMATIVE DEFENSES (pp. 20 through 28) and a PRAYER FOR RELIEF (untitled, p. 28).

In response to each of the items enumerated above IDWR responds that pursuant to Section 4 a.(2)(c) of SRBA Administrative Order 1, Rules of Procedure, IDWR generally denies each and every allegation, if any, contained in each enumerated portion of the attachment. IDWR affirmatively responds that neither SRBA Administrative Order 1, Rules of Procedure, nor Title 42, Chapter 14, Idaho Code, make provision for IDWR to affirm, amplify, or otherwise respond to the claimant's admissions, or to deny the claimant's denials, and that IDWR therefore does not believe that it is required to do so. Title 42, Chapter 14, Idaho Code solely defines the content and scope of the director's report. It is to contain a description of the water system and is to provide a recommendation as to each water right claimed and as to those matters necessary for administration of those water rights. Therefore, the content and scope of the objection is limited to those same matters. The attachment to the present objection asserts or otherwise raises matters not directly addressing the elements of the water right as recommended, the description of the water system, or the general provisions. Rather, the attachment raises broad issues as to the constitutional, statutory and administrative efficacy of the entire adjudication process. All such issues should be raised by means of motions to designate basinwide issues and similar procedural vehicles specifically designed to provide for basinwide notice and participation. They should not be permitted to divert the focus of any individual subcase away from the issues directly connected to the elements of the water right and the administration thereof. Therefore, because the attachment to the present objection is not within the scope of the statutory purpose of an objection it should be stricken.

However, in the event that the court should determine that all or part of the attachment is properly within the scope of the objection, IDWR further responds as follows:

IDWR affirmatively responds that all statements within the director's report are properly included therein pursuant to Title 42, Chapter 14, Idaho Code, and in particular pursuant to Idaho Code §§ 42-1411 and 42-1412(8); and that the provisions of the Idaho Rules of Civil Procedure regarding pleadings are inapplicable to the extent that they are in conflict with the statutory requirements. Therefore IDWR denies all allegations directed at the contents of the director's report.

As to the enumerated portions of the attachment addressing the listings of recommended water rights, abstracts of federal reserved water right claims, or negotiated agreements, other than the individual recommendation that is the subject of this objection, IDWR responds that such claims or agreements are not brought before this court by this objection.

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Responding to the 27 affirmative defenses asserted in the attachment, IDWR generally denies each and every affirmative defense asserted. IDWR further responds that affirmative defense numbers 1, 2, 4, 5, 10, 11, 12, 18, and 22, asserting various violations of civil or constitutional rights, fail to comply with the requirements I.R.C.P. 9(b) providing that in all averments of violation of civil or constitutional rights the factual circumstances constituting such violation must be stated with particularity. Accordingly, IDWR asserts that those affirmative defenses should be stricken.

In response to that portion of the multi-page attachment to the objection wherein the claimant asserts a prayer for relief, IDWR responds as follows:

1. IDWR denies that the director's report asserts any claims against the claimant; rather, the director's report contains only the recommendation of the director as to how the claimant's water right should be decreed and administered.
2. IDWR denies that the claimant is entitled to have the water right decreed as claimed unless in the director's report the water right has been recommended as claimed.
3. IDWR denies that any acts upon its part constitute the taking of private property for which just compensation should be allowed and awarded.
4. IDWR denies that the claimant is entitled to recover court costs and reasonable attorney fees.
5. IDWR denies that the claimant by this objection has raised any claims against IDWR entitling such claimant to any relief other than the eventual judicial determination and decree of the various elements of the claimant's water right, if any, and of those related matters necessary to describe and administer that water right.



State of Idaho

DEPARTMENT OF WATER RESOURCES

Southern Region, 222 Shoshone St. East, Twin Falls, Idaho 83301 (208) 736-3033

CECIL D. ANDRUS
Governor

R. KEITH HIGGINSON
Director

01-Feb-1993

JOHN W JONES JR
BOX 265
HAGERMAN ID 83332

RE: Copy of SRBA File(s): 36-00068, 36-00069, 36-00070, 36-07071

Dear Mr. Jones:

Please find enclosed the copies of documents you recently requested contained in the above referenced SRBA file(s) as of this date. Please note that copies of orthophoto quad maps or NAPP photography or aerial slides which may have been used in the review of your claim(s) have not been included since they are not easily reproduced. These items are however available for your review at our office. Please also note that in some situations some water rights may have other associated files which contain privileged information between IDWR staff and our legal council which has not been copied.

Please remit the following for the cost of the copies and postage:

\$12.17

Sincerely,

Jane
Jeanie Robertson
Records Clerk

Encl:

Jones
51
46
40
44
181x5 = 9.05
post 2.90
encl. 22
12.17

MICROFILMED

OCT 12 1994

RECEIVED

JAN 27 1993

Department of Water Resources
Southern Region Office

Jan 25, 1993

(Date)

IDAHO DEPARTMENT OF WATER RESOURCES
222 SHOSHONE ST. EAST
TWIN FALLS, IDAHO 83301

Dear Idaho Department of Water Resources:

Please provide me with a copy of all information included in
my file as it relates to water right number 36-00068; 36-00069.

36-07071; 36-00070

Please advise me of any documents in my file which you are not
releasing to me and why they are not being released.

Please bill me for the copy charge.

Sincerely,

John W. Jones Jr.

John W. Jones Jr.
(Name)

Box 265

(Address)

Hagerman, Idaho 83332

(City, State, Zip Code)

cc: David B. Shaw, Adjudication Bureau Chief
Idaho Department of Water Resources
1301 North Orchard Street
Statenhouse Mail
Boise, Idaho 83720-9000

MICROFILMED
OCT 12 1994

RECEIVED

APR 30 1993

Department of Water Resources
Adjudication Bureau

IN THE DISTRICT COURT OF THE FIFTH JUDICIAL DISTRICT OF THE
STATE OF IDAHO, IN AND FOR THE COUNTY OF TWIN FALLS

In Re the General Adjudication
of Rights to the Use of Water
from the Snake River Basin
Water System

Case No. A36-00069
(You must insert the
water right number you
are objecting to)

The State of Idaho, ex rel.
R. Keith Higginson in his
official capacity as Director
of the Idaho Department of
Water Resources,

OBJECTION

Petitioner,

vs.

36-00069 -0001/
93-04-0073

The United States; the State
of Idaho; and all Claimants to
the use of water from the Snake
River Basin Water System,

Respondents.

INSTRUCTIONS

This form must be used to file an objection to any water right recommended in the Director's Report. You may object to one water right per objection form. The water right number you are objecting to must be indicated above in the blank space following "Case No." To object to more than one water right, you must file a separate objection form for each. Forms may be obtained from the Idaho Department of Water Resources (IDWR), or you may copy or reproduce this blank form, as long as it is identical to the court's form. You must file your objection by the deadline shown in the notice that IDWR mailed to you. The objection must be received by the court on or before the deadline specified. Instructions for mailing this objection are found at Page 6, and must be strictly followed.

Any party physically filing 25 (twenty-five) or more objections must make an appointment with the Clerk of the Adjudication Court and arrange for an appointment to file multiple objections.

(Over)

OBJECTION - 1

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By filing an objection form, you are certifying that the objection is well-grounded in fact; is warranted by existing law or a good-faith argument for the extension, modification or reversal of existing law; and that it is not filed for any improper purpose, such as to harass, cause unnecessary delay or needless increase in the cost of litigation.

I. GENERAL INFORMATION

Please fill in the following information:

1. Person objecting:

Name: John W. & Deloris D. Jones, Jr.

Address: P.O. Box 265

Hagerman, ID 83332

Briefly describe your interest in this water right:

Decreed water right pursuant to New

International Mortgage Bank v. Idaho Power

Company dated 03/22/32 with date of priority

of 02/01/1888

2. Owner of the water right:

Name: John W. & Deloris D. Jones, Jr.

Address: P.O. Box 265

Hagerman, ID 83332

3. If this objection is filed by an attorney:

Attorney Name: Hepworth, Nungester & Lezamiz

Attorney Address: P. Parker & Patrick D. Brown

P.O. Box 389, Twin Falls, ID 83303

Attorney Phone No.: (208)734-7510; Fax: (208)734-4115

If filed by an attorney, notice of pending court proceedings will be sent to the attorney only.

II. STATEMENT OF THE OBJECTION

Please check each "box" which states your objection to the recommendation in the Director's Report.

1. ☐ Name and Address: I object to the name and/or address of the owner of the water right.
2. ☐ Source: I object to the source of water.
3. ☒ Quantity: I object to:
 - a. ☒ the total quantity of water used in cubic feet per second; or
 - b. ☐ the total quantity of water stored in acre-feet per year; or
 - c. ☐ the total quantity of water reserved for each and every purpose, including all present and future uses.
4. ☐ Priority Date: I object to the priority date.
5. ☐ Points of Diversion: I object to the legal description of the point(s) of diversion.
6. ☐ Instream Flow: I object to the legal description of the beginning and ending points of the instream flow.
7. ☒ Purpose(s) of Use: I object to the purpose(s) of use.
8. ☒ Period of Year: I object to the period of year when water is used or is necessary for the purpose stated.
9. ☒ Place of Use: I object to:
 - a. ☒ the legal description of the place of use; or
 - b. ☐ the number of irrigated acres within each forty (40) acre subdivision.
10. ☒ Consumptive Use: I object to the annual volume of consumptive use.
11. ☒ Remarks: I object to the "remarks" listed with the water right.

(Over)

12. ☐ Water Right Recommendation: I object to:
- a. ☐ this water right being recommended at all; or
- b. ☐ this water right not being recommended.
13. ☐ Description of Reservation: I object to the legal description of the reservation.
14. ☒ Other: I object to: See Attached

REASONS SUPPORTING EACH BOX CHECKED

In the space following, you must state the reason(s) by number for each box checked. You may use additional pages if necessary.

See Page 7

CHANGES TO THE DIRECTOR'S REPORT

Specifically describe how you want the Director's Report to be changed. You may use additional pages if necessary.

Maximum quantity: as decreed with corresponding change in

consumptive use; Period of use: 1/01 - 12/31; Purpose of

use: add stockwater & domestic; Place of use: 517 acres;

Remarks: strike all

Please note: You should attach copies of documents which support your objection. Note on each document the "box number" it supports.

☒ Check here if you are submitting documents. Please list each document by the title and number of pages. You may use additional pages if necessary.

See Hagerman Water Right Owners, Inc.'s

Compendium "A"

VERIFICATION (Must be Completed)

State of Idaho

County of Groding

John W. Jones Jr., being first duly
(Name of person filing objection)

sworn, upon oath, deposes and says:

That I am the person or entity filing this objection, that I am a water claimant or party in this proceeding, as defined by I.C. Sec 42-1401A(1) and (7), and that I have read the foregoing objection, know its contents and that the statements contained therein are true to the best of my knowledge and belief.

John W. Jones Jr.

Signature of person filing objection

By: [Signature]

(Attorney signing in
representative capacity)

Subscribed and sworn to before me this 19th day of April,
1993.

[Signature]
Notary Public for Idaho
Residing at: Hagerman Idaho
My Commission Expires: 5-10-97

(Over)

INSTRUCTIONS FOR MAILING

You must mail the objection, including all attachments, to the Clerk of the Court. **FAX filings will not be accepted by the Clerk of the Court.** You must also send a copy to the owner of the water right, if other than yourself; to the Office of the Attorney General, State of Idaho; and to the United States Department of Justice, as set out below in the Certificate of Mailing. Finally, you must sign the Certificate of Mailing to show that you followed these steps.

CERTIFICATE OF MAILING

I hereby certify that on the 28 day of April, 1993, I mailed the original and copies of the foregoing objection, including all attachments, to the following persons, by mailing the original and/or true and correct copies, postage prepaid and addressed as follows:

1. Original to:

Clerk of the District Court
Snake River Basin Adjudication
253 Third Avenue North
P.O. Box 2707
Twin Falls, Idaho 83303-2707

2. One copy to the owner of the water right, and you must fill in the following information:

Owner name: John W. & Deloris D. Jones, Jr.

Owner's address: P.O. Box 265

Hagerman, ID 83332

3. One copy to:

Chief, Natural Resources Division
Office of the Attorney General
State of Idaho
P.O. Box 44449
Boise, Idaho 83711-4449

4. One copy to:

United States Department of Justice
Environment and Natural Resource Division
550 West Fort Street, Box 33
Boise, ID 83724



Signature of Objector or attorney
mailing on Objector's behalf

REASONS SUPPORTING EACH BOX CHECKED, page 4

Box 3, 3a and 10 - IDWR recommends an amount less than decreed and/or beneficially used. A reduction in water right would constitute a taking.

Box 7 - Beneficially used for purposes set forth in notice of claim.

Box 8 - IDWR recommends a period of use less than decreed and/or beneficially used. A reduction in water right would constitute a taking.

Box 9 - Director's Report fails to accurately state the place of use.

Box 11 - This is beyond the statutory authority vested in the Director.

CHANGES TO DIRECTOR'S REPORT, page 4

Objectors reserve the right to claim all purposes of use and quantities of use as shown by the evidence at trial.

Question 14., page 4, Other

I.

GENERAL RESPONSE

Except as specifically admitted herein, objectors deny each and every allegation contained in the Director's Report, any related or subsidiary pleadings, and/or any attachments thereto.

II.

DESCRIPTIVE SUMMARY

(DIRECTOR'S REPORT PART I)

(hereinafter DRP-I)

(DRP-I at first unnumbered page)

The objectors admit that Part I of the Director's recommendation contains some claims to water rights appropriated under state law from Reporting Area 3. The objectors deny all other averments because the objectors lack sufficient knowledge or information upon which to form a belief as to the truth of the averments.

III.

TABLE OF CONTENTS

(DRP-I at 2nd and 3rd unnumbered pages)

The objectors admit that the Table of Contents reflects the page numbers of the referenced sections and deny all other averments based upon the objectors' lack of sufficient knowledge or information upon which to form a belief as to the truth of the averments and because any averment, expressed or implied, is so

indefinite that it prevents the objectors from knowing what would be admitted or denied.

IV.

INTRODUCTION

1. INSTRUCTIONS FOR USING THIS REPORT PART I. (DRP-I at page 1)

The objectors admit that Part I consists of seven sections; that the description of the water system includes a brief description of Reporting Area 3 and an illustration of the boundaries of the reporting area; that the water rights and the list of the recommended rights are grouped alphabetically by source and listed chronologically by priority date; that the rights or claims in the list of claims/rights not recommended are listed numerically by water right number; and that brief instructions are found at the beginning of the applicable sections. The objectors deny that any description or any implication that the description of the water system or the illustrations are true and accurate due to lack of knowledge or information regarding the truth of the averment; deny that the general provisions apply to all water rights or define or limit classes of water rights; and deny that the general provisions "will affect your water right," based upon insufficient knowledge or information upon which to form a belief as to the truth of the averments.

2. SCOPE OF THE ADJUDICATION. (DRP-I at page 1 - 3)

The objectors deny all averments in paragraph a., due to lack of sufficient knowledge or information upon which to form a belief as to the truth of the averments.

Regarding paragraph b., the objectors lack sufficient information or knowledge upon which to form a belief as to whether water rights which are not claimed in the adjudication will or will not exist upon entry of the court's decree and, therefore, deny such averment. The objectors admit that the court entered an order dated January 17, 1989, but presently lack sufficient knowledge to know whether any of the other averments concerning the court's order are true or accurate and, therefore, deny the same. The objectors deny that a right must be adjudicated before water may be distributed by the director. The objectors deny all other averments in paragraph b.

3. PURPOSE OF THIS REPORT PART I. (DRP-I at page 3 - 4)

The objectors admit that portion of the first sentence which states "This report contains the Director's recommendations to the SRBA District Court as to the nature and extent of water rights," but deny that such recommendations "are necessary for administration of water rights in Reporting Area 3," and further deny the Director has authority to "administer" such rights.

Regarding the second paragraph, the objectors admit that all water rights remain subject to the applicable law generally, but deny the remainder of the second paragraph.

Regarding the third paragraph of this section, the objectors deny all averments therein based upon lack of knowledge or information upon which to form a belief as to the truthfulness of the averments.

V.

DESCRIPTION OF THE WATER SYSTEM: BASIN 36

1. **BOUNDARIES OF BASIN.** (DRP-I at pages 4 - 6)

Regarding the first paragraph of this section, the objectors deny all averments due to a lack of knowledge or information upon which to admit or deny.

Regarding the second, third and fourth paragraphs of this section, the objectors admit that as broad statements, those paragraphs are generally accurate but the statements are so broad and attenuated from any matter relevant to the objectors' water right that the objectors are unable to know what would be implicitly admitted or denied and therefore, deny the same.

With respect to the fifth paragraph of this section, the objectors lack sufficient knowledge or information upon which to form a belief as to the truth of any matter averred and, therefore, deny the averments.

2. **WATER SOURCES.** (DRP-I at page 6)

The objectors admit that the Snake River Plain Aquifer is the source of outflows of springs located along the Snake River Canyon Wall in the Hagerman Valley. The objectors presently lack sufficient knowledge or information upon which to form an opinion as to the truth of the other averments set out in this section and, therefore, deny the same.

3. **DEVELOPMENT OF WATER USE.** (DRP-I at pages 6 - 9)

The objectors admit that numerous factual and historical averments are set out in this section, which may be accurate, but

these objectors have no basis for knowing whether some or all of the averments are intended to relate to the objectors' claims and, thus, are prevented from knowing what would be admitted or denied. Therefore, the averments are denied.

VI.

GENERAL PROVISIONS

GENERAL PROVISIONS 1 - 8 APPLY TO ALL WATER RIGHTS IN BASIN 36.

(DRP-I at page 9)

The objectors deny that "General Provisions 1 - 8" apply to all water rights in Basin 36 as the statements are so broad and attenuated from any matter relevant to the objectors' water rights, that the objectors are unable to know what would be explicitly admitted or denied. The objectors also specifically deny that general provisions 1-8 apply to the objectors' right.

1. EFFECT OF ADJUDICATION. (DRP-I at page 9)

With respect to paragraph a., the objectors presently have no knowledge or information upon which to form a belief as to the truth of whether a future decree would supersede prior decrees, or whether unclaimed rights would cease to exist and, therefore, deny the same.

Regarding paragraph b., the objectors deny that the Director has any powers to administer water rights other than those specifically delegated by the Legislature of the State of Idaho, and which do not violate the objectors' state and federal constitutional rights, and therefore the averments are denied.

2. GENERAL ADMINISTRATIVE PROVISIONS. (DRP-I at pages 9 - 10)

The objectors admit paragraphs a. and b.

3. CONJUNCTIVE ADMINISTRATION (DRP-I at page 10)

The objectors deny the conjunctive administration provisions based upon the objectors' lack of sufficient knowledge or information upon which to form a belief as to the truth of the averments and because any averment expressed or implied is so indefinite that it prevents the objectors from fairly understanding what would be admitted or denied. Additionally, the objectors deny that the Department of Water Resources has any statutory or regulatory authority for the "conjunctive administration" as therein described.

4. ADMINISTRATION OF GROUND WATER RIGHTS (DRP-I at page 10)

The objectors deny the averments within this section.

5. ADMINISTRATION OF BASIN 36 RELATIVE TO THE SNAKE RIVER (DRP-I at page 10)

The objectors admit that the springs are hydrologically interconnected with the Snake River Aquifer, but deny all other averments based upon the objectors' lack of sufficient information or knowledge upon which to form a belief as to the averments herein. The objectors additionally deny any said averments expressed or implied because the averments are so indefinite and generalized as to prevent the objectors from fairly understanding what would be admitted or denied.

6. ADMINISTRATION OF SMALL DOMESTIC AND STOCK WATER RIGHTS (DRP-I at page 11)

The objectors admit that part of the first sentence of subparagraph a. to the effect that "small domestic and stock water rights from surface water are not subject to administration," but deny the balance of said sentence and said paragraph.

The objectors admit the first sentence of paragraph b., and deny the balance of that paragraph because the criteria set forth therein ("if the director determines that administration is necessary") is so ambiguous, indefinite and uncertain that it prevents the objectors from knowing what would be admitted or denied, and by further reason of the fact that no statutory or regulatory authority exists conferring such sweeping and unlimited authority upon the Director or the Department.

The objectors deny the averments in paragraph c. as the averments are inaccurate and because the objectors lack sufficient knowledge or information upon which to form a belief as to the truth of the matters averred.

7. MEASURING DEVICES AND CONTROL WORKS (DRP-I at page 11)

The objectors deny all averments contained herein as such averments are based upon an indeterminate subjective standards which are so ambiguous and indefinite as to prevent the objectors from fairly knowing what would be admitted or denied. Additionally, no statutory or regulatory authority exists conferring such sweeping and unlimited authority upon the Director or the Department as is alleged in this paragraph.

8. FIRE FIGHTING PURPOSES (DRP-I at page 11)

The objectors admit that subparagraph a. and subparagraph b. are generally accurate statements of present law, but deny the averments are in any way relevant to defining the objectors' right.

9. CONSUMPTIVE USE (DRP-I at page 12)

The objectors lack sufficient knowledge or information upon which to form a belief as to the truth of any matter averred and, therefore, deny the same.

GENERAL PROVISION 10 APPLIES TO ALL WATER RIGHTS IN BASIN 36 SHOWN WITH DOMESTIC USE AS A PURPOSE OF USE (DRP-I at page 12)

The objectors deny that "General Provision 10" applies to all water rights in Basin 36 shown with domestic use as a purpose of use as the statements are so broad and attenuated from any matter relevant to the objectors' water rights, that the objectors are unable to fairly understand what would be explicitly admitted or denied and, therefore, deny the same.

10. DOMESTIC USE (DRP-I at page 12)

The objectors deny that the definition of "domestic use" contained in paragraphs a., b., and c. is consistent or in conformity with the definition of such term for purposes of the Idaho Constitution, or statutory definition contained in I.C. Section 42-111 as now, or as heretofore in effect at relevant times. The objectors further deny that the limitations set forth therein exist, are in force, or apply or serve in any way to limit objectors' rights.

GENERAL PROVISION 11 APPLIES TO ALL WATER RIGHTS IN BASIN 36 SHOWN WITH STOCK WATER USE AS A PURPOSE OF USE. (DRP-I at page 13)

The objectors deny that "General Provision 11" applies to all water rights in Basin 36 shown with stock water use as a purpose of use as the statements are so broad and attenuated from any matter relevant to the objectors' water right, that the objectors are unable to fairly understand what would be admitted or denied and, therefore, deny the same.

11. STOCK WATER USE (DRP-I at page 13)

The objectors deny the averments herein as beyond the scope and applicability of the definition as provided by Idaho law as now, or as heretofore in effect at relevant times. The objectors further deny that the limitations set forth therein limit the objectors' right or are relevant to the right.

GENERAL PROVISIONS 12 - 16 APPLY TO ALL WATER RIGHTS IN BASIN 36 SHOWN WITH IRRIGATION AS A PURPOSE OF USE (DRP-I at page 13)

The objectors deny that "General Provisions 12 - 16" apply to all water rights in Basin 36 shown with irrigation as a purpose of use as the statements are so broad and attenuated from any matter relevant to the objectors' water right that the objectors are unable to fairly understand what would be admitted or denied.

12. IRRIGATION USE. (DRP-I at pages 13 - 14)

The objectors deny all averments based upon the objectors' lack of sufficient knowledge or information upon which to form a belief as to the truth of the averments and because

prevent the objectors from fairly knowing what would be admitted or denied; because the standard utilized ("as determined by the director") is ambiguous, subjective and indefinite so as to prevent objectors from knowing what would be admitted or denied; and because it is both expressly and implicitly in excess of the power and authority conferred upon the State of Idaho, the Director or the Department by the Constitutions of the United States and State of Idaho, pertinent provisions of the Idaho Code or valid applicable regulations, if any, adopted by the Department in conformity with law. Therefore, the objectors deny the same.

13. DIVERSION VOLUME FOR IRRIGATION. (DRP-I at page 14)

The objectors admit that Figure 1 generally depicts certain lands in Basin 36; however, the objectors deny all other averments including that the amounts set forth are the maximum annual volume of water reasonably required at the field headgate for irrigation, either within Basin 36 in general, or upon objectors' real property in particular. The objectors additionally deny that the maximum annual volumes per acre set forth is that which is "reasonably required for irrigation unless a higher annual diversion volume is reasonably required due to conveyance losses, method of irrigation or field conditions;" because the standard utilized ("as determined by the director") is ambiguous, subjective and indefinite so as to prevent objectors from knowing what would be admitted or denied; and because it is both expressly and implicitly in excess of the power and authority conferred upon the State of Idaho, the Director or the Department

by the Constitutions of the United States and State of Idaho, pertinent provisions of the Idaho Code or valid applicable regulations, if any, adopted by the Department in conformity with law. Therefore, the objectors deny the same.

14. CONSUMPTIVE USE FOR IRRIGATION. (DRP-I at page 14 and 15)

The objectors admit that the recommended water rights contained within the Director's Report show only the irrigation use listed unless otherwise indicated in "Remarks." The objectors deny all other averments contained within this section, including the amount of maximum annual volume of consumptive use per acre in the northern and southern portions of the basin, all of which is beyond the scope of any power or authority vested in the Director or the Department, and contrary to fact; historical use; established, vested, decreed, licensed or permitted rights.

15. AMOUNT OF COMBINED WATER RIGHTS FOR IRRIGATION. (DRP-I at page 15)

The specific averments have no relationship to or basis in fact relating to the individual needs or rights of the objectors, and accordingly, objectors deny this section in its entirety. In addition, no statutory or regulatory authority exists conferring upon the Director, or the Department, the power to limit use and ownership of objectors' private property rights as alleged.

16. DIVERSION RATES IN EXCESS OF .02 CFS PER ACRE. (DRP-I at page 15 - 16)

The objectors deny the averments contained in this section in its entirety.

17. INSTRUCTIONS FOR USE OF LIST OF RECOMMENDED WATER RIGHTS. (DRP-I at page A-i, A-ii and A-iii)

The objectors admit that each water right in the list of recommended water rights includes a description including right number, name and address, source, maximum quantity, consumptive use, priority date, point of diversion, purpose of use, period of use, place of use, basis of right and others. The objectors lack sufficient knowledge or information upon which to form a belief as to the truth of any matter averred in said descriptions other than that the descriptions allegedly include the Director's or Department's version of the facts as they relate to the matters identified. Objectors deny the accuracy of the substantive allegations or information set forth with regard to the objectors' right.

18. IDAHO DEPARTMENT OF WATER RESOURCES RECOMMENDED WATER RIGHTS ACQUIRED UNDER STATE LAW. (DRP-I, pages A-1 - B-25)

The objectors lack sufficient knowledge or information upon which to form a belief as to the truth of any matter averred in said recommended water rights other than those specific admissions contained in Questions 1 - 12 of the attached individual objection, and therefore deny the same.

DIRECTOR'S REPORT FOR REPORTING AREA 3 (BASIN 36)

(DIRECTOR'S REPORT PART II)

I.

Objectors do not understand the allegations, averments or contents of Part II of the Director's Report for Reporting Area 3 (Basin 36) to pertain or relate to objectors or their claims, and do not believe any response is required. To the extent a response is required, objectors deny the same in its entirety.

DIRECTOR'S REPORT FOR REPORTING AREA 3 (BASIN 36)

(DIRECTOR'S REPORT PART III)

I.

No report denominated as Part III of the Director's Report for Reporting Area 3 (Basin 36) has been filed, and accordingly objectors are unable to admit, deny or otherwise response to the same. Objectors do not understand that the contemplated subject matter of such Part III will relate or pertain to objectors or their claims, and no response is required in any case. To the extent any response is required, objectors deny the same in its entirety.

VIII.

AFFIRMATIVE DEFENSES

Pursuant to I.R.C.P. 8(c), objectors herewith state the following matters of affirmative defense or avoidance:

AFFIRMATIVE DEFENSE NO. 1

The objectors' water right is an incorporeal form of real property (as defined by Idaho Code Sections 7-703, 73-114, 55-101,

and like statutes) protected by Section 14, Article 1, of the Idaho Constitution, and the Fifth Amendment to the United States Constitution, and allege that the actions of the Director in recommending, limiting and/or regulating said rights is an unconstitutional infringement upon and a taking of private property, without just compensation and violation thereof.

AFFIRMATIVE DEFENSE NO. 2

The adjudication authorization legislation, I.C. Section 42-1401, et seq., on its face and as applied by the Director and the Department constitutes an improper delegation of constitutional power and authority conferred upon the executive, legislative and/or judicial branches of government and as such violate the provisions governing separation of powers set forth in Article 2, Section 1, Idaho Constitution.

AFFIRMATIVE DEFENSE NO. 3

The procedure set forth in the adjudication authorization legislation, statutes, I.C. Section 42-1401, et seq., and any rules, regulations, procedures, policies or standards promulgated by the Director and/or the Department, if any, are vague and so lacking in reasonable specificity so as to render them impossible of reasonable comprehension, or consistent and meaningful application.

AFFIRMATIVE DEFENSE NO. 4

The procedures, rules, regulations, policies or standards, if any, adopted, implemented and applied by the Department and/or the Director violate the equal protection and due

process clauses of the Fourteenth Amendment, United States Constitution, and Article 1, Sections 2 and 13, Idaho Constitution.

AFFIRMATIVE DEFENSE NO. 5

The adjudication authorization legislation, Idaho Code Section 42-1401, et seq., and the actions of the Director and Department in recommending, limiting and/or regulating the objectors' water right constitutes a violation of 42 U.S.C. Section 1983.

AFFIRMATIVE DEFENSE NO. 6

The water right owned by the objectors is the subject of valid existing decrees issued by the Director and Department, which decrees are binding upon the State of Idaho, the Department and the Director. As a result, the State of Idaho, the Department and the Director are precluded by the doctrines of res judicata, collateral estoppel, judicial estoppel and the like from relitigating or questioning the validity, existence or priority of such right, and/or from taking any position in the Director's Report, or otherwise, which is inconsistent with such decrees.

AFFIRMATIVE DEFENSE NO. 7

The Director's recommendations are contrary to decreed rights, historical use and extent licenses and permits issued by the Department. There has been no forfeiture nor abandonment of the objectors' water rights, nor have the objectors' water rights been prescriptively or adversely possessed, nor have such decrees been vacated or such licenses and permits revoked.

CONFIDENTIAL

AFFIRMATIVE DEFENSE NO. 8

The Directors' Report fails to state a claim to the extent the same asserts a forfeiture, abandonment, prescriptive or adverse acquisition or loss, or loss resulting from estoppel, of the objectors' water right in the absence of any fact upon which forfeiture, abandonment, prescriptive or adverse acquisition for loss, or loss resulting from estoppel, may be based or asserted.

AFFIRMATIVE DEFENSE NO. 9

The objectors' water right is an incorporeal form of real property, as defined by Idaho Code Sections 7-703, 73-114, 55-101, and like statutes, and, as such, pursuant to Idaho Code Section 7-904, et. seq., the actions of the Director in attempting to limit, reduce and/or regulate such rights, and the assertion of some inconsistent proprietary ownership or right to use or control by the State of Idaho, constitutes an unauthorized and invalid taking of private property without the payment of just compensation, or compliance with statutory requirements, all in violation of Title 7, Chapter 7, Idaho Code.

AFFIRMATIVE DEFENSE NO. 10

The actions of the Director, the Department and their agents, servants and employees in recommending, limiting, reducing and/or regulating objector's water rights, either as alleged in the Director's Report or as in fact applied, violates objectors' rights as secured by Art. 1, Section 1; Art. 15, Sections 3, 4 and/or 5; and/or as otherwise provided in the Constitution of the State of Idaho.

AFFIRMATIVE DEFENSE NO. 11

The various allegations, statements and assertions contained in the Director's Report concerning the Department and/or the Director's position or intentions with regard to the adjudication, as well as the implementation of statutes and/or regulations, as well as the administration of water or management of water rights or claims to the beneficial uses of water, if implemented, constitute a violation of various provisions the United States and Idaho constitutions, and/or a violation of the letter, spirit and/or intent of various statutes enacted by the legislature, and/or constitute an exercise of purported authority or powers either in excess of those conferred by law, or in a manner inconsistent with those conferred by law, or both.

AFFIRMATIVE DEFENSE NO. 12

The individual recommendations relating to the specific water right of the objectors as set forth in the Director's Report are (1) not based upon substantial evidence and/or are not, in fact, the product of any reasonable, complete or accurate investigation as required by law; (2) are the product of arbitrary and capricious action on the part of the Department or the Director; (3) have been made in excess of the constitutional and statutory authority of the Department and the Director; (4) have been made upon an unlawful and invalid procedure; (5) are affected by various and sundry errors of law; and/or (6) are clearly erroneous in view of the reliable, probative and substantial evidence.

AFFIRMATIVE DEFENSE NO. 13

The Director's Report is a pleading subject to the provisions of the Idaho Rules of Civil Procedure, including, but not limited to the requirement of I.R.C.P. 8(a)(1) that such pleadings contain a clear and plain statement of the facts, demonstrating an entitlement to relief. The Director's Report violates such provision.

AFFIRMATIVE DEFENSE NO. 14

The Director's Report fails to state a claim upon which relief may be granted.

AFFIRMATIVE DEFENSE NO. 15

The Director's Report is subject to, and must comply with, the requirements of Idaho Code Section 42-1411. The Director's Report does not comply with the requirements of the statute.

AFFIRMATIVE DEFENSE NO. 16

In conducting the investigation and compiling the Director's Report, the Department and the Director have not complied with the requirements of Idaho Code Section 42-1410.

AFFIRMATIVE DEFENSE NO. 17

In conducting the investigation and compiling the Director's Report, the Department and the Director have not complied with the requirements of Idaho Code Section 42-1416.

AFFIRMATIVE DEFENSE NO. 18

The procedures specified in the authorizing legislation and procedural rules promulgated in accordance therewith serve to

deny objectors due process of law in violation of Amendment Fourteen to the Constitution of the United States and Art. 1, Section 13, Idaho Constitution.

AFFIRMATIVE DEFENSE NO. 19

The "General Provisions" and "Other Statements" contained in the Director's Report, along with the Claims Investigation Manual, Adjudication Memoranda and other materials of a similar nature used or employed by the Department, the Director and/or their agents, servants and/or employees constitute rules and regulations which were required to be proposed, promulgated, adopted and approved in conformity with the Administrative Procedures Act and other applicable statutory provisions. The Department, Director and their agents, servants and employees have failed to comply with such requirements, and accordingly, the "General Provisions," "Other Statements", Claims Investigation Manual and the like are invalid, void and of no force or effect.

AFFIRMATIVE DEFENSE NO. 20

Neither the "General Conditions," the Claims Adjudication Manual, Adjudication Memoranda or other promulgations, adoptions, policies, or the like have been submitted to or approved by the Legislature as required by Idaho Code Section 67-5217.

AFFIRMATIVE DEFENSE NO. 21

The relief requested by the Department and the Director in the Director's Report are beyond and in excess of the subject matter jurisdiction of the Court.

AFFIRMATIVE DEFENSE NO. 22

The actions of the Legislature, or the Department and the Director to enact, adopt, implement or enforce statutes, regulations, rules or policies subsequent to November 19, 1987, and to apply or enforce the same for the purpose of, or with the effect of recommending, diminishing or altering objectors' water rights, constitute a violation of Amendment Fourteen, United States Constitution; Art. 1, Section 13, Idaho Constitution; the SRBA authorization legislation; and Idaho Code Sections 73-101 and 73-106.

AFFIRMATIVE DEFENSE NO. 23

These proceedings are subject to the requirements and provisions of Idaho Code Sections 12-117, 12-121, 12-123 and I.R.C.P. 11, and the provisions of the private attorney general doctrine, and other related doctrines, and the Department, Director and State of Idaho are obligated to objectors for the payment and reimbursement of any and all reasonable costs or attorney fees incurred herein.

AFFIRMATIVE DEFENSE NO. 24

The Director's Report asserts what amounts to be a taking of private property by power of eminent domain as governed by Idaho Code Section 7-701 et seq., and as such, venue is therefore improper.

AFFIRMATIVE DEFENSE NO. 25

The Department and the Director are equitably estopped from seeking any reduction in the quantity, quality or priority of

objectors' water rights by virtue of prior statements, representations and actions of the Department, Director or their agents, servants and employees.

AFFIRMATIVE DEFENSE NO. 26

The Department and the Director are barred by laches and the applicable statutes of limitation, including, but not limited to, Idaho Code Sections 5-202, 5-203, 5-204, 5-206, 5-207, 5-208, 5-215, 5-218, 5-219(2), 5-224 and/or 5-241.

AFFIRMATIVE DEFENSE NO. 27

Objectors hereby reserve the right to assert any further affirmative defenses not expressly stated herein, but which subsequently become apparent.

WHEREFORE, the objectors pray for judgment as follows:

1. That the State of Idaho take nothing by reason of its Directors' Report, and that this action, and any claims asserted against objectors, be dismissed.

2. That a decree be entered adjudicating the existence, validity, amount and priority of objectors' water rights in accordance with objectors' claims.

3. That to the extent the acts of the Department or Director constitute a taking of objectors' property for public use, that objectors be allowed and awarded just compensation therefor.

4. That the objectors be allowed all costs of suit and reasonable attorney fees incurred herein.

5. For such further relief to which the Court finds objectors justly entitled.

(WATER\21530ANS)

NOTICE OF ERROR



RESPONSE



CORRECTED R PROOF

no changes made at this time
K KC 10-14-92

MICROFILMED

JAN 21 1993

**RESPONSE TO NOTICE OF ERROR
IN THE SNAKE RIVER BASIN ADJUDICATION**

Water Right No: 36-00068, -00069, -00070 Contact Date: 10-23-92

IDWR Contact Person: (print and initial) Roxanne McCarthy

Claimant Contact Person John and Deloris Jones

Others Present _____

Contact By (give date) _____

Meeting (location): _____

Phone Call (no.) _____

Letter (attach letter): _____

IDWR USE ONLY	
Date	Initials
Date Entered	_____
Verified	_____

I. Issues identified by claimant: per phone call to Steve Clelland. Unnamed springs (36-00070)
are not used. 36-00069 represents the claimant's use of Hoagland Tunnel which should be
viewed as a separate source from Weatherby Springs. Pumping rate from pond for irrigation
should not be limited by capacity of pumps which are old and therefore less efficient.

II. Reasons provided claimant for original recommendation: _____

III. Additional information provided by claimant: _____

IV. Changes to be made in final recommendation (if any): Claim for 36-00070 will be disallowed due to
non-use. Irrigation diversion rate on 36-00068 will be shown as 8.02 cfs (one inch per acre).
Right 36-00069 will be recommended from Hoagland Tunnel at the claimed rate. Copies of
recommendations are attached.

V. Action taken (date): Recommendations changed 10-23-92.

MICROFILMED
JAN 21 1993

IDAHO DEPARTMENT OF WATER RESOURCES
ADJUDICATION CLAIM PROFILE REPORT
(REGIONAL)

OWNER CODE	NAME & ADDRESS	PRIORITY DATE	WATER USE	USE PERIOD FROM TO	DIVERSION RATE	DIVERSION VOLUME
C	JOHN W JONES JR	02/01/1888	IRRIGATION	03-15 11-15	1.00 CFS	
C	DELORIS D JONES					
	PO BOX 265					
	HAGERMAN ID 83332					
	(208) 837-4580					
				TOTAL DIVERSION:	1.00 CFS	

Water Source: HOAGLAND TUNNEL

Tributary to: BILLINGSLEY CREEK

Stage: DECREED

Point(s) of Diversion:

T07S R14E S30

SENESEW

GOODING County

Place of use Legal Description for: IRRIGATION

				NE				NW				SW				SE						
T	R	S	:	Lt	Ac	Lt	Ac	Lt	Ac	Lt	Ac	Lt	Ac	Lt	Ac	Lt	Ac	Lt	Ac	SUM		
07S	13E	25	:	40		40		40		40		:						37	38	29	38	302.0
07S	14E	30	:									:	01-10	02-21				04	03-25	04-27	12	99.0
																				TOTAL ACRES	401.0	

POU County: GOODING

Remarks: USE OF THIS RIGHT WITH RIGHT NO. 36-00068 IS LIMITED TO A
TOTAL COMBINED DIVERSION RATE OF 8.25 CFS, A TOTAL COMBINED
ANNUAL CONSUMPTIVE USE VOLUME OF 1203 AF, AND TO THE IRRIGATION
OF A COMBINED TOTAL OF 401 ACRES IN A SINGLE IRRIGATION SEASON.

Dates: Exam Made Date: Verified Date:

Misc: Water District Number: 36A Field Inspection Flag:
Presumption Flag:

Comments: Date: 03/08/1991 User-ID: BEDKE Subject: SCC-STAFF REVIEW

Date: 08/07/1992 User-ID: CHRISTEN Subject: COPIED FROM REMARKS
IRRIG, STOCK, FISH PROP., & DOMESTIC USES THE SAME WATER FROM
4 DIFFERENT WATER RIGHTS WITH A TOTAL OF 87.05 CFS.

Date: 08/07/1992 User-ID: CHRISTEN Subject: BASIS FOR RECOMMENDATION
REQUIRED WATER IS SUPPLIED BY 36-00068. THEREFORE THIS CLAIM IS
NOT NECESSARY AS THEY ARE FROM THE SAME SOURCE.

Date: 09/24/1992 User-ID: SCHULTZ Subject: NOTICE OF ERROR (NOE)
NOE RECEIVED 9/23/92. CHANGED NOE FLAG FROM BLANK TO A.
CLAIM VERIFIED 8/7/92. DID NOT REVERIFY ANY PART OF CLAIM.

Date: 10/14/1992 User-ID: CHRISTEN Subject: RESPONSE TO NOE
RESPONSE WAS STANDARD LETTER FORMAT "MULTIPLE RIGHTS, DECREED
RIGHT DISALLOWED" COMBINED WITH OTHER ISSUES FOR OTHER CLAIMS
HELD BY CLAIMANT. NO CHANGE IN THE RECOMMENDATION MADE AT THIS

MICROFILMED
JAN 21 1993

=====

Comments: Date: 10/14/1992 User-ID: CHRISTEN Subject: RESPONSE TO NOE
TIME. KKC 10-14-92.

Date: 10/23/1992 User-ID: SOUTH3 Subject: RECOMMENDATION CHANGED
IT WAS DECIDED TO TREAT THE HOAGLAND TUNNEL AS A SEPARATE
SOURCE FROM WEATHERBY SPRINGS. THIS RIGHT HAS BEEN
RECOMMENDED TO DESCRIBE THE CLAIMANT'S USE OF THIS SOURCE. RMC

Audit: 10/23/92 SOUTH3

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JAN 21 1993

NOTICE OF ERROR FORM

AUG-24-1992

Please type or print clearly, fill out completely, and return to:
Idaho Department of Water Resources
Statehouse Mail
Boise, Idaho 83720-9000

RECEIVED

SEP 23 1992

The notice of error must be received at IDWR by the ~~deadline date printed~~ ^{Department of Water Resources} below with your proposed recommendation.

YOUR DEADLINE FOR FILING A NOTICE OF ERROR IS:

SEP-24-1992

1. Water right number: 36-00069
2. Name: John W Jones Jr
Deloris D Jones
Address: Box 265
Hagerman, Idaho 83332
Weekday Telephone Number: 837-4580

RECEIVED

SEP 28 1992

Department of Water Resources

Southern Region Office

MICROFILMED

JAN 21 1993

TEAR AT PERFORATIONS AND COMPLETE FORM ON OTHER SIDE

(Instead of filling in items 3 and 4 below you may include a copy of your proposed recommendation with the changes marked on the copy.)

3. Describe the portion of proposed recommendation with which you disagree:

Disagree with cancelling this permit

4. Describe the changes you wish to have made in the proposed recommendation:

re instate as per application

5. Describe why you disagree with the proposed recommendation:

*This is not a duplicate water supply.
This is a separate February 1, 1888 decree.*

6. Date: *September 22, 1992*

SIGNATURE

John W Jones Jr.
John W Jones



State of Idaho

DEPARTMENT OF WATER RESOURCES

Southern Region, 222 Shoshone St. East, Twin Falls, Idaho 83301 (208) 736-3033

CECIL D. ANDRUS
Governor

R. KEITH HIGGINSON
Director

14-Oct-1992

JOHN W JONES JR
BOX 265
HAGERMAN ID 83332

RE: RESPONSE TO NOTICE OF ERRORS FOR CLAIMS 36-00068,
36-00069, 36-00070, AND 36-07071.

Dear Mr Jones

ISSUE = PERIOD OF USE FOR ALL CLAIMS

Your NOE(s) indicate that you would like the recommendation to show a longer season of use for irrigation. The Director has approved extending the period of use for the Hagerman valley to 3/15 to 11/15.

The proposed recommendation is based on irrigation season of use standards adopted by the Director for the various regions throughout the state. These standards are based on the period of the year in which there is less than a 75% chance of a 24 degree F. frost.

In addition, since there are some years in which water can be beneficially used for irrigation outside the irrigation season, the proposed Director's Report includes a general provision which provides for irrigation outside the irrigation season under certain conditions. The conditions are that the water is beneficially used, as determined by the director; that all water rights with a period of use outside the irrigation season, regardless of priority, are satisfied; and that the use does not conflict with the public interest as determined by the director. This proposed general provision will be included in the Director's Report.

RESPONSE TO NOE FOR 36-00068 AND 36-00069

Your NOE questions the basis for recommending disallowal of a claim to a previously decreed water right.

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JAN 21 1993

JONES
PAGE 2
14-Oct-1992

Under Idaho law, water rights are limited to the amount of water beneficially used for the purposes for which the water rights were established. The amount of water beneficially used is limited to the amount that is actually used and is reasonably required. For irrigation purposes, a reasonable amount is the amount required using irrigation methods that are reasonably efficient under current circumstances. If the water right shown in a decree is no longer beneficially used, then the water right is forfeited.

In your case, you filed multiple overlapping claims. IDWR determined the amount of water reasonably required for the recommended uses, based on available data and current methods of analysis, and proposed to recommend the most senior claims that were within this total. To support recommendation of the notice of claims listed above, you will need to submit evidence of beneficial use of an amount of water greater than the total of the rights proposed to be recommended.

RESPONSE TO NOE FOR 36-07071

The recommendation for 82 raceways was based upon the field examiner's findings of raceways in use as of 1987. Expansion of the system beyond the original licensed system will require an application for permit even though the development has already occurred as the development has occurred since the May 20, 1971 mandatory permit statute for developments from surface water.

The 325 inches referenced in remarks was included within your claim based upon the court findings in Case No. 16676 which stated that the 325 inches was to be discharged into the Bar S ditch.

The Department does recognize that the "33" rights are only from Weatherby Springs although it does not clearly state that in the remarks section of your right. Within the "33" rights, only Weatherby Springs is listed.

Based upon currently available information, the period of use has been changed as stated above but the other points in your NOE(s) will remain the same.

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JAN 21 1993

JONES
PAGE 3
14-Oct-1992

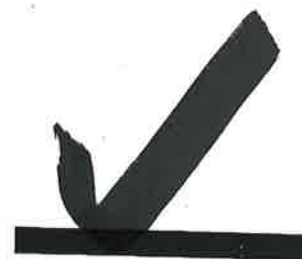
If you still disagree with IDWR's recommendations, you will have an opportunity to file an objection to the Director's Report with the court. When the Director's Report is filed with the court, you will be mailed a notice that will contain more information about the objection process. As part of the objection process, IDWR will work with the claimants to resolve disputed issues, including efforts to obtain additional data which will be made available to the water users.

Sincerely

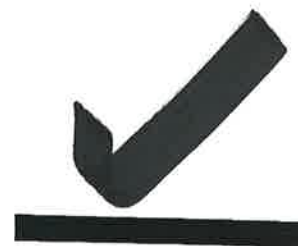
Kelly K. Christensen
Sr. Water Resource Agent

MICROFILMED
JAN 21 1993

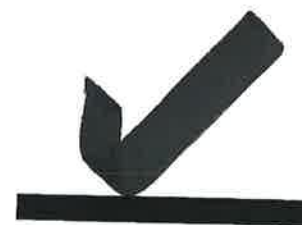
R PROOF



CVR



MAPS



PHOTOS



MISC



MICROFILM

JAN 21 1993

Water Right Number - R36-00069

Prefix Translation: RESEARCH

Old (D) Number -

+ - - - - Last Name - - - - + + - First Name - - + + - - - - - Address - - - - - +

*** C - CURRENT OWNER ***
JONES

DELORIS D

1 - PO BOX 265

2 -

3 -

City- HAGERMAN

Phone - 208-837-4580

State- ID Zip- 83332

JONES JR

JOHN W

1 - PO BOX 265

2 -

3 -

City- HAGERMAN

Phone - 208-837-4580

State- ID Zip- 83332

+ - - Priority Date - - + + - - - Region - - - + + - - - Stage - - - + + - - - Status - - - +
02/01/1888 17 SOUTHERN I - DISALLOWED+ - - - - Source - - - - - + + - - - - - Tributary - - - - - +
WEATHERBY SPRINGS BILLINGSLEY CREEK

+ - - - - Point of Diversion - - - - - +

Twn	Rng	Sec	Tract	Lot	RFlg	County
07S	14E	30	SE NE SW		(47)	GOODING

Code	Description	Period From	Period To	Diversion Rate	Diversion Volume
01 - IRRIGATION		04/01	10/31	1.000	1604.00
43 - DOMESTIC		01/01	12/31	0.110	
04 - STOCKWATER		01/01	12/31	0.120	

+ - Total Div. Rate - + + - Total Div. Volume - + + - Total Consumptive Use - + + - KW Usage - +
1.000 1604.00 1203.0

Twn	Rng	Sec	Tract	Lot	Acres	Code	Description	County
07S	13E	25	NE NE		40.0	01	IRRIGATION	(47) GOODING
07S	13E	25	NW NE		40.0	01	IRRIGATION	(47) GOODING
07S	13E	25	SW NE		40.0	01	IRRIGATION	(47) GOODING
07S	13E	25	SE NE		40.0	01	IRRIGATION	(47) GOODING
07S	13E	25	NE SE		37.0	01	IRRIGATION	(47) GOODING
07S	13E	25	NW SE		38.0	01	IRRIGATION	(47) GOODING
07S	13E	25	SW SE		29.0	01	IRRIGATION	(47) GOODING
07S	13E	25	SE SE		38.0	01	IRRIGATION	(47) GOODING
07S	14E	30	NW NW	1	10.0	01	IRRIGATION	(47) GOODING
07S	14E	30	SW NW	2	21.0	01	IRRIGATION	(47) GOODING
07S	14E	30	NE SW		4.0	01	IRRIGATION	(47) GOODING
07S	14E	30	NW SW	3	25.0	01	IRRIGATION	(47) GOODING
07S	14E	30	SW SW	4	27.0	01	IRRIGATION	(47) GOODING
07S	14E	30	SE SW		12.0	01	IRRIGATION	(47) GOODING

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JAN 21 1993

Water right number - R36-00069

Prefix Translation: RESEARCH

+	Tw	Rng	Sec	Tract	Lot	Acres	Code	Description	County	+
---	----	-----	-----	-------	-----	-------	------	-------------	--------	---

Total Acres: 401.0

+ - - Diversion Means - VIA HOAGLAND TUNNEL, HEADWORKS, CEMENT DITCH, 10" PIPE, 100HP PUMP

+ - - Non-Irrigation Use - DOMESTIC, 5 HOMES; STOCKWATER, 500 RANGE

+ - - Other Rights for Same Use - 36-00068, 36-00070

+	Remarks	+
	RECOMMENDED AS RIGHT NO. 36-00068.	

+	Old Water Right Numbers	+
	3600069	

+	Conditions of Approval	+
	P06 - RECOMMENDED AS RIGHT NO. _____: This is included for a - claim that is PROPOSED to be disallowed because the right claimed - is recommended pursuant to another right. The remark indicates - the water right number of the OTHER right that is proposed to be - recommended. If you are not mailed a notice of the recommendation - of the OTHER right, then the OTHER right is recommended in - another claimant's name.	

+	Decree Plaintiff	+	Decree Defendant	+	Decree Date	+
	NEW INTERNATIONAL MORTGAGE BANK		IDAHO POWER COMPANY		00/00/0000	

+	Comments	+
	Date: 03/08/1991 User Id: BEDKE Subject: SCC-STAFF REVIEW Date: 08/07/1992 User Id: CHRISTEN Subject: COPIED FROM REMARKS IRRIG, STOCK, FISH PROP., & DOMESTIC USES THE SAME WATER FROM 4 DIFFERENT WATER RIGHTS WITH A TOTAL OF 87.05 CFS. Date: 08/07/1992 User Id: CHRISTEN Subject: BASIS FOR RECOMMENDATION REQUIRED WATER IS SUPPLIED BY 36-00068. THEREFORE THIS CLAIM IS NOT NECESSARY AS THEY ARE FROM THE SAME SOURCE.	

+ - - Audit Fields - - +
08/07/92 CHRISTEN

+ - - Adjudication Rights Dates and Flags Area - - -

Court Report Filing	- 00/00/0000	Field Inspection Made	- 00/00/0000	Civil Case Number	- 39576
Objection Filed Date	- 00/00/0000	Field Inspection Flag	-	Old Case Number	-
Response Filed Date	- 00/00/0000	Verified Date	- 08/07/1992	Old Judicial District	-
Claim Received Date	- 08/19/1988	Last Amended Date	- 00/00/0000	Temporary Right	- P
		Receipt Number	- S001554	Water District	- 36A
		POU Ownership Flag	- Y	Federal/State Indicator	- S
		Name Connector	- AND/OR	Presumption Flag	-
				Notice of Error Flag	-

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JAN 21 1993

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
ADJUDICATION CLAIM VERIFICATION REPORT

14:51:10
06/29/90

PAGE: 13
QUICKLOOK INFORMATION

CLAIM NUMBER: A36-00069

WR ELEMENT	FIELD EXAM Y/N	CORRESPONDENCE SENT/RECEIVED BY WHOM/DATE	FIELD EXAM BY WHOM/DATE	CHANGE CLAIM Y/N	VERIFIED BY CODE	COMPLETED REVIEW WHOM/DATE	COMPLETED DATA ENTRY WHOM/DATE	VERIFIED DATE WHOM/DATE
PRIORITY DATE	N		8-21-90			HHT	OB	
POINT OF DIV	Y N		SEE/HAT	N	1,5	8/14/92	D	KKE
SOURCE	N			(Y)				8-7-92
PLACE OF USE	Y (Y)			N				
DIV. AMOUNT CFS/VOLUME	Y N			(Y)	1,4,5			
CONSUMPTIVE USE	- N			N			Y	
PURPOSES	Y N			(Y)				
PERIOD OF USE	Y N			N				
BASIS OF CLAIM	N			N				
REMARKS	Y N			N				
				(Y)				

lw 7/18/90

"VERIFIED BY" CODES

TOPO MAP/ORTHO-PQ = 1
ASCS MAP = 2
WATERMASTER RECORDS = 3
NAPP PHOTOS = 4
FIELD EXAM = 5
OTHER (SEE REMARKS) = 6

THESE CODES ARE USED TO INDICATE HOW THE FIELD EXAMINER VERIFIED THE INFORMATION
USED FOR THIS FIELD EXAMINATION. INDICATED ARE ALL CODES WHICH APPLY.

SEE MASTER REVIEW:

A36-00068

all water supplied by A36-00068 -
See Rt. R36-00068

Reconsideration 10-23-92
RNF

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JAN 21 1993

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
ADJUDICATION CLAIM VERIFICATION REPORT

14:51:10
06/29/90

PAGE: 1
GENERAL INFORMATION

CLAIM NUMBER: A36-00069

LAST: JONES, JR.
ADDRESS: P.O. BOX 265
CITY: HAGERMAN
PHONE NUMBER: 208-837-4580

FIRST: JOHN W.
STATE: ID ZIP: 83332

OWNER CODE: C

LAST: JONES
ADDRESS: P.O. BOX 265
CITY: HAGERMAN
PHONE NUMBER: 208-837-4580

FIRST: DELORIS D.
STATE: ID ZIP: 83332

OWNER CODE: C

FIELD EXAM REQUIRED?

VERIFICATION REQUIRED DUE TO REMARKS?

DATABASE
Y

FIELD
EXAMINER

CLAIM REMARKS: IRRIG, STOCK, FISH PROP., & DOMESTIC USES THE SAME WATER FROM
4 DIFFERENT WATER RIGHTS WITH A TOTAL OF 87.05 CFS.

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JAN 21 1993

CONTACT PERSON: _____

PHONE NUMBER: (____) ____-____

DATE OF FIELD EXAM: 8/4/90

APPOINTMENT MADE: Y(____) N(____)

TIME: ____:____ A(____) P(____)

ACCOMPANIED BY: _____

PHONE NUMBER: (____) ____-____

RELATIONSHIP TO CLAIMANT: _____

DIRECTIONS TO PROPERTY / REMARKS:

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JAN 21 1993

A. AJ CLAIM: # A36-00069 PRIORITY DATE: 02-01-1888 STAGE: D
B. WR RECORD: # 36-00069 PRIORITY DATE: 02-01-1888 STAGE: D

C. FIELD EXAM REQUIRED?

DUE TO PRIORITY DATE DISCREPANCY? (Y/N)

DATABASE
N

FIELD
EXAMINER
N

ARE THERE OBVIOUS REASONS TO QUESTION THE PRIORITY DATE CLAIMED? Y() N(/)
IF YES EXPLAIN.

REMARKS:

=====

RECOMMENDED PRIORITY DATE:
02-01-1888

REVIEWED BY lw

DATE

7/18/90

=====

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JAN 21 1993

A. AJ CLAIM POINT OF DIVERSION AND SOURCE:

RIGHT	TWP.	RGE.	SEC.	1/4	1/4	1/4	LOT	CNTY
A36-00069	07S	14E	30		NE	SW		GOODING

OTHER AJ CLAIMS WITH SAME AJ POD
A PREFIX R PREFIX
A36-00009 NONE

WR RECORDS IN SAME 40 ACRE TRACT

36-00009
36-00010
36-00011
36-00015
36-00016
36-00017
36-00033
36-00041
36-00042
36-00044
36-00045
36-00060
36-00061
36-00062
36-00063
36-00068
36-00086A
36-00086B
36-00105
36-00116
36-00118
36-00119
36-00120
36-02029
36-07071
36-07740

SOURCE: WEATHERBY SPRINGS

TRIB: BILLINGSLEY CREEK

B. WR POINT OF DIVERSION AND SOURCE:

RIGHT	TWP.	RGE.	SEC.	1/4	1/4	1/4	LOT	CNTY
36-00069	07S	14E	30		NE	SW		GOODING

OTHER WR RECORDS WITH SAME WR POD

AJ CLAIMS IN SAME 40 ACRE TRACT

A PREFIX R PREFIX

36-00009	A36-00009	NONE
36-00010	A36-00033C	
36-00011	A36-00060	
36-00015	A36-00086G	
36-00016	A36-00119	
36-00017	A36-00033D	
36-00033	A36-00063	

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JAN 21 1993

36-00041
36-00042
36-00044
36-00045
36-00060
36-00061
36-00062
36-00063
36-00068
36-00086A
36-00086B
36-00105
36-00116
36-00118
36-00119
36-00120
36-02029
36-07071
36-07740

A36-00116
A36-00086F
A36-00086H
A36-00011B
A36-00011A
A36-00011C
A36-00105
A36-00120
A36-00061
A36-00062

MICROFILMED

JAN 21 1993

SOURCE: WEATHERBY SPRINGS

TRIB: BILLINGSLEY CREEK

C. FIELD EXAM REQUIRED?

DUE TO POD DISCREPANCY? (Y/N)
DUE TO SOURCE DISCREPANCY? (Y/N)

DATABASE
Y
N

FIELD
EXAMINER
N
N

REMARKS:

RECOMMENDED POINT(S) OF DIVERSION AND SOURCE:

TWP.	RGE.	SEC.	1/4	1/4	1/4	LOT	COUNTY
<u>7S</u>	<u>13E</u>	<u>11</u>	<u>SE</u>	<u>NE</u>	<u>SW</u>	<u>---</u>	<u>47</u>

change claim

SOURCE: WEATHERBY SPRINGS

TRIB: BILLINGSLEY CREEK

REVIEWED BY: lw

DATE: 7/18/90

VIA ~~WEATHERBY SPRINGS~~

Flagland Tunnel

*per conversation between claimant
& S. Clelland RMF 10-23-92*

A. ROOT WATER RIGHT NUMBERS: A36-00069

B. POU LISTING

TWP	RNG	SEC	1/4	1/4	LOT	NAME	AJ #/ACRES	WR #/ACRES	LANDSAT DATA	FIELD EXAM.	RECOMM ACRES
07S	13E	25	NE	NE		JONES, JR. , JOHN W. JONES, JR. , JOHN W. JONES, JR. , JOHN W.	A36-00069 /40.0 A36-00068 /40.0 A36-00070 /40.0	36-00069 / 36-00068 / 36-00070 /	40.0		
07S	13E	25	SW	NE		JONES, JR. , JOHN W. JONES, JR. , JOHN W. JONES, JR. , JOHN W.	A36-00069 /40.0 A36-00068 /40.0 A36-00070 /40.0	36-00069 / 36-00068 / 36-00070 /	39.0		
07S	13E	25	SE	NE		JONES, JR. , JOHN W. JONES, JR. , JOHN W. JONES, JR. , JOHN W.	A36-00069 /40.0 A36-00068 /40.0 A36-00070 /40.0	36-00069 / 36-00068 / 36-00070 /	38.0		
07S	13E	25	NE	SE		JONES, JR. , JOHN W. JONES, JR. , JOHN W. JONES, JR. , JOHN W.	A36-00069 /40.0 A36-00068 /40.0 A36-00070 /40.0	36-00069 / 36-00068 / 36-00070 /	37.0		
07S	13E	25	NW	SE		JONES, JR. , JOHN W. JONES, JR. , JOHN W. JONES, JR. , JOHN W.	A36-00069 /40.0 A36-00068 /40.0 A36-00070 /40.0	36-00069 / 36-00068 / 36-00070 /	39.0		
07S	13E	25	SW	SE		JONES, JR. , JOHN W. OMOHUNDRO , NEVADA B. JONES, JR. , JOHN W. JONES, JR. , JOHN W. OMOHUNDRO , NEVADA B. ELIASON , JACOB	A36-00069 /29.0 A36-00044 / 2.0 A36-00068 /29.0 A36-00070 /29.0 A36-00041B / -	36-00069 / 36-00044 / 36-00068 / 36-00070 / / 36-00043 /	40.0		
07S	14E	30	NW	NW	1	JONES, JR. , JOHN W. JONES, JR. , JOHN W. JONES, JR. , JOHN W.	A36-00069 /32.0 A36-00068 /32.0 A36-00070 /32.0	36-00069 / 36-00068 / 36-00070 /			
07S	14E	30	SW	NW	2	JONES, JR. , JOHN W. JONES, JR. , JOHN W. JONES, JR. , JOHN W.	A36-00069 /32.0 A36-00068 /32.0 A36-00070 /32.0	36-00069 / 36-00068 / 36-00070 /			
07S	14E	30	NE	SW		JONES, JR. , JOHN W. JONES, JR. , JOHN W. JONES, JR. , JOHN W. JONES, JR. , JOHN W.	A36-00069 /40.0 A36-07071 / A36-00068 /40.0 A36-00070 /40.0	36-00069 / 36-07071 / 36-00068 / 36-00070 /	23.0		
07S	14E	30	NW	SW	3	JONES, JR. , JOHN W. JONES, JR. , JOHN W. JONES, JR. , JOHN W.	A36-00069 /32.0 A36-00068 /32.0 A36-00070 /32.0	36-00069 / 36-00068 / 36-00070 /			
07S	14E	30	SW	SW	4	JONES, JR. , JOHN W. JONES, JR. , JOHN W. JONES, JR. , JOHN W.	A36-00069 /32.0 A36-00068 /32.0 A36-00070 /32.0	36-00069 / 36-00068 / 36-00070 /			
07S	14E	30	SE	SW		JONES, JR. , JOHN W.	A36-00069 /40.0	36-00069 /	26.0		

for Review see A36-00068

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		JONES, JR. , JOHN W.	A36-00068	/40.0	36-00068	/	
		JONES, JR. , JOHN W.	A36-00070	/40.0	36-00070	/	
07S	13E	25	SE	SE	JONES, JR. , JOHN W.	A36-00069	/40.0
					JONES, JR. , JOHN W.	A36-00068	/40.0
					JONES, JR. , JOHN W.	A36-00070	/40.0
07S	13E	25	NW	NE	JONES, JR. , JOHN W.	A36-00069	/40.0
					JONES, JR. , JOHN W.	A36-00068	/40.0
					JONES, JR. , JOHN W.	A36-00070	/40.0
		TOTAL ACRES	A36-00069	517.00			362.00

ARE IRRIGATED ACRES FOUND IN TRACTS OTHER THAN INDICATED ABOVE, Y() N(☒)
IF YES SEE ATTACHED SHEET:

C. FIELD EXAM REQUIRED?

DUE TO POU DISCREPANCY? (Y/N)

DATABASE
Y

FIELD
EXAMINER
☒

PRESUMPTION FLAG:

REMARKS:

*Napp shows irrig in sec 30 - ASCS does not have actual
acres marked in sec 30. Landrat shows discrepancy.
Confirm sec 30 acres.*

RECOMMENDATIONS:

TOTAL ACRES:

401

REVIEWED BY:

9-10-90

DATE:

See

See analysis & maps in 36-00068.

RTH 10-23-92

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A. AJ CLAIMED USES:

PURPOSES	MONTH/DAY	DIVERSION QUANTITY
A36-00069 IRRIGATION	FROM 03-15 TO 11-15	1.000 CFS
A36-00069 DOMESTIC	FROM 01-01 TO 12-31	.110 CFS
A36-00069 STOCKWATER	FROM 01-01 TO 12-31	.120 CFS
TOTAL DIVERSION RATE/VOLUME CLAIMED		1.000 CFS

B. WR RECORDED USES:

PURPOSES	MONTH/DAY	DIVERSION QUANTITY
36-00069 IRRIGATION	FROM TO	1.000 CFS
TOTAL DIVERSION RATE/VOLUME CLAIMED		1.000 CFS

PRESUMPTION FLAG:

C. FIELD EXAM REQUIRED?

	DATABASE	FIELD EXAMINER
DUE TO WATER-USE DISCREPANCY? (Y/N)	Y	<u> N </u>
DUE TO DIVERSION RATE DISCREPANCY? (Y/N)	Y	<u> N </u>
DUE TO PERIOD FROM/TO DISCREPANCY? (Y/N)	Y	<u> N </u>

D. PERIOD OF USE:

RECOMMEND AS CLAIMED?

Y(/) N()

RECOMMEND TO WR STANDARDS OR OTHER?

Y() N() Explain in remarks, below.

REMARKS:

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JAN 21 1993

A. DOES DIVERSION RATE CLAIMED AGREE WITH EXISTING RECORDS?

Y(☒) N(☐)

AJ TOTAL CLAIMED DIVERSION RATE: 1.000 CFS
WR ROOT RIGHT TOTAL DIVERSION RATE: 1.000 CFS

*** IF NO or IF STATUTORY CLAIM or BENEFICIAL USE then flow measurement required. ***
** If an amount smaller than the original diversion rate is **
** claimed and an exam is NOT required, explain in remarks. **

FLOW MEASUREMENT REQUIRED?

DUE TO STAGE OR DIVERSION RATE DISCREPANCY? (Y/N)

FIELD
DATABASE EXAMINER
N N

B.

FLOW MEASUREMENT

MEASUREMENT METHOD _____, SEE ATTACHED CALCULATIONS.

C. ARE OTHER WATER RIGHTS USED? Y(☒) N(☐) IF YES COMPLETE OVERLAP REVIEW.

OTHER RIGHTS LISTED IN CLAIM: ~~A36-07071~~, A36-00068, A36-00070 ← DROP FISH RT.

LIST ALL RIGHTS WITH A SAME POU AND IRRIGATION USAGE:

CLAIM	SOURCE	NAME	DIV. RATE	DIV. RATE/ACRE	DIV. VOL.	DIV. VOL./ACRE
A36-00069	WEATHERBY SPRINGS	JONES, JR. , JOHN W.	1.000	0.001		
A36-00068	WEATHERBY SPRINGS	JONES, JR. , JOHN W.	12.500	0.024		

LIST ALL RIGHTS WITH SAME POU BUT NOT USED FOR IRRIGATION.

CLAIM NO.	PURPOSES	NAME	MONTH/DAY	RATE	VOLUME
A36-00069	DOMESTIC	JONES, JR. , JOHN W.	FROM 01-01 TO 12-31	.110 CFS	
A36-00069	STOCKWATER	JONES, JR. , JOHN W.	FROM 01-01 TO 12-31	.120 CFS	
A36-00041B	DOMESTIC	OMOHUNDRO , NEVADA B.	FROM 01-01 TO 12-31	.020 CFS	
A36-07071	FISH PROPAGATION	JONES, JR. , JOHN W.	FROM 01-01 TO 12-31	73.050 CFS	52794.00 AF/A

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D.

RATE/VOLUME CALCULATIONS: (IRRIGATION)

1a. IRRIGATION RATE

ACRES 401 x 0.02 CFS/ACRE = 8.02 CFS
(Taken from p/u review)

1b. CALCULATIONS

DOES AMOUNT CLAIMED EXCEED 0.02 CFS/ACRE? Y(X) N()

*** IF YES ADDITIONAL WATER USE FORM FILED AND ATTACHED? Y() N(X) ***

2. IRRIGATION CONSUMPTIVE USE

CLAIMED CONSUMPTIVE USE = 1551.0 AF/A

ACRES 401 x CONSUMPTIVE VOL. AF/A FOR AREA 3.0 =

TOTAL CONSUMPTIVE USE 1203 AF/A

3. IRRIGATION DIVERSION VOLUME

CLAIMED DIVERSION VOLUME = AF/A

ACRES 401 x DIVERSION VOL. AF/A FOR AREA 40 =

TOTAL DIVERSION VOLUME 1604 AF/A

4. CALCULATIONS FOR USES OTHER THAN IRRIGATION:

SEE ATTACHED SHEET? Y() N()

REMARKS: (Include limitations on CONSUMPTIVE USE for combined rights.)

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JAN 21 1993

RECOMMENDATIONS:

REC. PURPOSES	REC. PERIOD FROM TO	REC. DIV RATE CFS	REC. DIV VOL. AF/A	REC. CONS. USE
IRRIGATION	3-15 11-15	1.0	1604	1203
STOCK WATER	1-1 12-31	0.12		
DOMESTIC	1-1 12-31	0.11		
TOTAL FOR THIS RIGHT		1.0		
REVIEWED BY: <u>SC</u>	DATE: <u>9-10-90</u>			

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> provided by 36-00068
RNF 10-23-92

Allow 1.0 cfs for Irrigation
Reconsideration
disallowed
8/6/92 - system limited by pumping capacity
That capacity is supplied by 36-00068.
See A36-00068 for further detail.
HTT

A. CHECK ONLY THE FOLLOWING THAT APPLY:

	ACCEPTED AS CLAIMED	NEEDS REVIEW
OWNERSHIP _____	(☒)	()
FORFEIT/ABANDON _____	(☒)	()
ADDITIONAL DIV. AMOUNT _____	()	()

B. SPLIT WATER RIGHT REVIEW

ROOT WATER RIGHT NUMBER: 36-00069

TOTAL DIVERSION RATE OF WR SPLITS	DATABASE 1.000	EXAMINER _____	CFS
-----------------------------------	-------------------	-------------------	-----

SPLITS:

OLD RIGHT NUMBERS	CURRENT CLAIM NUMBERS	DIVERSION RATE	CURRENT "R" CLAIM NUM.	"R" DIV. RATE	WR RIGHT NUMBERS	DIVERSION RATE
-	A36-00069	1.000	-		36-00069	1.000
TOTAL CFS		1.000				1.000

DIVERSION RATE REVIEW

DO THE SUM CFS RATE OF THE SPLITS EQUAL THE ROOT RIGHT CFS RATE? (Y/N)
IF NO, is the written review sheet attached? (Y/N)

DATABASE
Y

FIELD
EXAMINER
Y

REMARKS:

See A36-00068 for Remarks.

AUTHENTICATION:

SIGNATURE: *Steve [Signature]*

DATE: 9-10-90

NAME OF FIELD EXAMINER: _____ TITLE: _____

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JAN 21 1993

REMARK AND CONDITION CODE WORKSHEET

SYSTEM CLAIM NUMBERS

R36 00069

AGENT

INITIALS

H H J

DATE

8/6/92

CLAIM NO.
OR ENTRY
ORDERREMARK
CODE

ENTRY DATA

CONDITION
CODESTAGE
OR
STATUSPRESUMPTION
CODE

P06 - 36-00068

P06

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JAN 21 1993

400 000
FEET

42°45'

MICROFILMED
JAN 21 1993

4741

3209

3250

3251

3233

3250

4743

3080

47'30"

25

THREE
Springs

TUNNEL
WEATHERBY SPRINGS
HIGHLAND TUNNEL

4739

DECEASE
325

BARS
water/pipe

3213

VADER

GRADE

IPREN

DITCH

HAGERMAN 3.8 MI.

36

31

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JAN 21 1993



C276
(5885)

C277

C227
(773)

C353

513 way

T7S
N14E

40MB
6-1

MICROFILMED
1992-1-1993

CONVERSATION MEMORANDUM

NAME OF PARTY BILL JONES
EMPLOYEE: _____DATE 8-22-90
FILE _____RE: WEATHERBY SPRINGS & THREE SPRINGS COMPLEX

Helen Harrington and I made Ultrasonic Measurements on the 24" pipe from 3 Springs and the 20" pipe from the Weatherby Springs Tunnel. Mr. Jones explained that water from 3 Springs is exchanged for water from Weatherby Springs. Water Users west of the Jones Farm and Mr. McFadden are in agreement with this system. The other users are able to use Weatherby Tunnel water for domestic uses which is a closed source. Mr. Jones is able to use their 3 Springs water and allows for better use of the facilities & water. Due to Fluctuations in water use the water is better controlled under this exchange. The Original water rights can still be used as defined and are not permanently changed or revised.

I have made 2 maps of the 2 sources above to help describe the systems.

Steve Collins
8-23-90

MICROFILMED
JAN 21 1993



State of Idaho

DEPARTMENT OF WATER RESOURCES

Southern Region, 222 Shoshone St. East, Twin Falls, Idaho 83301 (208) 734-3578

CECIL D. ANDRUS
Governor

R. KEITH HIGGINSON
Director

MODE SELECT
INPUT

OUTER DIAMETER
24.0323 IN

PIPE MATERIAL
? CS, SS

WALL THICKNESS
0.1100 IN

INNER LINING
? NO LING.

KIND OF FLUID
? WATER

SENSOR MOUNTING
? U

TYPE OF SENSOR
? SMALL

DATA CHANGE
? NO

SPACING
19.602 IN U

08-22 12:3800 *R
+597.028E 1GPM

ZERO MODE
CLEAR

ZERO MODE
AUT ZERO

ZERO MODE
ZERO OPR

MODE SELECT
T0 CHECK

0897.6 MMSEC
100.88 % T0

08-22 12:4100 *R
+002.90 % AI2

08-22 12:4100 *R
+712.472E 1GPM

08-22 12:4100 *R
+714.849E 1GPM

08-22 12:4300 *I
+711.151E 1GPM

3 Spgs Pipeline to Bill Jones Fish Prop. Use

8-22-90

AT THE TIME OF THIS
MEASUREMENT, MR. JONES
EXPLAINED HE IS USING THE
WATER THAT NORMALLY FLOWS
TO McFADDEN, FUEL, BOYER &
OTHERS FROM THE THREE SPRINGS
SOURCE. IN RETURN HE HAS
REPLACED THIS WATER WITH
HIS RIGHT FROM WEATHERBY
SPRINGS VIA THE TUNNEL
& PIPELINE.

SCC/HHT

MICROFILMED
JAN 21 1993



State of Idaho

DEPARTMENT OF WATER RESOURCES

Southern Region, 222 Shoshone St. East, Twin Falls, Idaho 83301 (208) 734-3578

CECIL D. ANDRUS
Governor

R. KEITH HIGGINSON
Director

MODE SELECT
INPUT

OUTER DIAMETER
20.1169 IN

PIPE MATERIAL
? CS,SS

WALL THICKNESS
.11500 IN

INNER LINING
? NO LING.

KIND OF FLUID
? WATER

SENSOR MOUNTING
? U

TYPE OF SENSOR
? SMALL

DATA CHANGE
? NO

SPACING
16.240 IN U

08-22 13:0500 *R
+449.885E 16PM

ZERO MODE
CLEAR

ZERO MODE
AUT ZERO

ZERO MODE
ZERO OPR

08-22 13:0700 *R
+003.00 % AI2

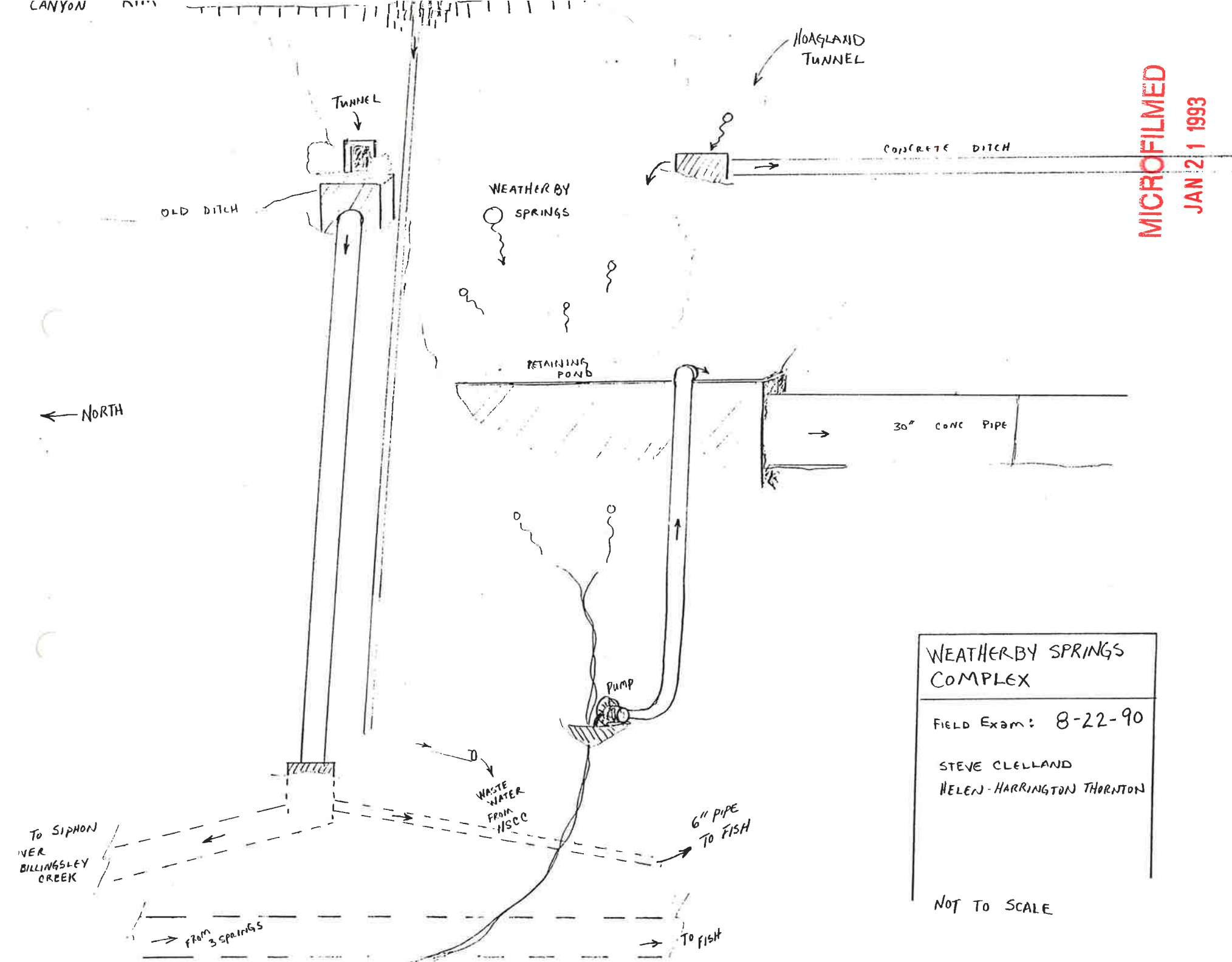
MODE SELECT
T0 CHECK

0748.5 MMSEC
100.72 % T0

08-22 13:0800 *R
+445.129E 16PM

*WEATHERBY SPANNS TUNNEL
PIPELINE SIPHON*

MICROFILMED
JAN 21 1993

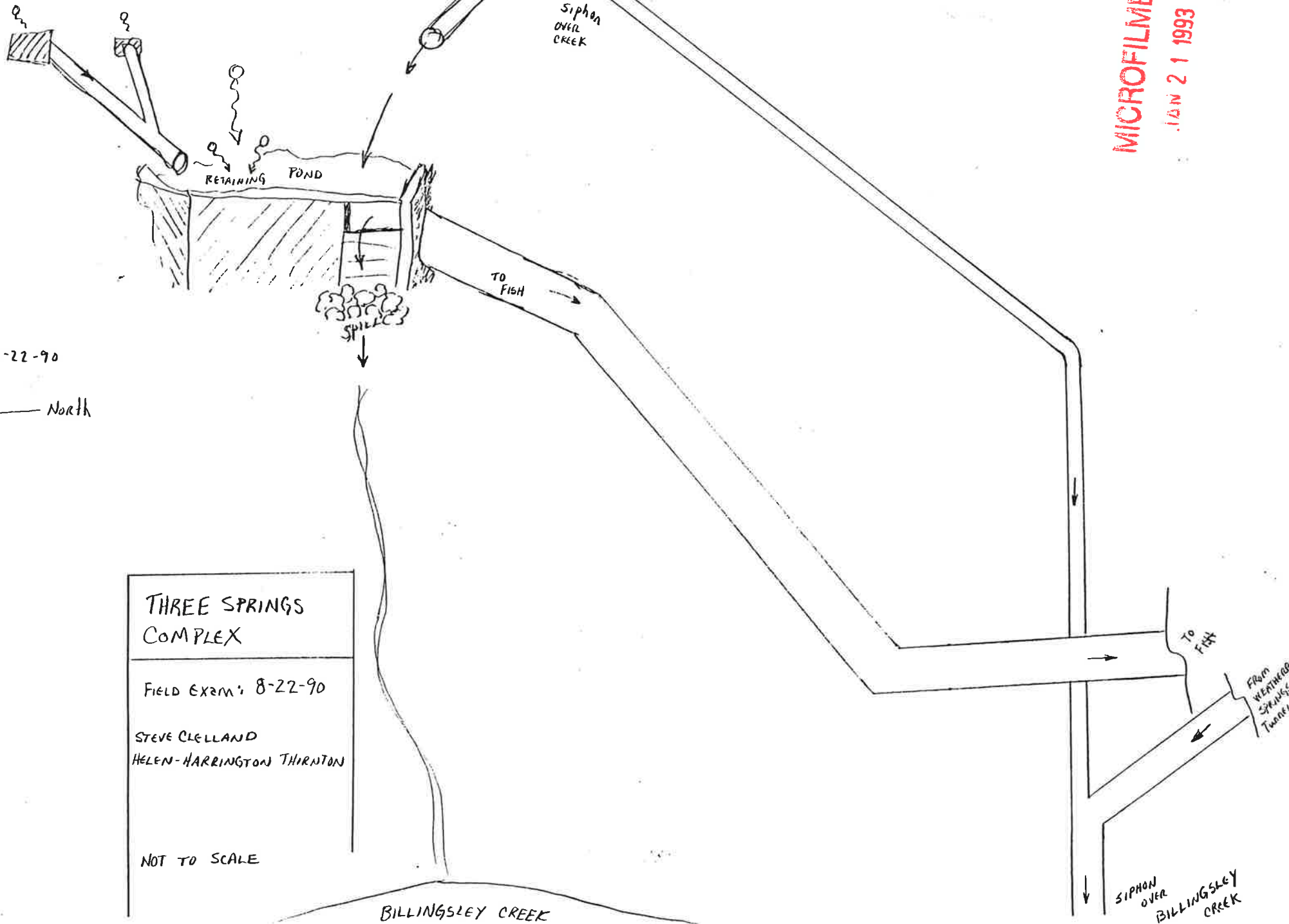


MICROFILMED

JAN 21 1993

WEATHERBY SPRINGS COMPLEX
Field Exam: 8-22-90
STEVE CLELLAND HELEN HARRINGTON THORNTON
NOT TO SCALE

THREE SPRINGS
COMPLEX



MICROFILMED

JAN 21 1993

4741

3209

3250

3251

3239

4740

3080

47'30"

25

THREE
Springs

TUNNEL
WEATHERBY SPRINGS
HOSLAND TUNNEL

BARS
Ditch/pipe

Decade
3250

VADER

GRADE

HAGERMAN 3.8 MI.

PREN

DITCH

MICROFILMED

31 JAN 21 1993

36



State of Idaho

DEPARTMENT OF WATER RESOURCES

Southern Region, 222 Shoshone St. East, Twin Falls, Idaho 83301 (208) 734-3578

CECIL D. ANDRUS
Governor

MODE SELECT
INPUT

R. KEITH HIGGINSON
Director

OUTER DIAMETER
16.0346 IN

PIPE MATERIAL
? CS, SS

WALL THICKNESS
0.2000 IN

INNER LINING
? NO LING.

KIND OF FLUID
? WATER

SENSOR MOUNTING
? U

TYPE OF SENSOR
? SMALL

DATA CHANGE
? NO

SPACING
12.861 IN U

08-22 14:4000 *R
+246.736E 1GPM

ZERO MODE
CLEAR

ZERO MODE
AUT ZERO

ZERO MODE
ZERO OPR

08-22 14:4200 *R
+002.40 % AI2

MODE SELECT
T0 CHECK

0584.7 MMSEC
100.09 % T0

08-22 14:4200 *R
+234.320E 1GPM

08-22 14:4300 *R
+236.698E 1GPM

08-22 14:5000 *R
+314.364E 1GPM

08-22 14:5100 *R
+317.534E 1GPM

08-22 14:5400 *R
+313.572E 1GPM

*Bill Jones
irrigated water
after pivot pump*

SLC/HHT

*PUMPS ARE PLACED IN
A RETAINING POND
BELOW ALL THE FISH PONDS.
COMBINE INTO A SINGLE
MAINLINE WHERE
MEASUREMENT WAS MADE.*

SLC/HHT

*2 pumps
50 & 150 HP
running
50, 100, 150 HP
3 pumps
on pivot*

← 2 pumps on.

MICROFILMED

JAN 21 1993

← 3 pumps on.



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+314.364E 1GPM

08-22 14:5100 *R
+317.534E 1GPM

08-22 14:5400 *R
+313.572E 1GPM

*811 Tones
irrigation water
after back pump*

SW/HNT

*2 pumps
50 & 150 HP
running
50, 100, 150 HP
3 pumps
on pivot*

*PUMPS ARE PLACED IN
A RETAINING POND
BELOW ALL THE FISH POND.
COMBINE INTO A SINGLE
MAINLINE WHERE
MEASUREMENT WAS MADE.*

SW/HNT

← 2 Pumps on.

MICROFILMED

JAN 21 1993

← 3 Pumps on.