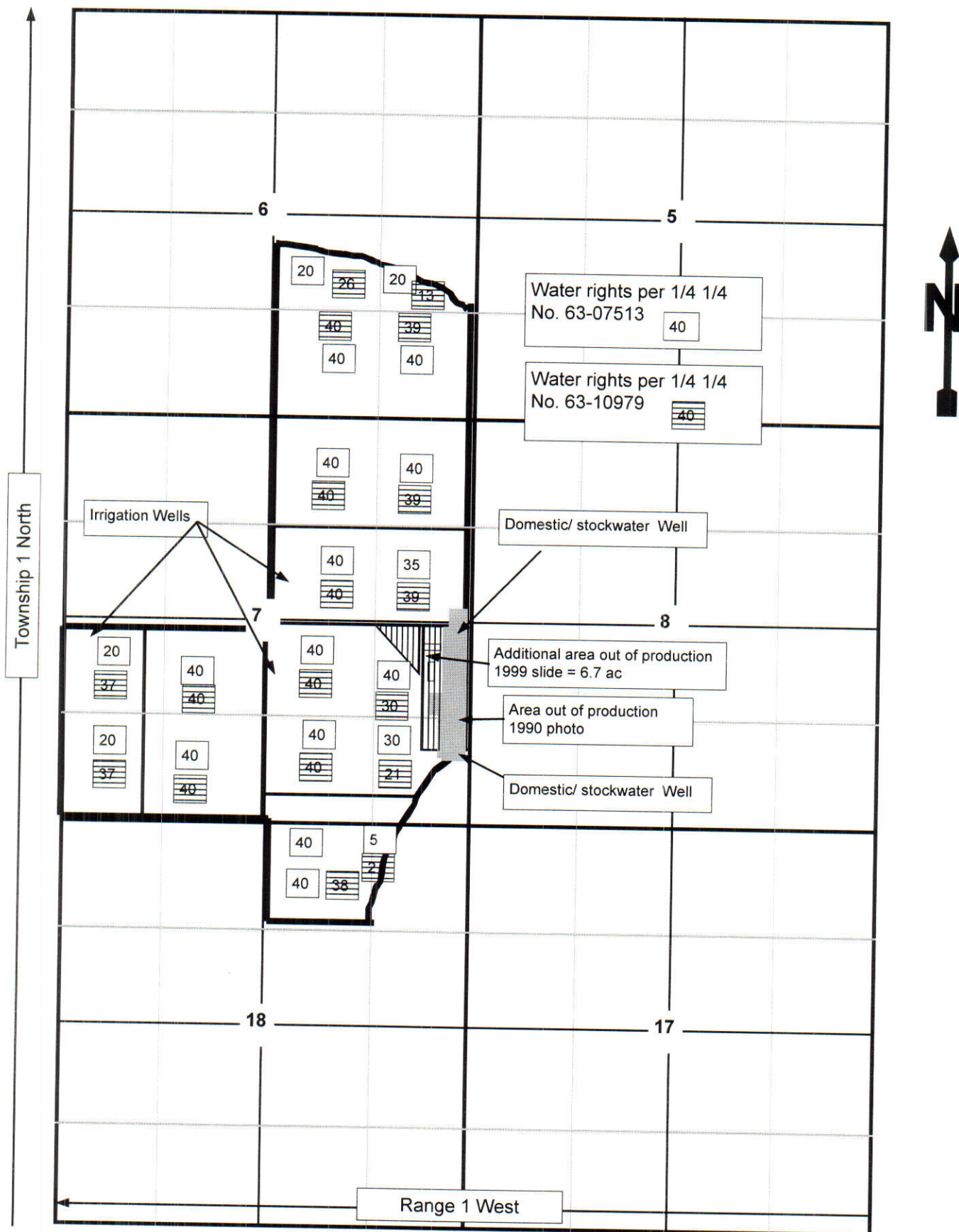
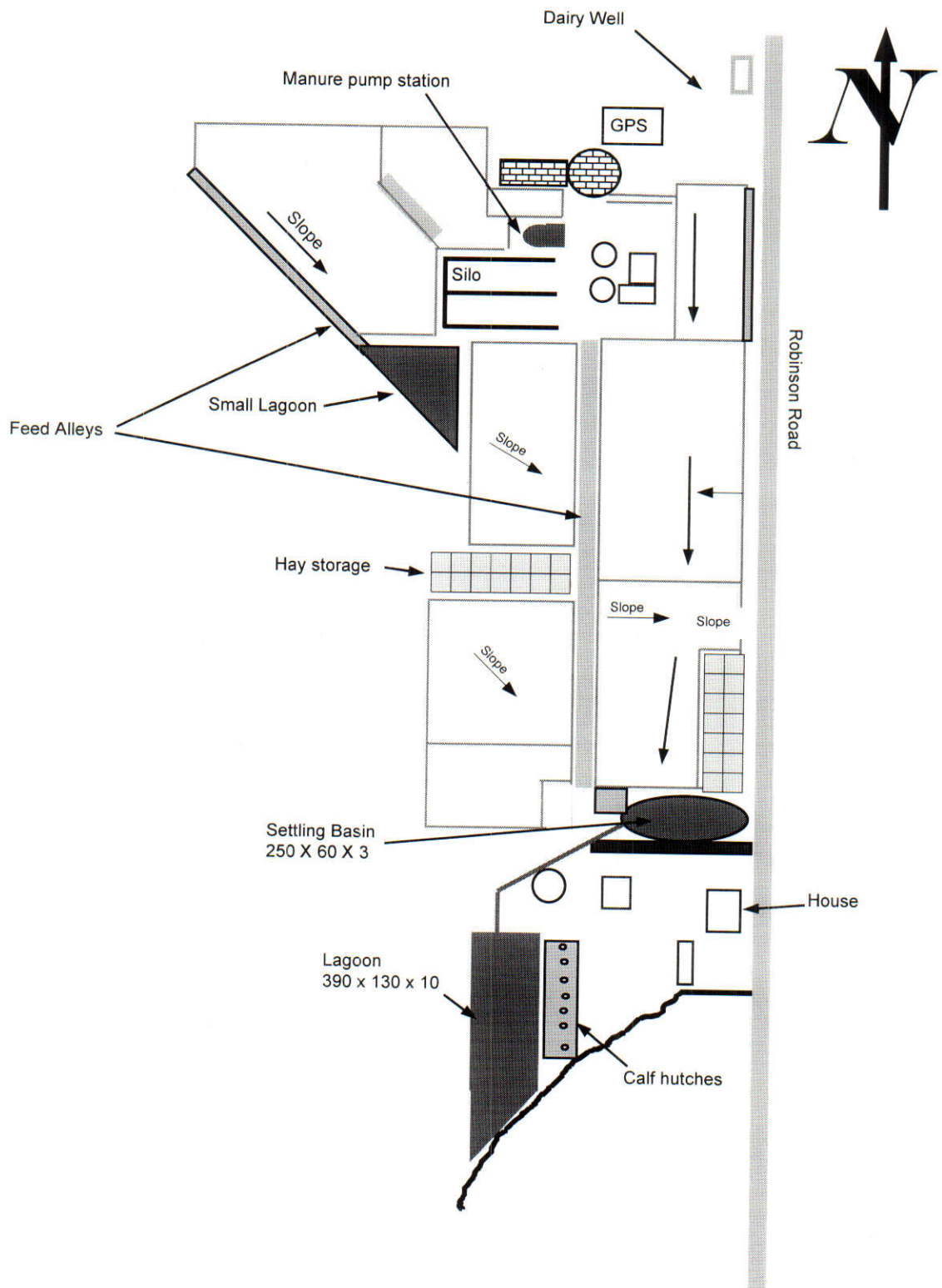




Site Plan		
Grasslands LLC	MICROFILMED	Scale 3" = 1 mile
Kuna, Idaho	SEP 07 2001	Prepared by: Darwin Vander Stelt



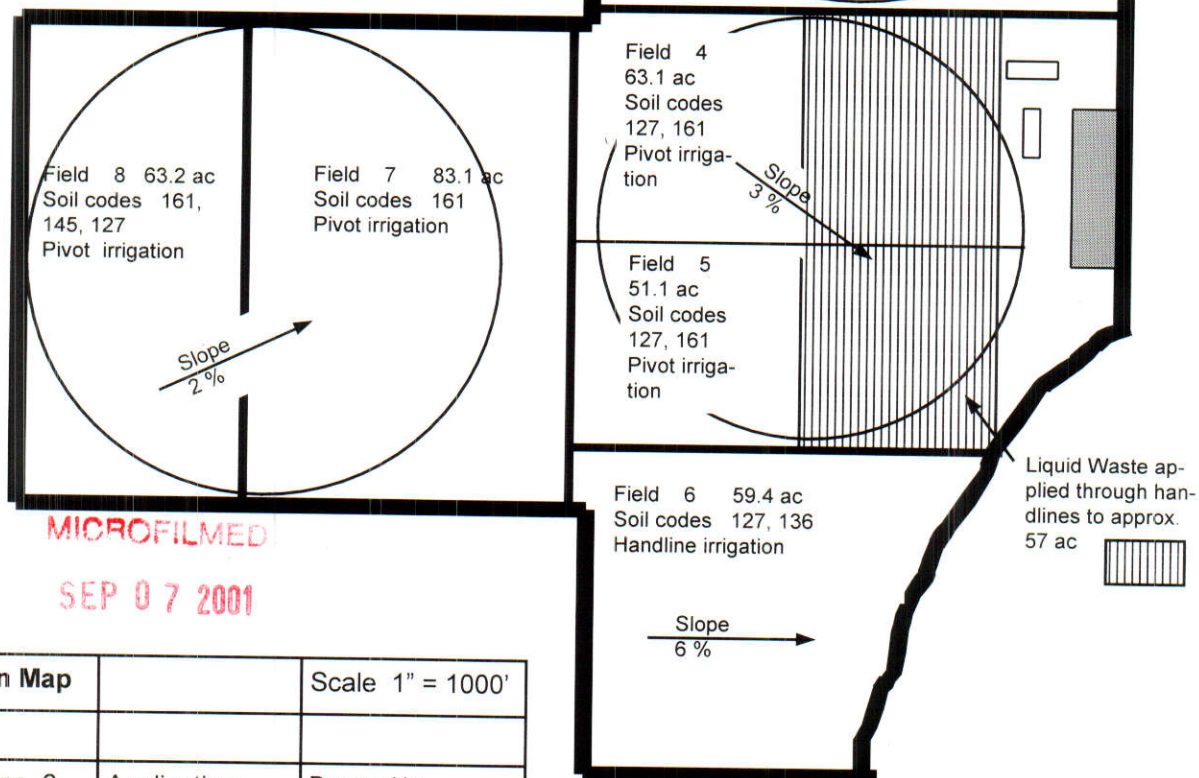
Site Plan		Scale 1" = 300'
Grasslands LLC		
Portions of sections 6, 7, and 18, T 1 N, R 1 W.		Prepared by Darwin Vander Stelt

MICROFILMED

DEC 07 2001

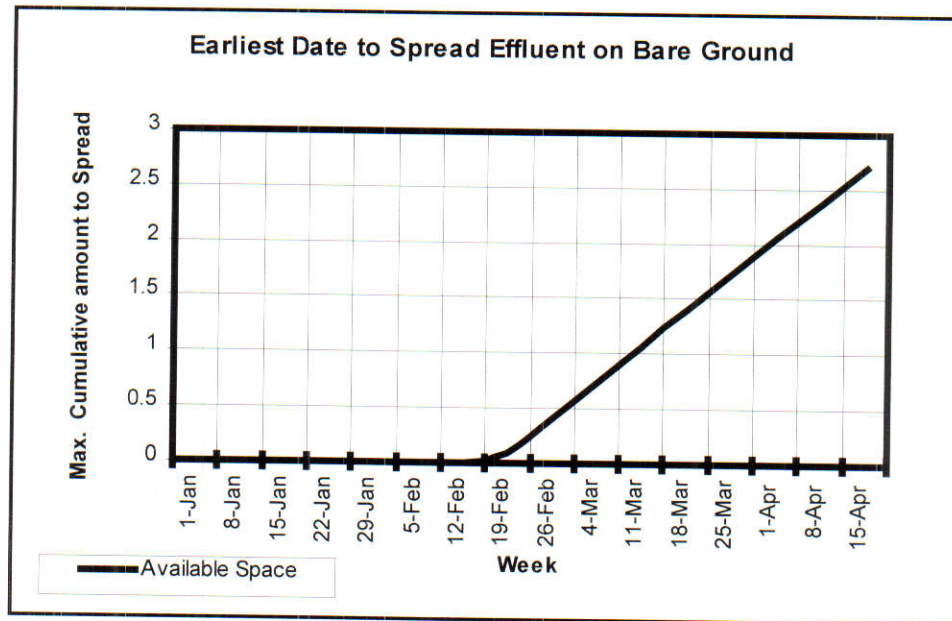


Soil Code	Description	Permeability	Runoff Hazard
127	Potratz- Power Silt loam 4 - 8 % slopes	Moderate	Medium
136	Power- McCain Silt loam 8- 12% slopes	Moderately slow	Medium
145	Purdam-Power silt loam 2-4% slopes	Moderately slow	Medium
160	Scism silt loam 0 - 2% slopes	Moderate	Slow
161	Scism silt loam 2 - 4% slopes	Moderate	Medium



Field Application Map		Scale 1" = 1000'
Grasslands LLC		
Portions of sections 6, 7, and 18, T 1 N, R 1 E.	Application area: 600.5 ac	Prepared by Darwin Vander Stelt

applications will be made in increments of .5 inches, the first week in March is the earliest date applications may be made.



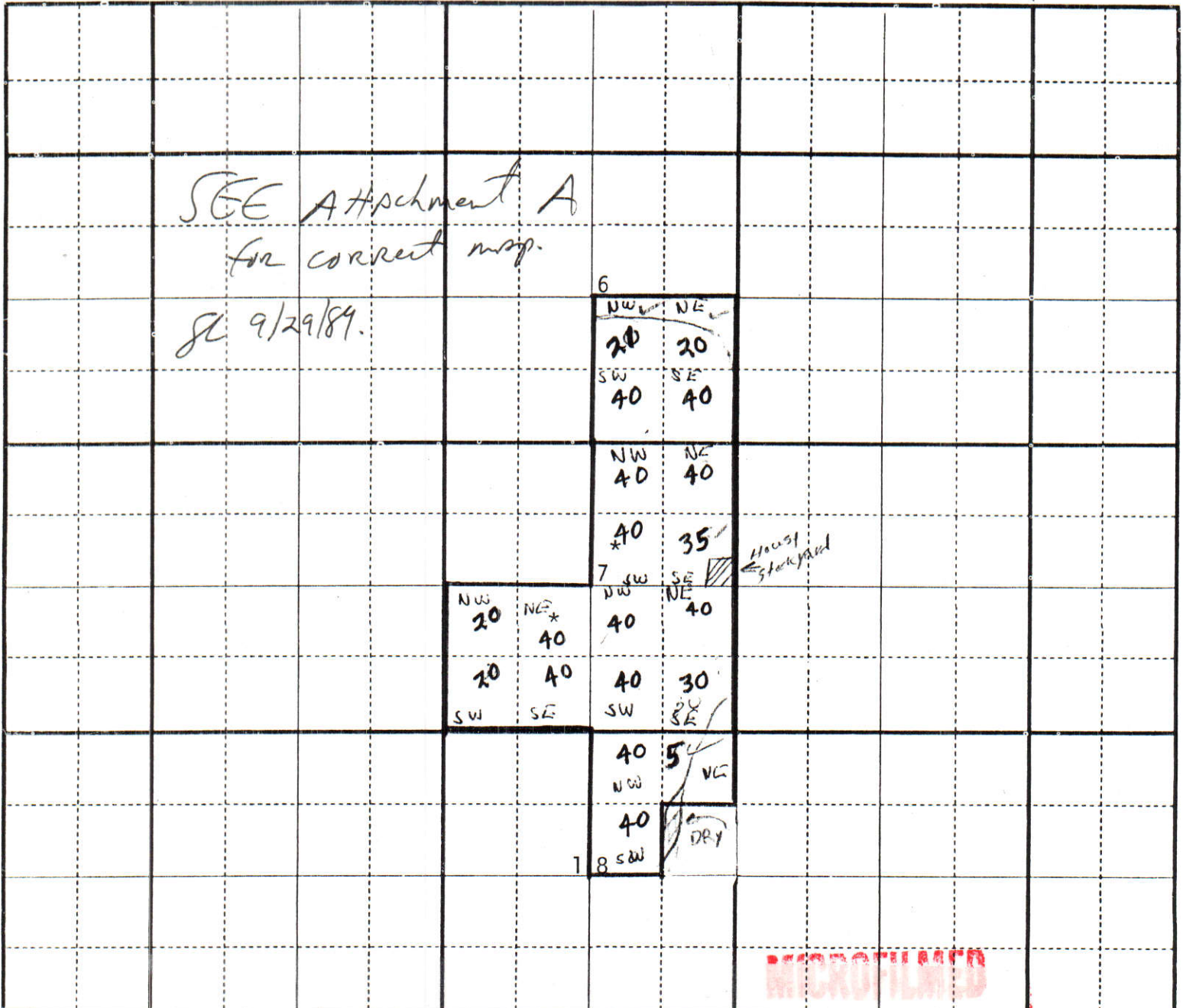
A list of recommended practices relating to irrigation is as follows: (from "*BEST MANAGEMENT PRACTICES for Nutrient Management in the State of Idaho*"):

IRRIGATION SYSTEM MANAGEMENT

- Evaluate the irrigation system based on the available water holding capacity of the soil, crop growth stage, evapotranspiration, rainfall, and previous irrigation in order to determine the timing and amount of irrigation water to be applied.
- Irrigation systems should be operated so that they meet the crop needs, but apply less than the amount needed to saturate the soil profile.
- Irrigate fields efficiently to meet crop needs and the available water holding capacity of the soil. This will prevent the movement of nitrogen through the soil profile to groundwater caused by over irrigation.
- Utilize a soil moisture monitoring device to help determine irrigation scheduling to meet crop demands.

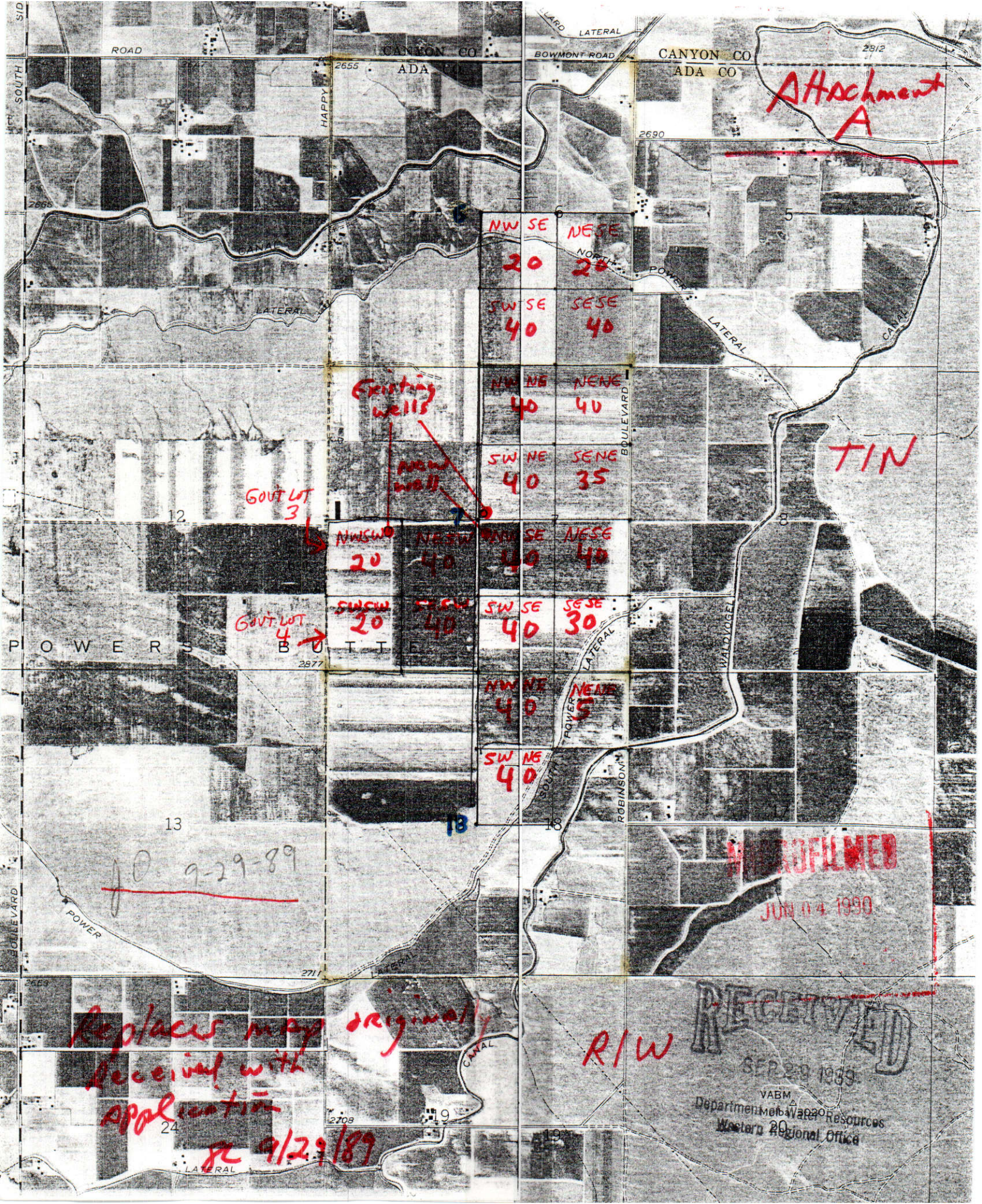
STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
APPLICATION FOR TRANSFER OF WATER RIGHT
PART 3

- A. Draw a map or attach a USGS map indicating the new point(s) of diversion and/or the new place of use for rights described in part 1. Clearly depict the land by section, township and range number.

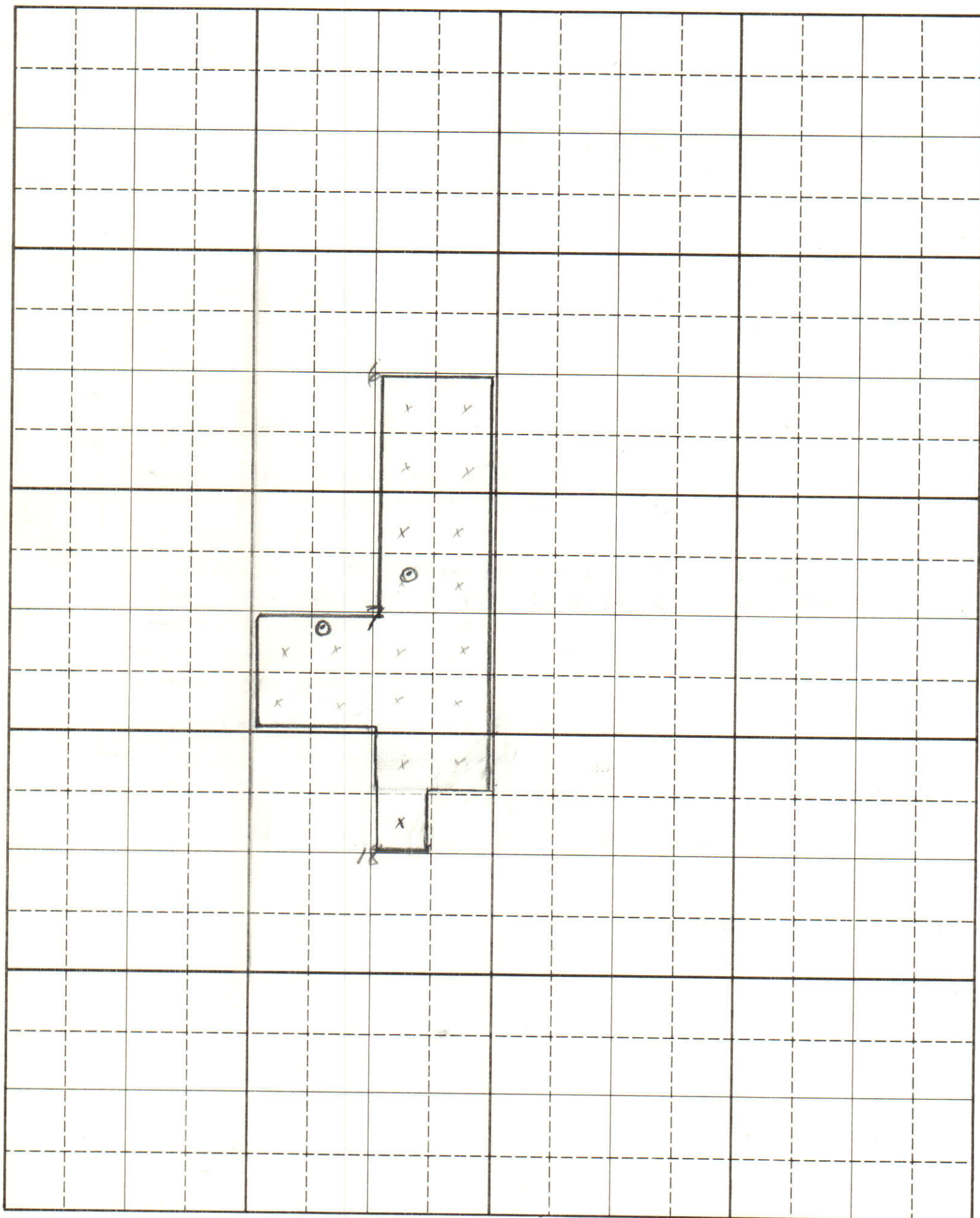


MICROFILMED

JUN 6 1990



11. Map of proposed project: show clearly the proposed point of diversion, place of use, section number, township and range number.



Scale: 2 inches equal 1 mile

BE IT KNOWN that the undersigned hereby makes application for permit to appropriate the public waters of the State of Idaho as herein set forth.

Geo. E. Hout
(Applicant)
President

63 7513

The Idaho Statesman

P.O. BOX 40, BOISE, IDAHO 83707

LEGAL ADVERTISING INVOICE

Amount Due

39.72

Account Name Idaho Dept. of Water Resources - Western		Account Number 47628	
Address 2735 Airport Way		City/State Boise, Idaho	Zip 83705
Ordered By Gail Garrett	P.O. Number	Rate nt	Run Dates 1989 October 19, 26
Identification Notice of Proposed change of Water Right		Estimated Inches	Real Inches
1 Number of Affidavits Requested			Legal Number 3887

NOTICE OF PROPOSED CHANGE OF WATER RIGHT

No. 63-07513

Notice is hereby given that Jerry &/or Linda Davis of Kuna, ID, have applied to the Department of Water Resources for a change of points of diversion of groundwater. The right sought to be changed is evidenced by a license and is recorded as follows:

Amount: 6.30 cfs

Priority Date: 10/22/1971

Point(s) of Diversion: T1N, R1W, S. 7, SWNE & NESW.

The water is used for irrigation and stockwater purposes in T1N, R1W, S. 6, SE1/4, S.7, E1/2 and SW1/4, S. 18, N1/2NE1/4, SWNE TO BE CHANGED AS FOLLOWS

Amount: 6.30 cfs

Point(s) of Diversion: T1N, R1W, S.7, SWNE, NWSW, NWSE.

The water will be used for irrigation and stockwater.

Any protest against approval of the proposed change of water right application must be filed with the Department of Water Resources, Western Region, 2735 Airport Way, Boise, ID 83705 on or before November 6, 1989.

R. Keith Higginson, Director
Pub. Oct. 19, 26, 1989

3887

Debbie Richards

, being duly sworn, deposes and says: That she is the Principal Clerk of The Idaho Statesman, a daily newspaper printed and published at Boise, Ada County, State of Idaho, and having a general circulation therein and which said newspaper has been continuously and uninterruptedly published in said County during a period of twelve consecutive months prior to the first publication of the notice, a copy of which is attached hereto; that said notice was published in The Idaho Statesman in conformity with Section 60-108, Idaho Code as amended, for 2

☒ consecutive weekly ☐ consecutive daily ☐ single ☐ odd skip

insertion(s) beginning with the issue of October 19, 19 89

and ending with the issue of October 26, 19 89

Debbie Richards

MICROFILMED

STATE OF IDAHO)

ss.

COUNTY OF ADA)

JUN 04 1990

On this 26th day of October 1989, before me, a Notary Public, personally appeared Debbie Richards

known or identified to me to be the person whose name subscribed to the within instrument, and being by me first duly sworn, declared that the statements therein are true, and acknowledged to me that she executed the same.

Linda Rice
Notary Public for Idaho
Boise, Idaho

Residing at

My commission expires: 12/93

RECEIVED

OCT 31 1989

Department of Water Resources
Western Regional Office

RECEIVED

NOV 19 1971

Department of Water Administration

STATE OF IDAHO,)
COUNTY OF ADA) ss.

Georgene Davis

, being duly sworn, deposes and says: That she is the Principal Clerk of The Idaho Statesman, a daily newspaper printed and published at Boise, Ada County, State of Idaho, and having a general circulation therein and which said newspaper has been continuously and uninterruptedly published in said County during a period of twelve consecutive months prior to the first publication of the notice, a copy of which is attached hereto; that said notice was published in the regular edition of The Idaho

Statesman for Two weeks consecutive insertions, beginning with the issue of November 11, 19 71, and ending with the issue of November 18, 19 71.

Georgene Davis

Subscribed and sworn to before me this 18th

day of November, 19 71.

Jana A. Young
Notary Public for Idaho, Residing at Boise, Idaho

NOTICE OF APPLICATION
FOR WATER PERMIT
Notice is hereby given that
Triangle H. Corporation, 1903
South Roosevelt, Boise, Idaho has
on October 22, 1971, submitted Ap-
plication No. 63-7513 for a permit
to appropriate 9.0 cubic feet per
second of water from a ground
water source by means of a pump
within the SW $\frac{1}{4}$ NE $\frac{1}{4}$, NE $\frac{1}{4}$
SW $\frac{1}{4}$, Sec. 7, T. 1N, R. 1W, B.M.
Ada County to be used from Jan. 1
to Dec. 31 for stockwatering pur-
poses within the SW $\frac{1}{4}$ NE $\frac{1}{4}$, NE $\frac{1}{4}$
SW $\frac{1}{4}$, Sec. 7, T. 1N, R. 1W, B.M.;
and from April 1 to Nov. 31 for the
irrigation of 760 acres within the
NE $\frac{1}{4}$, Sec. 6; NE $\frac{1}{4}$, S $\frac{1}{2}$, Sec. 7;
1N, R. 1W, B.M. NE $\frac{1}{4}$, Sec. 18, T.
If issued, this permit will be
subject to all prior water rights.
Protests against the granting of
the permit must be filed with the
Idaho Department of Water Ad-
ministration, Statehouse, Boise,
Idaho, 83707, on or before Novem-
ber 29, 1971.
R. KEITH HIGGINSON
Director
Pub. Nov. 11, 18, 1971.

269

63 7513

Idaho Dept. of Water Resources
Place of Use Comparison Report

Transfer 5795/68479 Grasslands LLC																					
Type	WR #	Owner	Source	TRS	NENE	NWNE	SWNE	SENE	NENW	NWNW	SWNW	SENW	NESW	NWSW	SWSW	SESW	NESE	NWSE	SWSE	SESE	Total
Right	63 2388	US DEPT OF INTERIOR,	BOISE RIVER	01N01W6																	0
Claim	63 20487	CAN-ADA FARMS,	GROUND WATER	01N01W6											40	40					80
Claim	63 3339A	CAN-ADA FARMS,	GROUND WATER	01N01W6											40	40					80
Claim	63 7513	GRASSLANDS LLC,	GROUND WATER	01N01W6																	80
Right	63 10979	GRASSLANDS L L C,	GROUND WATER	01N01W6													13	26	40	39	118
Right	63 3187	EST OF ANNA MARY KOBE,	GROUND WATER	01N01W6													13	26	40	39	118
Right	63 3188	SETH FORSGREN,	GROUND WATER	01N01W6											5	30					35
Right	63 3189	CLAYTER F FORSGREN,	GROUND WATER	01N01W6											5	30					35
Right	63 3339	CAN ADA FARMS,	GROUND WATER	01N01W6											5	30					35
Right	63 4032	TRIANGLE H CORP,	GROUND WATER	01N01W6											40	40					80
Right	63 4033	TRIANGLE H CORP,	GROUND WATER	01N01W6													X	X	X	X	0
Right	63 7513	LINDA M DAVIS, JERRY DAVIS,	GROUND WATER	01N01W6													X	X	X	X	0
TClaim	63 7513		GROUND WATER	01N01W6													20	20	40	40	120
TRight	63 10979		GROUND WATER	01N01W6													20	20	40	40	120
Right	63 2859	KENNETH CLEVINGER, MARQUERITE CLEVINGER,	WASTEWATER	01N01W6	9			6									13	26	40	39	118
																					15
Right	63 2388	US DEPT OF INTERIOR,	BOISE RIVER	01N01W7																	0
Claim	63 20487	CAN-ADA FARMS,	GROUND WATER	01N01W7																	0
Claim	63 3339A	CAN-ADA FARMS,	GROUND WATER	01N01W7					36	36	13.7	40									126
Claim	63 7513	GRASSLANDS LLC,	GROUND WATER	01N01W7					36	36	13.7	40									126
Right	63 10979	GRASSLANDS L L C,	GROUND WATER	01N01W7	39	40	40	39					40	37	37	40	30	40	40	21	443
Right	63 3187	EST OF ANNA MARY KOBE,	GROUND WATER	01N01W7	39	40	40	39					40	37	37	40	30	40	40	21	443
Right	63 3188	SETH FORSGREN,	GROUND WATER	01N01W7					35	35	40	40									150
Right	63 3189	CLAYTER F FORSGREN,	GROUND WATER	01N01W7					35	35	40	40									150
Right	63 3339	CAN ADA FARMS,	GROUND WATER	01N01W7					35	35	40	40									150
Right	63 4032	TRIANGLE H CORP,	GROUND WATER	01N01W7					36	36	38	40									150
Right	63 4033	TRIANGLE H CORP,	GROUND WATER	01N01W7	X	X	X	X					X	X	X	X	X	X	X	X	0
Right	63 7513	LINDA M DAVIS, JERRY DAVIS,	GROUND WATER	01N01W7	X	X	X	X					X	X	X	X	X	X	X	X	0
TClaim	63 7513		GROUND WATER	01N01W7	40	40	40	35					40	20	20	40	40	40	40	30	425
TRight	63 10979		GROUND WATER	01N01W7	40	40	40	35					40	20	20	40	40	40	40	30	425
					39	40	40	39					40	37	37	40	30	40	40	21	443
Right	63 2388	US DEPT OF INTERIOR,	BOISE RIVER	01N01W18																	0
Claim	63 15634	CLAYTER F FORSGREN,	GROUND WATER	01N01W18					40	40	40	40									160
Claim	63 7513	GRASSLANDS LLC,	GROUND WATER	01N01W18	2	38															40
Claim	63 8652	ROBERT A SVEDIN, KAYE SVEDIN,	GROUND WATER	01N01W18																	40
Right	63 10744	MARY A DYER, MARK V DYER,	GROUND WATER	01N01W18													34	3	35	35	107
Right	63 10979	GRASSLANDS L L C,	GROUND WATER	01N01W18	2	38		15													15
Right	63 3187	EST OF ANNA MARY KOBE,	GROUND WATER	01N01W18					40	40	40	40									40
Right	63 3188	SETH FORSGREN,	GROUND WATER	01N01W18					40	40	40	40									160
Right	63 3189	CLAYTER F FORSGREN,	GROUND WATER	01N01W18					40	40	40	40									160
Right	63 4032	TRIANGLE H CORP,	GROUND WATER	01N01W18	X	X															160
Right	63 4033	TRIANGLE H CORP,	GROUND WATER	01N01W18	X	X															0
Right	63 7513	LINDA M DAVIS, JERRY DAVIS,	GROUND WATER	01N01W18	5	40	40														0
Right	63 8652	ROBERT A SVEDIN, KAYE SVEDIN,	GROUND WATER	01N01W18																	85
TClaim	63 7513		GROUND WATER	01N01W18	5	40	40										34	3	35	35	107
TRight	63 10979		GROUND WATER	01N01W18	2	38															85
Claim	63 3537	ROBERT A SVEDIN, KAYE SVEDIN,	UNNAMED STREAM	01N01W18																	40
Right	63 3537	ROBERT A SVEDIN,	UNNAMED STREAM	01N01W18													31		9	40	80
																	31		9	40	80

SEP 07 2001

MICROFILMED

The Idaho Statesman

RECEIVED

AUG 28 2000

WATER RESOURCES
WESTERN REGION

P.O. Box 40, Boise, Idaho 83707-0040

LEGAL ADVERTISING PROOF OF PUBLICATION

Account #	DTI#	Identification	Amount:
047628	309954	PROPOSED CHANGE OF WATER RIGHT #5795	\$104.76
Ordered by:	P.O. #	Rate	Run Dates
		TT	AUGUST 17, 24, 2000
IDAHO DEPARTMENT OF WATER RESOURCES WEST 2735 AIRPORT WAY BOISE, IDAHO 83705			Number of Lines 32 X 2
			Affidavit 1
			Legal # 8083

LEGAL NOTICE NOTICE OF PROPOSED CHANGE OF WATER RIGHT TRANSFER NO. 5795

Notice is given that GRASSLANDS LLC of 6001 Robinson Rd, Kuna ID 83634, have applied to the Department of Water Resources to change the nature, period and place of use pursuant to I.C. § 42-222 for the following ground water licenses in TIN R1W, Ada County:

LICENSE #	PRIORITY	CFS	DIVERSION
63-07513	10/22/1971	6.30	SWNE, L1/3 NWSW, NWSE, S7
63-10579	9/14/1989	1.60	same as above

Total amount is 7.90 cfs from 3 wells. The place of use is 630 acres in the SE S6, E 1/2 SW S7 and NE S18. Stockwater use for .02 cfs in S7 is also listed for license 63-07513.

PROPOSED CHANGE
Clarify total acreage to 601 acres. Retire 7 acres from irrigation and use the water from those acres for an existing dairy located in the E1/2SE S7. The additional water will be used for 895 milking cows, 200 dry cows and 500 replacement heifers. Two existing domestic and stockwater wells located in the SENE and NESE S7 will be combined with the irrigation wells to reflect a common system. Wastewater from the dairy will be land applied to acres in S6, S7 and S18. New uses will be described as a total of .067 cfs commercial and stockwater to be used year around. Grasslands LLC dairy is located 3.5 miles West and 3.5 miles South of Kuna, just West of Robinson road.

Any protest against the approval of the proposed change must be filed with the Department of Water Resources, Western Region, 2735 Airport Way, Boise, ID 83705082, together with a protest fee of \$25 on or before September 5, 2000. The protestant must also send a copy of the protest to the applicant.

Karl J. Dreher, Director

Pub. Aug. 17/24, 2000

8083

JANICE HILDRETH, being duly sworn, deposes and says: That she is the Principal Clerk of *The Idaho Statesman*, a daily newspaper printed and published at Boise, Ada County, State of Idaho, and having a general circulation therein, and which said newspaper has been continuously and uninterruptedly published in said County during a period of twelve consecutive months prior to the first publication of the notice, a copy of which is attached hereto: that said notice was published in *The Idaho Statesman*, in conformity with Section 60-108, Idaho Code, as amended for:

TWO

☒ consecutive weekly ☐ single
☐ consecutive daily ☐ odd skip
insertion(s)

beginning with the issue of: AUGUST 17, 2000
and ending with the issue of: AUGUST 24, 2000

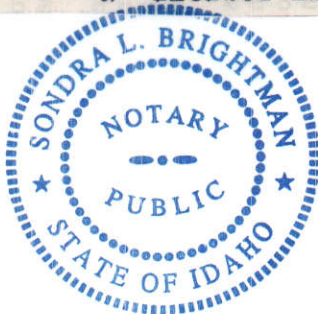
Janice Hildreth

STATE OF IDAHO)
)ss
COUNTY OF ADA)

On this 24 day of AUGUST in the year of 2000
before me, a Notary Public, personally appeared before me Janice Hildreth known or identified to me to be the person whose name subscribed to the within instrument, and being by me first duly sworn, declared that the statements therein are true, and acknowledged to me that she executed the same.

Sondra L. Brightman

Notary Public for Idaho
Residing at: Boise, Idaho
My Commission expires: 6/20/06



MICROFILMED

SEP 07 2001

63-07513

COMP

P N° 1 NORTH. RANGE N° 1 WEST

Sec. 31

Sec. 32

Sec. 33

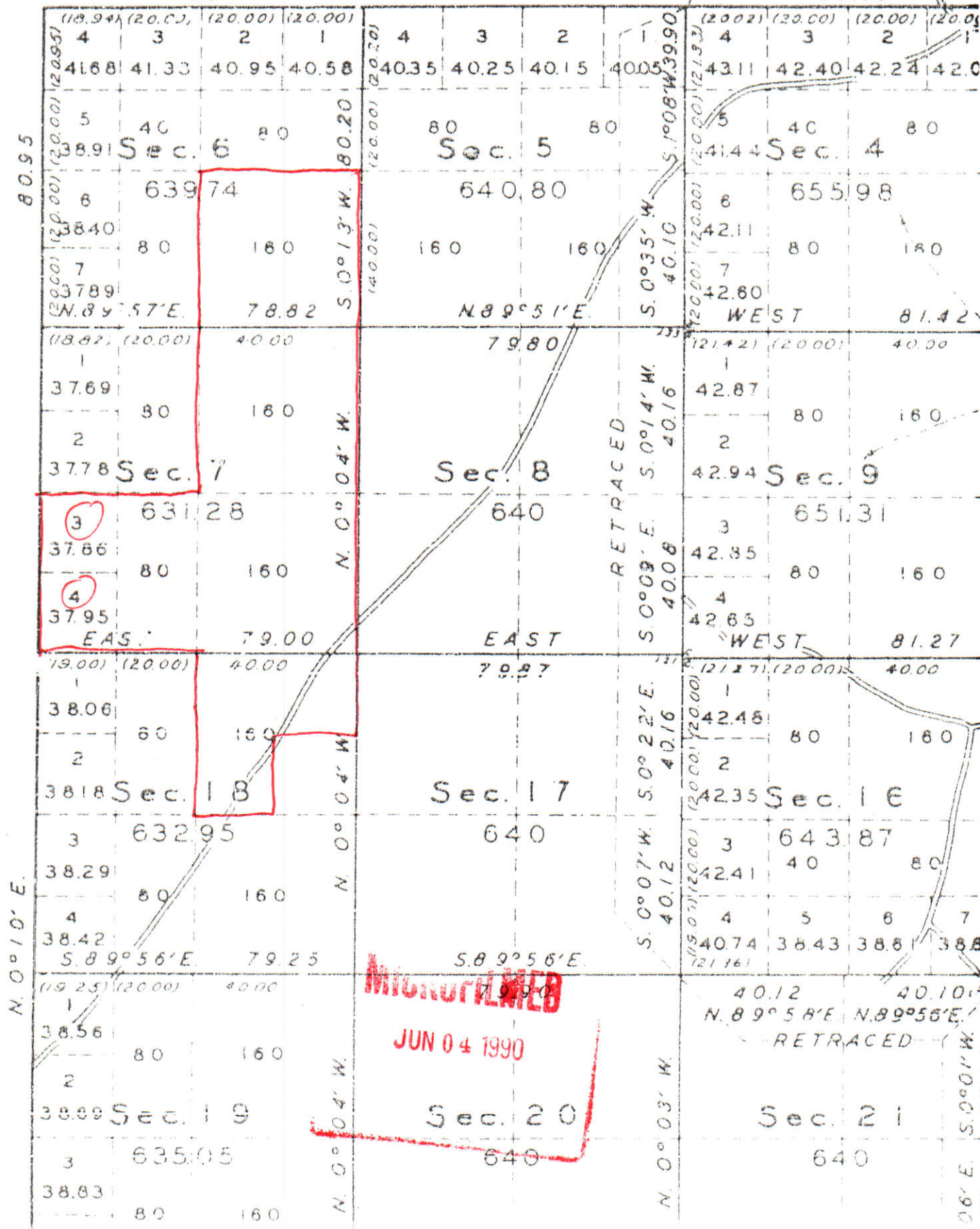
RESURVEYED-

S. 89° 39' E.

80.02

78.94

WEST



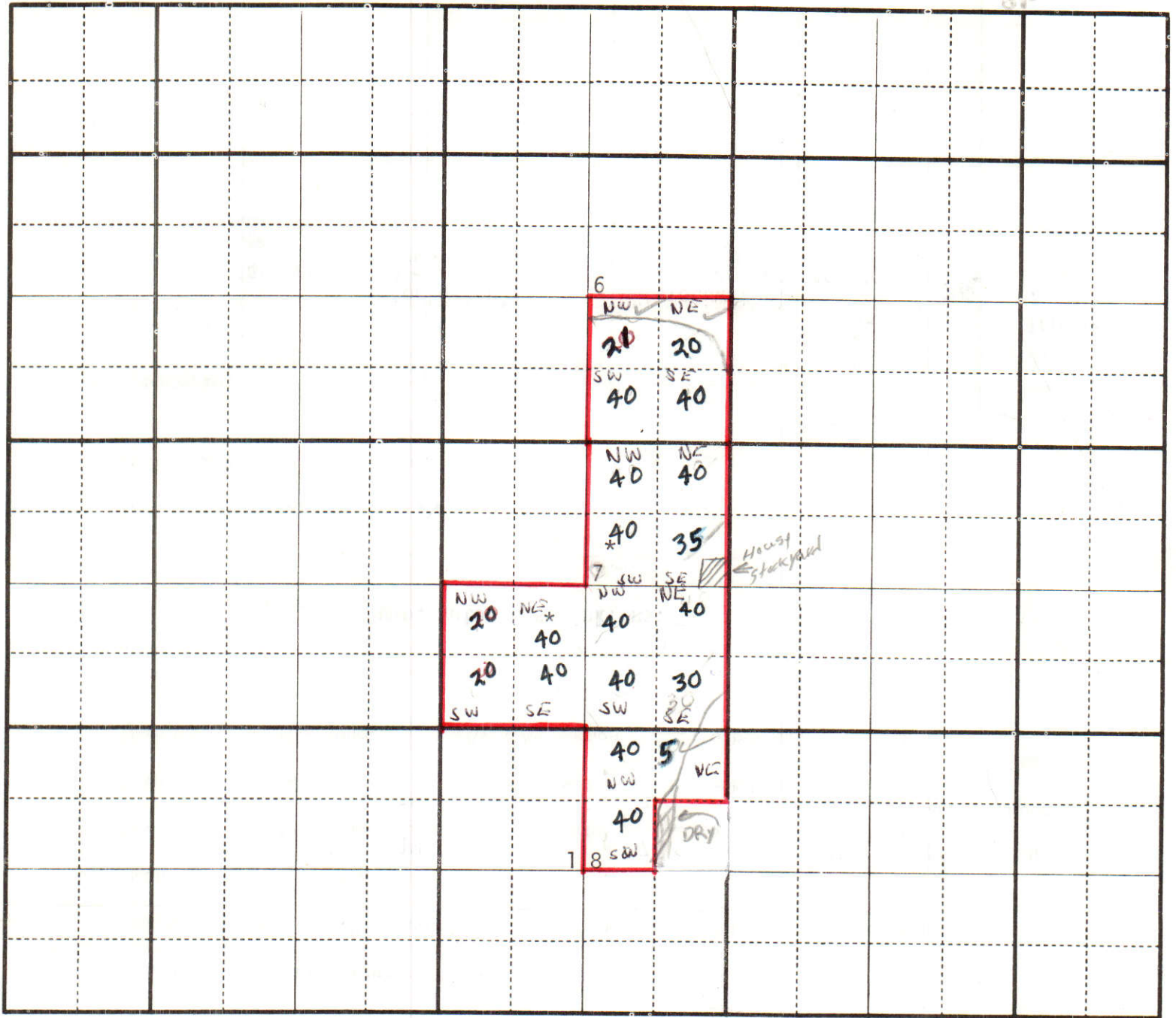


Diagram of System

13
 40
 520 ✓
 20 ✓
 20 ✓
 560
 35 ✓
 595
 30 ✓
 625
 630 ✓
 631 Total

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
TRANSFER OF WATER RIGHT
TRANSFER NO. 68479

This is to certify that: GRASSLANDS LLC
6001 ROBINSON RD
KUNA ID 83634
(208)467-7985

has requested a change to the water right(s) listed below. This change in water right(s) is authorized pursuant to the provisions of Section 42-222, Idaho Code. The authorized change for each affected water right, including conditions of approval, is shown on the following pages of this document.

Summary of Water Rights Before the Proposed Change

<u>Right</u>	<u>Origin/Basis</u>	<u>Priority</u>	<u>Rate</u>	<u>Volume</u>	<u>Acres</u>	<u>Total</u>	<u>Source</u>
63-10979	WR/License	09/14/1989	1.60 cfs		601.0	601.0	GROUND WATER
63-7513	AJC/License	10/22/1971	6.30 cfs	2840.0 af	601.0	601.0	GROUND WATER

Purpose of Transfer (Changes Proposed)

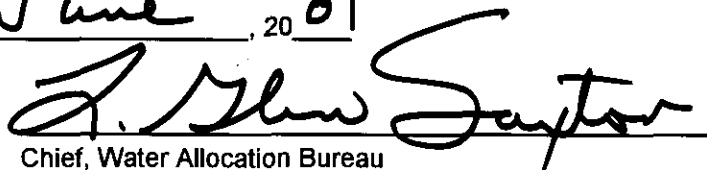
<u>Current Number</u>	<u>Split</u>	<u>POD</u>	<u>POU</u>	<u>Add POD</u>	<u>Period of Use</u>	<u>Nature of Use</u>
63-10979	NO	NO	YES	YES	NO	NO
63-7513	NO	NO	YES	YES	YES	YES

Summary of Water Rights After the Approved Change

<u>Existing Right</u>	<u>New No. (changed portion)</u>	<u>Transfer Rate</u>	<u>Transfer Volume</u>	<u>Acre Limit</u>	<u>Total Acres</u>	<u>New No. (remaining portion)</u>	<u>Remaining Rate</u>	<u>Remaining Volume</u>	<u>Remaining Acre Limit</u>	<u>Remaining Total Acres</u>
63-10979	63-10979	1.60 cfs	822.0 af	594.0	594.0		N/A	N/A	N/A	N/A
63-7513	63-7513	6.30 cfs	2698.4 af	594.0	594.0		N/A	N/A	N/A	N/A
TOTALS		7.90cfs	2698.4 af	594.0	594.0		N/A	N/A	N/A	N/A

Detailed Water Right Description(s) attached

Dated this 22nd day of June, 2001


Chief, Water Allocation Bureau

MICROFILMED

SEP 07 2001

WATER RIGHT NO. 63-10979
As Modified by Transfer No. 68479

In accordance with the approval of Transfer No. 68479, Water Right No. 63-10979 is now described as follows.

Right Holder: GRASSLANDS LLC
 6001 ROBINSON RD
 KUNA ID 83634

Priority Date: 09/14/1989

Source: GROUND WATER

<u>BENEFICIAL USE</u>	<u>From</u> <u>To</u>	<u>Diversion Rate</u>	<u>Volume</u>
IRRIGATION	03/15 to 11/15	1.60 CFS	822.0 AF
		1.60 CFS	822.0 AF

LOCATION OF POINT(S) OF DIVERSION:

GROUND WATER	SWNE	Sec. 7	Twp 01N	Rge 01W	ADA County
GROUND WATER	NWSE	Sec. 7	Twp 01N	Rge 01W	ADA County
GROUND WATER	Lot 3 NWSW	Sec. 7	Twp 01N	Rge 01W	ADA County
GROUND WATER	SENE	Sec. 7	Twp 01N	Rge 01W	ADA County
GROUND WATER	NESE	Sec. 7	Twp 01N	Rge 01W	ADA County

PLACE OF USE: IRRIGATION

Twp Rge Sec	NE				NW				SW				SE				Totals
	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
01N 01W 6													13.0	26.0	40.0	39.0	118.0
01N 01W 7	39.0	40.0	40.0	39.0					40.0	37.0	37.0	40.0	25.0	40.0	40.0	19.0	436.0
									L3	L4							
01N 01W 18	2.0	38.0															40.0

Total Acres: 594

CONDITIONS OF APPROVAL

1. The total instantaneous diversion of water from all points of diversion under Rights 63-7513 and 63-10979 shall not exceed 7.90 cfs, nor total combined annual volume of 2698.4 af.
2. Prior to diversion of water under this approval, the right holder shall provide a means of measurement acceptable to the Department from all authorized points of diversion which will allow determination of the total rate of diversion.

MICROFILMED
 SEP 07 2001

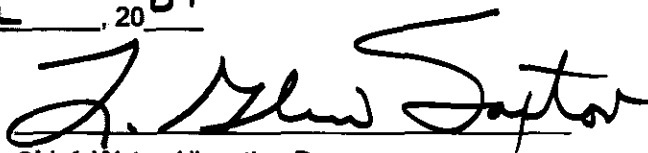
WATER RIGHT NO. 63-10979
As Modified by Transfer No. 68479

CONDITIONS OF APPROVAL

3. After specific notification by the Department, the right holder shall measure the diversion or shall enter into an agreement with the Department to determine the amount of water diverted from power records and shall annually report the information to the Department.
4. Rights 63-7513 and 63-10979 when combined shall not exceed a total diversion rate of 7.83 cfs and a total annual maximum diversion volume of 2673.0 af at the field headgate for the irrigation of 594.0 total acres.
5. This right when combined with all other rights shall provide no more than 0.02 cfs per acre nor more than 4.5 afa per acre at the field headgate for irrigation of the lands above.
6. The period of use for the irrigation described in this approval may be extended to a beginning date of 3/1 provided that beneficial use of the water can be shown and other elements of the right are not exceeded. The use of water before 3/15 is subordinate to all water rights having no subordinated early or late irrigation use and a priority date earlier than the date of this approval.
7. The right holder shall accomplish the change authorized by this transfer within one (1) year of the date of this approval.
8. Failure of the right holder to comply with the conditions of this transfer is cause for the Director to rescind approval of the transfer.

This water right is subject to all prior water rights and shall be administered in accordance with Idaho law and applicable rules of the Department of Water Resources.

Dated this 22nd day of June, 2001


Chief, Water Allocation Bureau

MICROFILMED
SEP 07 2001

WATER RIGHT NO. 63-7513
As Modified by Transfer No. 68479

In accordance with the approval of Transfer No. 68479, Water Right No. 63-7513 is now described as follows.

Right Holder: GRASSLANDS LLC
 6001 ROBINSON RD
 KUNA ID 83634

Priority Date: 10/22/1971

Source: GROUND WATER

<u>BENEFICIAL USE</u>	<u>From</u>	<u>To</u>	<u>Diversion Rate</u>	<u>Volume</u>
IRRIGATION	04/01	to 11/30	6.23 CFS	2,673.0 AF
STOCKWATER	01/01	to 12/31	0.07 CFS	25.4 AF
COMMERCIAL	01/01	to 12/31	0.07 CFS	20.4 AF
			6.30 CFS	2,698.4 AF

LOCATION OF POINT(S) OF DIVERSION:

GROUND WATER	SWNE	Sec. 7	Twp 01N	Rge 01W	ADA County
GROUND WATER	NWSE	Sec. 7	Twp 01N	Rge 01W	ADA County
GROUND WATER	Lot 3 NWSW	Sec. 7	Twp 01N	Rge 01W	ADA County
GROUND WATER	SENE	Sec. 7	Twp 01N	Rge 01W	ADA County
GROUND WATER	NESE	Sec. 7	Twp 01N	Rge 01W	ADA County

PLACE OF USE: IRRIGATION

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
01N	01W	6													13.0	26.0	40.0	39.0	118.0
01N	01W	7	39.0	40.0	40.0	39.0					40.0	37.0	37.0	40.0	25.0	40.0	40.0	19.0	436.0
											L 3	L 4							
01N	01W	18	2.0	38.0															40.0

Total Acres: 594

MICROFILMED

SEP 07 2001

PLACE OF USE: 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	
01N 01W 7			X						X				X			X	

PLACE OF USE: COMMERCIAL

Twp Rge Sec	NE				NW				SW				SE				Totals
	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
01N 01W 6													X	X	X	X	
01N 01W 7	X	X	X	X					X	X	X	X	X	X	X	X	
										L 3	L 4						
01N 01W 18	X	X															

CONDITIONS OF APPROVAL

1. The total instantaneous diversion of water from all points of diversion under Rights 63-7513 and 63-10979 shall not exceed **7.90 cfs**, nor total combined annual volume of 2698.4 af.
2. Prior to diversion of water under this approval, the right holder shall provide a means of measurement acceptable to the Department from all authorized points of diversion which will allow determination of the total rate of diversion.
3. After specific notification by the Department, the right holder shall measure the diversion or shall enter into an agreement with the Department to determine the amount of water diverted from power records and shall annually report the information to the Department.
4. Rights 63-7513 and 63-10979 when combined shall not exceed a total diversion rate of 7.83 cfs and a total annual maximum diversion volume of 2673.0 af at the field headgate for the irrigation of 594.0 total acres.
5. This right when combined with all other rights shall provide no more than 0.02 cfs per acre nor more than 4.5 afa per acre at the field headgate for irrigation of the lands above.
6. The period of use for the irrigation described in this approval may be extended to a beginning date of 3/1 provided that beneficial use of the water can be shown and other elements of the right are not exceeded. The use of water before 4/1 is subordinate to all water rights having no subordinated early or late irrigation use and a priority date earlier than the date of this approval.
7. Commercial use is for a dairy.
8. Use of water under this approval shall comply with applicable water quality standards of the Department of Environmental Quality.
9. The place of commercial use authorized by this approval includes land upon which wastewater may be applied for irrigation purposes to satisfy water quality requirements. Water diverted under this approval shall not be used for irrigation unless the water is first used in the dairy as authorized by this water right.

MICROFILMED

SEP 07 2001

WATER RIGHT NO. 63-7513
As Modified by Transfer No. 68479

CONDITIONS OF APPROVAL

10. The right holder shall accomplish the change authorized by this transfer within one (1) year of the date of this approval.
11. Failure of the right holder to comply with the conditions of this transfer is cause for the Director to rescind approval of the transfer.
12. Approval of this transfer does not preclude the opportunity for review of the validity of the water right(s) in the ongoing Snake River Basin Adjudication.

This water right is subject to all prior water rights and shall be administered in accordance with Idaho law and applicable rules of the Department of Water Resources.

Dated this 22nd day of June, 2001


Chief, Water Allocation Bureau

MICROFILMED

SEP 07 2001

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

Transfer No. 5795
68479

APPLICATION FOR TRANSFER OF WATER RIGHT

PART 1

Name of applicant: Grasslands LLC

Phone: (208) 495-1022 **RECEIVED**

Post Office address: 6001 Robinson Rd, Kuna, ID 83634

NOV 21 2000

A. PURPOSE OF TRANSFER

Department of Water Resources

1. ☐ Change point of diversion Add diversion point(s) ☒ Change place of use
☒ Change nature of use ☒ Change period of use ☐ Other

2. Describe the reason for the proposed changes: Applicant wishes to adjust water rights to reflect changes in his operation which have occurred since 1995, when the property was converted from a feedlot to a dairy. In addition, applicant wishes to correct an error in PU on 63-07513.

B. DESCRIPTION OF RIGHT(S) OR PORTION THEREOF, AFTER THE REQUESTED CHANGE

1. Right Number	Priority	Amount (cfs/ac-ft)	Nature of Use	Period of Use	
63- 07513	10/22/1971	6.23/ 2673	Irrigation	04/01	to 11/30
		.051/ 19.9	Stock water	01/01	to 12/31
		.016/ 4.7	Commercial	01/01	to 12/31
63- 10979	09/14/1989	1.6 /	Irrigation	03/15	to 11/15

2. Total amount of water being transferred 7.9 cubic feet per second and/or 2698 acre-feet per annum.

3. Source of water Ground water tributary to

4. Point(s) of Diversion:

Lot	1/4	1/4	1/4	Sec.	Twp	Rge.	County	Local Name for diversion
		SE	NE	07	01 N	01 W	Ada	Stockwater/ Dairy #1
		NE	SE					Stockwater/ Dairy #2
		NW	SE					Irrigation/ Stockwater #1
		SW	NE					Irrigation/ Stockwater #2
		NW	SW					Irrigation / Stockwater #3

5. Lands irrigated or place of use:

TWP	RGE	SEC	NE 1/4				NW 1/4				SW 1/4				SE 1/4				TOTALS
			NE 1/4	NW 1/4	SW 1/4	SE 1/4	NE 1/4	NW 1/4	SW 1/4	SE 1/4	NE 1/4	NW 1/4	SW 1/4	SE 1/4	NE 1/4	NW 1/4	SW 1/4	SE 1/4	
63-07513:																			
01N	01	6													13	26	40	39	118
															C	C	C	C	
		7	39	40	40	39					40	37	37	40	25	40	40	19	436
					S.						S.				S.			S.	
			C	C	C	C					C	C	C	C	C	C	C	C	
		18	2	38															40
			C	C															594
63- 10979																			
01N	01	6													13	26	40	39	118
		7	39	40	40	39					40	37	37	40	25	40	40	19	436
		18	2	38															40
																			594

MICROFILMED

NOV 21 2001

68479

T5795

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCESTransfer No. 5795**PART 1**

6. General Information:

- a. Description of diversion system: 3 wells with pressure tanks and piping to provide water for 2 homes, the dairy and stockwater.
- b. Are the lands from which you propose to transfer the water right subject to any liens, deeds of trust, mortgages, or contracts? Yes ☒ No ☐ If yes, provide a notarized statement from the holder of the lien, deed of trust, mortgage or contract agreeing to the proposed changes.
- c. Describe the affect on the land now irrigated if the place of use is changed pursuant to this transfer: The land formerly irrigated has been used for corrals, structures and buildings associated with the dairy operation.
- d. Remarks: See Attached Documents:
- Attachments:** A. Proof of Ownership / Lien holder permission
B. Daily fresh water requirement for Dairy
C. Crop history and calculation of historic consumptive use and annual diversion
D. Flow, Volume, and Allocation Calculations
E. 1990 aerial photo and 1999 aerial slides documenting land retirement.

ACTION OF THE DIRECTOR, DEPARTMENT OF WATER RESOURCES

This is to certify that I have examined Application for Transfer of Water Rights No. _____
And said application is hereby _____, subject to the following limitations and conditions:

Witness my hand this _____ day of _____, 19 _____

MICROFILMED

SEP 07 2001

Pg 3A of 6

WR0749NP
No. 63-07513IDAHO DEPARTMENT OF WATER RESOURCES
WATER RIGHT PROFILE REPORTDATE: 07/28/00
PAGE: 1

OWNER CODE	NAME & ADDRESS	PRIORITY DATE	WATER USE	USE PERIOD FROM TO	DIVERSION RATE	DIVERSION VOLUME
C	JERRY DAVIS	10/22/1971	IRRIGATION	04/01 11/30	6.300 CFS	2835.00 AFA
C	LINDA M. DAVIS		STOCKWATER	01/01 12/31	0.020 CFS	5.00 AFA
	6001 ROBINSON RD.					
	KUNA ID 83634					
TOTAL DIVERSION:					6.300 CFS	2840.00 AFA

Water Source: GROUNDWATER

Tributary to:

Stage: LICENSE

Point(s) of Diversion: T01N R01W S07 SWNE Lot 03(NWSW) NWSE ADA 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	Lt	Ac	Lt	Ac	Lt	Ac	SUM	
01N	01W	6	:																								
01N	01W	7	:	40		40		40		35						40	03-20	04-20		40			40		40	30	425.0
01N	01W	18	:	05		40		40																		85.0	
																							TOTAL ACRES		630.0		

Place of use Legal Description for: STOCKWATER

01N	01W	7	:																							
			:	S												S										

Pou County: ADA

Other Water Rights with Same Point(s) of Diversion with Stage (Includes All Sources):

63-04032 63-04033 63-10979 63-12278 T63-07513 T63-10979

Other Water Rights Listing Overlapping Place(s) of use:

63-04032 63-04033 63-10979 T63-07513 T63-10979

Remarks: GEN TRANS. 3624.

Dates:	App. Received:	Priority Date:	10/22/1971
	Proof Due Date:	Proof Made Date:	
	Exam Made Date:	Exam Sent to S.O.:	
	Licensed Date:	09/13/1979	

Misc: Water District Number: Field Exam Fee:

Audit:	06/03/85	05/01/88	CONVERT	08/10/89	CURTIS	05/25/90	CURTIS
	12/22/95	BCHAPMAN					

MICROFILMED

SEP 07 2001

pg 3B of 6

WR0749NP
No. 63-10979

IDAHO DEPARTMENT OF WATER RESOURCES
WATER RIGHT PROFILE REPORT

DATE: 07/28/00
PAGE: 1

OWNER CODE	NAME & ADDRESS	PRIORITY DATE	WATER USE	USE PERIOD FROM TO	DIVERSION RATE	DIVERSION VOLUME
C	GRASSLANDS L L C 6001 ROBINSON RD KUNA ID 83634 (208) 467-7985	09/14/1989	IRRIGATION	03/15 11/15	1.600 CFS	
					TOTAL DIVERSION:	1.600 CFS

Water Source: GROUNDWATER

Tributary to:

Stage: LICENSE

Point(s) of Diversion Capacity: 7.900 CFS

Point(s) of Diversion: T01N R01W S07 SWNE Lot 03(NWSW) NWSE ADA County

Place of use Legal Description for: IRRIGATION

NE				NW				SW				SE					
NENE		NWNW		SWNW		SENE		NENW		NWNW		SWNW		SENE			
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	SUM	
01N	01W	6	:				:						:	13	26	40	39
01N	01W	7	:	39	40	40	39	:					:	40	03-37	04-37	40
01N	01W	18	:	02	38		:						:				40.0
															TOTAL ACRES	601.0	

Pou County: ADA

Other Water Rights with Same Point(s) of Diversion with Stage (Includes All Sources):
63-04032 63-04033 63-07513 63-12278 T63-07513 T63-10979

Other Water Rights Listing Overlapping Place(s) of use:
63-04032 63-04033 63-07513 T63-07513 T63-10979

Remarks: GEN This right uses the same wells as Right 63-07513 and when combined with Right 63-07513 shall not exceed an annual diversion volume of 2704.5 af for the lands above.
This right when combined with Right 63-07513 and all other rights shall provide no more than .02 cfs per acre nor more than 4.5 afa per acre for the lands above.

Dates: App. Received: 09/14/1989 Priority Date: 09/14/1989
Proof Due Date: 04/01/1992 Proof Made Date: 02/04/1992
Exam Made Date: 08/11/1993 Exam Sent to S.O.: 12/15/1995
Licensed Date: 12/23/1995

Misc: Water District Number: Field Exam Fee: R (Received)

Comments: Date: 02/04/1992 User-ID: VAULT Subject: Proof of Beneficial Use Rcvd
Proof of Beneficial Use Rcvd

MICROFILMED

SEP 07 2001

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

Transfer No. 5795

APPLICATION FOR TRANSFER OF WATER RIGHT

PART 2

(Attach one copy for each right)

A. DESCRIPTION OF RIGHT AS RECORDED

1. Right evidenced by:

- a. Decree No. _____ Decreed to _____
 in case of _____
 dated _____ in _____ county of _____
- b. License No. _____
- c. Claim No. _____ on file with the Idaho Department of Water Resources.
- d. Transfer No. _____ which produced this right.

2. Attach a copy of last year's tax notice for the property to which the water right is appurtenant or other documents which show ownership. Label document as attachment A. Check appropriate box below:

☒ Tax Notice ☐ Warranty Deed ☐ Other

3. Source of water

4. Date or priority

5. Water is used for the following purpose:

Amount (cfs/ac-ft)						
	for		purposes from		to	
	for		purposes from		to	
	for		purposes from		to	
	for		purposes from		to	

6. Total amount of water under right _____ cubic feet per second and/or _____ acre-feet per annum

7. Point(s) of Diversion:

Lot	1/4	1/4	1/4	Sec.	Twp	Rge.	County	Local Name for diversion

8. Lands irrigated or place of use:

TWP.	RGE.	SEC.	NE 1/4				NW 1/4				SW 1/4				SE 1/4				TOTALS
			NE 1/4	NW 1/4	SW 1/4	SE 1/4	NE 1/4	NW 1/4	SW 1/4	SE 1/4	NE 1/4	NW 1/4	SW 1/4	SE 1/4	NE 1/4	NW 1/4	SW 1/4	SE 1/4	

9. Describe any other water right used for the same purpose as described above:

MICROFILMED

SEP 07 2001

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

Transfer No. 5795

10. To your knowledge, has any portion of this water right undergone a period of five or more consecutive years of non use? YES If yes, describe: IN 1W 518 SWNE

B. DESCRIPTION OF PORTION OF RIGHT BEING TRANSFERRED

(If the entire right is to be changed by the applicant, omit part B and C.)

1.

Amount (cfs/ac-ft)					
	for		purposes from		to
	for		purposes from		to
	for		purposes from		to
	for		purposes from		to

2. Point(s) of Diversion:

Lot	1/4	1/4	1/4	Sec.	Twp	Rge.	County	Local Name for diversion

3. Lands irrigated or place of use:

TWP.	RGE.	SEC.	NE 1/4				NW 1/4				SW 1/4				SE 1/4				TOTALS
			NE 1/4	NW 1/4	SW 1/4	SE 1/4	NE 1/4	NW 1/4	SW 1/4	SE 1/4	NE 1/4	NW 1/4	SW 1/4	SE 1/4	NE 1/4	NW 1/4	SW 1/4	SE 1/4	

C. Description of unchanged portion of right

1.

Amount (cfs/ac-ft)					
	for		purposes from		to
	for		purposes from		to
	for		purposes from		to
	for		purposes from		to

2. Point(s) of Diversion:

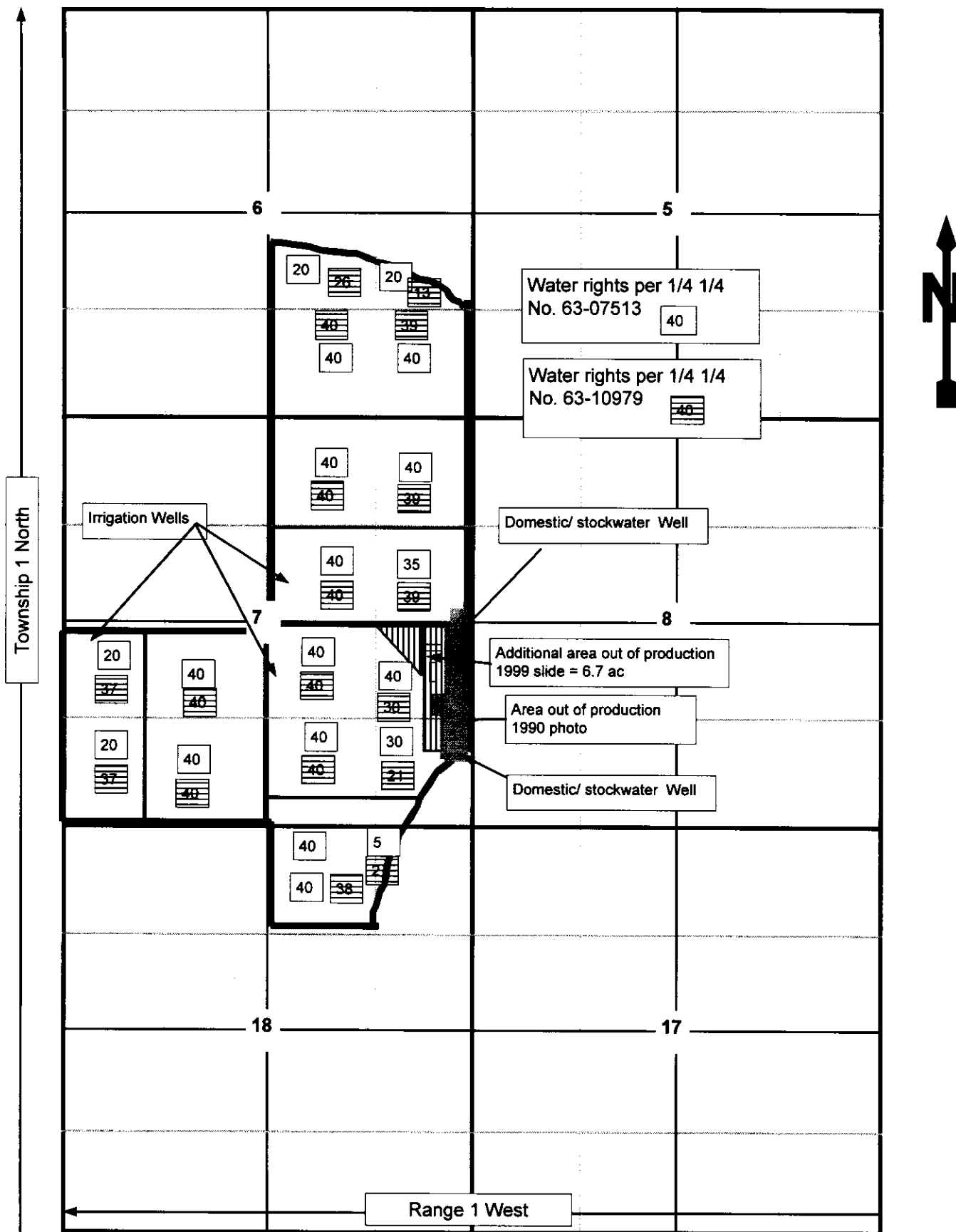
Lot	1/4	1/4	1/4	Sec.	Twp	Rge.	County	Local Name for diversion

3. Lands irrigated or place of use:

TWP.	RGE.	SEC.	NE 1/4				NW 1/4				SW 1/4				SE 1/4				TOTALS
			NE 1/4	NW 1/4	SW 1/4	SE 1/4	NE 1/4	NW 1/4	SW 1/4	SE 1/4	NE 1/4	NW 1/4	SW 1/4	SE 1/4	NE 1/4	NW 1/4	SW 1/4	SE 1/4	

MICROFILMED

SEP 07 2001



Site Plan	MICROFILMED	
Grasslands LLC		Scale 3" = 1 mile
Kuna, Idaho	SEP 07 2001	Prepared by: Darwin Vander Stelt

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCESTransfer No. 5795

PART 3

B. CHANGES IN NATURE OF USE

1. New Nature of use	Amount (cfs/ac-ft)	Hours/days/year	Period of Use		
Stockwater	.051 / 14.9	365	01/01	to	12/31
Commercial	.016 / 4.8	365	01/01	to	12/31

2. Quantity and quality of return flows and location of discharge: Process water in the amount of 4.8 afa will be collected and stored in a lagoon and land applied on the total irrigation PPU. Wastewater will be applied to growing crops.

3. Describe effects on other water uses resulting from the proposed change: No effect on other users.

I hereby assert that no one will be injured by such change and that the change does not constitute an enlargement in use of the original right. The information contained in this application is true to the best of my knowledge. I understand that any willful misrepresentations made in this application may result in voiding its approval.



held from lands LLC.
(Signature of Applicant)

Subscribed and sworn to before me this 5th day of June, 2000

Lori Graves
(Notary Public)

My commission expires 6/18/04

FOR DEPARTMENT USE ONLY

Transfer contains 6 pages and 5 attachments (A-E)

Received by Ly Date 6/5/00 Protest filed by _____

Prelim. check by Ly Fee 100 # W026560

Received by Ly Date 6/7/00

Published in Id Statesman Copies of protest forwarded by _____

Pub. Dates 8-17 & 24-00 Hearing held by _____ Date _____

Watermaster recommendation requested on _____ Recommended for ☐ approval ☐ denial

_____ rec'd _____ by _____

Copy of transfer sent to lien holder _____

SEP 07 2001

ROBERT H MCQUADE
ADA COUNTY ASSESSOR
650 MAIN ST
BOISE ID 83702

ASSESSMENT NOTICE

RETURN SERVICE REQUESTED

CATEGORY DESCRIPTION

Tax Code 91
LOTS/ACRES

RR
MARKET VALUE

IRRIGATED AG	119.000	61.600
WASTE LAND	.500	0
IMPROVEMENT		11.000
HOMESITE ON AG	.500	13.000

2000
Taxes are based on the
valuation listed on this statement

FOR ANY QUESTIONS
PLEASE NOTIFY THE
ASSESSOR'S OFFICE BEFORE
JUNE 26, 2000
364-2411

TOTAL MARKET VALUE 85.600

TOTAL TAXABLE VALUE 85.600

NE 4 SE 4 & W 2 SE 4
SEC 7 1N 1W

PROPERTY ADDRESS 6001 S ROBINSON BLVD

VALUE: PRIOR YEAR 89,028 CURRENT YEAR 85,600

Mail To:
GRASSLANDS LLC
6001 ROBINSON RD
KUNA ID 83634

TAX: PRIOR YEAR 1.040 ESTIMATED 1.000

See back for details.

DO NOT PAY ESTIMATE

TAX ESTIMATES DO NOT INCLUDE ADDITIONAL
CERTIFICATIONS AND FEES.

ROBERT H MCQUADE
ADA COUNTY ASSESSOR
650 MAIN ST
BOISE ID 83702

ASSESSMENT NOTICE

RETURN SERVICE REQUESTED

CATEGORY DESCRIPTION

Tax Code 91
LOTS/ACRES

RR
MARKET VALUE

IRRIGATED AG	24.000	12.400
--------------	--------	--------

2000
Taxes are based on the
valuation listed on this statement

FOR ANY QUESTIONS
PLEASE NOTIFY THE
ASSESSOR'S OFFICE BEFORE
JUNE 26, 2000
364-2411

TOTAL MARKET VALUE 12.400

TOTAL TAXABLE VALUE 12.400

NW OF CL OF S POWER
IRR LATERAL IN SE 4 SE 4

PROPERTY ADDRESS S ROBINSON BLVD

VALUE: PRIOR YEAR 13.115 CURRENT YEAR 12.400

Mail To:
GRASSLANDS LLC
6001 ROBINSON RD
KUNA ID 83634

TAX: PRIOR YEAR 153 ESTIMATED 145

See back for details.

DO NOT PAY ESTIMATE

TAX ESTIMATES DO NOT INCLUDE ADDITIONAL
CERTIFICATIONS AND FEES.

MICROFILM

SEP 07 2001

AI

ROBERT H MCQUADE
ADA COUNTY ASSESSOR
650 MAIN ST
BOISE ID 83702

ASSESSMENT NOTICE

RETURN SERVICE REQUESTED

CATEGORY DESCRIPTION

Tax Code 91
LOTS/ACRES

RR
MARKET VALUE

IRRIGATED AG

153.930

79.600

2000
Taxes are based on the
valuation listed on this statement

FOR ANY QUESTIONS
PLEASE NOTIFY THE
ASSESSOR'S OFFICE BEFORE
JUNE 26, 2000
364-2411

TOTAL MARKET VALUE

79.600

PARCEL # S220731480

TOTAL TAXABLE VALUE

79.600

SW 4 EXC N 82° OF W 1000' OF
NW 4 SW 4

PROPERTY ADDRESS S ROBINSON RD

VALUE: PRIOR YEAR 84.115 CURRENT YEAR 79.600

Mail To:
GRASSLANDS LLC
6001 ROBINSON RD
KUNA ID 83634

TAX: PRIOR YEAR 982 ESTIMATED 930

See back for details.

DO NOT PAY ESTIMATE

TAX ESTIMATES DO NOT INCLUDE ADDITIONAL
CERTIFICATIONS AND FEES.

ROBERT H MCQUADE
ADA COUNTY ASSESSOR
650 MAIN ST
BOISE ID 83702

ASSESSMENT NOTICE

RETURN SERVICE REQUESTED

CATEGORY DESCRIPTION

Tax Code 85
LOTS/ACRES

RR
MARKET VALUE

IRRIGATED AG

158.000

82.100

WASTE LAND

1.500

0

RES IMPROVEMENT

44.500

HOMESITE ON AG

.500

14.000

2000
Taxes are based on the
valuation listed on this statement

FOR ANY QUESTIONS
PLEASE NOTIFY THE
ASSESSOR'S OFFICE BEFORE
JUNE 26, 2000
364-2411

TOTAL MARKET VALUE

140.600

PARCEL # S220710000

TOTAL TAXABLE VALUE

140.600

NE 4
SEC 7 1N 1W

PROPERTY ADDRESS 5595 S ROBINSON BLVD

VALUE: PRIOR YEAR 143.921 CURRENT YEAR 140.600

Mail To:
GRASSLANDS LLC
6001 ROBINSON RD
KUNA ID 83634

TAX: PRIOR YEAR 1.620 ESTIMATED 1.582

See back for details.

DO NOT PAY ESTIMATE

TAX ESTIMATES DO NOT INCLUDE ADDITIONAL
CERTIFICATIONS AND FEES.

MICROFILMED

SEP 07 2001

AZ

Section 6
over

ROBERT H MCQUADE
ADA COUNTY ASSESSOR
650 MAIN ST
BOISE ID 83702

ASSESSMENT NOTICE

RETURN SERVICE REQUESTED

CATEGORY DESCRIPTION

Tax Code 85
LOTS/ACRES

RR
MARKET VALUE

IRRIGATED AG
WASTE LAND

120.000
1.500

62.400
0

2000
Taxes are based on the
valuation listed on this statement

FOR ANY QUESTIONS
PLEASE NOTIFY THE
ASSESSOR'S OFFICE BEFORE
JUNE 26, 2000
364-2411

TOTAL MARKET VALUE

62,400

PARCEL # 5220643000

TOTAL TAXABLE VALUE

62,400

SE 4 S OF CANAL
SEC 6 IN 1W

PROPERTY ADDRESS

W KUNA MORA RD

VALUE: PRIOR YEAR
64,877

CURRENT YEAR
62,400

Mail To:
GRASSLANDS LLC
6001 ROBINSON RD
KUNA ID 83634

TAX: PRIOR YEAR
730

ESTIMATED
702

See back for details.

DO NOT PAY ESTIMATE

TAX ESTIMATES DO NOT INCLUDE ADDITIONAL
CERTIFICATIONS AND FEES.

MICROFILMED

SEP 07 2001

RC H MCQUADE
ADA COUNTY ASSESSOR
650 MAIN ST
BOISE ID 83702

ASSESSMENT NOTICE

RETURN SERVICE REQUESTED

CATEGORY DESCRIPTION

Tax Code 273
LOTS/ACRES

RP
MARKET VALUE

IRRIGATED AG

40.000

20.700

2000
Taxes are based on the
valuation listed on this statement

FOR ANY QUESTIONS
PLEASE NOTIFY THE
ASSESSOR'S OFFICE BEFORE
JUNE 26, 2000
364-2411

TOTAL MARKET VALUE

20,700

TOTAL TAXABLE VALUE

20,700

PROPERTY ADDRESS S ROBINSON BLVD

VALUE: PRIOR YEAR 21,858 CURRENT YEAR 20,700

TAX: PRIOR YEAR 255 ESTIMATED 242

See back for details.

Mail To:
GRASSLANDS LLC
6001 ROBINSON RD
KUNA ID 83634

PARCEL # 5221812100

DO NOT PAY ESTIMATE

TAX ESTIMATES DO NOT INCLUDE ADDITIONAL
CERTIFICATIONS AND FEES.

ROBERT H MCQUADE
ADA COUNTY ASSESSOR
650 MAIN ST
BOISE ID 83702

ASSESSMENT NOTICE

RETURN SERVICE REQUESTED

CATEGORY DESCRIPTION

Tax Code 273
LOTS/ACRES

RP
MARKET VALUE

IRRIGATED AG
WASTE LAND

4.250
.750

3,400
0

2000
Taxes are based on the
valuation listed on this statement

FOR ANY QUESTIONS
PLEASE NOTIFY THE
ASSESSOR'S OFFICE BEFORE
JUNE 26, 2000
364-2411

TOTAL MARKET VALUE

3,400

TOTAL TAXABLE VALUE

3,400

PROPERTY ADDRESS S ROBINSON BLVD

VALUE: PRIOR YEAR 3,602 CURRENT YEAR 3,400

TAX: PRIOR YEAR 42 ESTIMATED 40

See back for details.

Mail To:
GRASSLANDS LLC
6001 ROBINSON RD
KUNA ID 83634

PARCEL # 5221811220

DO NOT PAY ESTIMATE

TAX ESTIMATES DO NOT INCLUDE ADDITIONAL
CERTIFICATIONS AND FEES.

MICROFILM

2001

Attachment B

Daily Fresh Water Requirement For Dairy Facility Worksheet

For: **Grasslands LLC**

Cow size adjustment factor:

See note at bottom on procedure

Table values based on 1400 lb. cow

Jersey/Holstein cross siz 1200

Adjustment factor

0.86

Number

Table

Drinking Water Estimates (see Table 1 & 2):

we need

Use/day

Jersey

Total

Total

Acre-feet/Yr

Current

Covered

right for

(60 dg)

Use/day

Gal/Day

Gals/Yr.

(AF/a)

Milking Cow

895

300

595

35

30.0

17850

Dry Cows

200

200

0

12

10.3

0

Total Cows

1095

500

595

17850

6,515,250

19.99

Heifers:

Age

% of Herd

Number

Use/day

Total

16-24 mo.

0.38

185

10

8.6

1586

13-15 mo.

0.12

60

8

6.9

411

9-12 mo.

0.17

85

6

5.1

437

5-8 mo

0.17

85

5

4.3

364

3-4 mo

0.08

45

4

3.4

154

0-2 mo

0.08

40

2.5

2.1

86

Total Heifers (Covered)

500

0

-

0.00

Less: 5 acre feet stockwater claimed in A63-07513

-5

Total additional stockwater required:

6,515,250

14.99

500 cows and 500 heifers stockwater requirements covered by A63-15493

Milk House and Parlor Estimate (see Table 4)

Item	Gals/Op	x's/day	Gals/day
Bulk Tank	100	1	100
Pipeline	150	2	300
Backflush	0.5	0	
Cleanup	1000	2	2000
Cow Prep	1	2	1790
Plate Cooler(ignore if recycled)			
Total Milk House and Parlor Water Used:			4,190
			1,529,350
			4.69

Total Fresh Water Diverted Annually not covered by adjudication claims 8,044,600 19.69

Acres to dry up:

Acres to dry up @ 2.92 afa/acre = 6.7 acres actually dried up= 7
(from crop history)

	<u>Acres out</u>	<u>Volume needed (afa)</u>
Stockwater	5.13	14.99
Commercial	1.61	4.69
(Rounded)	<u>7</u>	<u>20</u>

Procedure:

Stockwater right in adjudication claim will cover existing heifers, dry cows, and 300 milk cows
Transfer irrigation right from area out of production to furnish commercial and remaining stockwater

Prepared by
Darwin Vander Stelt

MICROFILMED

SEP 07 2001

Attachment C

Crop history, 1997,1998,1999. Tract # 1948, 1949 Grasslands LLC

Field	Acres	1997 Crop	%	1998 Crop	%	1999 Crop	%
1	81.7	Grass	13.6%	Grass	13.6%	Grass	13.6%
2	81.3	Grass	13.5%	Grass	13.5%	Grass	13.5%
3a	63.1	Grass	10.5%	Grass	10.5%	Grass	10.5%
3b	51.1	Grass	8.5%	Grass	8.5%	Grass	8.5%
3c	59.4	Grass	9.9%	Grass	9.9%	Grass	9.9%
4	83.1	Grass	13.8%	Corn	13.8%	Corn	13.8%
5	63.2	Grass	10.5%	Grass	10.5%	Grass	10.5%
1	117.6	Grass	19.6%	Grass	19.6%	Corn	19.6%
600.50			100.0%		100.0%		100.0%

Crops Grown	97	98	99	Average % Grown	Average Acres/yr
Grass	100.0%	86.2%	66.6%	84.2%	505.90
Corn		13.8%	33.4%	15.8%	94.60
	100.0%	100.0%	100.0%	100.0%	600.50

Crop History Evaluation for estimation of Diversion Volume and Consumptive Use

Allen and Brockway Data

Transfer No. Grasslands LLC

By: Darwin Vander Stelt

Date: 05/08/00

Allen and Brockway report site: KUNA

Year	Crop	Acres	Method	App. Eff. %**	IR for Crop mm/season	Crop Div Vol AF/Ann	Crop CU AF/Ann	millimet
3 yr	Grass	505.90	sprinkler	70%	931	2207.50	1545.25	304.8
	Corn	94.60	sprinkler	70%	673	298.40	208.88	
Totals		601				2506	1754.13	

Summary for 3 year period:

Average Acres Irrigated	601	Acres	Average Diversion Vol/acre	4.17
Total Diversion	2506	AF/ann	Average Consumptive Use/acre	2.92
Total Consumptive Use	1754	AF/ann		

MICROFILMED

Prepared by
Darwin Vander Stelt

SEP 07 2001

Attachment D Flow, Volume, and Allocation Calculations

Amount of water (afa) to be transferred	19.7	(From Dairy worksheet, Attachment A)
	Volume Acres to dry	
Stockwater	15.0	5.1 (volume needed/consumptive use/acre)
Commercial	4.7	1.6 (volume needed/consumptive use/acre)
Historic consumptive use per acre		2.92 (From Attachment C. Crop history etc)
Acres to dry up in Section 31	7	(From Dairy worksheet, Attachment A)

To determine acres irrigated and flow under each license:

Total Flow for each license:		Licensed	
Priority	Acres	Flow (cfs)	Flow/acre (cfs)
10/22/71 A63-07513	601	6.30	0.0105
9/14/89 63-10979	601	1.60	0.003
Total	601	7.9	Note on license

earliest priority date license limited to 6.30 cfs
next priority date license and is limited to 1.6 cfs

Allocation of flow under license	A63-07513	after transfer:
Total licensed flow	6.30	cfs
Acres irrigable	601	(pu is same as right 63-10979)
acres irrigable (after transfer)	594	(601- 7 acres out of production)
flow for irrigation	6.23	(acres irrigable X's licensed flow/acre)
acres out for stockwater	5.13	(from dairy worksheet)
flow for stock water	0.05	(acres out X's licensed flow/acre)
acres out for Commercial	1.61	(from dairy worksheet)
flow for Commercial	0.017	(acres out X's licensed flow/acre)
total flow after transfer	6.30	cfs (total of the three flows)

Allocation of Volume after transfer:

Total Diversion:			
before: A63-07513	irrigation	2835	ac-ft (from license)
	stockwater	5.0	
Total		2840	acre-ft/annum
After Transfer:			
Tot. diversion/irrigation	2673	(4.5*594 acres irrigated)	(1.9835*246*6.23>4.5 afa/acre)
Tot. diversion/ commercial	4.7	(from dairy worksheet)	
New stockwater	15.0	(from dairy worksheet)	
Add: existing 5 afa stockwater	5		
Total stockwater	20.0	afa	
Total allowable diversion after transfer		2698	

MICROFILMED

SEP 07 2001

Allocation of flow under license	63-10979	after transfer:
Total licensed flow	1.60	cfs
Acres irrigable	601	(pu is same as right 63-10979)
acres irrigable (after transfer)	594	(601- 7 acres out of production)
flow for irrigation	1.60	unchanged

Allocation of Volume after transfer: Volume is not listed on 63-10979 because total volume is limited to 4.5 afa

Prepared by:
 Darwin Vander Stelt

MICROFILMED
 SEP 07 2001

Attachment F (continued)**MEMORANDUM**

TO: Lori Graves and IDWR
FROM: Darwin Vander Stelt, preparer

RECEIVED**NOV 21 2000**

Department of Water Resources

DATE: 11/15/2000**RE:** Grasslands LLC Transfer, RIGHTS 63-10979 & 63-07513,

1. Purpose and scope of the Nutrient Management Plan submitted with the transfer request.
2. Purpose and meaning of the Ada county zoning certificate.

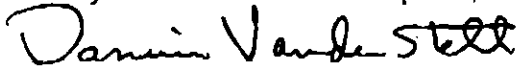
The Nutrient Management Plan, submitted with the transfer application, states its purpose in the second paragraph of the Summary:

"The purpose of this nutrient management plan is to inform the producer and others of the value of animal waste and to certify that nutrients are utilized in an appropriate way which will not adversely impact surface or groundwater."

The plan is prepared according to standards outlined in the NRCS' Agricultural Waste Management Field Handbook, and also according to the NRCS Conservation Practice Standard for Nutrient Management. The plan is reviewed by an IDA engineer, both for consistency with the above standards and for completeness and accuracy. IDA approval assures the plan user that if the plan is followed, there will be no contamination of ground or surface waters as a result of the operation of the dairy. It supports the contention that the proposed transfer will not injure other water right holders, and is in the public interest.

The Ada County Zoning Certificate certifies that the facility conforms to the land use ordinances in effect at the county government level. It demonstrates the legality of the operation as structured post-transfer, and thus may be considered to be operating "in the public interest".

If any other information is required, the applicant will respond in timely fashion.



Darwin Vander Stelt, preparer

MICROFILMED

NOV 27 2001

Valid
10/20/2000
THRU
10/20/2001

ADA COUNTY DEVELOPMENT SERVICE
ZONING DIVISION
650 MAIN ST.
BOISE, IDAHO 83702
(208) 364-2277

ZONING CERTIFICATE
RECEIVED No. 0001311
OCT 20 2000
WATER RESOURCES
WESTERN REGION

OWNER
GRASSLANDS LLC
6001 ROBINSON RD
KUNA

APPLICANT
GRASSLANDS LLC

ID
83634

PARCEL: S2207410000 ADDRESS: 05595 S ROBINSON
LOT: 000 BLOCK: 000 SUBDIVISION: 1N 1W 07
QUARTER; SECTION 07 TOWNSHIP 1N RANGE 1W ZONE RR
SETBACKS (in ft): Front-30 Rear-25 Side-25 Flank-30

PROPOSED USES:
ANIMAL FEEDING OPERATION

USE DESCRIPTION: REGISTERED DAIRY OPERATION. MAXIMUM OPERATING CAPACITY IS
2,400 COWS.

Zoning X-references: 1- 00-000- 2- 00-000-

Flood Zone FP-00000 STREET CLASS: Local

LOT SIZE 640.0000 Acre MAX LOT COV 5% MAX BLDG HGT 35 ft

WATER SERVICE Well SEWER SERVICE Septic Tank

This certificate is issued subject to the regulations contained in the zoning ordinance and all other applicable laws, regulations, codes and ordinances; and that the work will be done in accordance with the plans specifications and in compliance with all such applicable laws, regulations, codes and ordinances.

The Director may, in writing, suspend or revoke a certificate issued under provisions of said regulations, codes or ordinances, whenever the certificate is issued in error; or on the basis of incorrect information supplied; or in violation of the provisions of any law, regulation, code or ordinance.

When application is made for service from public agencies or utilities they may require proof of issuance of this certificate.

IN ACCORDANCE WITH SECTION 8-7-1 ADA COUNTY CODE, THIS CERTIFICATE EXPIRES ONE YEAR FROM THE DATE OF ISSUE. I HEREBY CERTIFY THAT THE ABOVE INFORMATION IS COMPLETE AND CORRECT TO THE BEST OF MY KNOWLEDGE, AND FURTHER, I WILL ABIDE BY THE TERMS AND CONDITIONS CONTAINED IN THIS CERTIFICATE.

Date 10/20/00

Domin VonderStelt
Applicant or agent

Posted on map: Y
Zoning certificate fee: \$32.00

G. Thomas
Planner

MICROFILMED

OCT 27 2001



Grasslands LLC Dairy

RECEIVED

OCT 20 2000

WATER RESOURCES
WESTERN REGION

Nutrient Management Plan

June 1, 2000

Nutrient Management Plan Prepared For:

Grasslands LLC Dairy
T 1 N, R. 1 W, parts of sect 6,7, 18
Kuna, Idaho, 83634
Certified Planner: Darwin Vander Stelt

MICROFILMED

SEP 7 2001

Table of Contents

FACILITY INFORMATION SHEET	1
PRODUCER SUMMARY	2
FACILITY SUMMARY	2
RESOURCE CONCERNS	2
FACILITY SITE PLAN	2
NUTRIENT MANAGEMENT PLAN REQUIREMENTS.....	3
IRRIGATION SYSTEM REQUIREMENTS	3
FACILITY TESTING REQUIREMENTS.....	4
STORAGE AND HANDLING PLAN RECOMMENDATIONS	4
NUTRIENT MANAGEMENT PLAN RECOMMENDATIONS	4
IRRIGATION MANAGEMENT PLAN RECOMMENDATION	5
ANALYSIS OF NUTRIENT MANAGEMENT PRACTICES	6
FACILITY DESCRIPTION	6
RESOURCE CONCERNS	6
WASTE STORAGE AND HANDLING	6
LAND APPLICATION SITE PLAN	9
NUTRIENT MANAGEMENT SYSTEM	10
CROP INFORMATION	14
NUTRIENT BUDGETING.....	19
IRRIGATION SYSTEM	20
APPENDIXES.....	23
APPENDIX A - NUTRIENTS PRODUCED	23
APPENDIX B - THIRD PARTY WASTE AGREEMENTS	24
APPENDIX C - SIZING OUTPUT FOR 180 LIQUID STORAGE.....	25
APPENDIX D - CROP ROTATION BALANCE	26
APPENDIX E - NUTRIENT BUDGET WORKSHEETS	27
APPENDIX F - IRRIGATION CALCULATIONS	28
APPENDIX G - SOIL INFORMATION	29
APPENDIX H - SOIL SAMPLE BULLETIN	33

MICROFILM

SEP 07 2001

Facility Information Sheet

Facility	Grasslands LLC Dairy		
Operator Information	Grasslands LLC 6001 S. Robinson Road Kuna, ID 83634	Barn Home Cell	(208) 495-2417
County	Ada County		
Soil Conservation District	Ada County SCD		
Watershed Basin	Southwest		
Hydrologic Unit Code #	17050114-070		
Stream Segment	Boise River Notus to Snake River		
GPS	N 43°33.62' , W 116° 29.52'		

	Nitrogen (lbs)	% of Total Produced	Phosphorus (lbs)	% of Total Produced	Potassium (lbs)	% of Total Produced
Nutrients Exported	-	0%	-	0%	-	0%
Animal Nutrients Applied	74,558	100%	30,405	100%	125,264	100%
Commercial Nutrients Applied						

Limiting Resource:	Groundwater	Vulnerability:	Low
Plan Designed to	Phosphorus	Univ of Idaho	Crop Uptake
AU on the facility	1362	2.3	1.6
Total Acres Available for Nutrients Owned by the Facility	600.5		
Animal Equivalent Units per Acre			

Action Required	Compliance Date	Completion Date
Containment Upgrade Required:		
Irrigation Mechanical Upgrade Required:		
Irrigation Management Upgrade Required:		
Water Quality Related Practice Required:		

Certified Planner: Darwin Vander Stelt Date _____
 Darwin Vander Stelt (#212)

Operator: J. J. L. Date 10/16/2000
 Grasslands LLC

MICROFILM

SEP 27 2001

Producer Summary

Facility Summary

The Grasslands LLC Dairy is an existing dairy facility located in Kuna, Idaho at 6001 S. Robinson Road. The dairy is operated by Dennis Dunlop and Lorne Clapson and has been operating at the current location since 1996.

The purpose of this nutrient management plan is to inform the producer and others of the value of animal waste and to certify that nutrients are utilized in an appropriate way which will not adversely impact surface or groundwater.

The Grasslands LLC Dairy milks 750 Holstein- Jersey cross cows and also maintains 150 mature dry cows and 500 crossbred heifers aged 1 day to 2 years. All animals over 3 months of age are housed in pasture or open corrals. The dairy owns approximately 640 acres, of which 600 acres are irrigated cropland. The dairy uses pasture extensively. A seasonal freshening system is used to keep most of the cows milking during the grazing season, and most of the cows dry in December and January. The cattle are housed in the pastures 6 months of the year, and in corrals the remaining 6 months. Cows are milked 2 times a day in a parallel parlor. Corrals are bedded with straw and manure is piled in the corrals until it can be hauled away.

The dairy will apply wastewater on 57 acres of cropland using handlines.

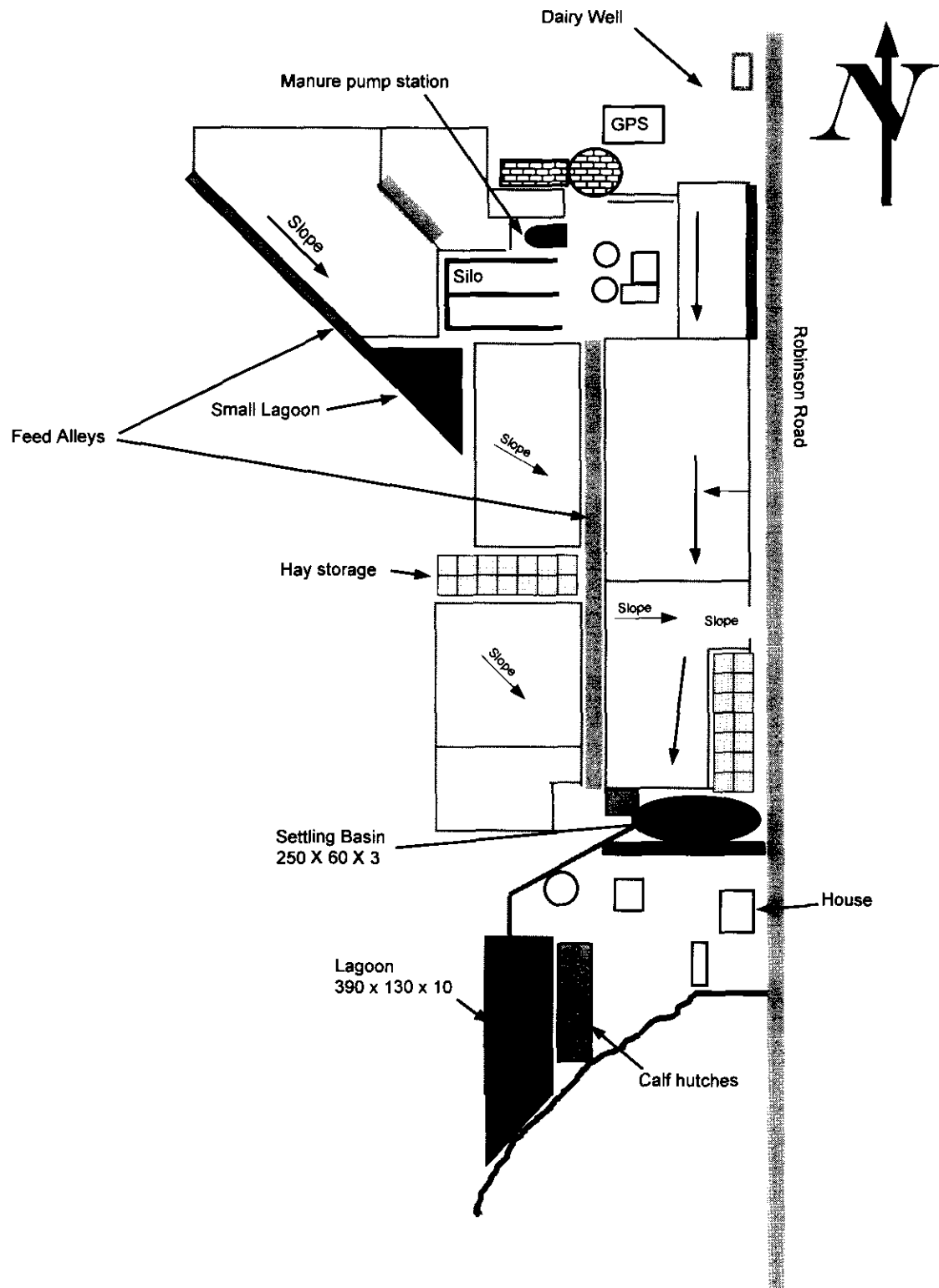
Resource Concerns

The north half of Grasslands LLC Dairy is located in the hydrologic unit code 17050114-070 in the Southwest Idaho watershed basin within the Boise River, Lake Lowell, and Dixie hydrologic area. The south half is located in hydrologic unit code 17050103-070. The stream segment is the Snake River from Swan Falls to the Boise River and is water quality limited by bacteria, dissolved oxygen, flow alteration, nutrients, ph, and sediment. The facility is found at N 43°33.62', W 116° 29.52' using GPS co-ordinates.

The default resource concern on the Grasslands LLC Dairy is groundwater quality. While care must always be taken to avoid runoff, the use of sprinkler irrigation and the presence of well drained soils on the farm make run-off unlikely in an average rainfall year. Depth to groundwater is greater than 6' on all the property, and there is no flooding. The major environmental concern to groundwater on this facility is from leaching of nitrogen, potassium and various salts. Although leaching of nutrients into groundwater is the immediate concern, excessive land applications of animal waste will also elevate soil potassium and salt concentrations which will reduce crop yields.

Land application rates were designed on the basis of University of Idaho Guidelines on all fields because the owner's soil testing program has not indicated phosphorous levels in excess of 25 ppm in the top 12" of soil. Annual nutrient budgets will be prepared using soil test data and crop uptake rates or the University Guidelines.

Facility Site Plan



Site Plan		Scale 1" = 300'
Grasslands LLC		
Portions of sections 6, 7, and 18, T 1 N, R 1 W.		Prepared by Darwin Vander Stelt

MICROFILMED

2001

Nutrient Management Plan Requirements

- Liquid wastes will be applied as appropriate to Fields 4 and 5. Total acreage currently available for land application of liquid wastes is 57 acres. Waste will be applied through a hand line system. While the plan requires only a total of 22 acres for land disposal of liquid wastes, the availability of additional acreage allows for greater flexibility in meeting the requirements of the crop rotation. Liquid waste should be applied to non legume crops, at appropriate times, until the lagoon is empty.
- Solid wastes will be applied in the spring or fall, at agronomic rates (after accounting for planned liquid waste applications), to land going into a non-legume crop. Land applied manure will be incorporated through plowing or disking as soon as possible after spreading on bare ground.
- Nutrient application rates developed in appendix D are based on University of Idaho guidelines for phosphorous deficient soils, and are approximately as follows. If necessary, this table should be adjusted after spring soil samples are available and budgets for each field can be prepared:

Liquid Waste					
Field No	Year	% of Lagoon			
4	annual	51%			
5	annual	49%			

Solid Waste Application					
Field No	loads/ac				
	2001	2002	2003	2004	2005
1	3.0	1.5			1.5
1A	1.5				
2			3.0	3.0	1.5
3			1.5	3.0	3.0
4	3.0	3.0			
5	3.0	3.0			
6			1.5		
7				1.5	1.5
8		3.0	3.0		

See Appendix D.

- Spring soil tests must be taken to ascertain the nitrogen and potassium requirements of the particular crop.

Irrigation System Requirements

- Liquid waste from the dairy will be applied to Fields 4 and 5 at the volumes specified in Appendix D.
- The lagoon will be emptied during the growing season, starting with the first irrigation and ending with the last irrigation with no effluent application through the winter season, except that effluent may be applied to growing winter crops provided there is no run-off. **Effluent must not be applied to bare ground before March 1 without consulting the Idaho Department of Agriculture.** See Appendix F for a chart which will show dates and cumulative amounts which may be applied. Irrigation times

MICROFILMED3

SEP 07 2001

should be adjusted so that each field receives uniform coverage with nutrients. The lagoon should never be full in the fall.

- Apply liquid waste at a rate that is consistent with the infiltration rate and available water holding capacity of the soil. Avoid applying liquids at a rate that will bring the soil to its maximum available water holding capacity. This will prevent run-off and groundwater contamination.

Facility Testing Requirements

- Initial soil tests for phosphorous must be completed by October 31, 2000.
- Regulatory soil samples will be required from each field every three years. These samples must be taken from the 18- 24" zone for all fields. The samples will be reviewed for phosphorus level and compared with previous test data. These tests will indicate compliance with the nutrient management plan and the adequacy of the plan. Regulatory soil testing will be conducted every three years starting in 2001.

Storage and Handling Plan Recommendations

- Continual inspection and maintenance of waste handling facilities and equipment will prevent unwarranted waste discharges into surface water and groundwater.
- Weed control along the top and inside surface of the lagoon will help control plugging problems associated with pumping lagoon water through sprinklers.
- Contain manure storage areas to prevent run-off and direct seepage to groundwater from occurring.
- Apply liquid wastes during daylight hours so that set times can be adjusted and run-off avoided. Use as fast as possible stream flows and as short as possible set times to achieve uniform distribution. See Appendix F for specific recommendations.

Nutrient Management Plan Recommendations

- Set realistic crop yield goals in order to provide an accurate account of the plant nutrient needs.
- Weigh crops so that accurate yield data can be acquired.
- Test hay, silage, manure, and lagoon water for concentrations of N,P, and K. Use this data to fine tune the actual crop uptakes.
- Nitrification inhibitors in liquid-manure injection systems can decrease N losses in coarse-textured soils all year long, in all soils during fall and summer, and in fine or medium textured soils with high water-tables during winter and spring.
- Apply N so that it is available during peak plant demand.
- Apply fertilizer to cool season crops in the spring rather than the previous fall. This will prevent fertilizer leaching through the soil profile and provide the crop with the necessary levels of nutrients.
- Use split or multiple fertilizer applications in order to provide the crop with a propellant treatment and the needed nutrient levels throughout the growing season till the point of major nutrient uptake.
- For each field, keep a record of manure and chemical fertilizer applications.
- Periodically re-evaluate the crop rotation and add a year of corn silage if potassium is building up in the soil.

MICROFILMED 4

SEP 07 2001

Irrigation Management Plan Recommendation

- Irrigate fields efficiently to meet crop needs and the available water holding capacity of the soil. This will prevent the movement of nitrogen through the soil profile to groundwater caused by over irrigation.
- A soil moisture monitoring device should be utilized to help determine irrigation scheduling to meet crop demands.
- The following schedule suggests maximum irrigation frequencies for the soil types, crops, and irrigation systems on the farm:

Field	Days between Irrigations	No. hours/ rotation or set	in . water
1	1	24	0.4
1A	7	11	2.6
2, 3	1	24	0.4
4, 5	1	24	0.4
6	1	11	2.5
7, 8	7	24	0.4

MICROFILMED

SEP 07 2001

Analysis of Nutrient Management Practices

Facility Description

The Grasslands LLC Dairy is an existing dairy facility located in Kuna, Idaho at 6001 S. Robinson Road. The dairy is operated by Dennis Dunlop and Lorne Clapson, and has been operating at the current location since 1996.

The purpose of this nutrient management plan is to inform the producer and others of the value of animal waste and to certify that nutrients are utilized in an appropriate way which will not adversely impact surface or groundwater.

The Grasslands LLC Dairy milks 750 Holstein- Jersey cross cows and also maintains 150 mature dry cows and 500 crossbred heifers aged 1 day to 2 years. All animals over 3 months of age are housed in pasture or open corrals. The dairy owns approximately 640 acres, of which 600 acres are irrigated cropland. The dairy uses pasture extensively. A seasonal freshening system is used to keep most of the cows milking during the grazing season, and most of the cows dry in December and January. The cattle are housed in the pastures 6 months of the year, and in corrals the remaining 6 months. Cows are milked 2 times a day in a parallel parlor. Corrals are bedded with straw and manure is piled in the corrals until it can be hauled away.

The dairy will apply wastewater on 57 acres of cropland using handlines.

Resource Concerns

The north half of Grasslands LLC Dairy is located in the hydrologic unit code 17050114-070 in the Southwest Idaho watershed basin within the Boise River, Lake Lowell, and Dixie hydrologic area. The south half is located in hydrologic unit code 17050103-070. The stream segment is the Snake River from Swan Falls to the Boise River and is water quality limited by bacteria, dissolved oxygen, flow alteration, nutrients, ph, and sediment. The facility is found at N 43°33.62', W 116° 29.52' using GPS co-ordinates.

The default resource concern on the Grasslands LLC Dairy is groundwater quality. While care must always be taken to avoid runoff, the use of sprinkler irrigation and the presence of well drained soils on the farm make run-off unlikely in an average rainfall year. Depth to groundwater is greater than 6' on all the property, and there is no flooding. The major environmental concern to groundwater on this facility is from leaching of nitrogen, potassium and various salts. Although leaching of nutrients into groundwater is the immediate concern, excessive land applications of animal waste will also elevate soil potassium and salt concentrations which will reduce crop yields.

Land application rates were designed on the basis of University of Idaho Guidelines on all fields because the owner's soil testing program has not indicated phosphorous levels in excess of 25 ppm in the top 12" of soil. Annual nutrient budgets will be prepared using soil test data and crop uptake rates or the University Guidelines.

Waste Storage and Handling

Solid waste and bedding deposited in the corrals will be piled and stored in the corrals. Cattle are kept in corrals for 6 months of the year, and are grazed the remaining 6 months.

MICROFILMED

SEP 07 2001

It is estimated that 100 tons of straw will be used yearly for bedding purposes. Manure will be transported from the corrals and from the solids stacking areas in spreader trucks and applied to either owned or third party cropland.

Manure deposited in the milking parlor and wash pen flows directly into a separation box, where approximately 60% of the solid materials are removed. It is then pumped into the two lagoons. The large lagoon has a trapezoidal shape with averaged dimensions of 390' x 130' x 10'. The small lagoon is triangular in shape with sides of approximately 180' and is 8 feet deep. The lagoons are pumped through handlines into fields 4 and 5. After the lagoons are emptied, they are allowed to dry out and the settled solids are then scraped and hauled to the fields in spreaders. It is estimated that total separation efficiency is 70% after this practice is taken into consideration.

After milking, the cows are held for an additional hour in a feeding area, which is scraped into the triangular lagoon. It is estimated that approximately 15% of the total manure is deposited in the milking parlor and holding areas, and an additional 15% is deposited in the feeding area adjacent to the milking parlor. Because cows are pastured 50% of the year, it is estimated that 35% of the manure ($50\% \times (100\% - 15\% - 15\%)$) is evenly distributed over the pasture areas during the grazing season, 35% is deposited in corrals, and 30% goes into the lagoons. Of that 30%, 21% is recovered and spread. Consequently, only 9% of the total manure nutrients are present in the lagoon water.

The calculations for the required 180 day storage for liquid waste is found in Appendix C. The lagoons are more than adequate for 180-days liquid storage, including runoff from the corrals and roofs.

A list of recommended practices relating to the storage and handling of manure is as follows: (from *"BEST MANAGEMENT PRACTICES for Nutrient Management in the State of Idaho"*)

ODOR CONTROL

- Maintain a distance from the facility to any occupied residence. When considering where to place corrals, lagoon, etc., one should take into consideration the prevailing wind direction and frequency, land topography, number of animal units, the size of structure (i.e. lagoon, etc.), and manure management practices in relationship to nearby residences.
- General housekeeping around the facility, such as gathering feed spillage around feed bunks, proper carcass disposal, and keeping manure accumulation to a minimum will assist in reducing odor.
- Using inoculants (bacteria, etc.) in lagoons can reduce the amount of solid manure in the lagoon and reduce odor.
- Manure storage management - cleaning solids, settling basins, and channels on a regular basis can have a significant effect on odor.
- Through the use of aeration devices, the intensity of odor coming off of a lagoon structure can be significantly reduced. Some typical aeration devices that are being used are windmill aerators, aeration pumps, and recirculatory systems where water is pumped from the bottom of the lagoon and injected onto the surface of the lagoon.
- Creating windbreaks through the use of structural and natural barriers around the facility can reduce the degree and distance of odor dispersal. Using a windbreak along the prevailing wind side of a lagoon can increase the velocity of the wind crossing the surface of the lagoon and decrease the odor through dilution.
- Artificial or biocovers are an excellent method of reducing containment system odors. These methods can also be used in conjunction with methane harvesting systems.

MICROFILMED

SEP 07 2001

WASTE HANDLING

- Store, handle and mix nutrient products away from wells and other water sources. Keep manure and livestock wastes at least 100 ft away from wells to prevent problems with direct run-in.
- Berm corrals to prevent run-off of manure from the facility.
- Contain manure storage areas to prevent run-off and direct seepage to groundwater from occurring.
- When composting manure, try to maintain temperatures between 130 to 160°F through turning of windrows and the addition of moisture to achieve maximum composting capabilities.
- Continual inspection and maintenance of waste handling facilities and equipment will prevent unwarranted waste discharges into surface water and groundwater.

Table 1 shows the total quantity of nutrients produced on the facility.

Table 1. Nutrients Produced

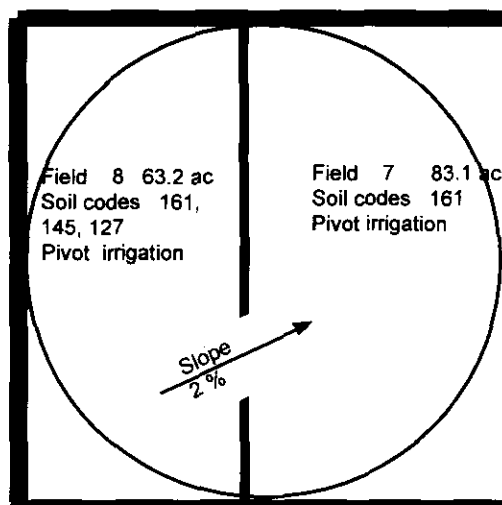
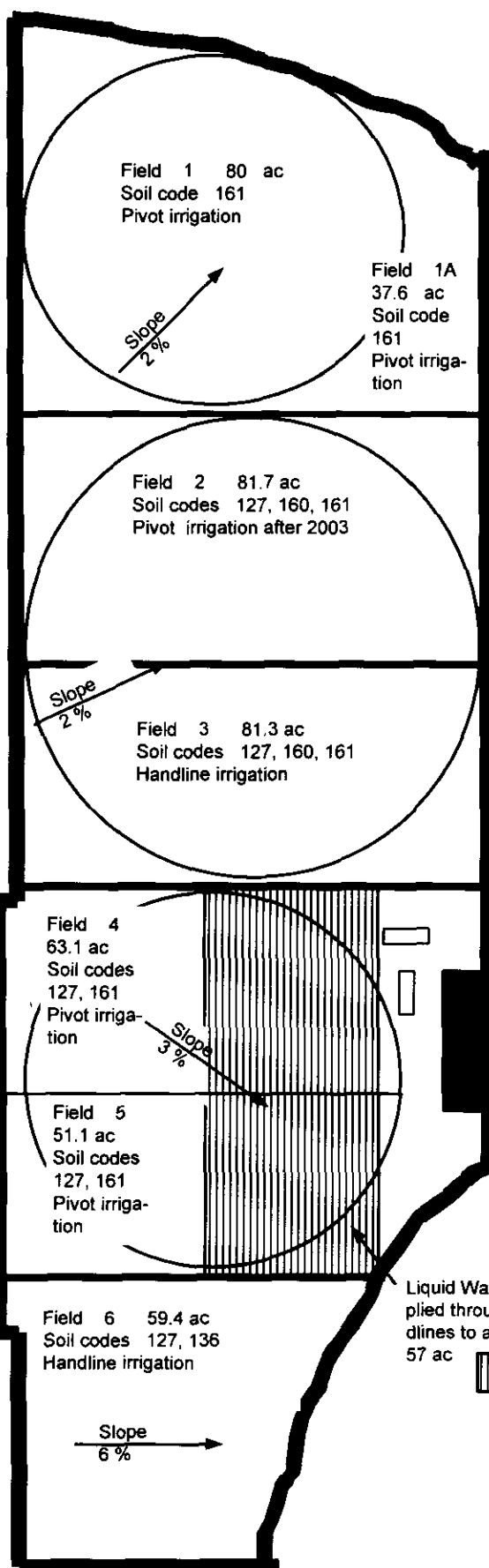
Description	Volume cu.ft	N lbs/yr	P lbs/yr	K lbs/yr	Tons (40#/cf)/ Gallons
Lagoon	144,975	2,778	1,183	4,524	1,087,315
Solid Waste	629,825	71,779	29,222	120,740	12,597
Total Nutrients Produced	774,801	74,558	30,405	125,264	
Deduct: Nutrients exported	-	-	-	-	-
Total Nutrients for Land Application	774,801	74,558	30,405	125,264	12,597

See Appendix A

Raw data used to calculate the information illustrated in Table 1 is found in Appendix A. As shown in Table 1, 100% of the total nitrogen, phosphorus and potassium produced, and 100% of the solids produced will be utilized on this facility. The actual tonnage of material to be applied or exported is dependent upon the degree of decomposition of the solid material, moisture levels and other factors.



Soil Code	Description	Permeability	Runoff Hazard
127	Potratz- Power Silt loam 4 - 8 % slopes	Moderate	Medium
136	Power- McCain Silt loam 8- 12% slopes	Moderately slow	Medium
145	Purdam-Power silt loam 2-4% slopes	Moderately slow	Medium
160	Scism silt loam 0 - 2% slopes	Moderate	Slow
161	Scism silt loam 2 - 4% slopes	Moderate	Medium



MICROFILMED

SEP 9 7 2001

Field Application Map		Scale 1" = 1000'
Grasslands LLC		
Portions of sections 6, 7, and 18, T 1 N, R 1 E.	Application area: 600.5 ac	Prepared by Darwin Vander Stelt

Nutrient Management System

Currently the Grasslands LLC Dairy owns a total of 600.5 acres of irrigated cropland. An inventory of the cropland can be found in Table 2:

Table 2 Farmland Inventory

Field	Acres	Crop	Yield	Yr. in Rotation	Resource Concern
1	80	Corn	32	1	Groundwater
1A	37.6	Grass	6	1	Groundwater
2	81.7	Grass	6	4	Groundwater
3	81.3	Grass	6	3	Groundwater
4	63.1	Corn	32	1	Groundwater
5	51.1	Grass	6	6	Groundwater
6	59.4	Grass	6	1	Groundwater
7	83.1	Grass	6	3	Groundwater
8	63.2	Grass	6	5	Groundwater
Total	600.5				

Liquid waste (100%) will be applied to Fields 4 and 5 due to their proximity to the lagoons. **Application of all the lagoon effluent is the first priority**, with applications of solid manure in amounts dependent upon the specific crop. This necessitates budgeting varying amounts of liquid and solid waste depending on acres available for emptying the lagoon. Testing of actual quantities of phosphorous in the manure and lagoon water, and regular soil testing are recommended.

The operator intends to use a rotation of corn (2 or 3 years) and grass (3 or 4 years) for most fields. Fields 1A and 6 are irrigated with handlines and will use a grass and alfalfa rotation. It should be understood that the farmer is not bound to any particular crop selection by this plan. It is, however, required that annual nutrient budgets be prepared which take into account the manure application history, the crop production history, and the nutrient requirements for the current crop for each field.

The crop rotations, yields, and fertilization rates are shown in Table 3.

MICROFILMED

SEP 8 7 2001

Table 3. Recommended Crop Rotation, Nutrient Uptake, and Fertilization

Rotation 1 Fields: 1-5, 8	Years of Rotation	Years in Rotation	Yield (tons/acre)	N lbs/acre	P (uptake) lbs/acre	P (U of I) lbs/acre	K lbs/acre
Corn Silage	1-2	2	32	246.4	56.0	84	244
Grass	3-6	4	6	186.0	28.8	43	216
Totals		6		206	38	57	225
Rotation 2 Field 1A, 6, 7	Years of Rotation	Years in Rotation	Yield (tons/acre)	N lbs/acre	P (uptake) lbs/acre	P (U of I) lbs/acre	K lbs/acre
Grass	1-4	4	6	186	28.8	43	216
Alfalfa	5 - 8	4	7		28.6	43	223
Totals		8		93	29	43	219
Uniform Rate Calculation	Acres			N	P (uptake)	P (U of I)	K
Rotation 1	420.4			206	38	57	225
Rotation 2	180.1			93	29	43	219
Average Rate of Uptake	600.5			172	35	53	224

See Appendix D

The average annual rate of phosphorus uptake is 53 lbs. While uptakes of nitrogen and potassium are also calculated, it is assumed that **soil test values will be used to determine a recommendation for nitrogen and potassium based on the University of Idaho Fertilizer Guides.**

A soil test will be taken by October 31. Results of these tests are displayed below.

Table 4. Soil Test Data

Field	Date	Depth	N	P (ppm)	K	pH	% OM	CEC	Org	Salts
1	12/20/99	18- 24 "								
2	12/20/99	18- 24 "								
3	12/20/99	18- 24 "								
4	12/20/99	18- 24 "								
5	12/20/99	18- 24 "								
6	12/20/99	18- 24 "								
7	12/20/99	18- 24 "								
8	12/20/99	18- 24 "								

Table 5 illustrates the nutrients supplied by the liquids and solids when applied at either University of Idaho Guideline rates or Plant Uptake rates. It must be understood that the Guidelines make recommendations based on soil test, crop, and expected yield, so that these average rates of application are not appropriate for any particular field or crop. They are used to provide a crude indicator of the nutrient balance for this farm.

MICROFILM
JUL 3 2001

Table 5. Nutrient Applied to Cropland (using P rates)

Solids	cu.ft	N lb/acre	P lb/acre	K lb/acre
Crop Uptake	757	86	35	145
U of I Guidelines	1,135	129	53	218
Liquids	Cu.ft			
Crop Uptake	4,304	82	35	134
U of I Guidelines	6,456	124	53	201

As shown in Table 5, waste application to meet crop phosphorus demands will not supply enough nitrogen for this crop rotation. In general, where only manure is applied at phosphorus uptake levels, non-legume crops will need more nitrogen, and legume crops will need more potassium.

The application rates suggested in this model are useful as general guidelines, however, mineralization plays an important role in the availability of nitrogen and potassium. Mineralization is dependent upon temperature, precipitation, nutrient content of the manure, as well as other factors. Because these factors cannot be managed, mineralization can and will vary considerably from one year to the next. Therefore, due to the mobility and variability in the availability of nitrogen and potassium, **a spring soil test is imperative to determine the exact nutrient needs of the crop. This is especially true when using a nutrient budget approach to optimize nutrient applications.**

Table 6 shows the total acres that should be utilized to land apply the liquid and solid waste from **1362 AU's** onto the current cropland rotation:

Table 6. Acres Needed for Land Application

Crop Uptake	
Liquids	34
Solids	832
U of I Guidelines	
Liquids	22
Solids	555

The Grasslands LLC Dairy has 600.5 acres in cropland rotation, of which approximately 57 are currently available for disposal of liquid wastes. All of the liquid wastes will be spread on the east half of fields 4 and 5 every year, along with additional solid wastes, however, care must be taken to leave room in the 5 year budget for future liquid manure applications. While it is possible and acceptable to apply all the phosphorous required for 5 years in the first year, if that is done through the application of solid waste, there will be no place to go with liquid manure in the subsequent years.

It is assumed that all fields in grass are grazed and that 35% of the total nutrients produced are distributed evenly on these fields by the cattle while grazing. The remaining manure and liquid waste should be applied according to the following schedule:

Liquid Waste					
		% of			
Field No	Year	Lagoon			
4	annual	51%			
5	annual	49%			
Solid Waste Application					
	loads/ac				
Field No	2001	2002	2003	2004	2005
1	3.0	1.5			1.5
1A	1.5				
2			3.0	3.0	1.5
3			1.5	3.0	3.0
4	3.0	3.0			
5	3.0	3.0			
6			1.5		
7				1.5	1.5
8		3.0	3.0		

In spreading the lagoon water, care should be used to distribute the applications throughout the season. Applications of lagoon water should be alternated with irrigation water or mixed with irrigation water to avoid burning crops.

A list of recommended practices relating to nutrient management and spreading manure is as follows: (from "BEST MANAGEMENT PRACTICES for Nutrient Management in the State of Idaho")

WASTE APPLICATION

- Check with local city and county officials for applicable regulations on zoning, health, building codes, setback distances, etc.
- Calibrate the manure spreader and apply only as much manure as the nutrient requirements of the crop. Incorporate the manure as soon as possible after application, to prevent runoff and conserve nitrogen.
- Test the soil in each field for N, P, K, and other nutrient levels, pH, and cation exchange capacity. Follow a soil testing routine recommended by the Cooperative Extension Service or by a crop consultant or fertilizer dealer.
- On each field, keep a record of manure and chemical fertilizer applications, crop information, and soil and manure test results.
- Create buffer zones or filter strips around environmentally sensitive areas, such as rock outcroppings, surface waters, etc., to prevent surface water and groundwater contamination.
- To prevent excessive P and K buildup, rotate manure applications to other fields, or decrease applications to meet the most limiting nutrient requirement (generally P) and then supplement with commercial fertilizer.
- Be cautious applying waste to areas of high soil permeability with high leaching potential and areas of low soil permeability (>50% clay) since they do not provide sufficient infiltration.
- Refrain from manure application near residences, roadways, etc. to decrease risk of incidental contamination and odor problems.

- Apply liquid waste at a rate that is consistent with the infiltration rate and available water holding capacity of the soil. Avoid applying liquids at a rate that will bring the soil to its maximum available water holding capacity. This will prevent run-off and groundwater contamination.
- Manure application to frozen ground should be limited to fields with slopes less than 6%. These minimal slopes will be less likely to have a major run-off due to a storm event.
- If manure is applied in a 10-yr. floodplain area, it should be incorporated within 72 hrs of application.
- In the spring or fall, apply manure with the greatest N content; in the summer, apply that with the least N content.
- Haul the highest nutrient content manure to the farthest fields. Apply the lowest nutrient content manure to the closest fields. Irrigate with runoff water and lagoon water.
- Apply the highest nutrient manure to corn silage, vegetable root crops, or other crops with high nutrient demands.
- Apply the highest nutrient manure to legumes only if you have no better use for the N, for legumes can produce their own N if none is provided.
- To avoid N leaching to ground water, limit N applications on sandy soils, and avoid soils with high water tables.

NITROGEN MANAGEMENT

- When applying manure in the fall and winter, it is recommended that it not be applied when soil temperatures are greater than 50° F. At lower temperatures, the conversion of ammonium-N to nitrate-N is significantly reduced.
- Nitrification inhibitors in liquid-manure injection systems can decrease N losses in coarse-textured soils all year long, in all soils during fall and summer, and in fine or medium textured soils with high water-tables during winter and spring.
- Apply N so that it is available during peak plant demand.
- To minimize nitrate leaching, apply manure to sandy soil shortly before planting time, and apply small amounts N frequently instead of a large amount at one time. Do not fall-apply on sandy soil without first completing a hydraulic loading analysis.

PHOSPHORUS MANAGEMENT

- In areas of surface water or run-off concern, berm field boundaries to prevent phosphorus from leaving the field through erosion and run-off.
- Irrigate fields efficiently to meet crop needs and the available water holding capacity of the soil. This will prevent phosphorus run-off from occurring caused by over irrigation.
- Install and maintain properly designed buffer/filter strips to prevent phosphorus runoff and erosion.
- The use of PAM is a management practice to prevent sediment attached phosphorus runoff and erosion.

Crop Information

The following crop information was taken from the University of Idaho Crop Fertilization Guides. Some of the charts have been expanded to demonstrate quantities of manure which are required to replace chemical fertilizers.

MICROFILMED

SEP 07 2001

Corn Silage

**Table 7. Recommended fertilizer N rates (LB/acre) for field corn
Harvested for silage as affected by yield level and soil test N.**

Soil Test N (ppm)*	Silage yields (tons/acre)				
	20	25	30	35	40
	lb N/acre				
0	210	230	250	270	295
10	170	190	210	230	255
20	130	150	170	190	215
30	90	110	130	150	175
40	50	70	90	110	135
50	10	30	50	70	95
60	0	0	10	30	55
70	0	0	0	0	15

*Soil test N values summed for the 0 to 12 and 12 to 24 inch depths

The recommended fertilizer nitrogen rates do not account for nitrogen cycling as influenced by previous crops. Add 20 pounds nitrogen per acre for each ton of straw or stover plowed under to a maximum of 50 pounds per acre. Straw yields are normally 3 or 4 tons per acre and are not always related to grain yields. Winter wheat generally produces more straw than spring wheat or barley. Fertilizer nitrogen rates should be reduced 60 pounds per acre where corn follows alfalfa.

Coarse textured soils, including sandy loams, loamy soils and sands, may lose nitrogen from leaching. For these soils, sidedress a portion of the nitrogen at the time of the last cultivation.

High nitrogen rates (approaching 300 pounds per acre) broadcast and incorporated before planting may reduce early season corn growth.

**Table 8. Fertilizer P rates (lb/acre)
based on soil test P and lime content**

Soil Test P (ppm)*	Phosphate fertilizer			Elemental P (from manure)		
	Lime Content			Lime Content		
	5	10	15	5	10	15
	lb P ₂ O ₅ /acre			lb P/acre		
0	180	240	300	79	106	132
5	100	160	220	44	70	97
10	20	80	140	9	35	62
15	0	0	60	0	0	26
20	0	0	0	0	0	0

Other micronutrients have not been shown to limit corn production. "Shot gun" applications of micronutrient mixtures containing boron (B), copper(Cu), iron (Fe) and manganese (Mn) "for insurance" have not been shown to be economical and are not recommended.

MICROFILMED

SEP 07 2001

alfalfa

Soils containing 20 to 30 pounds (4 to 7.5 ppm) of nitrate-nitrogen in the top 12 inches have sufficient nitrogen to establish a stand of alfalfa seeded alone. Adding fertilizer nitrogen at establishment reduces nodule number and nodule activity.

Table 9. Fertilizer P rates based on a soil test

Soil Test P	Phosphate fertilizer	Elemental P (from manure)
(ppm)*	lb P₂O₅/acre	lbs P per acre
0	160	70
3	120	53
7	60	26
>10	0	0

Alfalfa has a high potassium (K) requirement.

Table 10. Fertilizer K rates based on a soil test

Soil Test P	Potassium fertilizer	Elemental K (from manure)
(ppm)*	lb K₂O/acre	lbs K per acre
0	240	199
56	160	133
112	80	66
150	0	0

Alfalfa and other legumes require more sulfur than grasses. Plant tissue testing is an excellent tool for detecting sulfur-deficient alfalfa. Samples should be analyzed for total nitrogen and total sulfur. These values are used to calculate the nitrogen/sulfur ratio, which should be less than 15.

Zinc (Zn) deficiencies on alfalfa have not been observed in Idaho.

Alfalfa quality is enhanced by cutting at the early bud stage and more frequently during the growing season. This practice will reduce stand life, however.

Irrigated Pastures, Southern Idaho

These guidelines are based on University of Idaho research results and relationships between soil test and yield responses. Lack of adequate fertilizer, improper irrigation management, poor stands, non-adapted plant species and poor grazing management are the major causes of low forage production in irrigated pastures. When properly managed, pastures will respond to fertilization and produce large quantities of high-quality forage and livestock products.

MICROFILMED

SEP 07 2001

Irrigated pastures are typically composed either of grass-legume mixtures or grasses alone. The composition of the pasture can be changed by fertilizer management and grazing method.

Adapted and high-quality grasses for irrigated pastures include brome grass and orchardgrass for well drained soil, fescue and wheatgrass for saline soils and creeping meadow foxtail and reed canarygrass for wet soil. These grasses make excellent summer regrowth. Highest producing grass-legume mixtures usually include one or more of the above grasses with a well-adapted legume variety. An adapted legume variety should have good winter hardiness and resistance to insects and diseases.

Nitrogen

Grass pastures have responded well to nitrogen (N) fertilizer applications up to 150 pounds N per acre. The N rate depends upon the length of frost-free growing season and the number of cuttings or grazing periods. Production potential increases as the frost-free growing period is extended.

Split applications of N fertilizer maintain a more uniform level of forage production through summer and fall. Broadcast 30 to 50 pounds N per acre per application after each cutting or grazing cycle, and irrigate to move N into the plant root zone.

As the amount of legume increases in a grass-legume mixture, the need for N fertilizer decreases. When the legume composes even 60 percent of the mixture, responses from N are limited.

Nitrogen applications will reduce the quantity of legume in a mixed species stand. Inoculation of legumes when the stand is established will reduce the need for N fertilization when legumes dominate the stand composition.

Phosphorus

Intensively managed, high-producing pasture may respond to phosphorus (P) fertilization. Grasses generally have a low P requirement, and legumes generally have a high P requirement. Thus, P fertilizer applications tend to encourage legumes.

Phosphorus movement in soils is limited, so P fertilizer needs to be placed in the rooting zone. Apply phosphorus during seedbed preparation whenever possible. Top dress established pastures with P fertilizer, preferably in the fall.

Rates of P needed for optimum forage production as determined by soil test are shown in Table 1.

Table 1. Phosphorus based on soil test.

Soil test level (0 - 12 inches)	Apply (pounds per acre)	
	(P2O5)	(P)
(ppm)		
0 - 3	160	70
3 - 7	120	53
7 - 10	60	26
10 and above	0	0

Phosphorus test (P) is by NaHCO₃ extraction.

MICROFILMED

SEP 07 2001

"Phosphorus is expressed as both the oxide and elemental forms:
 $P_2O_5 \times 0.44 = P$ or $P \times 2.29 = P_2O_5$

Potassium

Grasses have moderate potassium (K) requirements, and legumes have high K requirements. Idaho soils are usually high in natural K. Irrigation water contains K except in mountain streams.

Potassium movement in soils is limited, though not to the same extent as that of phosphorus. Incorporate K during seedbed preparation or broadcast in the fall on established stands.

Rates of K needed for optimum forage production as determined by soil test are shown in Table 2.

Table 2. Potassium fertilizer rates based on soil test.

Soil test level* (0-12 inches) (ppm K)	Apply (pounds per acre)	
	(K ₂ O)	(K)
0 – 40	200	166
40 – 75	140	116
75 – 110	80	66
Over 110	0	0

*potassium test (K) is by NaHCO₃ extraction.

**Potassium is expressed as both the oxide and elemental forms:
 $K_2O \times 0.83 = K$ or $K \times 1.20 = K_2O$.

Sulfur

Sulfur (S) demand is greater for legumes than grasses. Sulfur requirements for grass and legumes will vary with soil texture, leaching losses, S soil test and S content of irrigation water. Apply 30 pounds of S to soil testing less than 10 ppm sulfate-sulfur (SO₄-S) in the plow layer.

Areas irrigated with water from the Snake River and other streams fed by return flow should have adequate S. High rainfall areas, mountain valleys and foothill areas are likely areas for S deficiencies.

Sulfur sources should be carefully selected due to variation in its availability to plants. Elemental sulfur must be converted to sulfate (SO₄) form by soil micro-organisms before it can be taken up by plants. Conversion of elemental S to SO₄ may take several months in warm moist soils. Elemental S fertilizers cannot supply adequate levels of S the year of application. However, these elemental S sources can supply considerable S the year after the initial application. Sulfate-sulfur sources are recommended to alleviate deficiencies the year of application.

Micronutrients

Deficiencies of micronutrients such as zinc (Zn), Copper (Cu), manganese (Mn) and iron (Fe) have not been observed on irrigated pastures in southern Idaho. Grasses and

legumes are not sensitive to low levels of micronutrients as are row crops such as beans and corn.

Boron (B) deficiencies may be observed on legumes in gravelly textured soils. If the soil tests less than 0.25 ppm B, apply 1 to 3 pounds of B per acre. Do not use 'higher rates because B is toxic to plants in excessive amounts.

General Comments

1. Nitrogen and phosphorus are the elements needed most on Idaho irrigated pastures. Potassium, sulfur, zinc and boron may be needed. Their need is best determined by soil and plant tissue tests.
2. Legume population in a grass-legume mixture is reduced by nitrogen fertilization and increased by phosphorus and potassium addition when these nutrients are low in the soil.
3. Forage from properly fertilized grass or mixed grass- legume pastures has higher protein, providing higher quality livestock feed than unfertilized pastures.
4. Irrigated pastures make good use of sloping land, stony soils and, shallow soils which are less desirable for row crops. Pastures reduce soil erosion during irrigation on sloping land.
5. Fertilizers are only one part of pasture management. Pastures are most profitable when plant selection, irrigation and harvest techniques are not limiting production.
6. Rotational grazing will provide more forage and greater returns than continuous.

Contact your County Extension Agent if you have any questions regarding the interpretation of this information or for further information on your local needs.

Nutrient Budgeting

The following section will be utilized in conjunction with the Nutrient Budget worksheets, which are available in Appendix E to help determine fertilization rates.

The top half of the sheet is used to determine crop requirements for N, P, and K. Because this plan is based on crop uptake rates of phosphorus, phosphorus recommendations from the University of Idaho fertilizer guides should not be used. Use either standard tables (used in Appendix D) or actual tests of phosphorus composition of the specific crop grown on this farm.

Line 1- Crop nutrient (N and K) requirements can be determined from spring soil testing and the University of Idaho Crop Fertilization Guides. Use the back side of the sheet to calculate these. For additional information on how to soil test, see University of Idaho Bulletin 704 - Soil Sampling. (Appendix H)

Line 2- Credit N and K from irrigation water if either exceeds 5 ppm

Line 3 - Using the U of I Fertilizer Guide, credit nitrogen from previous legume crop.

Line 4 - Total each column to arrive at nutrients required by the crop..

Line 5 - Nutrients provided by solid waste. Use appendix D for the specific field and crop.

Line 6- Nutrients provided by liquid waste. Use appendix D for the specific field and crop.

Line 7 - Subtotal the nutrients provided by animal waste (line 5 + line 6)

Line 8 - Units of each nutrient in excess or deficit. Excess phosphorus is expected in the first 4 years of the rotation.

Line 9 - Nutrients to be provided by chemical fertilizer.

This budgeting approach will help the producer to determine the amount of commercial fertilizer that should be applied to the cropland.

A list of recommended practices relating to Nutrient Budgeting is as follows: (from "BEST MANAGEMENT PRACTICES for Nutrient Management in the State of Idaho")

NITROGEN MANAGEMENT

- Set realistic crop yield goals in order to provide an accurate account of the plant nitrogen needs.
- Soil Sampling - Take representative samples of the field 34 weeks before planting. When taken at the rooting depth of the crop, these samples provide an accurate account of the plant available nitrogen already existing in the soil profile.
- Nitrogen Credits for Legumes and Manure - Crediting nitrogen supplied by legumes and manure can substantially reduce over application of nitrogen and reduce fertilizer application rates.

PHOSPHORUS MANAGEMENT

- Set realistic crop yield goals in order to provide an accurate account of plant phosphorus needs.
- Soil Sampling - Take representative samples of the field 34 weeks before planting. When taken at the rooting depth of the crop, these samples provide an accurate account of the plant available phosphorus already existing in the soil profile.

Irrigation System

A summary of the soil types and textures found on the farm, and the water holding capacity of these soils is summarized in Table 7:

Table 7. Field Irrigation Information							
Field	texture	AWHC in./in.	Soil Depth (ft)	Irrig. System	Runoff?	Drained?	WT?
1	Scism silt loam	0.20	2.7	Pivot	N	N	N
1A	Scism silt loam	0.20	2.7	Handline	N	N	N
2	Potratz- Power Silt loam	0.19	3.3	Pivot	N	N	N
3	Potratz- Power Silt loam	0.19	3.3	Pivot	N	N	N
4	Potratz- Power Silt loam	0.19	3.3	Pivot	N	N	N
5	Potratz- Power Silt loam	0.19	3.3	Pivot	N	N	N
6	Potratz- Power Silt loam	0.19	3.3	Handline	N	N	N
7	Scism silt loam	0.20	2.7	Pivot	N	N	N
8	Scism silt loam	0.20	2.7	Pivot	N	N	N

*AWHC = Average water holding capacity in inches of water per inch of soil

** Water Table

source : Soil survey of Ada County Area

MICROFILMED

The crops grown on these fields use water at the following rates:

Table 8. Crop Irrigation Information					
Crop	Table ET* mm/day	Yield Adj. %	Peak ET* in/day	Root Depth Ft	M.A.D**
Corn Silage	7.88	100%	0.31	3	50%
Grass	6.52	100%	0.26	2.5	50%
Alfalfa Hay	6.88	100%	0.27	4	55%

* Evapotranspiration rate (Allen & Brockway, Kuna data)

** Management Allowable Depletion (% of available soil water which may be depleted without yield or quality losses. (Introduction to Irrigation System Planning and Management, table 2.3))

Appendix F suggests times and application rates for irrigation of each field. The flows and times listed for each field are based on estimates of pump capacity. The following chart summarizes the set times and application rates:

Field	Days between Irrigations	No. hours/ rotation or set	in . water
1	1	24	0.4
1A	7	11	2.6
2, 3	1	24	0.4
4, 5	1	24	0.4
6	1	11	2.5
7, 8	7	24	0.4

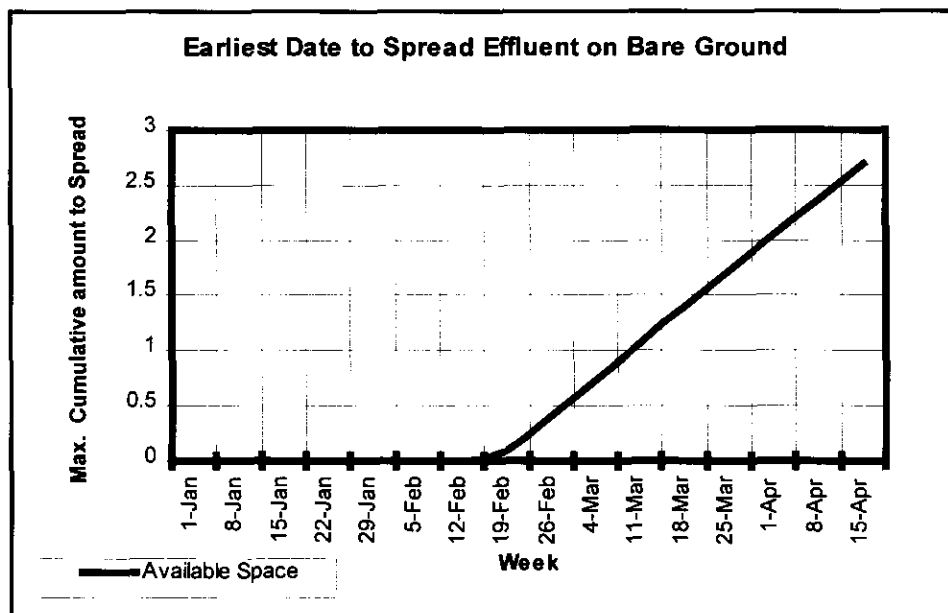
The frequencies and set times in the chart are for periods of maximum evapotranspiration (i. e. oats in June or corn in July.) Frequencies may be reduced during cooler periods or when crop is immature. Efforts should be made to keep water in the root zone of growing crops. Too frequent irrigation will result in loss of water below the root zone, and flushing of nitrates and salts into the groundwater aquifer. If the irrigation rate exceeds the permeability of the soil, there will be runoff.

Particular care must be exercised when spreading lagoon effluent by means of surface (gravity) irrigation. Applications of effluent above 2" per irrigation are not recommended because lagoon effluent reduces the intake rate in the soil in proportion to the no. of inches spread. The 57 acre parcel only needs .7 inches of effluent to use up everything produced. The handline system can deliver .7" of effluent to one set in only 2 ½ hours so it is recommended that effluent be applied during daylight hours when infiltration can be monitored. Appendix F has a sheet which describes the recommended effluent application set up.

Hydraulic Balance

Liquid waste may be applied to a growing crop through the irrigation system at any time of the year, **provided there is no run-off**. When applying liquid wastes to bare ground, there is an additional concern that nutrients will be leached into the ground water. Consequently, it is important to determine the date before which application to bare ground poses an unacceptable risk of groundwater contamination. The calculations which develop this date are found in Appendix F. The calculations are summarized in a chart which follows. Notice that the line indicates **Maximum Cumulative Amounts**. This means that a **total** of 2.7" of effluent could conceivably be applied to bare ground before April 15, provided that other aspects of the plan are respected (i.e. the phosphorous budget). Assuming that

applications will be made in increments of .5 inches, the first week in March is the earliest date applications may be made.



A list of recommended practices relating to irrigation is as follows: (from "*BEST MANAGEMENT PRACTICES for Nutrient Management in the State of Idaho*");

IRRIGATION SYSTEM MANAGEMENT

- Evaluate the irrigation system based on the available water holding capacity of the soil, crop growth stage, evapotranspiration, rainfall, and previous irrigation in order to determine the timing and amount of irrigation water to be applied.
- Irrigation systems should be operated so that they meet the crop needs, but apply less than the amount needed to saturate the soil profile.
- Irrigate fields efficiently to meet crop needs and the available water holding capacity of the soil. This will prevent the movement of nitrogen through the soil profile to groundwater caused by over irrigation.
- Utilize a soil moisture monitoring device to help determine irrigation scheduling to meet crop demands.

Appendixes

Appendix A - Nutrients Produced

MICROFILMED
23 JUL 2001

Herd Profile

1	Total Cows	900
	Milking Cows	750
	Average weight /cow	1200
	Number of 1000 lb animal units	900
	Daily manure weight/1000lb animal (NRCS Handbook, Table 4-5) (Lb.)	80
	Daily manure volume/1000 lbs (cu.ft./day) (Table 4-5) (cu.ft./day)	1.30
2	Total Milk Cow Manure volume (cu.ft./day)	1170
	Total Milk Cow Manure weight (Lbs./day)	72,000

	% Dry cows	17%
	Number of Dry Cows	150
	Number of 1000 lb animal units	180
	Daily manure weight/1000lb animal (NRCS Handbook, Table 4-5) (Lb.)	82
	Daily manure volume/1000 lbs (cu.ft./day) (Table 4-5) (cu.ft./day)	1.3
3	Total Dry Cow Manure volume (cu.ft./day)	234
	Total Dry Cow Manure weight (Lbs./day)	14,778

Heifers:

Expected and actual numbers:

Expected and actual numbers:			Expected	Actual	Actual Avg.	Calculated
	Age % of Herd		Number	Number	Weight	Mass (lbs)
	16-24 mo.	0.38	342	185	850	157250
	13-15 mo.	0.12	108	60	700	42000
	9-12 mo.	0.17	153	85	550	46750
	5-8 mo	0.17	153	85	300	25500
	3-4 mo	0.08	72	45	150	6750
	0-2 mo	0.08	72	40	100	4000
	Total heifers		900	500	Total Mass	282250

Total no. of 1000 lb animal units	282
Daily manure weight/1000lb animal (NRCS Handbook, Table 4-5) (Lb.)	85
Daily manure volume/1000 lbs (cu.ft./day) (Table 4-5) (cu.ft./day)	1.30
Total Heifer Manure volume (cu.ft./day)	367
Total Heifer Manure weight (Lbs./day)	23,991

Total volume in cu.ft./day from all animals in herd	1771
Total weight in Lb./day from all animals in herd	110,769

MICROFILMED

Prepared by:

Darwin Vander Stelt 10/12/00

2001

Appendix A Animal Nutrients

Total Nutrients Excreted:

Source: NRCS Agricultural Waste Handbook, Table 4-5

Animals		1000# AU	Lbs. per day			Lbs. per year		
			N	P	K	N	P	K
Milk Cow	750	900	0.45	0.07	0.26	147,825	22,995	85,410
Dry cows	150	180	0.36	0.05	0.23	23,681	3,289	15,129
Heifers	500	282	0.31	0.04	0.24	31,937	4,121	24,725
Total Lbs. nutrients excreted annually						203,442	30,405	125,264

Manure nutrients are handled as either solid waste or liquid waste.

		Lbs. Per Yr			Cubic ft Solids/yr	Authority
		N	P	K		
% of Milk cows handled as liquid (lagoon)	15%	22,174	3,449	12,812	64,058	(NRCS 11-5) (NRCS 11-6) (NRCS 11-8)
less separator solids	70%	(15,522)	(2,414)	(8,968)	(44,840)	
% Dry Cows handled as liquid	15%	3,552	493	2,269	12,827	
less separator solids	70%	(2,486)	(345)	(1,589)	(8,979)	
% Heifers handled as liquid	0%	-	-	-	-	
less separator solids	70%	-	-	-	-	
Total nutrients into lagoon		7,718	1,183	4,524	23,065	
N retained in storage	50%					
N retained after application	75%					
N retained after denitrification	96%					
Total N, P, K in Lagoon water		2,778	1,183	4,524		

		Lbs. Per Yr			Cubic ft Solids/yr	Authority
		N	P	K		
% Milk Cows handled as Solid waste	85%	125,651	19,546	72,599	362,993	(NRCS 11-5) (NRCS 11-6) (NRCS 11-8)
Add Separator solids		15,522	2,414	8,968	44,840	
% Dry Cows handled as solid Waste	85%	20,128	2,796	12,860	72,686	
add Seperator Solids		2,486	345	1,589	8,979	
% Heifers Handled as Solid waste	100%	31,937	4,121	24,725	133,928	
add Separator Solids		-	-	-	-	
Total nutrients in Solids		195,724	29,222	120,740	623,425	
N retained in storage	65%					
N retained after application	60%					
N retained after denitrification	96%					
Tons of straw used	100					
deduct: 15 Lb N/ton		-1500				
Total N, P, K in Solid Waste		71,779	29,222	120,740	623,425	

Total N, P, K for land application

74,558	30,405	125,264
--------	--------	---------

Concentration of nutrients in Solid waste and Lagoon Water:

Solid waste volume:

Total 1000 Lb. Animal Units

1,362

Cu. Ft. Waste /day/AU

1.3

NRCS Table 4-5

Daily cu.ft.

1,771

Annual Cu.ft

646,491

4%

deduct solids into lagoon (appendix c)

23,065

MICROFILMED

Prepared by:

Darwin Vander Stelt

Appendix A - 1

Annual Cu.ft

623,425

Add Straw (compacted to 64 cu.ft./ton)

6,400

Total Solid Waste Volume 629,825

Liquid Waste Volume (from Appendix C) 144,975

Type	Total Volume (Cu. Ft.)	Lbs. Nutrients/cu.ft.		
		N	P	K
Solid Waste	629,825	0.11	0.05	0.19
Lagoon Water	144,975	0.0192	0.0082	0.0312

Solid Waste Volume Deposited directly in fields
tons

220,439
275549

35%

MICROFILMED

Prepared by:

Darwin Vander Stelt

SEP 7 2001

Appendix A - 2

Appendix B - Third Party Waste Agreements

Name	Address	Phone	Acres Farmed or other use	Apprx. tons
-------------	----------------	--------------	----------------------------------	--------------------

MICROFILMED
SEP 07 2001

Appendix C - Sizing Output for 180 Liquid Storage

MICROFILMED
JUL 27 2001

APPENDIX C LAGOON STORAGE VOLUME WORKSHEET

Manure into lagoon: %
 Milk Cows 15% Parlor and holding pen
 Dry Cows 15% Runoff from corrals
 0%

Separator efficiency 70%

6 Manure into lagoon in cu.ft./day 63

Wash Pen: NA

7 Number of sprinklers in holding pen 0

8 Sprinkler output in gallons per minute (gpm) 4.04

(@50 psi 9/64 = 4.04; 5/32 = 4.98;
 11/64 = 6.01; 3/16 = 7.18)

9 Minutes per day sprinklers are used: 120

No. of Strings 12

Minutes/String 5

Number of milkings per day 2

10 Days run per year 270

11 Total wash pen water in Gals/day (Lines 7 X 8 X 9 X (line10/365) -

Milkhouse and parlor:

	gals/optn.	x's/day	Gals/day
Bulk Tank	50	1	50
Pipeline	40	2	80
Backflush	0.5	0	0
Cleanup	1000	2	2000
Cow Prep	0.25	2	375
Plate Cooler (ignore if recycled)			

12 Total Milkhouse and parlor in Gals/day : 2505

13 Total Milking Center Water in Gals/day 2,505 914,325

14 Total Milking Center water in cu.ft./day 334

Days storage required 180

15 Total storage required for Manure and barnwater (Cu.ft) 71,495

Total volume of liquid waste produced per year 144,975

Runoff Calculations :

Area1 length in ft	1200
Area1 width in ft	600
Area 2 length in ft	400
Area 2 width in ft	300
Runoff area in Sq. ft. and acres	840,000 19.28

Precipitation in 25 yr 24hr storm from map (inches) 2

Runoff /1000 sq.ft. from Table 6 (Cu.ft) 96.92

16 Cu. ft. of storage required by 25 yr/24hr. storm 81,413

Precipitation from 1 in 5 yr winter from Table 7 (in) 5.4

Runoff /1000 sq.ft. from Table 7 (Cu.ft) 75

17 Cu. ft. of storage required by 1 in 5 yr winter precipitation 63,000

18 Total Storage required (cu. ft.) 215,907

Main Lagoon

All water in lagoon (process and runoff):

No. of Cells	1
Slope	2 :1
Depth (ft) (add 2' freeboard)	10
Width of lagoon at top (ft)	130
Width of lagoon at bottom(ft)	120
Avg Width	125
Length at top	390
Length at bottom	380
Avg. Length	385
Actual Capacity in Cu. Ft.	481,250

Triangular Lagoon

MICROFILMED

Prepared by:
 Darwin Vander Stelt

Appendix C-1

All water in lagoon (process and runoff):

No. of Cells	1	
Slope	2	:1
Depth (ft) (add 2' freeboard)	8	
Width of lagoon at top (ft)	90	1/2 base x's height
Width of lagoon at bottom(ft)	80	
Avg Width		85
Length at top	180	
Length at bottom	170	
Avg. Length		175
Actual Capacity in Cu. Ft.	119,000	

Total for both lagoons 600,250
Reserve 384,343 Cu. Ft

MICROFILMED

SEP 3 7 2001

Appendix D - Crop Rotation Balance

MICROFILMED

26 MAR 27 2001

Crop Rotation and Manure to spread Calculations

Rotation 1 Fields 1 - 5, 7	Years of Rotation	Years in Rotation	Yield (tons/acre)	N lbs/acre	P (uptake) lbs/acre	P (U of I) lbs/acre	K lbs/acre
Corn Silage	1-2	2	32	246	56	84	244
Grass	3-6	4	6	186	29	43	216
Totals		6		206	38	57	225

Wastes to apply (per field):								
Field	1	2	3	4	5	8	Total	
Yr in rotation (2000)	1	4	3	1	6	5	Acres	
Acres in field	80	81.7	81.3	63.1	51.1	63.2	420.4	% of
Gals of Liquid or tons of solid (color highlight) to apply / 1:							Gallons	lagoon
year: 2001				549,134	533,644		1,082,778	100%
2002	1,420			549,134	533,644		1,084,198	100%
2003			1,443	549,134	533,644		1,084,221	100%
2004				549,134	533,644		1,082,778	100%
2005	1,420	1,450		549,134	533,644		1,085,648	100%
Total	2,840	1,450	1,443	2,745,671	2,668,218	-	1,087,314.99	
Phos./acre/ yr	16	8	8	9	11	-		
% of lagoon		0%	0%	51%	49%			% total
Tons of Manure to apply:							Tons	Solids
year: 2001	2,840	1,000	995	2,240	1,814	774	9,664	77%
2002	940	960	955	2,240	1,814	2,244	10,574	84%
2003	862	2,901	876			2,244	8,325	66%
2004	979	2,901	2,886	772	626	774	8,938	71%
2005	979		2,886	772	626	774	8,878	70%
Tot. Tns. of Manure	6,601	7,761	8,599	6,025	4,879	6,809	46,379	
Phos. /acre/ yr	38	44	49	44	44	50	Average	74%
Total P Applied/Yr	55	52	57	54	56	50		

Notes:

- The solid amounts budgeted in the yellow squares are spread on land going into corn. The green squares are solid manure spread at a lower rate and may be either corn or grass. The remaining solid amounts are deposited by cows and heifers on pasture. The quantity of manure deposited on pasture are estimated to be 35% of the total. Amounts per acre vary depending on how many acres are pastured in a given year.
- Liquid should be applied to a growing crop, at appropriate times during the season. Liquid manure applications should be divided into 3 to 4 separate applications, spaced one or more irrigations apart. Too much liquid in one application will burn crops. Liquid is spread on the east half of fields 4 and 5, consequently solids budgeted in 2001 and 2002 should be spread on west half.
- Use spring soil tests to determine appropriate N and K fertilization requirements. See conversion chart on last page of Appendix D.
- See mineralization table last page of Appendix D.
- Assumes 12 ton spreader loads. Weigh sample loads and adjust load numbers accordingly.

Summary/ 5			Lds per
Field No	Liquid*	Solid	Acre
1		01**, 02*, 05*	1.5 or 3
2		03*, 04**, 05**	1.5 or 3
3		03*, 04**, 05**	1.5 or 3
4	Annual	01**, 02**	1.5 or 3
5	Annual	01**, 02**	1.5 or 3
8		02**, 03**	1.5 or 3
deposited by cows on pasture (10-13 tons/acre)			
*1.5 loads (18 ton / acre) (corn or grass)			
**3 loads (36 ton / ac)(corn)			

MICROFILM

1975 - 1980

Crop Rotation and Manure to spread Calculations

Rotation 2 Fields 1A, 6, 7	Years of Rotation	Years in Rotation	Yield (tons/acre)	N lbs/acre	P (uptake) lbs/acre	P (U of I) lbs/acre	K lbs/acre
Grass	1-4	4	6	186	29	43	216
Alfalfa	5 - 8	4	7		29	43	223
Totals		8		93	29	43	219

Wastes to apply (per field):							
Field	1A	6	7	0	0	0	Total
Yr in rotation (2000	1	1	3	#N/A	#N/A	#N/A	Acres
Acres in field	37.6	59.4	83.1	#N/A	#N/A	#N/A	180.1
Tons of Manure to spread:							0
year: 2001	655	-	-				655
2002							0
2003		1,035					1035
2004			1,449				1449
2005	-		1,449				1449
Total tons to spread	655	1,035	2,897	-	-	-	4,588
Phos./acre/ yr	8	8	16	#N/A	#N/A	#N/A	25
Tons of Manure to apply:							Tons
year: 2001	349	551	771				2,325
2002	335	529	740	#N/A	#N/A		1,603
2003	310	489	684	#N/A	#N/A		3,554
2004		551	771				2,770
2005		551	771				2,770
Tot. Tns. of Manure	993	2,670	3,735	#N/A	#N/A	-	13,022
Phos. /acre/ yr	12	21	21	#N/A	#N/A	-	
Total P Applied/Yr	20	29	37	#N/A	#N/A	#N/A	

Notes.

1. Use spring soil tests to determine appropriate N and K fertilization requirements. See conversion chart on last page of Appendix D
2. See mineralization table last page of Appendix D
3. Assumes 12 ton spreader loads. Weigh sample loads and adjust load numbers accordingly

Summary/ 3			loads/ac
Field No	Liquid	Solid	(Solid)
1A	NA	01	1.5
6	NA	03	1.5
7	NA	04, 05	1.5
*1.5 loads (18 ton / acre) (corn or grass)			

7/20/2011

Table 2. General mineralization rates for nitrogen, phosphorus, and potassium for the PNW

Nutrient and location			Percent mineralized (years after application)		
			1st Year	2nd Year	3rd Year
Nitrogen					
West of Cascades			60%	20%	15%
East of Cascades, irrigated			60%	25%	10%
East of Cascades, dryland			45%	20%	15%
Phosphorus					
West of Cascades			76%	10%	6%
East of Cascades			80%	8%	5%
Potassium					
West of Cascades			80%	8%	5%
East of Cascades			85%	8%	5%

Source: How to Calculate Manure Application Rates in the Pacific Northwest, PNW0239, University of Idaho, Oregon State University, or Washington State University

Fertilizer Value Conversion Chart

1 lb. P₂O₅ = 0.44 lb. P

1 lb. K₂O = 0.83 lb. K

To convert to elemental form:

Multiply P₂O₅, by 0.44 = elemental P

Multiply K₂O by 0.83 = elemental K

To convert to fertilizer form:

Multiply P by 2.29 = P₂O₅

Multiply K by 1.21 = K₂O

References for Further Reading

- x Calculating the Fertilizer Value of Manure from Livestock Operations, EC1094, Oregon State University
- x Dairy Manure as a Fertilizer Source, EM8586 Oregon State University
- x How to Calculate Manure Application Rates in the Pacific Northwest, PNW0239, University of Idaho, Oregon State University, or Washington State University
- x Manure Application Rates for Forage Production, EM8585, Oregon State University

MICROFILMED
SEP 07 2001

Appendix E - Nutrient Budget Worksheets

MICROFILMED

SEP 07 2001

Appendix F - Irrigation Calculations

MICROFILMED
SEP 07 2001

Appendix F

Field No: 1
 No. Acres 80.0
 Soil Type & code nos: Scism silt loam
 Crop: Corn
 Rooting Depth(in): 32

Max. ET for crop (Allen and Brockway, Kuna):
 mm/day 7.75 in/day 0.31

Management Allowable Depletion (MAD): 50%
 Irrigation Method center pivot
 Irrigation efficiency 70%

Theoretical frequency to irrigate:
 available water (in) 3.20
 days until depleted 10.5
 Days between irrigation 1

Water to apply each irrigation (in): 0.44

Application Rate in inches /hr 0.02

Flow calculations

System flow (Gal/Min) 660.0
 Pivot length (ft) 1050
 Portion of Circle 100%
 Gal water applied to field 943,582

Set time (hrs)/ rotation 23.8

Available water capacity (AWC):

depth	inches	AWC (in/in)	in/in
0-4	4	0.2	0.025
04-32	28	0.2	0.175
			0.000
			0.000
Total	32	AWC	0.20

Source: Soil Survey, Ada County Area, Table 14

Maximum stream size (gpm):	10
Erodability (S.A.E)	S
Slope%	1.5
coeff.	15

Hydrologic Soil Group (see last page App. F) C

Permeability			time to fill
depth	inches	Perm* (in/hr)	layer
0-4	4	1.3	0.6
04-32	28	1.3	4.3
0	0	0	
0	0	0	
Total	32		

Source: Soil Survey, Ada County Area, Table 14

*Average permeability for layer (Table 5)

Permeability Class **Moderately slow**

Recommendations:

(Hottest week in summer, field corn)
 Rotation Time: 24 hrs (run continuously)

Flow Rate (gpm): 660 gpm

Permeability of this field is moderately slow, and hazard of runoff is moderate. Use of a dammer-diker in corn can help to avoid runoff

Appendix F

Field No: 1A

No. Acres 37.6

Soil Type & code nos: Scism silt loam

Crop: Grass

Rooting Depth(in): 32

Max. ET for crop (Allen and Brockway, Kuna):

mm/day 6.52 in/day 0.26

Management Allowable Depletion (MAD):

Irrigation Method Handline

Irrigation efficiency

Theoretical frequency to irrigate:

available water (in) 3.20

days until depleted 12.5

Days between irrigation 7

Water to apply each irrigation (in): 2.57

Application Rate in inches /hr 0.23

Flow calculations

System flow (Gal/Min) 385.0

Row length (ft) 1320

Distance between sets (ft) 60

Gal water to apply(field) 2,627,663

Flow rate per sprinkler 5.83

Set time (hrs) 11

No. sprinkler heads/line 33

No. sets/line 10

No. laterals this field 2

Available water capacity (AWC):

depth	inches	AWC (in/in)	in/in
0-4	4	0.2	0.025
04-32	28	0.2	0.175
Total	32	AWC	0.20

Source: Soil Survey, Ada County Area, Table 14

50%

Maximum stream size (gpm): 24

Erodability (S,A,E) A

Slope% 0.5 coeff. 12

70%

Hydrologic Soil Group (see last page App. F) C & D

Permeability			time to fill
depth	inches	Perm* (in/hr)	layer
0-4	4	1.3	0.6
04-32	28	1.3	4.3
Total	32		5

Source: Soil Survey, Ada County Area, Table 14

*Average permeability for layer (Table 5)

Miner's
inches
43

Permeability Class

Moderately slow

Recommendations:

Set Time: 11 hrs

Flow Rate (gpm): 385 GPM

Flow at each Nozzle: 5.8 gpm

No. lines: 2

100251M

1002

Appendix F

Field No: 2,3

No. Acres **163.0**

Soil Type & code nos: Potratz- Power Silt loam

Crop: Corn

Rooting Depth(in): 36

Max. ET for crop (Allen and Brockway, Kuna):

mm/day 7.75 in/day 0.31

Management Allowable Depletion (MAD):

Irrigation Method	Pivot
-------------------	-------

Irrigation efficiency

Theoretical frequency to irrigate:

available water (in)	3.40
----------------------	------

days until depleted	11.1
---------------------	------

Days between irrigation	1
-------------------------	---

Water to apply each irrigation (in): **0.44**

Application Rate in inches /hr 0.02

Flow calculations

System flow (Gal/Min)	1050.0
-----------------------	--------

Pivot length (ft)	1320
-------------------	------

Portion of Circle	100%
-------------------	------

Gal water applied to field	1,491,244
----------------------------	------------------

Set time (hrs)/ rotation **23.7**

Available water capacity (AWC):

depth	inches	AWC (in/in)	in/in
0-10	10	0.2	0.053
11 - 38	28	0.185	0.136
Total	38	AWC	0.19

Source: Soil Survey, Ada County Area, Table 14

Maximum stream size (gpm):	7.5
----------------------------	-----

Erodability (S.A.E)

Slope%	2.0	coeff. 15
--------	-----	-----------

Hydrologic Soil Group (see last page App. F) C

Permeability			time to fill layer
depth	inches	Perm* (in/hr)	
0-10	10	1.3	1.5
11 - 38	28	1.3	4.0
Total	38		6

Source: Soil Survey, Ada County Area, Table 14

*Average permeability for layer (Table 5)

Permeability Class Moderately slow

Recommendations:

Set Time: 12 hrs

Flow Rate (gpm): 191

Flow at each gate: 8 gpm

No. gates to open: 24

Note: Slopes average 2% , and permeability is moderately slow. Use of a dammer- diker can help control run off.

Appendix F

Field No: 4, 5
 No. Acres 114.2
 Soil Type & code nos: Power-Potratz silt loam
 Crop: Grass
 Rooting Depth(in): 30

Max. ET for crop (Allen and Brockway, Kuna):
 mm/day 6.52 in/day 0.26

Management Allowable Depletion (MAD): 50%
 Irrigation Method Pivot
 Irrigation efficiency 70%
 Theoretical frequency to irrigate:

available water (in) 2.83
 days until depleted 11.0
 Days between irrigation 1

Water to apply each irrigation (in): 0.37

Application Rate in inches /hr 0.02

Flow calculations

System flow (Gal/Min) 670.0
 Pivot length (ft) 1150
 Portion of Circle 100%
 Gal water applied to field 952,231

Set time (hrs)/ rotation 23.7

Available water capacity (AWC):

depth	inches	AWC (in/in)	in/in
0-10	10	0.2	0.053
11 - 38	28	0.185	0.136
Total	38	AWC	0.19

Source: Soil Survey, Ada County Area, Table 14

Maximum stream size (gpm):	10
Erodability (S,A,E)	S
Slope%	1.5
coeff.	15

Hydrologic Soil Group (see last page App. F) C

Permeability			time to fill
depth	inches	Perm* (in/hr)	layer
0-10	10	1.3	1.5
11 - 38	28	1.3	4.0
0	0	0	
0	0	0	
Total	38		6

Source: Soil Survey, Ada County Area, Table 14

*Average permeability for layer (Table 5)

Permeability Class **Moderately slow**

Recommendations:

Slightly smaller nozzles and flow rate can be used on grass then on corn, or system can be run less frequently. These parameters are for hottest week of summer, continuous run.

Set Time: 24 hrs

Flow Rate (gpm): 670

MICRON

Appendix F

Field No: 6
 No. Acres 59.4
 Soil Type & code nos: Potratz- Power Silt loam
 Crop: Grass
 Rooting Depth(in): 32

Max. ET for crop (Allen and Brockway, Kuna):
 mm/day 6.39 in/day 0.25

Management Allowable Depletion (MAD): 55%
 Irrigation Method Handline
 Irrigation efficiency 70%

Theoretical frequency to irrigate:
 available water (in) 3.33
 days until depleted 13.2
 Days between irrigation 7

Water to apply each irrigation (in): 2.52
 Application Rate in inches /hr 0.23

Flow calculations
 System flow (Gal/Min) 566.0
 Row length (ft) 1320
 Distance between sets (ft) 60
 Gal water to apply(field) 4,068,380
 Flow rate per sprinkler 5.72
 Set time (hrs) 11
 No. sprinkler heads/line 33
 No. sets/line 11
 No. laterals this field 3

Available water capacity (AWC):

depth	inches	AWC (in/in)	in/in
0-10	10	0.2	0.053
11 - 38	28	0.185	0.136
Total	38	AWC	0.19

Source: Soil Survey, Ada County Area, Table 14

Maximum stream size (gpm):	10
Erodability (S,A,E)	S
Slope%	1.5
coeff.	15

Hydrologic Soil Group (see last page App. F) C

Permeability			time to fill
depth	inches	Perm* (in/hr)	layer
0-10	10	1.3	1.5
11 - 38	28	1.3	4.0
Total	38		4

Source: Soil Survey, Ada County Area, Table 14

*Average permeability for layer (Table 14)

Permeability Class Moderately slow

Recommendations:

Set Time: 11.5 hrs

Flow Rate/ nozzle (gpm): 5.72

No. sprinkler hds/line: 33

Size nozzle: 11/64"

Irrigate every 7 days

Note: May be necessary to irrigate longer first irrigation

Table 5.1. Soil intake family designations USDA soil textural classes
(Source: USDA-NRSC Idaho Irrigation Guide. 1977).

Intake Family	USDA Soil Textural Classes
0.3	Heavy clays, silty clay (more than 60% clay)
0.5	Clays, silt loam (lake deposits), sandy clay
1	Silty clay loam, clay loam, sandy clay loam, silt loam (alluvial deposits)
1.5	Silt loam (wind deposits), loam, very fine sandy loam
2	Sandy loam, fine sandy loam, gravelly loam
3	Very fine sand, loamy sands, gravelly sandy loam
4	Sand

Soil Intake Family Adjustment Factors

Basic Factors

Texture

Fine-textured soils generally have slower intake rates than coarse-textured soils.

Structure

The arrangement of soil particles (structure) affects intake as follows:

- Single grain or granular structure - most rapid intake
- Blocky or prismatic structure - moderate intake rate
- Massive or platy structure - slowest intake rate

Density

Dense soils, which consist of soils with grains tightly packed together, have slower intake rates. Even sand, if well-graded (a mixture of sizes) and densely packed, can have a slow intake rate.

MICROFILMED

1987 2001

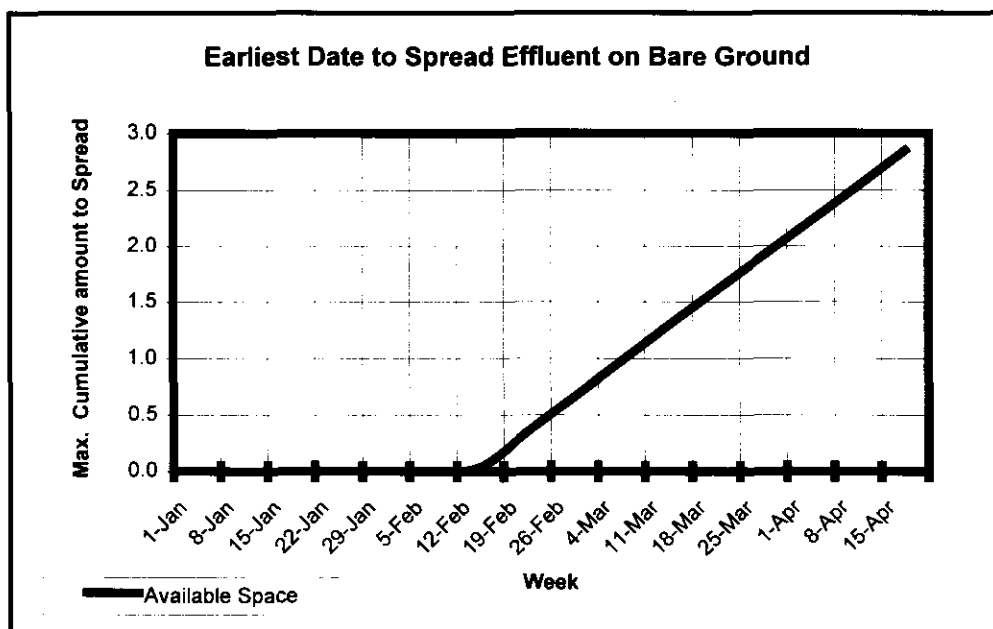
Hydraulic Balance

Date to Spray Calculations (for bare, unfrozen ground):

AWC 0.19
 Depth 30
 Field capacity 5.7
 % filled 50% on 4/15/00 (Beginning of irrigation season)
 Space available 4/15 2.85 inches
 1 in 5 winter precip
 Kuna 5.4
 Average 5.4 during 121 days (December-Marc)
 daily rainfall 0.044628

Week Available Space

Week	Available Space
1-Jan	0.0
8-Jan	0.0
15-Jan	0.0
22-Jan	0.0
29-Jan	0.0
5-Feb	0.0
12-Feb	0.0
19-Feb	0.4
26-Feb	0.7
4-Mar	1.0
11-Mar	1.3
18-Mar	1.6
25-Mar	1.9
1-Apr	2.2
8-Apr	2.5
15-Apr	2.85



Note*

There is an assumed evaporation rate in that soil moisture drops from saturation to 50% of field capacity during the weeks before April 15.

MICROFILM

2001

Table 11-2 Maximum application rate (in/hr)							
Soil texture	Application Amount in Inches						
	0.25	0.5	0.75	1	1.25	1.5	2
Sand	6	6	6	6	6	6	6
Loamy sand	6	6	4.83	4.22	3.86	3.62	3.32
Sandy loam	4.91	2.97	2.32	1.99	1.8	1.67	1.51
Loam	3.11	1.69	1.21	0.98	0.84	0.74	0.62
Silt loam	2.7	1.45	1.03	0.82	0.7	0.61	0.51
Sandyclay lo	2	1	1	1	0	0	0
Clay loam	1.27	1	0	0	0	0	0
Silty clay loa	1	1	0	0	0	0	0
Sandy clay	0.61	0	0	0	0	0	0
Silty clay	0.84	0	0	0	0	0	0
Clay	0.39	0.21	0	0	0	0	0

Note: This table is for infiltration rate for full cover conditions and initial moisture content at 50 percent of the available water capacity. Field capacity of sand through sandy loam is assumed to be at 1/10 bar.

source: NRCS "Animal Waste Handbook"

This table is for liquid manure with solids content < .5 %

MICROFILM

1999

Appendix G - Soil Information

SCISM SERIES

The Scism series consists of moderately deep to a duripan, well drained soils with moderate permeability on plains. They formed in loess and weathered volcanic ash over loamy alluvium from basalt, volcanic ash and lacustrine deposits. Slopes range from 0 to 20 percent. The average annual precipitation is about 9 inches and the average annual temperature is about 50 degrees F.

TAXONOMIC CLASS: Coarse-silty, mixed, superactive, mesic Xereptic Haplodurids

TYPICAL PEDON: Scism silt loam -- on a nearly level upland area at 2,700 feet elevation in cropland. (Colors are for air dry soil unless otherwise noted.)

Ap--0 to 8 inches; light brownish gray (10YR 6/2) silt loam, dark grayish brown (10YR 4/2) moist; weak very fine granular structure; soft, very friable, slightly sticky and slightly plastic; common fine roots; many very fine pores; few fine gravel and duripan fragments; slightly effervescent; moderately alkaline (pH 8.0); abrupt smooth boundary. (2 to 11 inches thick)

Bk1--8 to 13 inches; light gray (10YR 7/2) silt loam, brown (10YR 5/3) moist; massive; slightly hard, very friable, slightly sticky and slightly plastic; many very fine to medium roots; many very fine and fine pores; about 5 percent weakly cemented rounded nodules or (cicada) krotovinas; 1 to 2 cm in diameter and 1.5 to 3 cm in length; strongly effervescent; moderately alkaline (pH 8.2); gradual smooth boundary. (5 to 15 inches thick)

Bk2--13 to 21 inches; light gray (10YR 7/2) silt loam, grayish brown (10YR 5/2) moist; massive; slightly hard, very friable, slightly sticky slightly plastic; many very fine to medium roots; common very fine tubular pores; 40 percent nodules similar to those described above; strongly effervescent, few fine veins of calcium carbonates; strongly alkaline (pH 8.5); abrupt smooth boundary. (7 to 17 inches thick)

Bkqm--21 to 30 inches; light gray (10YR 7/2) weakly cemented duripan with silt loam soil material between plates, grayish brown (10YR 5/2) moist; massive; hard, very firm; common very fine and fine roots matted at surface; violently effervescent; strongly alkaline (pH 8.7); gradual smooth boundary. (4 to 20 inches thick)

Bkq--30 to 42 inches; light gray (10YR 7/2) light silt loam, dark grayish brown (10YR 4/2) moist; massive; hard, very firm, nonsticky and slightly plastic; few very fine and fine roots; common very fine tubular pores; violently effervescent, few veins and common splotches of calcium carbonates; strongly alkaline (pH 8.5); abrupt smooth boundary. (0 to 10 inches thick)

2C--42 to 62 inches; pale brown (10YR 6/3) light loam, dark grayish brown (10YR 4/2) moist; massive; soft, very friable, few very fine roots and pores; few fine pieces of duripan; strongly effervescent, few splotches of calcium carbonates 1 to 5 cm in diameter; moderately alkaline (pH 8.3).

TYPE LOCATION: Canyon County, Idaho; about 8 miles south and 5 miles west of Nampa; 700 feet south and 70 feet west of NE corner of section 10, T.1 N., R.3 W.; USGS Givens Hot Springs Quadrangle; (Latitude - 116 degrees, 40 minutes, 21 seconds N. and Longitude - 43 degrees, 26 minutes, 34 seconds W.).

RANGE IN CHARACTERISTICS:

Average annual soil temperature - 47 to 56 degrees F.
Depth to duripan - 20 to 40 inches
Depth to bedrock - greater than 60 inches
Particle-size control section - 12 to 18 percent clay
Moisture control section - moist less than 90 consecutive days when the soil temperature is greater than 47 degrees F.

A horizon

Hue - 2.5Y or 10YR
Value - 5 through 7 dry, 3 through 5 moist
Chroma - 2 through 4 dry or moist
Reaction (pH) - slightly or moderately alkaline
Calcium carbonate equivalent - 0 to 10 percent

Bk horizon

Hue - 2.5Y or 10YR
Value - 6 through 8 dry, 4 through 6 moist
Chroma - 2 through 5 dry or moist
Texture - SIL or VFSL
Clay content - 12 to 18 percent
Nodules or krotovinas - 10 to 50 percent
Reaction (pH) - moderately alkaline or strongly alkaline
Calcium carbonate equivalent - 15 to 40 percent

COMPETING SERIES: There are no other series in this classification. A closely related soils is the Portneuf series. Portneuf soils lack duripans.

GEOGRAPHIC SETTING: Scism soils are on lava plains, shield volcanoes, calderas, terraces, draws, and tablelands at elevations of 2,000 to 5,000 feet. Slopes range from 0 to 20 percent, but most commonly are less than 8 percent. These soils formed in loess and weathered volcanic ash over loamy alluvium from lacustrine deposits, volcanic ash and basalt. Average annual precipitation is 8 to 11 inches, including up to 25 inches of snow. Average annual temperature is 45 to 54 degrees F. Frost-free period is 100 to 160 days.

GEOGRAPHICALLY ASSOCIATED SOILS: These are the Minidoka, Vickery, and Purdam soils. Purdam soils have an argillic horizon. Minidoka and Vickery soils have an indurated duripan. Minidoka, Vickery, and Purdam soils are on landscape positions similar to Scism soils.

DRAINAGE AND PERMEABILITY: Well drained; slow to rapid runoff; moderate permeability.

USE AND VEGETATION: Scism soils are used mainly for irrigated cropland and in some areas rangeland and wildlife habitat. The principal crops are alfalfa, corn, sugar beets, small grains, potatoes, and onions. Dominant natural vegetation is Wyoming big sagebrush, Sandberg bluegrass, Thurber needlegrass, and bluebunch wheatgrass.

DISTRIBUTION AND EXTENT: Southwestern Idaho; MLRA 11. This series is moderately extensive.

MICROFILMED

SEP 07 2001

MLRA OFFICE RESPONSIBLE: Portland, Oregon

SERIES ESTABLISHED: Canyon County, Idaho, 1973.

REMARKS: Diagnostic horizons and other features recognized in this pedon:

Ochric epipedon - the zone from the surface to 8 inches (Ap horizon)

Haplic duripan - the zone from 21 to 30 inches (Bkqm horizon)

Calcic horizon - the zone from 8 to 42 inches (Bk1, Bk2, Bkqm and Bkq horizons)

Particle-size control section - the zone from 10 to 21 inches

Soil moisture regime - aridic bordering xeric

Geographic setting - terms used throughout MLRA 11 to identify the setting of this soil are quite varied although all equate to the same landscape. There will be further investigation from an MLRA project level as to the accepted terms for use.

Classification of this pedon reflects a revision as of 4/00 from coarse-silty, mixed, mesic Haploxerollic Durorthids to coarse-silty, mixed, superactive, mesic Xereptic Haplodurids based on revisions to Soil Taxonomy.

Bedrock substratum phases of the Scism series will no longer meet the series concept and will be new soils. (see Ada County Area, Idaho soil survey).

More investigation is needed on this series to determine the presence of sodium and/or salts.

National Cooperative Soil Survey
U.S.A.

MICROFILMED

SEP 07 2001

UNRECORDED

SEP 07 2001

Appendix H - Soil Sample Bulletin

MICROFILMED
SEP 07 2001

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCESRECEIVED
Transfer No. 3634
SEP 27 1990

APPLICATION FOR TRANSFER OF WATER RIGHT

PART 1

Department of Water Resources
Western Regional OfficeName of applicant JERRY DAVIS & GR LINDA M. DAVIS Phone 495-2840
Post Office address 6001 Robinson Road Kuna, Id. 83634

A. PURPOSE OF TRANSFER

1. ☒ Change point of diversion ☒ Add diversion point(s) ☐ Change place of use
☐ Change nature of use ☐ Change period of use ☐ Other _____
2. Describe the reason for the proposed changes ADD P/O & correct location
description of existing P/O

B. DESCRIPTION OF RIGHT(S) OR PORTION THEREOF, AFTER THE REQUESTED CHANGE

1. Right Number	Priority	Amount (cfs/ac-ft)	Nature of Use	Period of Use
<u>63-7513</u>	<u>10/22/1971</u>	<u>6.30</u>	<u>IRR.</u>	<u>4/1</u> to <u>11/30</u>
		<u>0.02</u>	<u>STOCK</u>	<u>1/1</u> to <u>12/31</u>
				to _____
				to _____

2. Total amount of water being transferred 6.3 cubic feet per second and/or _____ acre-feet per annum.
3. Source of water Groundwater tributary to _____
4. Point(s) of Diversion:

Lot	1/4	1/4	1/4	Sec.	Twp.	Rge.	County	Local name for diversion
<u>3</u>		<u>NW</u>	<u>SW</u>	<u>7</u>	<u>1N</u>	<u>1W</u>	<u>ADA</u>	
		<u>SW</u>	<u>NE</u>	<u>7</u>	<u>1N</u>	<u>1W</u>	<u>"</u>	
		<u>NW</u>	<u>SE</u>	<u>7</u>	<u>1N</u>	<u>1W</u>	<u>"</u>	

5. Lands irrigated or place of use: NO CHANGE

Twp.	Rge.	Sec.	NE 1/4				NW 1/4				SW 1/4				SE 1/4				Totals
			NE 1/4	NW 1/4	SW 1/4	SE 1/4	NE 1/4	NW 1/4	SW 1/4	SE 1/4	NE 1/4	NW 1/4	SW 1/4	SE 1/4	NE 1/4	NW 1/4	SW 1/4	SE 1/4	

MICROFILMED

JUN 04 1990

Total acres _____

PART 1**6. General Information:**a. Description of diversion system 3 wells & pipelinesb. Are the lands from which you propose to transfer the water right subject to any liens, deeds of trust, mortgages, or contracts? _____ Yes X No. If yes, provide a notarized statement from the holder of the lien, deed of trust, mortgage or contract agreeing to the proposed changes.

c. Describe the affect on the land now irrigated if the place of use is changed pursuant to this transfer:

N/A

d. Remarks:

ACTION OF THE DIRECTOR, DEPARTMENT OF WATER RESOURCESThis is to certify that I have examined Application for Transfer of Water Rights No. 63-7513And said application is hereby APPROVED, subject to the following limitations and conditions:

Witness my hand this

13th

day of

April

, 19

90J. Glen Senter
Chief, Water Alloc. Bureau**MICROFILMED**

JUN 04 1990

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
APPLICATION FOR TRANSFER OF WATER RIGHT

PART 2

(Attach one copy for each right)

A. DESCRIPTION OF RIGHT AS RECORDED

1. Right evidenced by:

- a. Decree No. _____ Decreed to _____
 in case of _____ vs. _____
 dated _____ in _____ county of _____
- b. License No. 63-7513 issued by the Idaho Department of Water Resources.
- c. Claim No. _____ on file with the Idaho Department of Water Resources.
- d. Transfer No. _____ which produced this right.

2. Attach a copy of last year's tax notice for the property to which the water right is appurtenant or other documents which show ownership. Label document as attachment A. Check appropriate box below:

☐ Tax Notice☐ Warranty Deed☒ Other N/R3. Source of water Groundwater tributary to _____4. Date or priority 10/22/1971

5. Water is used for the following purpose:

amount 6.30 for irr purposes from 4/1 to 11/30
 (cfs/ac-ft)
 amount .02 for stock purposes from 1/1 to 12/31
 (cfs/ac-ft)
 amount _____ for _____ purposes from _____ to _____
 (cfs/ac-ft)

6. Total amount of water under right 6.3 cubic feet per second and/or _____ acre-feet per annum.

7. Point(s) of Diversion:

Lot	1/4	1/4	1/4	Sec.	Twp.	Rge.	County	Local name for diversion
		SW	NE	7	1N	1W	ADA	
		NE	SW	7	1N	1W	"	

8. Lands irrigated or place of use:

Twp.	Rge.	Sec.	NE 1/4				NW 1/4				SW 1/4				SE 1/4				Totals
			NE 1/4	NW 1/4	SW 1/4	SE 1/4	NE 1/4	NW 1/4	SW 1/4	SE 1/4	NE 1/4	NW 1/4	SW 1/4	SE 1/4	NE 1/4	NW 1/4	SW 1/4	SE 1/4	
1N	1W	6													20	20	40	40	120
		7	40	40	40	35					40	20	20	40	40	40	40	30	425
		18	5	40	40														85
		7				S					S								

MICROFILMED

JUN 04 1990

Total acre 6309. Describe any other water rights used for the same purpose as described above 63-10877 (application for permit)for permit

10. To your knowledge, has any portion of this water right undergone a period of five or more consecutive years of non-use?

NO

If yes, describe _____

B. DESCRIPTION OF PORTION OF RIGHT BEING TRANSFERREDN/A

(If the entire right is to be changed by the applicant, or _____)

1. amount _____ for _____ purposes from _____ to _____
 (cfs/ac-ft)
 amount _____ for _____ purposes from _____ to _____
 (cfs/ac-ft)
 amount _____ for _____ purposes from _____ to _____
 (cfs/ac-ft)

2. Point(s) of Diversion:

Lot	1/4	1/4	1/4	Sec.	Twp.	Rge.	County	Local name for diversion

3. Lands irrigated or place of use:

Twp.	Rge.	Sec.	NE 1/4				NW 1/4				SW 1/4				SE 1/4				Totals
			NE 1/4	NW 1/4	SW 1/4	SE 1/4	NE 1/4	NW 1/4	SW 1/4	SE 1/4	NE 1/4	NW 1/4	SW 1/4	SE 1/4	NE 1/4	NW 1/4	SW 1/4	SE 1/4	

Total acres _____

C. DESCRIPTION OF UNCHANGED PORTION OF RIGHT (omit if there is no change)

1. amount _____ for _____ purposes from _____ to _____
 (cfs/ac-ft)
 amount _____ for _____ purposes from _____ to _____
 (cfs/ac-ft)
 amount _____ for _____ purposes from _____ to _____
 (cfs/ac-ft)

2. Point(s) of Diversion:

Lot	1/4	1/4	1/4	Sec.	Twp.	Rge.	County	Local name for diversion

3. Lands irrigated or place of use:

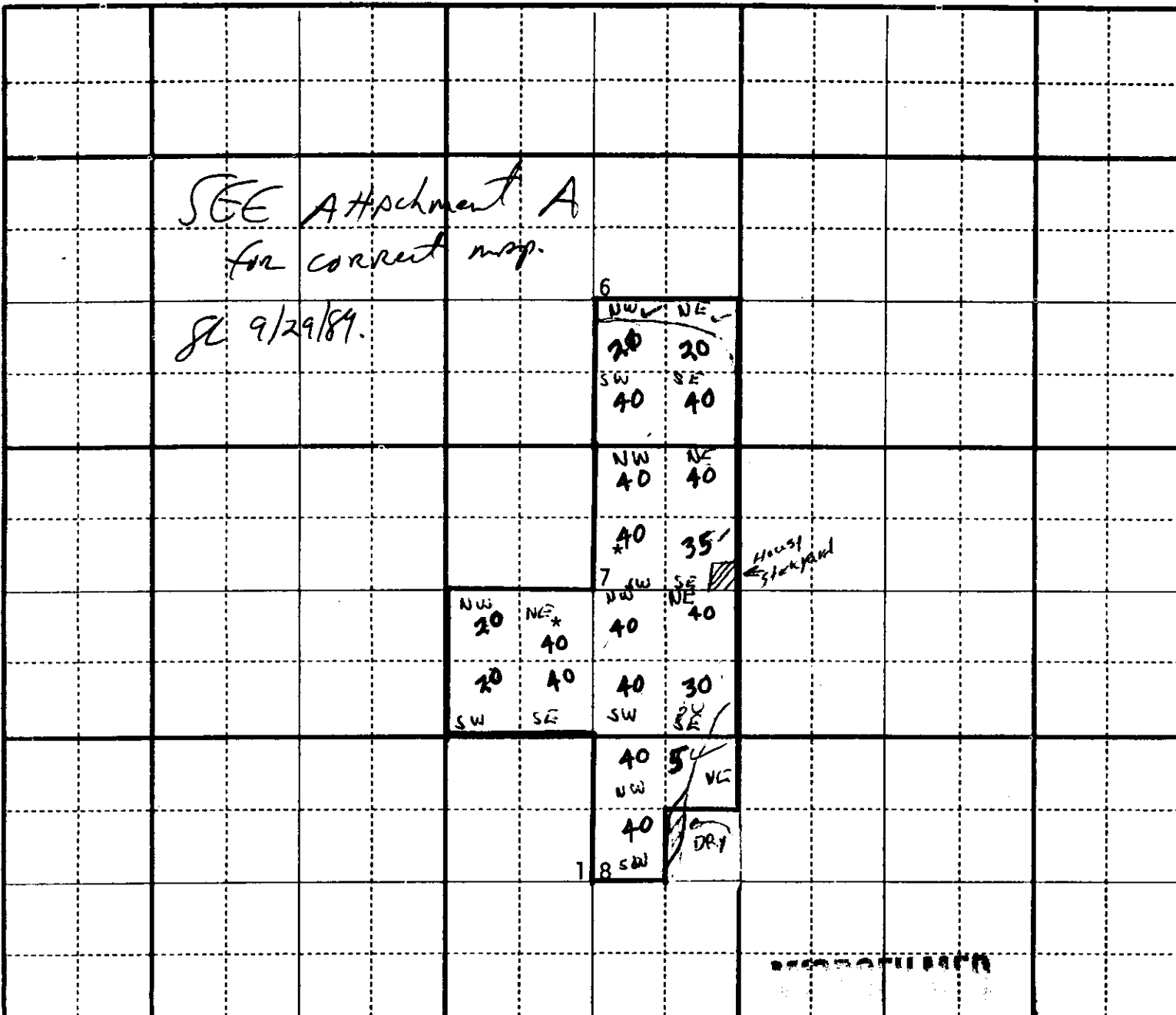
Twp.	Rge.	Sec.	NE 1/4				NW 1/4				SW 1/4				SE 1/4				Totals
			NE 1/4	NW 1/4	SW 1/4	SE 1/4	NE 1/4	NW 1/4	SW 1/4	SE 1/4	NE 1/4	NW 1/4	SW 1/4	SE 1/4	NE 1/4	NW 1/4	SW 1/4	SE 1/4	

Total acres _____

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
APPLICATION FOR TRANSFER OF WATER RIGHT
PART 3

- A. Draw a map or attach a USGS map indicating the new point(s) of diversion and/or the new place of use for rights described in part 1. Clearly depict the land by section, township and range number.

nyc - 111



PART 3**B. CHANGES IN NATURE OF USE**

1	New Nature of Use	Amount (cfs/ac-ft)	Hours/days/year	Period of Use
				to
				to

2. Quantity and quality of return flows and location of discharge:

3. Describe effects on other water uses resulting from the proposed change:

I hereby assert that no one will be injured by such change and that the change does not constitute an enlargement in use of the original right. The information contained in this application is true to the best of my knowledge.

I understand that any willful misrepresentations made in this application may result in voiding its approval.

Subscribed and sworn to before me this 14TH day of SEPTEMBER, 19 89.

My commission expires LIFE

FOR DEPARTMENT USE ONLY

Transfer contains 6 pages and 1 attachments
Received by Jim SL Date 8-13-89 9-27-89 Protest filed by _____
Prelim. check by SL Fee \$50.00 #C011607
Received by SC Date 9/14/89
Published in Ad Statesman Copies of protest forwarded by _____
Pub. dates 10/19 & 10/26/1989 Hearing held by _____ Date _____
Watermaster recommendation requested on _____ Recommended for ☒ approval ☐ denial

_____ rec'd. **MICROFILMED** by DPT TJL Barry

Copy of transfer sent to lien holder _____

JUN 04 1990

ROAD

LATERAL

CANYON CO

2512

ADA CO

Attachment
A

2690

NE

40

SW

40

SW

40

NE

40

SW

40

NE

40

SW

40

NE

40

SW

40

NE

40

SW

40

NE

40

SW

40

NE

40

SW

40

NE

40

SW

40

NE

40

SW

40

NE

40

SW

40

NE

40

SW

40

NE

40

12

SOUTHWEST

3

20

SOUTHWEST

20

2877

13

9-29-89

POWER

271

2708

24

8C 9/29

LATERAL

ASSIGNED TO:

George V. Hjort &/or Jerry Dale Davis
&/or Travelers Insurance
Real Estate Investment Dept.
707 S. W. Washington St.
Portland, Oregon

Identification No. 63-7513
Application No. _____

97205

STATE OF IDAHO
DEPARTMENT OF WATER ADMINISTRATION

APPROVED

APPLICATION FOR PERMIT

To Appropriate the Public Waters of the State of Idaho
(TYPE OR PRINT IN INK)

1. Name of applicant Triangle H. Corporation
post office address 1903 South Roosevelt, Boise, Idaho
2. Source of water supply Ground water which is a tributary of _____
3. a. Location of point of diversion is SW $\frac{1}{4}$ of NE $\frac{1}{4}$ of Section 7 Township 1 N
Range 1 W B.M. Ada County; additional points of diversion if any: _____
NE $\frac{1}{4}$ SW $\frac{1}{4}$, Sec. 7, T. 1N, R. 1W, B.M.
- b. If water is not consumed, it will be discharged into _____ at a point in _____ $\frac{1}{4}$
of _____ $\frac{1}{4}$ of Section _____ Township _____ Range _____ B.M. _____
4. Water will be used for the following purposes:
Amount 8.98 for irrigation purpose from April 1 to Nov. 31 (both dates inclusive)
(cfs or acre-feet per annum)
Amount 0.02 for stockwater purpose from Jan. 1 to Dec. 31 (both dates inclusive)
(cfs or acre-feet per annum)
Amount _____ for _____ purpose from _____ to _____ (both dates inclusive)
(cfs or acre-feet per annum)
5. Total quantity to be appropriated:
a. 9.0 cubic feet per second and/or
b. _____ acre feet per annum.
6. Proposed diverting works:
a. Description of ditches, flumes, pumps, headgates, etc. pump, motor & sprinklers

b. Height of storage dam _____ feet, active reservoir capacity _____ acre feet; total reservoir capacity _____ acre feet, materials used in storage dam: _____
Period of year during which storage will occur _____ to _____ inclusive.
(Mo. Day) (Mo. Day)
c. Proposed well diameter is _____ inches; proposed depth of well is _____ feet.
7. a. Time required for the completion of the works and application of the water to the proposed beneficial use is 5 years.
b. Estimated construction cost is \$ _____.
8. Description of proposed uses:
a. If water is **not** for irrigation:
(1) Give the place of use of water: SW $\frac{1}{4}$ of NE $\frac{1}{4}$ of Section 7 Township 1 N
Range 1W B.M. _____
(2) Amount of power to be generated: _____ hp under _____ feet of head.
(3) List number of each kind of livestock to be watered 200 cattle, 600 sheep

(4) Name of municipality to be served _____, or number of families to be supplied with domestic water _____.
(5) If water is to be used for other purposes describe: _____

63-7513

b. If water is for irrigation, indicate acreage in each subdivision in the tabulation below:

TWP.	RANGE	SEC.	NE¼				NW¼				SW¼				SE¼				TOTALS
			NE¼	NW¼	SW¼	SE¼	NE¼	NW¼	SW¼	SE¼	NE¼	NW¼	SW¼	SE¼	NE¼	NW¼	SW¼	SE¼	
1 N	1 W	6													40	40	40	40	160
		7	40	40	40	40					40	40	40	40	40	40	40	40	480
		18	40	40	40														120

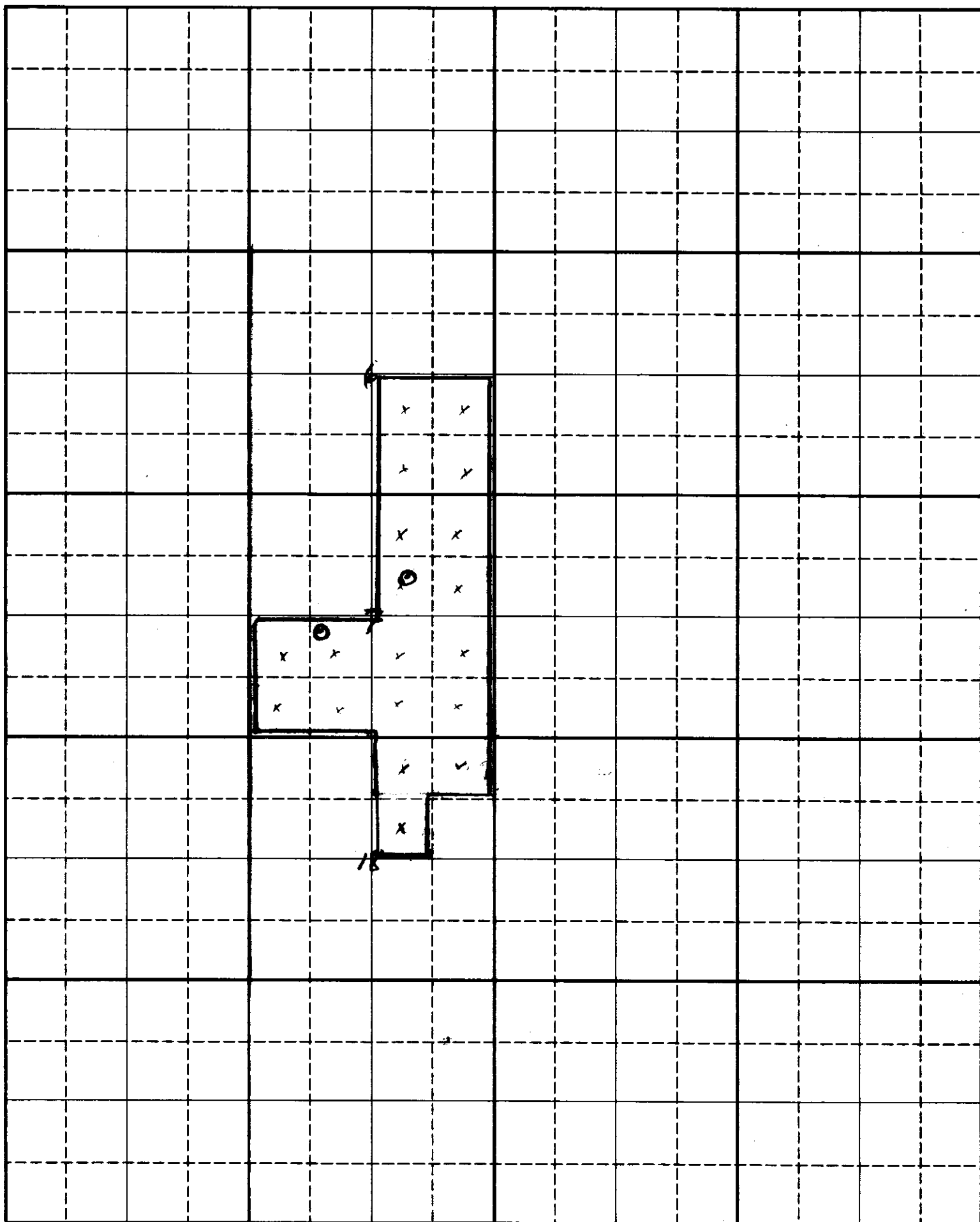
Total number of acres to be irrigated 760

c. Describe any other water rights used for the same purposes as described above.

9. a. Who owns the property at the point of diversion Applicant
- b. Who owns the land to be irrigated or place of use Applicant
- c. If the property is owned by a person other than the applicant, describe the arrangement enabling the applicant to make this filing

10. Remarks

11. Map of proposed project: show clearly the proposed point of diversion, place of use, section number, township and range number.



Scale: 2 inches equal 1 mile

BE IT KNOWN that the undersigned hereby makes application for permit to appropriate the public waters of the State of Idaho as herein set forth.

James V. Boyd
(Applicant)
President

63 7513

Received by F.E. Date 10/22/71 Time 2:00 PM
 Preliminary check by F.E. Fee \$ 105.00
 Receipted by de Date 10-22-71 # 8410
 Publication prepared by cr Date 11-2-71
 Published in Idaho Statesman
 Publication dates 11-11 & 11-18-71
 Publication approved CR Date 11-23-71
 Priority reduced to _____ Reason _____

 Protests filed by: _____

 Copies of protests forwarded by _____
 Hearing held by _____ Date _____
 Recommended for approval denial by De D.F. JA

ACTION OF THE DIRECTOR, DEPARTMENT OF WATER ADMINISTRATION

This is to certify that I have examined Application for Permit to appropriate the public waters of the State of Idaho No. 63-7513, and said application is hereby APPROVED.

1. Approval of said application is subject to the following limitations and conditions:

- a. SUBJECT TO ALL PRIOR WATER RIGHTS.
- b. Proof of construction of works and application of water to beneficial use shall be submitted on or before December 1, 1976.
- c. Other: A measuring device of a type approved by this Department shall be permanently installed and maintained as part of the diverting works.

2. Denial of said application is for the following reasons: _____

Witness my hand this 13 day of December, 1971.

L. Keith Higgins
 Director

State of Idaho
Department of Water Resources

WATER RIGHT LICENSE

License of Water Right No. 63-7513 Priority Oct. 22, 1971 Amount 6.30 cfs

THIS IS TO CERTIFY, that George V. Hjort of Boise, Idaho &/or Jerry Dale Davis of Meridian, Idaho &/or Travelers Insurance Company of Portland, Oregon, has complied with the terms and conditions of Permit No. 63-7513 issued pursuant to Application for Permit dated October 22, 1971, and has submitted proof to the Department of Water Resources on April 23, 1975, that he has applied water to a beneficial use; an examination by the Department indicates that the works have a capacity for the diversion of 6.30 cfs of water from a ground water source, tributary to _____, and that the permit holder has applied to a beneficial use and established a right to use water as follows:

Beneficial Use	Period of Use	Rate of Diversion	Annual Volume
Stockwater	from <u>Jan. 1</u> to <u>Dec. 31</u> at <u>0.02</u> cfs and	<u>5.0 acre feet</u>	
Irrigation	from <u>April 1</u> to <u>Nov.</u> at <u>6.30</u> cfs and	<u>2,835 acre feet or</u>	
	from _____ to _____ at _____ cfs and	<u>4.5 af per acre</u>	
(both dates inclusive)			

Subject, however, to the condition that no more than 6.30 cfs of water be diverted at any one time, and that the amount of water so diverted and to which such right is entitled and confirmed for the purpose aforementioned and is limited to the amount which can actually be beneficially used and shall not exceed 2,840 acre feet per year, said waters to be diverted within the SW $\frac{1}{4}$ NE $\frac{1}{4}$ and NE $\frac{1}{4}$ SW $\frac{1}{4}$ of Sec. 7, Twp. 1 N, Rge. 1 W, B. M. in the County of Ada

Description and location of place of use:

Twp.	Range	Sec.	NE $\frac{1}{4}$				NW $\frac{1}{4}$				SW $\frac{1}{4}$				SE $\frac{1}{4}$				Totals
			NE $\frac{1}{4}$	NW $\frac{1}{4}$	SW $\frac{1}{4}$	SE $\frac{1}{4}$	NE $\frac{1}{4}$	NW $\frac{1}{4}$	SW $\frac{1}{4}$	SE $\frac{1}{4}$	NE $\frac{1}{4}$	NW $\frac{1}{4}$	SW $\frac{1}{4}$	SE $\frac{1}{4}$	NE $\frac{1}{4}$	NW $\frac{1}{4}$	SW $\frac{1}{4}$	SE $\frac{1}{4}$	
1 N	1 W	6																	120
		7	40	40	40	35					40	20	40	40	40	40	40	30	425
		18	5	40	40														85
Stockwater use:																			
1 N	1 W	7			X						X								

Total number of acres irrigated 630

A measuring device of a type approved by this Department shall be permanently maintained as part of the diverting works.

NOTE: Modifications to or variance from this license must be made within the limits of Section 42-222, Idaho Code, or the applicable Idaho Law. This right may be forfeited by five years of non-use.

The right to the use of the water hereby confirmed is restricted and appurtenant to the lands or place of use herein described, as provided by the laws of Idaho.

Witness the seal and signature of the Director, affixed at Boise, Idaho, this 11 day of December, 19 76.

Director

RECEIVED

JAN 25 1972

STATE OF IDAHO

Department of Water Adminis. 600

DEPARTMENT OF RECLAMATION

ASSIGNMENT OF PERMIT George V. Hjort &/or Jerry Dale Davis &/or

I, Triangle H. Corporation, hereby assign to Travelers Insurance,
of Real Estate Investment Dept., 707 S.W. Washington S Portland, Oregon 97205
Address

- CHECK ONE
- ☒ All my right, title, and interest, in and to Permit No. 63-7513 to appropriate the public waters of the State of Idaho.
 - ☐ The following described portion of my right, title, and interest in and to Permit No. _____ to appropriate the public waters of the State of Idaho. (Give that portion of the permit being assigned by describing the land list and the point of diversion - describe by acreage within each 40-acre subdivision.)

Made this 25th day of January, 19 72.

TRIANGLE H. CORPORATION

George V. Hjort, President
Permit Holder

Wife of Permit Holder

State of Idaho)
County of Ada) ss.

On this 25th day of January, 1972, personally
appeared before me the signer(s) of the above instrument, who duly acknowledged
to me that he ~~(she)~~ (they) executed the same.

Ronald W. Adams
Notary Public residing at
Boise Idaho

My commission expires 2-18-1974

MICROFILMED

STATE OF IDAHO

Department of Water Administration

DEPARTMENT OF RECLAMATION

ASSIGNMENT OF PERMIT

George V. Hjort &/or Jerry Dale
Davis &/or
Travelers Insurance

I, Triangle H. Corporation, hereby assign to Travelers Insurance,
of Real Estate Investment Dept., 707 S.W. Washington S Portland, Oregon 97205
Address

CHECK ONE

☒ All my right, title, and interest, in and to Permit No. 63-7513
to appropriate the public waters of the State of Idaho.

☐ The following described portion of my right, title, and interest in and to Permit No. _____ to appropriate the public waters of the State of Idaho. (Give that portion of the permit being assigned by describing the land list and the point of diversion - describe by acreage within each 40-acre subdivision.)

Made this 25th day of January,, 19 72.

TRIANGLE H. CORPORATION

TRIANGLE H. CORPORATION
Geo. V. R. R. R. President
Permit Holder

Wife of Permit Holder

State of Idaho)
County of Ada) ss.

On this 25th day of January, 1972, personally appeared before me the signer(s) of the above instrument, who duly acknowledged to me that he ~~(she)~~ (they) executed the same.

Notary Public residing at

Boite 12/10

My commission expires 2-18-1977

63 7513

The Idaho Statesman

P.O. BOX 40, BOISE, IDAHO 83707

LEGAL ADVERTISING INVOICE

Amount Due

39.72

Account Name Idaho Dept. of Water Resources - Western			Account Number 47628	
Address 2735 Airport Way		City/State Boise, Idaho		Zip 83705
Ordered By Gail Garrett	P.O. Number	Rate nt	Run Dates 1989 October 19, 26	
Identification Notice of Proposed change of Water Right			Estimated Inches	Real Inches
Number of Affidavits Requested 1				Legal Number 3887

NOTICE OF PROPOSED CHANGE OF WATER RIGHT No. 63-07513

Notice is hereby given that Jerry &/or Linda Davis of Kuna, ID, have applied to the Department of Water Resources for a change of points of diversion of groundwater. The right sought to be changed is evidenced by a license and is recorded as follows:

Amount: 6.30 cfs

Priority Date: 10/22/1971

Point(s) of Diversion: TIN, RIW, S. 7, SWNE & NESW.

The water is used for irrigation and stockwater purposes in TIN, RIW, S. 4, SE1/4, S. 7, E1/2 and SW1/4, S. 18, N1/2NE1/4, SWNE TO BE CHANGED AS FOLLOWS

Amount: 6.30 cfs

Point(s) of Diversion: TIN, RIW, S. 7, SWNE, NWSW, NWSE.

The water will be used for irrigation and stockwater.

Any protest against approval of the proposed change of water right application must be filed with the Department of Water Resources, Western Region, 2735 Airport Way, Boise, ID 83705 on or before November 6, 1989.

R. Keith Hoggins, Director
Pub. Oct. 19, 26, 1989 3887

Debbie Richards

, being duly sworn, deposes and says: That she is the Principal Clerk of The Idaho Statesman, a daily newspaper printed and published at Boise, Ada County, State of Idaho, and having a general circulation therein and which said newspaper has been continuously and uninterruptedly published in said County during a period of twelve consecutive months prior to the first publication of the notice, a copy of which is attached hereto; that said notice was published in The Idaho Statesman in conformity with Section 60-108, Idaho Code as amended, for 2

☒ consecutive weekly ☐ consecutive daily ☐ single ☐ odd skip

insertion(s) beginning with the issue of October 19, 19 89

and ending with the issue of October 26, 19 89

Debbie Richards

STATE OF IDAHO)

MICROFILMED

COUNTY OF ADA)

ss. JUN 04 1990

On this 26th day of October 1989 in the year of

before me, a Notary Public, personally appeared Debbie Richards, known or identified

to me to be the person whose name subscribed to the within instrument, and being by me first duly sworn, declared that the statements therein are true, and acknowledged to me that she executed the same.

[Signature]
Notary Public for Idaho, Idaho

Residing at

My commission expires: 12/83

RECEIVED

OCT 31 1989

Department of Water Resources
Western Regional Office

DEPARTMENT OF WATER ADMINISTRATION

STAFF ANALYSIS

Application No. 63-7513 Name Triangle H. Corporation

Source Groundwater

Point of Diversion SW $\frac{1}{4}$ NE $\frac{1}{4}$, Sec. 7, T. 1N, R. 1W, B.M., Ada County

Quantity 8.98 Use Irrigation Period April 1 - Nov. 31

Quantity .02 Use Stockwater Period Jan. 1 - Dec. 31

Quantity Use Period

Well Size Diameter Proposed Depth Feet

Use 760 acres - 200 cattle and 600 sheep

Date Forwarded 11-4-71 Date Returned 11-5-71 Received by SS

COMMENTS: Static wk is approx. 230-260 feet. Primary aquifer is broken basalt. Water levels show some fluctuation, but no net decline. Well development is light; aquifer should be capable of supporting additional development.

RECOMMENDED:

Applied: Qty. Use Period AF/A AF

Qty. Use Period AF/A AF

Qty. Use Period AF/A AF

Maximum: Qty. Use Period AF/A AF

Qty. Use Period AF/A AF

Qty. Use Period AF/A AF

ACTION: Approved ☒ Denied ☐

Conditions of approval or reason for denial:

INVESTIGATION By Paul M. Castelin Title W.R.I. - I

Date Nov. 5, 1971

63 7513

STATE OF IDAHO,) ss.
COUNTY OF ADA)

Georgene Davis, being duly sworn, deposes and says: That she is the Principal Clerk of The Idaho Statesman, a daily newspaper printed and published at Boise, Ada County, State of Idaho, and having a general circulation therein and which said newspaper has been continuously and uninterruptedly published in said County during a period of twelve consecutive months prior to the first publication of the notice, a copy of which is attached hereto; that said notice was published in the regular edition of The Idaho

Statesman for Two week consecutive insertions, beginning with the issue of November 11, 19 71, and ending with the issue of November 18, 19 71.

Georgene Davis

Subscribed and sworn to before me this 18th day of November, 19 71.

Lana A. Young
Notary Public for Idaho, Residing at Boise, Idaho



State of Idaho

DEPARTMENT OF WATER RESOURCES

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

June 25, 2001

DIRK KEMPTHORNE
Governor

KARL J. DREHER
Director

GRASSLANDS LLC
6001 ROBINSON RD
KUNA ID 83634

RE: Transfer No.: 68479 - Water Rights 63-10979/63-7513 - Transfer Approval Notice

Dear Water Right Holder(s):

The Department of Water Resources has issued the enclosed approved Transfer of Water Right(s). Please be sure to thoroughly review the conditions of approval and remarks listed on the approval document.

The Transfer of Water Right(s) is a PRELIMINARY ORDER issued by the Department pursuant to section 67-5243, Idaho Code. It can and will become a final order without further action by the Department unless the APPLICANT petitions for reconsideration or files an exception and/or brief within fourteen (14) days of the service date as described in the enclosed information sheet.

ANY PERSON aggrieved by any decision, determination, order or action of the Department and who has not previously been afforded an opportunity for a hearing on the matter may request a hearing pursuant to section 42-1701A(3), Idaho Code. A written petition contesting the action of the Department and requesting a hearing shall be filed within fifteen (15) days after receipt of the denial or conditional approval.

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

If you have any questions, please contact me at 208-327-7940.

Sincerely,

Camela S. Skaggs
for Jeff Peppersack, Manager
Water Rights Permits Section

JP:klt
Enclosure(s)

MICROFILMED

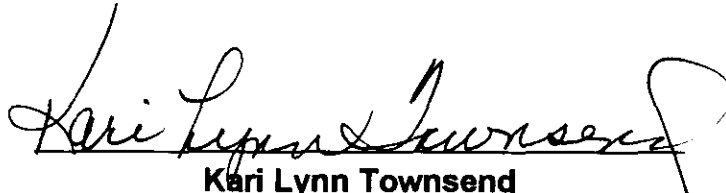
SEP 07 2001

CERTIFICATE OF MAILING

I hereby certify that on June 25, 2001 I mailed a true and correct copy, postage prepaid, of the foregoing TRANSFER APPROVAL to the person(s) listed below:

RE: TRANSFER NO. 68479 - WATER RIGHTS 63-10979 / 63-7513

**GRASSLANDS LLC
6001 ROBINSON RD
KUNA ID 83634**


**Kari Lynn Townsend
Secretary**

**MICROFILMED
SEP 07 2001**

**EXPLANATORY INFORMATION
TO ACCOMPANY A
PRELIMINARY ORDER**

The accompanying order or approved document is a "**Preliminary Order**" issued by the department pursuant to section 67-5243, Idaho Code. It can and will become a final order without further action of the Department of Water Resources (department) unless a party petitions for reconsideration, files an exception and brief, or requests a hearing as further described below:

PETITION FOR RECONSIDERATION

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

EXCEPTIONS AND BRIEFS

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

REQUEST FOR HEARING

Unless a right to a hearing before the department or the Idaho Water Resource Board (Board) is otherwise provided by statute, any person aggrieved by any final decision, determination, order or action of the Director of the department and who has not previously been afforded an opportunity for a hearing on the matter may request a hearing pursuant to section 42-1701A(3), Idaho Code. A written petition contesting the action of the Director and requesting a hearing shall be filed within fifteen (15) days after receipt of the denial or conditional approval.

ORAL ARGUMENT

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

CERTIFICATE OF SERVICE

All exceptions, briefs, requests for oral argument and any other matters filed with the Director in connection with the preliminary order shall be served on all other parties to the proceedings in accordance with IDAPA Rules 37.01.01302 and 37.01.01303 (Rules of Procedure 302 and 303).

FINAL ORDER

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

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

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

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

APPEAL OF FINAL ORDER TO DISTRICT COURT

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

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

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

MICROFILMED
SEP 07 2001

TRANSFER REVIEW SHEET

(05-01)

TRANSFER # 5795/68479

DATE REVIEWED 6-21-01 CR

SPLIT POD ADD POD ☒ POU ☒ PERIOD ☒ or NATURE ☒ of USE

ALL OF RIGHT(S) (W=Water Right) (C=SRBA Claim) R=SRBA Recommendation

				No Activity
C/63-7513	/	/	/	/
W/63-10979	/	/	/	/
/	/	/	/	/
/	/	/	/	/

PART OF RIGHTS(S)

(Unchanged)

(Changed)

/	to	/	/
/	to	/	/
/	to	/	/
/	to	/	/
/	to	/	/
/	to	/	/
/	to	/	/
/	to	/	/
/	to	/	/
/	to	/	/
/	to	/	/

Standard Season 3-1 to 11-15

Standard Volume 4.5/3.5

(1) ☒ Priority (2) Use (3) Season/W61 (4) ☒ Rate (5) Volume

(6) ☒ Source (7) P/D (8) P/U (9) ☒ Proof/Owner (10) ☒ Map
per region review, SRBA + Tax notices

(11) NA Water District (12) Yes Pertinent Conditions (13) No Expansion
WM/Rcvd Limit change to historic use.

- (2) Change 7 Acres IRR to STOCK + COMM
- (3) Allow yr. round use for dairy. Extended beginning season for IRR to 3-1.
- (5) Changed uses limited to historic C.U. Volume $7 \times 2.92 = 20.4 \text{ afa}$
IRR limited to 4.5 afa + combined limits
- (7) Add P/Ds - 5 wells on Farm system.
- (8) Correct P/U - Reduce by 7 acres IRR

7 acres $\times$ 2.92 afa/historic C.U. = 20.4 afa to STOCK + COMM
20.4 afa required to provide for existing expansion to dairy operation.

Conditions/Remarks W61, W35, W34, T17, O1Q, 106, R65, T07, T08, T09
WDR

Dairy conditions on 63-7513 only = IRR on both

WRs for Update Comments 63-7513 ☒

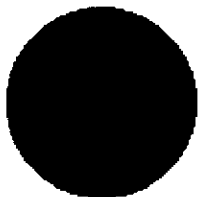
Database Updated to Reflect Final Action 6-22-01 CR

63-7513 only

Idaho Dept. of Water Resources
Place of Use Comparison Report

Transfer 5795/68479 Grasslands LLC																						
Type	WR #	Owner	Source	TRS	NENE	NWNE	SWNE	BENE	NENW	NWNW	SWNW	SENW	NESW	NWSW	SWSW	SESW	NESE	NWSE	SWSE	SESE	Total	
Right	63 2386	US DEPT OF INTERIOR,	BOISE RIVER	01N01W6																	0	
Claim	63 20467	CAN-ADA FARMS,	GROUND WATER	01N01W6																	0	
Claim	63 3339A	CAN-ADA FARMS,	GROUND WATER	01N01W6																	0	
Claim	63 7813	GRASSLANDS LLC,	GROUND WATER	01N01W6																	0	
Right	63 10979	GRASSLANDS LLC,	GROUND WATER	01N01W6													13	26	40	39	118	
Right	63 3187	EST OF ANNA MARY KOBE,	GROUND WATER	01N01W6																	0	
Right	63 3188	BETH FORSGREN,	GROUND WATER	01N01W6																	0	
Right	63 3189	CLAYTON F FORSGREN,	GROUND WATER	01N01W6																	0	
Right	63 3339	CAN-ADA FARMS,	GROUND WATER	01N01W6																	0	
Right	63 4032	TRIANGLE H CORP,	GROUND WATER	01N01W6													X	X	X	X	0	
Right	63 4033	TRIANGLE H CORP,	GROUND WATER	01N01W6													X	X	X	X	0	
Right	63 7813	LINDA M DAVIS, JERRY DAVIS,	GROUND WATER	01N01W6													20	20	40	40	120	
TRight	63 10979		GROUND WATER	01N01W6													13	26	40	39	118	
Right	63 2869	KENNETH CLEVENGER, MARQUERITE CLEVENGER,	WASTEWATER	01N01W6																	18	
Right	63 2386	US DEPT OF INTERIOR,	BOISE RIVER	01N01W7																	0	
Claim	63 20467	CAN-ADA FARMS,	GROUND WATER	01N01W7					36	36	13.7	40									120	
Claim	63 3339A	CAN-ADA FARMS,	GROUND WATER	01N01W7					36	36	13.7	40									120	
Claim	63 7813	GRASSLANDS LLC,	GROUND WATER	01N01W7	36	40	40	36					20	20	20	40	30	40	40	21	443	
Right	63 10979	GRASSLANDS LLC,	GROUND WATER	01N01W7	36	40	40	36					20	20	20	40	30	40	40	21	443	
Right	63 3187	EST OF ANNA MARY KOBE,	GROUND WATER	01N01W7					36	36	40	40									120	
Right	63 3188	BETH FORSGREN,	GROUND WATER	01N01W7					36	36	40	40									120	
Right	63 3189	CLAYTON F FORSGREN,	GROUND WATER	01N01W7					36	36	40	40									120	
Right	63 3339	CAN-ADA FARMS,	GROUND WATER	01N01W7					36	36	36	40									120	
Right	63 4032	TRIANGLE H CORP,	GROUND WATER	01N01W7	X	X	X	X					X	X	X	X	X	X	X	X	0	
Right	63 4033	TRIANGLE H CORP,	GROUND WATER	01N01W7	X	X	X	X					X	X	X	X	X	X	X	X	0	
Right	63 7813	LINDA M DAVIS, JERRY DAVIS,	GROUND WATER	01N01W7	40	40	40	36					40	40	40	40	40	40	40	20	443	
TRight	63 10979		GROUND WATER	01N01W7	39	40	40	39					40	37	37	40	30	40	40	21	443	
Right	63 2386	US DEPT OF INTERIOR,	BOISE RIVER	01N01W18																	0	
Claim	63 15834	CLAYTON F FORSGREN,	GROUND WATER	01N01W18					40	40	40	40									160	
Claim	63 7813	GRASSLANDS LLC,	GROUND WATER	01N01W18																	0	
Claim	63 15832	ROBERT A SVEDIN, KAYE SVEDIN,	GROUND WATER	01N01W18													34	3	36	36	107	
Right	63 10744	MARY A DYER, MARK V DYER,	GROUND WATER	01N01W18																	0	
Right	63 10979	GRASSLANDS LLC,	GROUND WATER	01N01W18																	0	
Right	63 3187	EST OF ANNA MARY KOBE,	GROUND WATER	01N01W18					40	40	40	40									160	
Right	63 3188	BETH FORSGREN,	GROUND WATER	01N01W18					40	40	40	40									160	
Right	63 3189	CLAYTON F FORSGREN,	GROUND WATER	01N01W18					40	40	40	40									160	
Right	63 4032	TRIANGLE H CORP,	GROUND WATER	01N01W18	X	X															0	
Right	63 4033	TRIANGLE H CORP,	GROUND WATER	01N01W18	X	X															0	
Right	63 7813	LINDA M DAVIS, JERRY DAVIS,	GROUND WATER	01N01W18					40	40											16	
Right	63 15832	ROBERT A SVEDIN, KAYE SVEDIN,	GROUND WATER	01N01W18													34	3	36	36	107	
TRight	63 10979		GROUND WATER	01N01W18	2	36															40	
Claim	63 2387	ROBERT A SVEDIN, KAYE SVEDIN,	UNNAMED STREAM	01N01W18													31		9	40	80	
Right	63 2387	ROBERT A SVEDIN,	UNNAMED STREAM	01N01W18													31		9	40	80	

MICROFILMED

**Idaho Secretary of State
Business Entity Search**

GRASSLANDS, L.L.C.

6001 S ROBINSON BLVD
KUNA, ID 83634

Type of Business: LIMITED LIABILITY COMPANY

Status: EXISTING, ANREPT SENT 01 Jun 2001

State of Origin: IDAHO

Date of 31 Aug 1995

Origination/Authorization:

Current Registered Agent: PATRICIA J DUNLOP
6001 S ROBINSON BLVD
KUNA, ID 83634

Filing Number: W-1496

Number of Authorized Stock N/A
Shares:

Date of Last Annual Report: 13 Jun 2001

Related Documents: 31 Aug 1995 - ARTICLES OF ORGANIZATION
(GRASSLANDS, L.L.C.)
18 Nov 1996 - 1996 ANNUAL REPORT
18 Jul 1997 - 1997 ANNUAL REPORT
01 Dec 1998 - 1998 ANNUAL REPORT
19 Jul 1999 - 1999 ANNUAL REPORT
31 Jul 2000 - 2000 ANNUAL REPORT
13 Feb 2001 - 2001 ANNUAL REPORT (CHNG OFF/DIR)
13 Feb 2001 - 2001 ANNUAL REPORT (CHNG RA/RO)
13 Jun 2001 - 2001 ANNUAL REPORT

Get a certificate of existence for GRASSLANDS, L.L.C.

MICROFILMED

SEP 07 2001

No. W 1496		Due no later than Aug 31, 2001 Annual Report Form		2. Registered Agent and Office NO PO BOX	
Return to: SECRETARY OF STATE 700 WEST JEFFERSON PO BOX 83720 BOISE, ID 83720-0080		GRASSDUNOB, L.L.C. DENIS C DUNLOP 6001 S ROBINSON BLVD KUNA, ID 83634		PATRICIA J DUNLOP 6001 S ROBINSON BLVD KUNA, ID 83634	
NO FILING FEE IF RECEIVED BY DUE DATE				3. Next Registered Agent Signature	
4. Limited Liability Companies: Enter Names and Addresses of Members.					
Office held	Name	Street or P.O. Address	City	State	Zip
Member	Patricia J Dunlop	6001 Robinson Road	Kuna	ID.	83634
Member	Denis C Dunlop	6001 Robinson Road	Kuna	ID.	83634
Member	Lorna L Clapton	1309 Florida Lane	Nampa	ID.	83686
Member	Joshie S Clapton	1309 Florida Lane	Nampa	ID.	83686
5. Organized Under the Laws of:		6. Signature <i>Patricia J Dunlop</i> Date <i>6/10/2001</i>			
IDAHO W 1496		Name (Print) <i>Patricia J Dunlop</i> Title <i>Member</i>			
Issued 06/01/2001		Do Not Tape or Staple		2093	

MICROFILMED

SEP 07 2001

RECEIVED

WESTERN REGION TRANSFER ANALYSIS

NOV 21 2000

Department of Water Resources

Applicant Gravelands Transfer No. 5795/68479
Reviewed by ly Date 7/28/00

1. Right number(s) 63-07513, 63-10979

2. Type of right ☐ Decree ☒ License ☐ Stat. Claim ☐ BU Claim

3. Purpose of transfer ☐ Change P/D ☐ Add P/D ☒ Change P/U
☒ Change N/U ☒ Change Period ☐ Split Right
☒ Other: Clarify P/U

4. Check Existing Right
☒ Source ☒ Priority ☒ Amount
☒ Purpose ☒ Period ☒ SRBA Claim
☒ Description of original point(s) of diversion
☒ Description of original place of use
☐ Overlapping rights for original P/D &/or P/U

5. Check Proposed Right for amount of land &/or water transferred:

- a. ☒ Analysis memo – always include unless justify why not needed
- b. ☒ All of right
- c. ☒ Part of right – Note: Part B should normally be completed only if part of right is owned by applicant
- d. ☒ Description of point(s) of diversion
- e. ☒ Description of place of use
- f. ☒ Map showing proposed P/D &/or P/U
- g. ☒ Correct notarized signature and fee – new fees effective July 1, 2000
- h. ☒ Proof of ownership of right &/or land from which water is transferred
- i. ☒ Expansion in use of right: check rate of flow, diversion volume and consumptive volume. Discuss in memo.
- j. ☒ Surface water source: IDFG letter; notify Water Planning Bureau if protected river or minimum flow reach.

68479
T5795

k. ☒ Overlapping rights for current & proposed scenarios

Current ~~R63-15493~~, ~~A63-~~ 63-12278

Proposed _____

l. _____ SRBA Claim(s) R63-15493, A63-07513

m. _____ Comment letters _____ Yes (also see #2 below) ☒ No

_____ Water District #
_____ Other

PUBLICATION REVIEW

1. Legal Notice electronically sent to S.O. ☒ Yes

2. Comment Letters

Watermaster comments requested on _____, received on _____

Other comment letters: _____ See attached information

3. Affidavit of publication received: ☒ Yes

4. Published correctly: ☒ Yes _____ No

If No, re-publication required: _____ Yes _____ No

5. Protests received: _____ Yes _____ No _____ If yes, acknowledgement sent

RECOMMENDATIONS

1. ☒ Approve _____ See attached memo

2. _____ Deny due to _____

3. Conditions of Approval See Lori Graves' memo dated 7/24/2000

4. Recommended by Gaug Date 11/20/00

FORWARDING FILE TO S.O.

1. Copies made for Region file (see attached supplemental page): _____ Yes pam

2. File forwarded to S.O. by At Date 11-20-00

MEMORANDUM

DATE: 10/23/00

FROM: Lori Graves ☺

Ly

TO: Transfer 5795

RE: Local Public Interest Info

In response to IDWR's "more info" letter dated 9/18/2000, applicant's consultant supplied an approved Zoning Certificate from Ada County Planning and Zoning, showing that the County considered Grasslands Dairy as a conformed use and also the dairy's nutrient management plan that addresses various local public interest considerations.

MICROFILMED

SEP 17 2001

WATER RESOURCES
WESTERN REGION

LEGAL ADVERTISING PROOF OF PUBLICATION

SEP 07 2001

MEMORANDUM

DATE: 7/24/00

FROM: Lori Graves ☺

TO: Transfer File (63-07513, 63-10979)

RE: Grasslands Dairy Transfer No. 5795

Attachments

- A. Ownership Documentation
- B. Dairy Requirements
- C. Crop History
- D. Allocation Calculations
- E. Aerial Photos

Brief

Applicants wish to restructure their water rights to account for changes made since 1995, when they began converting an existing feedlot into a Jersey cow dairy. The existing dairy consists of 895 milkers, 200 dry cows and 500 replacement heifers.

No new wells are proposed. Three wells are used for irrigation and stockwater and two wells are used for the dairy and stockwater. Although the irrigation wells are separate from the actual dairy system, Pam Skaggs said that the system was common enough to accept as one transfer as filed.

Overlaps

The transfer is based on 601 acres irrigated with three wells licensed under 63-07513 and 63-10979. Right 63-07513 was originally licensed for a system capacity of 6.3 cfs and 630 acres. License 63-10979 was later filed and licensed for additional flow. In 1989, the field examiner for right 63-10979 found that the actual acres owned and irrigated were 601, not 630. The applicant amended SRBA claim A63-07513 to the same 601 acres licensed on 63-10979. 1989, 1990 and 1999 FSA photos and ownership documentation support the 601 acre amendment. The change results in a greater cfs rate/acre for right 63-07513, but the reduced acreage is still under-appropriated at .01 cfs/acre. Even with both licenses combined, the 601 acres are limited to 7.9 cfs or .013 cfs/acre.

Drinking water for 1000 cattle (previous feedlot) has been recommended for decree in the SRBA under R63-15493. 5 afa for stockwater has also been licensed and claimed on right 63-07513/A63-07513. The transfer is based on the assumption that the SRBA

RECORDED

JUL 27 2001

claims A63-15493 and A63-07513 will be decreed as filed. The transfer only accounts for the amount of water needed above and beyond the stockwater claimed in the SRBA.

Attachment B develops the quantity of stockwater and commercial water that has not been claimed in the SRBA. Adjustments were made to cow size, as the dairy uses Jersey/Holstein crossbreds. Claim A63-15493 lists stockwater for 1000 head of cattle, so beginning with the smallest animals, 1000 head were subtracted out. An additional 5 afa was subtracted out for stockwater based on license 63-07513 and claim A63-07513. This transfer is for the remaining 20.4 afa needed for the dairy's stockwater/commercial uses.

Note: Applicant also has application no. 63-12278 on hold for additional commercial and stockwater flow and/or an additional well.

Amounts

Using the Allen/Brockway report, attachment C develops an average consumptive use estimation of 2.92 afa/acre averaged from three years of crop records from 1997 through 1999. Based on this estimation, ~7 acres need to be retired for the dairy (20.4/2.92).

Attachment D explains the allocation of flow and volume listed for licenses 63-07513 and 63-10979 as shown on the front page of the transfer.

Recommendations

Based on review of the submitted documentation, I recommend this transfer be approved as filed with the following condition:

When combined, licenses 63-07513 and 63-10979 limited to 7.83 cfs and 2673 afa for irrigation of 594 acres.

MICROFILMED
SEP 07 2001

**NOTICE OF PROPOSED CHANGE OF WATER RIGHT
TRANSFER NO. 5795**

Notice is given that **GRASSLANDS LLC** of 6001 Robinson Rd, Kuna ID 83634, have applied to the Department of Water Resources to change the nature, period and place of use pursuant to I.C. § 42-222 for the following ground water licenses in T1N R1W, Ada County:

LICENSE #	PRIORITY	CFS	DIVERSION
63-07513	10/22/1971	6.30	SWNE, Lt 3 NWSW, NWSE, S7
63-10979	9/14/1989	1.60	same as above

Total amount is 7.90 cfs from 3 wells. The place of use is 630 acres in the SE S6, E ½, SW S7 and NE S18. Stockwater use for .02 cfs in S7 is also listed for license 63-07513.

PROPOSED CHANGE

Clarify total acreage to 601 acres. Retire 7 acres from irrigation and use the water from those acres for an existing dairy located in the E½SE S7. The additional water will be used for 895 milking cows, 200 dry cows and 500 replacement heifers. Two existing domestic and stockwater wells located in the SENE and NESE S7 will be combined with the irrigation wells to reflect a common system. Wastewater from the dairy will be land applied to acres in S6, S7 and S18. New uses will be described as a total of .067 cfs commercial and stockwater to be used year around. Grasslands LLC dairy is located 3.5 miles West and 3.5 miles South of Kuna, just West of Robinson road.

Any protest against the approval of the proposed change must be filed with the Department of Water Resources, Western Region, 2735 Airport Way, Boise, ID 83705-5082, together with a protest fee of \$25 on or before September 5, 2000. The protestant must also send a copy of the protest to the applicant.

Karl J. Dreher, Director

Published in the Idaho Statesman on August 17 and 24 , 2000.

MICROFILMED

SEP 07 2001

Local Public Interest

Water right applications related to the construction and operation of large dairies have sparked significant controversy in recent years.

Please show how the existing dairy has complied with the necessary approvals required by the local governments responsible for granting permission for the dairy as well as the Idaho Department of Agriculture and/or the Idaho Division of Environmental Quality (DEQ).

Please supply this information within 30 days from the date of this letter. Thanks
Darwin.

Sincerely,



Lori Graves
Sr. Water Right Agent

MICROFILMED

SEP 07 2001

Grassland Officers :

DC Dunlop

PJ Dunlop

Lorene Clapson

Lesley Clapson

REVIEWER'S

NOTES

MICROFILMED

SEP 07 2001



State of Idaho

DEPARTMENT OF WATER RESOURCES

1301 North Orchard Street, Statehouse Mail, Boise, Idaho 83720 -(208) 327-7900

CECIL D. ANDRUS

GOVERNOR

R. KEITH HIGGINSON

DIRECTOR

April 18, 1990

RE: Transfer of Water Right No. 63-7513

Jerry &/or Linda M. Davis
6001 Robinson Rd.
Kuna, ID 83634

Dear Mr. and Mrs. Davis:

Enclosed is a copy of your approved Application for Transfer of the above referenced water rights (Transfer No. 3624).

Sincerely,

JIM JOHNSON
Water Rights Supervisor

JJ:sc

Enclosure

MICROFILMED

JUN 04 1990

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
TRANSFER ANALYSIS SHEET

INITIAL REVIEW BY: SL

1. Right number 63-07513 Applicant Jerry & Linda M. Davis
2. Type of right: ☐ Decree ☒ License ☐ Claim
3. Purpose of transfer: ☒ Change point of diversion ☒ Add diversion point(s) ☐ Change place of use
☐ Other _____

4. Check:

- a. ☒ Source ☒ Priority ☒ Amount ☒ Purpose ☒ Period of use *NOTE PERIOD OF USE ON LICENSE EXTENDS THROUGH 11/30 INSTEAD OF NORMAL 11/15.*
- b. ☒ Description of original point of diversion.
- c. ☒ Description of original place of use.

5. Amount of land &/or water transferred:

- a. ☒ All of right.
- b. ☒ Part of right (NOTE! Part B should be filled in only if part of the right is owned by the applicant).
- c. ☒ Check description of point(s) of diversion.
- d. ☒ Check description of place of use. *N/A*
- e. ☒ Check map (shows p.d. and p.u. after transfer).
- f. ☒ Check for correct signature, notarization, and fee.
- g. ☒ Check proof of ownership of right &/or land from which water is transferred. *N/A p/d changes*
- h. ☒ Check for expansion in use of right. Comments Lic. for .01 cfs/ac., new
Appl. for permit for .0032 cfs/ac., total .0132 cfs/ac. } *Note Appl. for Permit 63-10979 with use same 3 wells for same acres.*
- i. ☒ Check for existing water rights from same source, on land water is being transferred to.
Right number(s) N/A
- j. ☒ Is use within a Watermaster District? ☐ Yes ☒ No
If yes, what district? _____

FINAL PROCESSING REVIEW BY: _____

1. Watermaster recommendation requested on N/A Received on _____
2. Is transfer published correctly? ☒ Yes ☐ No
3. Protest received? ☐ Yes ☒ No

RECOMMENDED ACTION

1. ☒ Approve
2. ☐ Deny
3. Conditions* _____

4. By DW

Date 11/7/89

NOV 08 1989

RECEIVED

Department of Water Resources

All uses within Watermaster Districts require special conditions.

NOTICE OF PROPOSED CHANGE OF WATER RIGHT

No. 63-07513

Notice is hereby given that Jerry &/or Linda Davis of Kuna, ID, have applied to the Department of Water Resources for a change of points of diversion of groundwater. The right sought to be changed is evidenced by a license and is recored as follows:

Amount: 6.30 cfs Priority Date: 10/22/1971

Point(s) of Diversion: T1N, R1W, S. 7, SWNE & NESW.

The water is used for irrigation and stockwater purposes in T1N, R1W, S. 6, SE1/4, S.7, E1/2 and SW1/4, S. 18, N1/2NE1/4, SWNE

TO BE CHANGED AS FOLLOWS

Amount: 6.30 cfs

Point(s) of Diversion: T1N, R1W, S.7, SWNE, NWSW, NWSE.

The water will be used for irrigation and stockwater.

Any protest against approval of the proposed change of water right application must be filed with the Department of Water Resources, Western Region, 2735 Airport Way, Boise, ID 83705 on or before November 6, 1989.

R. Keith Higginson, Director

Published in the Idaho Statesman on 10/19 and 10/26, 1989.

RECEIVED

JUN 04 1990



State of Idaho
DEPARTMENT OF WATER RESOURCES

Western Region, 2735 Airport Way, Boise, Idaho 83705 - (208) 334-2190

CECIL D. ANDRUS

GOVERNOR

R. KEITH HIGGINSON

DIRECTOR

September 27, 1989

Jerry and Linda Davis
6001 Robinson Road
Kuna, Id. 83634

Re: Transfer 63-07513 and Application for Permit 63-10979

Dear Jerry and Linda:

Enclosed are the transfer application and a map. Please initial the changes on page 3 of the transfer document. Also, please mark the three well locations on the map. I will use the map for the transfer and permit applications.

For Application 63-10979 for more water (2.00 cfs) on the 630 acres, additional information is required before the application will be approved. Based on Idaho Code 42-203A(5)(a-e), additional information is needed for applications involving irrigation of more than 200 acres. Please provide information relating to the proposed development as outlined in the attached copy of Water Appropriation Rules 4,5,3,1 through 4,5,3,6,7. This covers the following items:

- a) effect on existing water rights,
- b) sufficiency of water supply,
- c) good faith, delay, or speculative purposes,
- d) financial resources, and
- e) local public interest.

The transfer and permit applications will be advertised and processed upon returning the transfer document and map. The application for more water will be processed but cannot be approved until the additional information is submitted.

Please return the transfer and map as soon as possible. The other information should be submitted within 30 days if possible. Let me know if I may help you. This office has records showing well and spring locations around your area.

Sincerely,

Steve Lester
Sr. Water Resource Agent

SL:sl
Enclosure

MICROFILMED

JUN 04 1990

Responded by office visit 9/29/89.

CONVERSATION MEMORANDUM

DATE 9/27/89FILE 63-07513 (transfer)
63-10979 (new appl)NAME OF PARTY Linda Davis 495-2896EMPLOYEE Flem LesterRE: 2 existing wells1 new well (drilling permit 63-89-Z-179)Large division analysis - addtl. info neededAppl. 63-10979 for additional water on same acres as
Lic. 63-075136.30 cfs for 630 ac. = .01 cfs/ac.Appl. 63-109792.00 cfs for 630 ac. = .0032 cfs/ac.TOTAL RATE PER ACRE = .0132 cfs/ac.Map - transfer appl - does not show wells after
transfer.- NO map with appl. for permit.Prepare *map & send to them.Anticipate on changes on transfer - Pg. 3, item A8,
structure wasn't shown on transfer.* New map attached to transfer - show wells2) map for Appl. - init. [unclear] for OK**MICROFILMED**

JUN 04 1990

Send w/
large div.
suppl.
encl.
letter

63-02513

COMP

P N° 1 NORTH. RANGE N° 1 WES'

Sec. 31

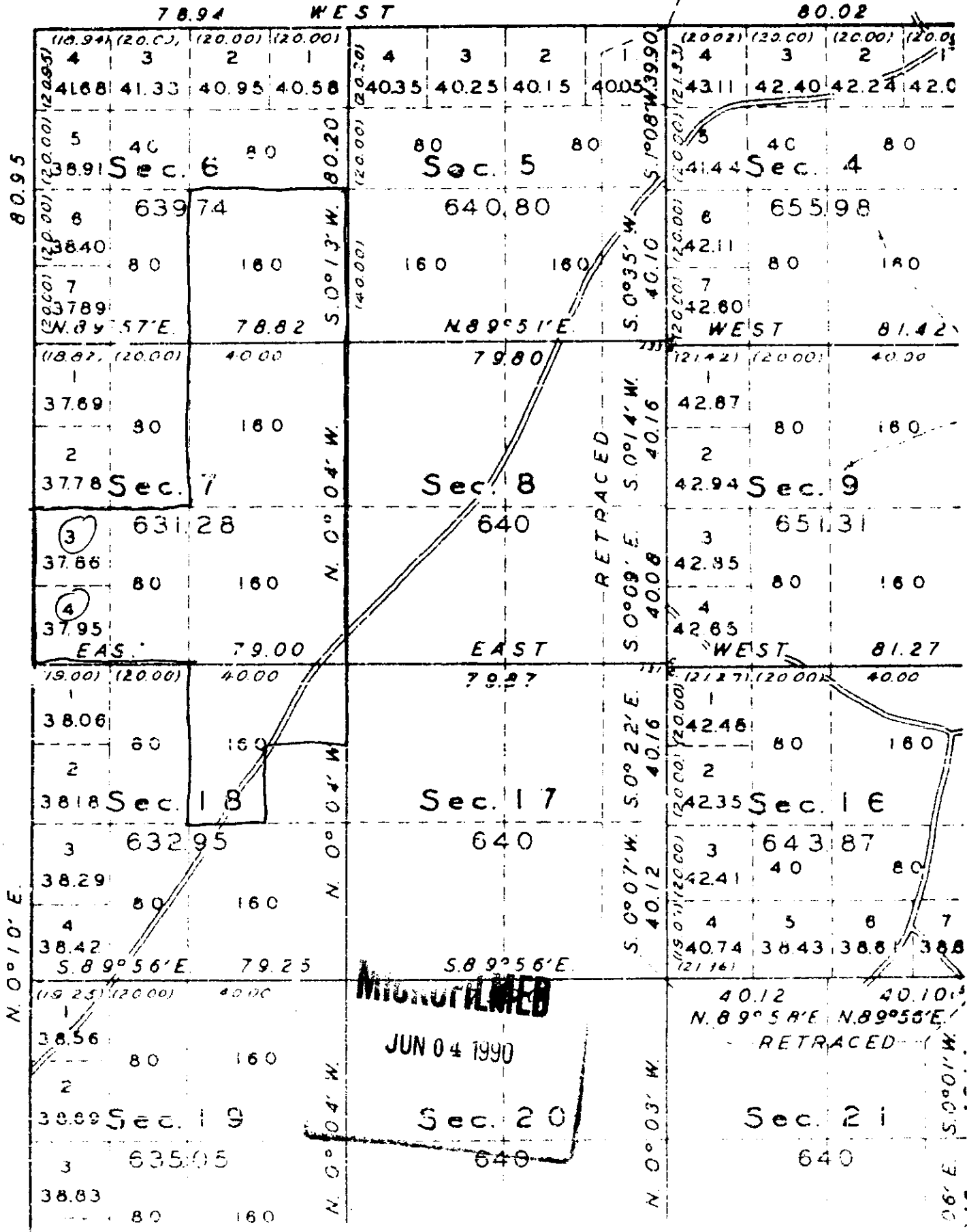
Sec. 32

Sec. 33

RESURVEYED-

S. 89° 39' E.

80.02



December 14, 1976

Re: Permit No. 63-7513

Travelers Insurance Company
Real Estate Investment Dept.
707 S.W. Washington
Portland, OR 97205

Gentlemen:

Enclosed herewith is a copy of the water right license issued on the above referenced permit.

Sincerely,

D. DARLENE REICH
Water Rights Supervisor

DDR:mef

Enc.

cc: George V. Hjort
6174 Winstead Place
Boise, ID 83704

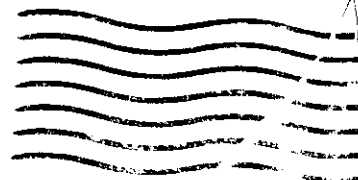
STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
Statehouse
Boise, Idaho 83720

*Recd 11-22-76 to:
6174 Winston Place
Boise 83704*

NOT DELIVERABLE
AS ADDRESSED -
UNABLE TO FORWARD

Mr. George V. Hjort
1903 So. Roosevelt
Boise, ID 83705

RECEIVED



CO CB

NOV 5 1976

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
Statehouse
Boise, Idaho 83720

No postage necessary if mailed in state
Do not re-mail in this envelope

~~Mr. Jerry Dale Davis
Route # 3
Meridian, ID 83642~~

RECEIVED

Department of Water Resources

RECEIVED

November 4, 1976

Travelers Insurance Company
Real Estate Investment Dept.
707 S.W. Washington
Portland, OR 97205

Re: Permit No. 63-7513

Gentlemen:

A representative of this Department has made an examination of the works covered by the above referenced permit and found the following:

Quantity of water diverted: 6.30 cfs Source: ground water

The amount of water that can be recognized as beneficially used under Idaho law: 6.30 cfs

The maximum quantity diverted shall not exceed 2,835 acre feet per year.

Point of diversion: SW $\frac{1}{4}$ NE $\frac{1}{4}$ and NE $\frac{1}{4}$ SW $\frac{1}{4}$, Sec. 7, Twp. 1 N, Rge. 1 W, B.M., Ada County

Beneficial use: Stockwatering purposes in the SW $\frac{1}{4}$ NE $\frac{1}{4}$, NE $\frac{1}{4}$ SW $\frac{1}{4}$, Sec. 7 and the irrigation of 630 acres within the SE $\frac{1}{4}$, Sec. 6; NE $\frac{1}{4}$, S $\frac{1}{4}$, Sec. 7; NE $\frac{1}{4}$ NE $\frac{1}{4}$, W $\frac{1}{4}$ NE $\frac{1}{4}$, Sec. 18; all in Twp. 1 N, Rge. 1 W, B.M.

Priority date established: October 22, 1971

If you do not concur with these findings please contact us within 15 days, otherwise a water license will be issued as set forth above.

Sincerely,

BOBBY D. FLEENOR
Chief, Water Rights

cc: George V. Hjort
1903 So. Roosevelt
Boise, ID 83705

Jerry Dale Davis
Route # 3
Meridian, ID 83642

495-2896

FIELD REPORT

3. Water will be used for the following purposes:

Other uses: _____

- Max Rate of Diversion 9.0 cubic feet per second and annual volume _____ AF/Annum.

- Other Points of Diversions: _____

Description of diverting works: Pump, motor & sprinklers.

Measuring device required: yes ☒ no ☐

6. Lands to be irrigated or place of use.

[illegible]**TOTAL ACREAGE**

631 ~~760~~

Rge - 1W

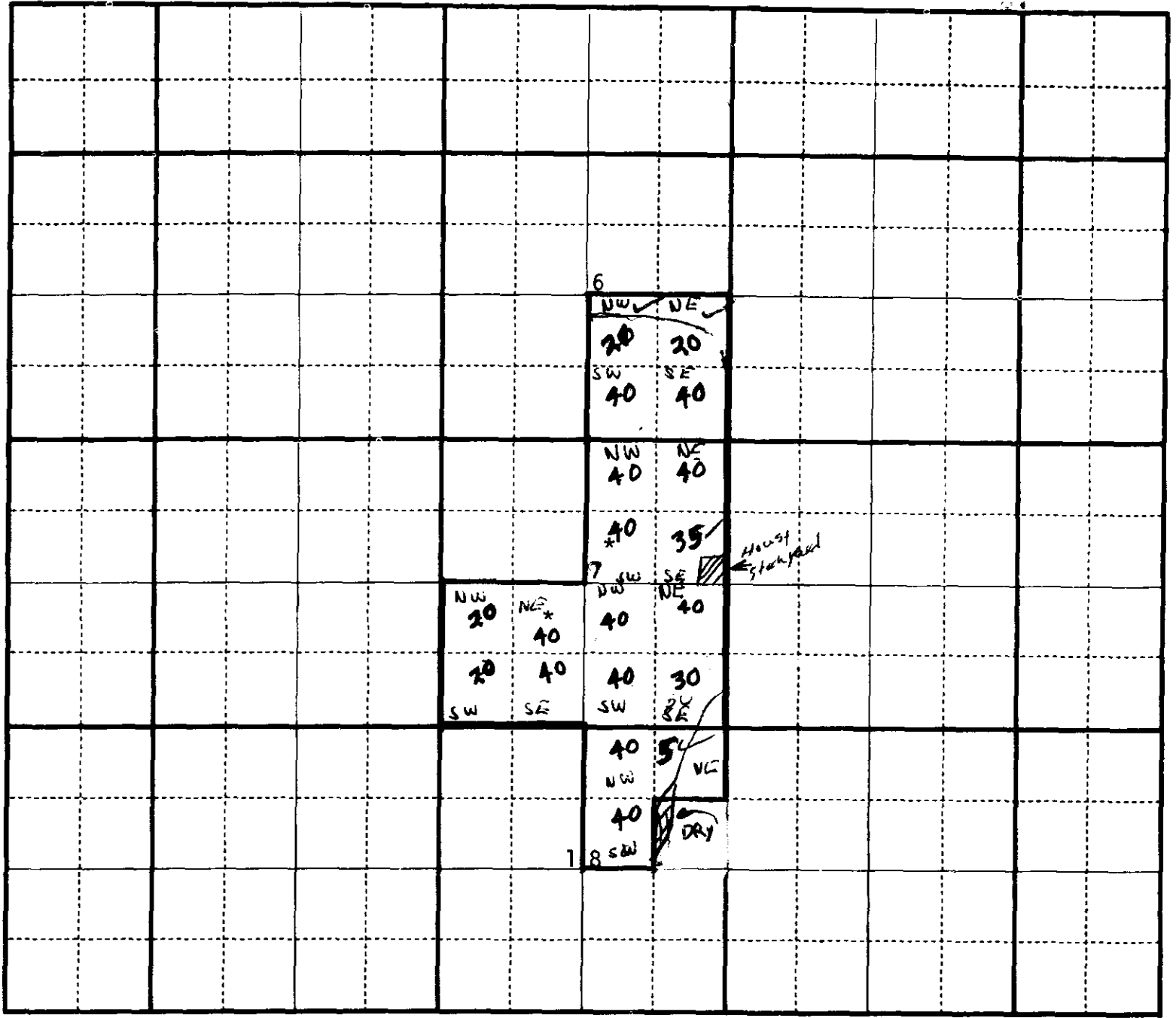


Diagram of System

$$\begin{array}{r} 15 \\ 40 \\ \hline 520 \checkmark \\ 80 \checkmark \\ 20 \checkmark \\ \hline 560 \\ 35 \checkmark \\ \hline 595 \\ 30 \checkmark \\ \hline 625 \\ 10 \checkmark \\ \hline 635 \checkmark \\ 635 \text{ Total} \end{array}$$

DATE OF EXAM 16 June 75

ACREAGE
Found 631
Recommended 631

Irrigation Requirement 4.5 Ac Ft/Ac

USE
Irrigation Q = 6.2 c.f.s. V = 2839.5 AF/Ann. from Apr. 1 to Nov. 30
Domestic Q = 0.02 c.f.s. V = 4.0 AF/Ann. from Jan 1 to Dec. 31
Livestock Q = 0.02 c.f.s. V = 4.0 AF/Ann. from Jan 1 to Dec. 31

Is water co-mingled? yes ☒ no ☐

Name source: Groundwater #1 & #2 wells on permit
twp. 1 N/S, Rge 1 E/W, B.M., Sec. 7, Sub. 3W 1/4 NC 1/4 Adca County

Exchange? yes ☐ no ☒

Name source exchanged with: _____
twp. _____ N/S, Rge _____ E/W, B.M., Sec. _____, Sub. _____ 1/4 _____ 1/4 _____ County

Point of injection:
twp. _____ N/S, Rge _____ E/W, B.M., Sec. _____, Sub. _____ 1/4 _____ 1/4 _____ County

Point of exchange:
twp. _____ N/S, Rge _____ E/W, B.M., Sec. _____, Sub. _____ 1/4 _____ 1/4 _____ County

Total Q measured #1 - 930 gpm #2 - 1400 gpm Method of measurement CSF estimate
Total Q recommended 2800 gpm = 6.2 cfs Meter No. 21049286 Condition Good
+ .02 cfs for stockwater = 6.22 cfs total recommended
Total V recommended 2839.5 AF + 4.0 AF (Stockwater) = 2843.5 AF
Irrigation

Recommended Amendments:

P.D. _____
Place of Use _____
Other _____
None ☒

MEASUREMENT CALCULATION:

#1 930 gpm = 2.07219 cfs
#2 1400 gpm = 3.11942 cfs
Total V = (4.5 AF/a) * (631 a.) = 2839.5 AF + (2.7 AF [200 cattle]) + (1.3 AF [600 sheep]) = 2843.5 AF = Total V. Volume
Rate
Total Q recommended is max. of system 2800 gpm = 6.2 cfs
2844 AF Total

SYSTEM DESCRIPTION:

#1 16" well 400' deep w/ 200 HP GE motor model 5K6285XC33A
on #2 120214H and a 200 HP GE motor Pump # 612231W/1211
discharge #2 16" 400' well w/ 150 HP GE motor model 5K627X133B
and 150 HP Vari-Tune Pump 347 P-9714

REMARKS:

systems operating well at 100% cap 1/2 mile lines
not operating during exam

Examiner's Signature Ernest Ballan Date 16 June 75

Checked by JK Date 10-30-75

Approved by _____ Date _____

April 30, 1975

Re: Permit No. 63-7513

George V. Hjort &/or Jerry Dale Davis
&/or Travelers Insurance
Real Estate Investment Department
707 S.W. Washington Street
Portland, Oregon 97205

Gentlemen:

We acknowledge receipt of the affidavit submitted as proof of beneficial use for the above referenced permit.

Before a license can be issued, a field examination must be made by a representative of this Department. We cannot tell during which part of the irrigation season this examination will be made, however, our examiner will try to contact you at the time he makes the exam so that you may show him the system.

If you have any questions concerning the field exam, please contact our District Office in **Boise.**

Sincerely,

D. Darlene Reich
Water Rights Supervisor

DDR:JG

RECEIVED

APR 23 1975

Identification No. _____

Permit No. 63-7513

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

PROOF OF APPLICATION OF WATER TO BENEFICIAL USE

1. a) Name of Permit Holder George V. Hjort &/or Jerry Dale Davis &/or Travelers Insurance
 b) Post Office Address Real Estate Investment Dept. 707 SW Washington S Portland, Oregon 97205
2. Permit Number 63-7513
3. Date of Priority that you are prepared to establish 10-22-71
4. a) Source from which water was appropriated Groundwater
 b) Location of the point of diversion: SW 1/4 NE 1/4, Section 7
 Township 1 N, Range 1 W Boise Meridian, Other points of diversion: NE 1/4 SW 1/4 Sec 7 T 1 N R 1 W BM
5. a) The amount of water and use to which the water has been applied:
 Amount 8.98 for irrigation purposes from Apr 1 to Nov 31 incl.
 (cfs and/or acre-feet per annum) (Month-Day) (Month-Day)
 Amount 0.02 for stockwatering purposes from Jan 1 to Dec 31 incl.
 (cfs and/or acre-feet per annum) (Month-Day) (Month-Day)
 Amount _____ for _____ purposes from _____ to _____ incl.
 (cfs and/or acre-feet per annum) (Month-Day) (Month-Day)
 b) Total amount appropriated 9.00 cfs and/or acre-feet per annum
 c) Describe how and by whom measurement of rate of flow or amount of storage was made and the qualifications of the person making the measurement: Farm manager determined the flow by using measuring devices installed
6. If the means of diversion and conveyance are owned by someone other than the Permit Holder:
 a) Give the name or description of the canal, ditch or other works by which the water is conducted to the place of use:

 b) Describe the agreement or understanding by which you take water from the works:

7. a) Briefly describe the works for diverting and conveying the water to the place of use, (if from a subterranean source, give the pump size, motor size, size of well casing, depth of well; if from surface water, give brief description of diversion structure and/or canal or ditch)

 b) Describe the type and size of measuring device which you have installed at your point of diversion:
One 12" & one 8" Commercial type flow meters
 c) Give well driller's name and address and the date the well was completed:

8. If for other than irrigation, describe the beneficial use to which you have applied the water and the place of use:
Stockwatering within NE SW and SW NE Sec. 7 T 1 N, R 1 W

Exam typed 5/1/75 by jq

MICROFILMED

9. Irrigation uses: describe the lands irrigated by giving the acreages irrigated within each 40 acre subdivision:

T	R	SEC.	NE¼				NW¼				SW¼				SE¼				TOTAL
			NE¼	NW¼	SW¼	SE¼	NE¼	NW¼	SW¼	SE¼	NE¼	NW¼	SW¼	SE¼	NE¼	NW¼	SW¼	SE¼	
1N	1W	6													40	40	40	40	160
		7	40	40	40	40					40	40	40	40	40	40	40	40	480
		18	40	40	40														120

Total number of acres irrigated 760

10. Remarks:

The above information is a true statement of the extent to which the above numbered permit has been developed.

4-23-75
(Date)

Jerry Dale Davis
(Signature)

State of Idaho)
County of Ada) ss.

On this 23rd day of April, 1975, personally appeared before me the signer(s) of the above instrument, who duly acknowledged to me that he (she) (they) executed the same.

Cathy L. Atkinson
Notary Public residing at Boise, Id

My commission expires 12-26-78



State of Idaho
DEPARTMENT OF WATER RESOURCES

Western Region, 2735 Airport Way, Boise, Idaho 83705-5082 - (208) 334-2190
FAX (208) 334-2348

DIRK KEMPTHORNE
GOVERNOR

KARL J. DREHER
DIRECTOR

9/18/2000

Darwin Vander Stelt
16931 Star Rd
Nampa ID 83687

RE: Grasslands Application for Transfer no. 5795

Dear Darwin:

The application for transfer no. 5795 you filed for Grasslands LLC has completed advertising without protest.

Idaho Dept. of Water Resources (IDWR) must address all of the factors in Idaho Code § 42-222 whether a transfer is protested or not. The following issues are generally brought to light during the protest process:

(1) Will injure other water rights, (2) will result in an enlargement of the original water right sought to be transferred, (3) is in the local public interest, (4) is consistent with the conservation of water resources of the state of Idaho, and (5) will significantly affect the agricultural base of the local area.

This application for transfer proposes a change in use from irrigation to commercial and industrial use associated with a 1,595 animal dairy. The computations attached to the application attempt to show that the use of water authorized by the original water right will not be enlarged. The computations accompanying the application assume conservation measures employed in a modern dairy. Because the application involves an existing dairy and no additional wells are proposed, injury to other water users and effects on the local agricultural base are assumed not applicable. However the following factor that must be considered by IDWR is not addressed by the application.

MICROFILMED
SEP 21 2001

February 3, 1972

Re: Permit No. 63-7513

Mr. George V. Hjort
1903 South Roosevelt
Boise, Idaho

Dear Mr. Hjort:

Pursuant to your filing the assignment of Permit No. 63-7513, we are returning the original assignment form.

The corrected form, which listed Travelers Insurance and/or George V. Hjort and/or Jerry Dale Davis, has been entered into the records and these individuals are now the present holders of the permit.

If we can be of further assistance in this matter, please feel free to contact this Department.

Very truly yours,

James Booker
Appropriation Examiner

JB:cs

Enc: assignment form (original)

63 7513

STATE OF IDAHO
DEPARTMENT OF WATER ADMINISTRATION
Statehouse - Annex 2
Boise, Idaho 83707

*unknown as addressed
from name or room# please
505c*

Mr. George V. Hjort
707 S.W. Washington Street
Portland, Oregon 97205



RETURN
TO
WRITER



STATE OF IDAHO

DEPARTMENT OF WATER ADMINISTRATION

Statehouse - Annex 2
Boise, Idaho 83707
(208) 384-2215



R. Keith Higginson
Director

Water Rights Administration
Water Resource Investigations
Dam and Reservoir Safety
Water Well Drilling
Flood Plain Management
Irrigation and
Flood Control Districts

January 26, 1972

Re: Permit No. 63-7513

Mr. George V. Hjort
707 S. W. Washington Street
Portland, Oregon 97205

Dear Mr. Hjort:

Pursuant to your filing the assignment of Permit No. 63-7513, we are returning the original assignment form.

The corrected form, which listed Travelers Insurance and/or George V. Hjort and/or Jerry Dale Davis, has been entered into the records and these individuals are now the present holders.

If we can be of further assistance in this matter, please feel free to contact this Department.

Very truly yours,

James Booker
Appropriation Examiner

JB:CS

Enc: assignment form (original)

*Retype Letter
Send to George Hjort
1903 South Roosevelt
Boise Idaho*

63-7513

M E M O

TO: Permit No. 63-7513
FROM: James Booker
SUBJECT: Address of Present Owners

Subsequent to the assignment of this permit, the address of the new holders are as follows:

George V. Hjort	1903 South Roosevelt Boise, Idaho
Jerry Dale Davis	Route #3 Meridian, Idaho
Travelers Insurance Co.	Real Estate Invest. Dept. 707 S. W. Washington St. Portland, Oregon



James Booker

63 7513

STATE OF IDAHO

DEPARTMENT OF WATER ADMINISTRATION

Statehouse - Annex 2
Boise, Idaho 83707
(208) 384-2215



R. Keith Higginson
Director

Water Rights Administration
Water Resource Investigations
Dam and Reservoir Safety
Water Well Drilling
Flood Plain Management
Irrigation and
Flood Control Districts

January 27, 1972

Re: Permit No. 63-7513

Travelers Insurance
Real Estate Investment Dept.
707 S.W. Washington St.
Portland, Oregon 97205

Gentlemen:

Enclosed is a copy of the recorded assignment conveying Permit No. 63-7513. We are also enclosing a copy of the permit. We wish to advise you that proof of beneficial use of the water is to be submitted on or before December 1, 1976.

If we can assist you further, please contact us.

Very truly yours,

Donald W. McEldowney
Appropriation Supervisor

DWM/BB
Enclosures

cc: George V. Hjort
Jerry Dale Davis
Enc: Copy of assignment & permit

63 7513



R. Keith Higginson
Director

Water Rights Administration
Water Resource Investigations
Dam and Reservoir Safety
Water Well Drilling
Flood Plain Management
Irrigation and
Flood Control Districts

STATE OF IDAHO

DEPARTMENT OF WATER ADMINISTRATION

Statehouse - Annex 2
Boise, Idaho 83707
(208) 384-2215

December 21, 1971

Re: Permit No. 63-7513 - Triangle H. Corporation

Triangle H. Corporation
1903 South Roosevelt
Boise, Idaho

Gentlemen:

Enclosed is a copy of your approved Application for Permit No. 63-7513. We direct your attention to the conditions of approval as listed on the fourth page.

Be sure to note that a special condition requiring you to install and maintain a measuring device at your point of diversion has been placed upon your permit. We are enclosing a letter describing different types of measuring devices accepted by this office.

Very truly yours,

BOBBY D. FLEENOR
Assistant Director

BDF:cr

Enclosures

63 7513

November 2, 1971

Re: Application No. 63-7510 - Dale E. Hunter
" " 63-7512 - George T. Benson &/or Paul B. Larsen
" " 63-7513 - Triangle H. Corporation

The Idaho Statesman
Box 2640
Boise, Idaho 83701

Gentlemen:

Enclosed you will find a legal notice which we wish to have published once a week for two consecutive weekly issues of your newspaper. We have inserted the publication dates allowing ample time for you to submit us a galley proof for our review before publication.

After sending us a galley proof, proceed with the publication on the dates we have inserted assuming the notice is correct. If we have any corrections, we will notify you before the first publication date. If you cannot publish the notice on the proposed dates, please contact us immediately.

An affidavit of publication must be submitted to the Department along with the publication bill. In order to receive payment, the following certification must appear on the bill:

"I hereby certify that the foregoing account is just and correct, that the amount claimed is legally due, after allowing all just credits, and that no part of the same has been paid."

(signature of claimant)

Very truly yours,

Donald W. McEldowney
Appropriation Supervisor

DWM:cr

Enc: Legal Notice

Bill submitted 11-2-71 By 11

63 7513

NOTICE OF APPLICATION FOR WATER PERMIT

Notice is hereby given that Triangle H. Corporation,

1903 South Roosevelt, Boise, Idaho

has on October 22, 1971 submitted Application No. 63-7513

for a permit to appropriate 9.0 cubic feet per second ~~acre-foot-per-second~~
of water from a ground water source

by means of well and pump

within the SW¹/₄NE¹/₄, NE¹/₄SW¹/₄, Sec. 7, T. 1N, R. 1W, B.M., Ada County

to be used from Jan. 1 to Dec. 31 for stockwatering purposes within the SW¹/₄NE¹/₄,

~~for~~ NE¹/₄SW¹/₄, Sec. 7, T. 1N, R. 1W, B.M.; and from April 1 to Nov. 31 for the irrigation

of 760 acres within the SE¹/₄, Sec. 6; NE¹/₄, S¹/₄, Sec 7; N¹/₄NE¹/₄, SW¹/₄NE¹/₄, Sec. 18,

~~within~~ T. 1N, R. 1W, B.M.

If issued, this permit will be subject to all prior water rights. Protests against the granting of the permit must be filed with the Idaho Department of Water Administration, Statehouse, Boise, Idaho, 83707, on or before November 29, 1971.

R. KEITH HIGGINSON

Director

Published in the Idaho Statesman, Boise, Idaho

on Nov. 11 and Nov. 18, 1971.

63 7513