

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 72-16703

Exam Date: 9/10/2012

1. Current Owner: MICHELLE MC GINLEY
HC 68 BOX 328
CLAYTON ID 83227
(208) 838-2954

And

CHARLES E CAMPBELL
HC 67 BOX 308
STANLEY ID 83278
(208) 838-3024

2. Accompanied by: Jeff Cooper (IDWR)

3. SOURCE

EAST FORK SALMON RIVER

TRIBUTARY

SALMON RIVER

B. OVERLAP REVIEW

1. Other water rights with the same place of use: None. 72-230L is for an adjacent lot (lot # 27)
2. Other water rights with the same point of diversion: 72-230A, 72-230AA, 72-230B, 72-230C, 72-230D, 72-230E, 72-230G, 72-230H, 72-230J, 72-230K, 72-230L, 72-230M, 72-230P, 72-230R, 72-230T, 72-230U, 72-230X, 72-230Y, 72-10539, 72-16646, and 72-16702

C. DIVERSION AND DELIVERY SYSTEM**1. LOCATION OF POINT(S) OF DIVERSION:**

EAST FORK SALMON RIVER

SW1/4NE1/4SW1/4

Sec. 24, Twp 10N, Rge 18E, B.M.

CUSTER County

Method of Determination: Aerial photography, field verification, IDWR Spatial Data Point (East Fork # 5 site tag # A0017256)

2.

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	
10N	18E	13					.1			2.6									2.7

Total Acres: 2.7

Method of Determination: Aerial photography, GIS, and field verification

D. FLOW MEASUREMENTS

Not required for permits with irrigation of less than five (5) acres per new Beneficial Use Examination Rules implemented 3/29/2012. However, a query of all records in the IDWR database listing a POD in the NESW of Sec 24, T10N, R18E indicates records 72-230A, 72-230AA, 72-230B, 72-230C, 72-230D, 72-230E, 72-230G, 72-230H, 72-230J, 72-230K, 72-230L, 72-230M, 72-230P, 72-230R, 72-230T, 72-230U, 72-230X, 72-230Y, 72-10539, 72-16646, 72-16702 and 72-16703 are all diverted from the East Fork # 5 diversion. Adding the face value (not accounting for possible diversion rate limits) of these records indicate a maximum diversion rate of 4.943 cfs. Examination of Water District 72D diversion records for the East Fork # 5 diversion indicates that at least 4.943 cfs is diverted on a fairly routine basis. Therefore, it is safe to assume that the permitted rate for 72-16703 has been diverted from the East Fork of the Salmon River and delivered down the ditch. The place of use was determined to be 2.7 acres of pasture, and allowing for a diversion rate of 0.03 cfs per acre for irrigation of less than five acres, indicates that only up to 0.08 cfs could be allowed. However, permit 72-16702 was permitted for 0.20 cfs (a rate greater than 0.03 cfs per acre). Using methodology utilized in the SRBA (Reevaluation of Irrigation Rates Based Upon 1997 Revised Hubble Analysis Procedures), and soil type data for the county, it was determined that of the 2.7 acre place of use approximately 1.4 acres was soil type BK1 and approximately 1.3 acres was soil type TS1. The Challis Area Soil Review from the SRBA methodology indicates that pasture in soil type BK1 could require 0.07 cfs per acre and soil type TS1 could require 0.08 cfs per acre. Using these values...

$$\begin{aligned}
 1.4 \text{ acres of BK1 at } 0.07 \text{ cfs per acre} &= 0.098 \text{ cfs} \\
 1.3 \text{ acres of TS1 at } 0.08 \text{ cfs per acre} &= 0.104 \text{ cfs} \\
 \text{Total} &= 0.202 \text{ cfs}
 \end{aligned}$$

This indicates that the 2.7 acres of pasture could require 0.20 cfs of water to irrigate using a wild flooding type of irrigation system. During the exam, it was observed that the place of use was being irrigated by damming the main delivery ditches and letting the water flood over the place of use. It was also noted that the approximate run lengths were 250 – 350 feet, which matches the assumptions in the SRBA methodology quite closely (300 foot run and 2% slope). Note that this particular analysis does not account for any conveyance loss between the point of diversion and place of use (approximately 1.5 miles of open ditch) so an even higher rate could probably be justified. It is recommended that 72-16703 be licensed for the permitted rate of 0.20 cfs.

E. VOLUME CALCULATIONS

Not required for permits with irrigation using natural stream flow from a stream or spring per new Beneficial Use Examination Rules implemented 3/29/2012.

F. NARRATIVE/REMARKS/COMMENTS

Application for Permit 72-16703 was filed on March 29, 2006 by Charlie Campbell and Michelle McGinley to appropriate 0.20 cfs of water from the East Fork of the Salmon River for irrigation of 5.0 acres on Lot 26, Block 2, of The East Fork Subdivision. The permit was approved on August 13, 2007 and Proof of Beneficial Use was filed on February 15, 2008. On September 10, 2012, while in the area, Jeff Cooper and I conduct the licensing exam for the permit.

The 72-16703 system consists of a shared diversion (East Fork # 5, GPS site tag # A0017256) from the East Fork of the Salmon River and a conveyance ditch from the diversion to the place of use (Lot 26, Block 2, of The East Fork Subdivision) located approximately 1.5 miles down the valley from the diversion. The main conveyance ditch forks prior to the place of use. During the exam, the property was in the process of being irrigated by damming a main conveyance ditch and flooding the property downhill of the ditch. An examination of the property and review of aerial photography indicates that approximately 2.7 acres are irrigated on the property (some of the property consists of a driveway, corral, high ground and river bottom adjacent to the East Fork of the Salmon River). Using methodology utilized in the SRBA (Reevaluation of Irrigation Rates Based Upon 1997 Revised Hubble Analysis Procedures), and soil type data for the county it is possible to justify 0.20 cfs of water for the irrigation of the 2.7 acres without even accounting for possible conveyance losses in the delivery ditch. In addition, it appears from water master delivery records, that the 0.20 cfs is being delivered at the point of diversion. It is recommended that license 72-16703 be issued for the irrigation of 2.7 acres and a diversion rate of 0.20 cfs.

Have conditions of permit approval been met? ☒ Yes ☐ No

G. RECOMMENDATIONS**1. Recommended Amounts**

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>DIVERSION RATE</u>	<u>ANNUAL VOLUME</u>
IRRIGATION	04/01 to 10/31	0.200 CFS	N/A
	<u>Totals:</u>	0.200 CFS	N/A

2. Recommended Amendments

☐ Change P.D. as reflected above ☐ Add P.D. as reflected above ☒ None
☐ Change P.U. as reflected above ☐ Add P.U. as reflected above ☐ Other

H. AUTHENTICATION

Field Examiner's Name

Date

2/12/13

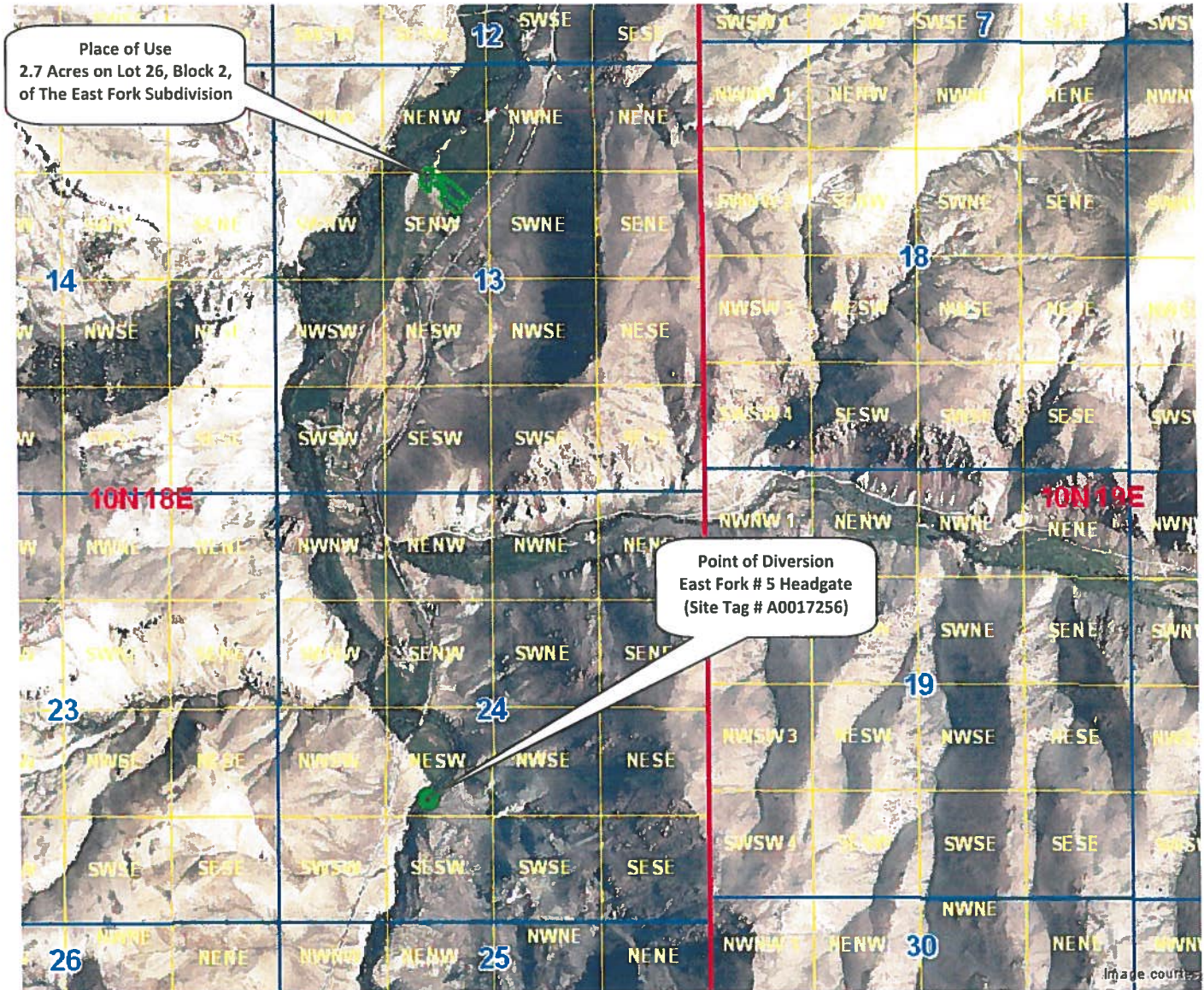
Reviewer

Date

2/13/13

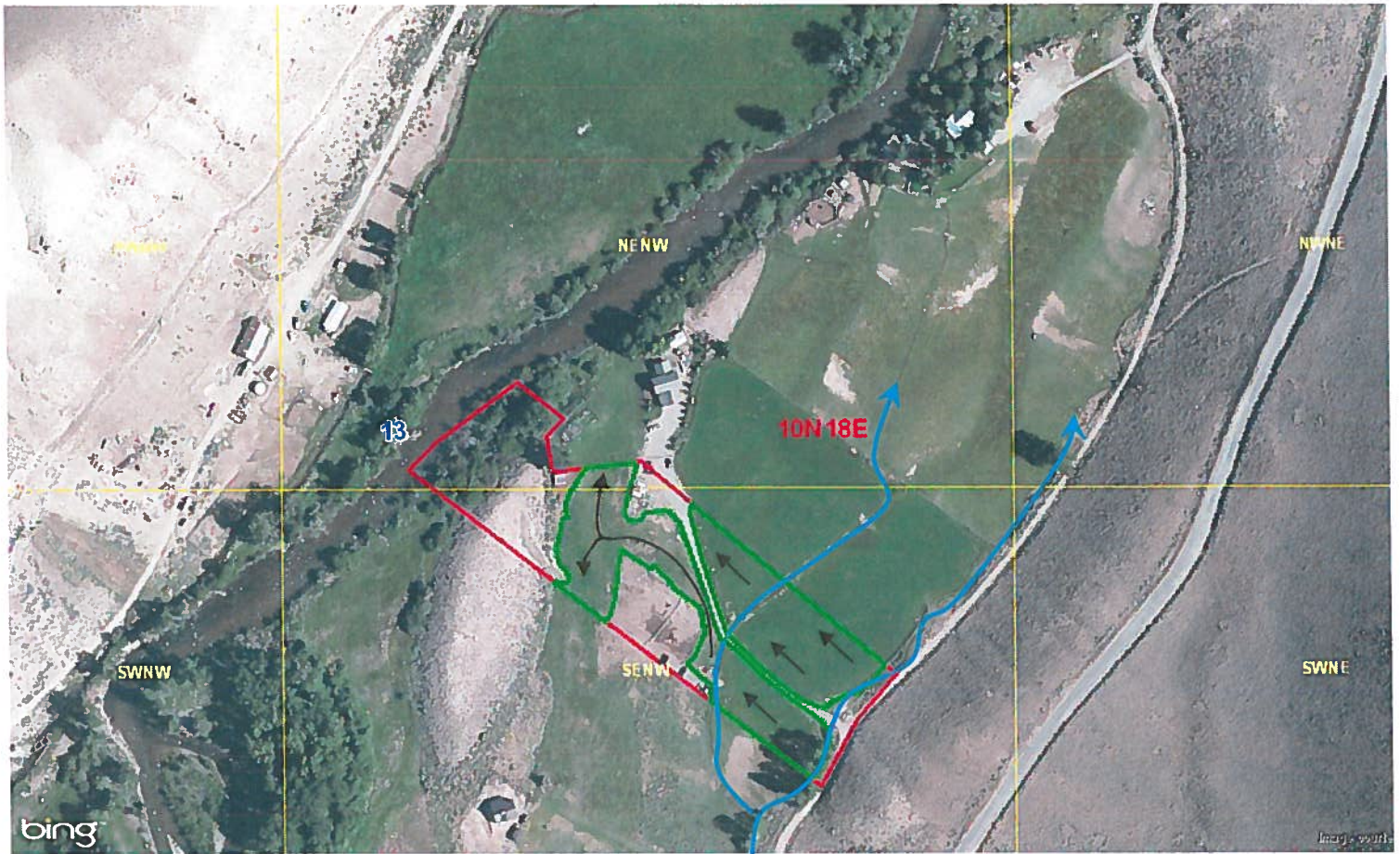
72-16703 Point of Diversion and Place of Use Map

2009 Aerial Photography



72-16703 Place of Use Map

Bing Aerial Photography



Irrigation Place of Use (2.7 Total Acres on Lot 26, Block 2, of The East Fork Subdivision)



Tax Lot (corrected for more accurate location)



Main Irrigation Delivery Ditches (Also Deliver Water to Other Properties)



Direction of Irrigation Flow from Main Delivery Ditches

72-16703 Point of Diversion Photos

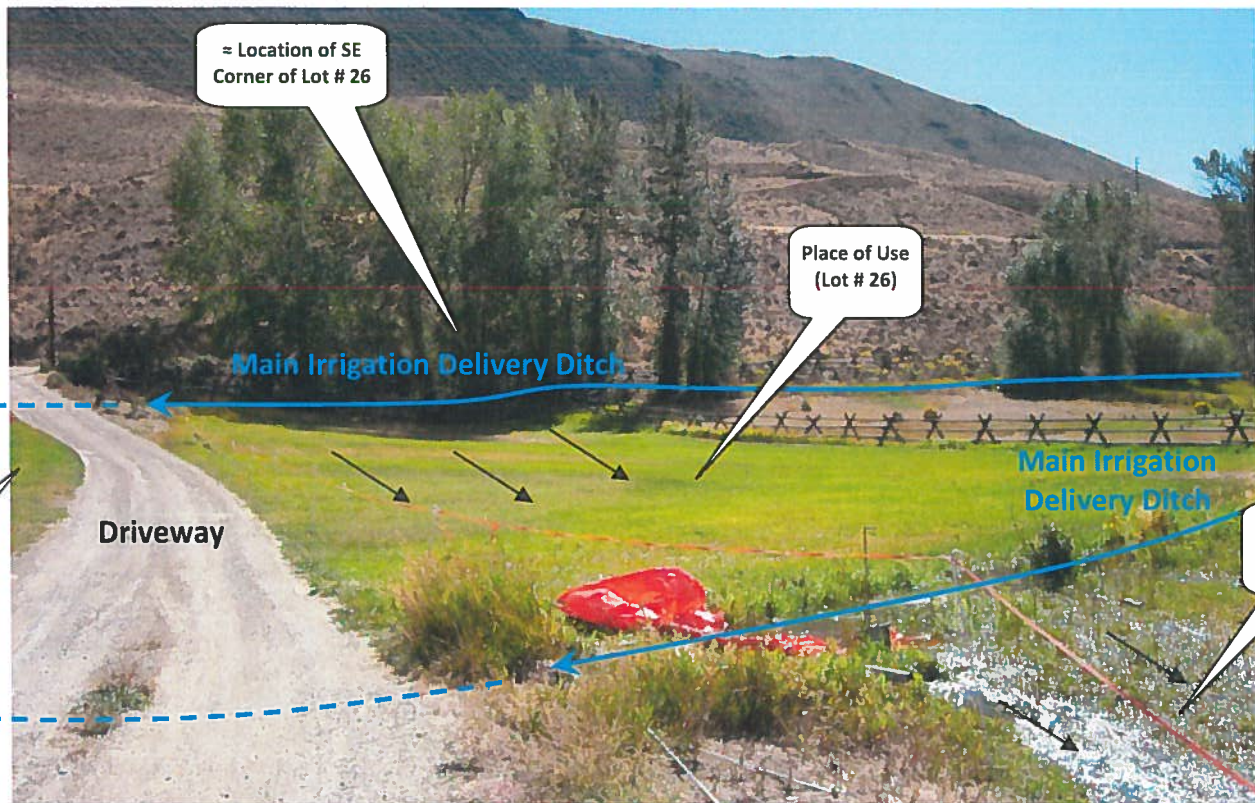


ABOVE: View of Point of Diversion and measuring device (East Fork # 5) for right 72-16703.

BELOW: View of GPS site tag (A0017256) at the point of diversion for right 72-16703.

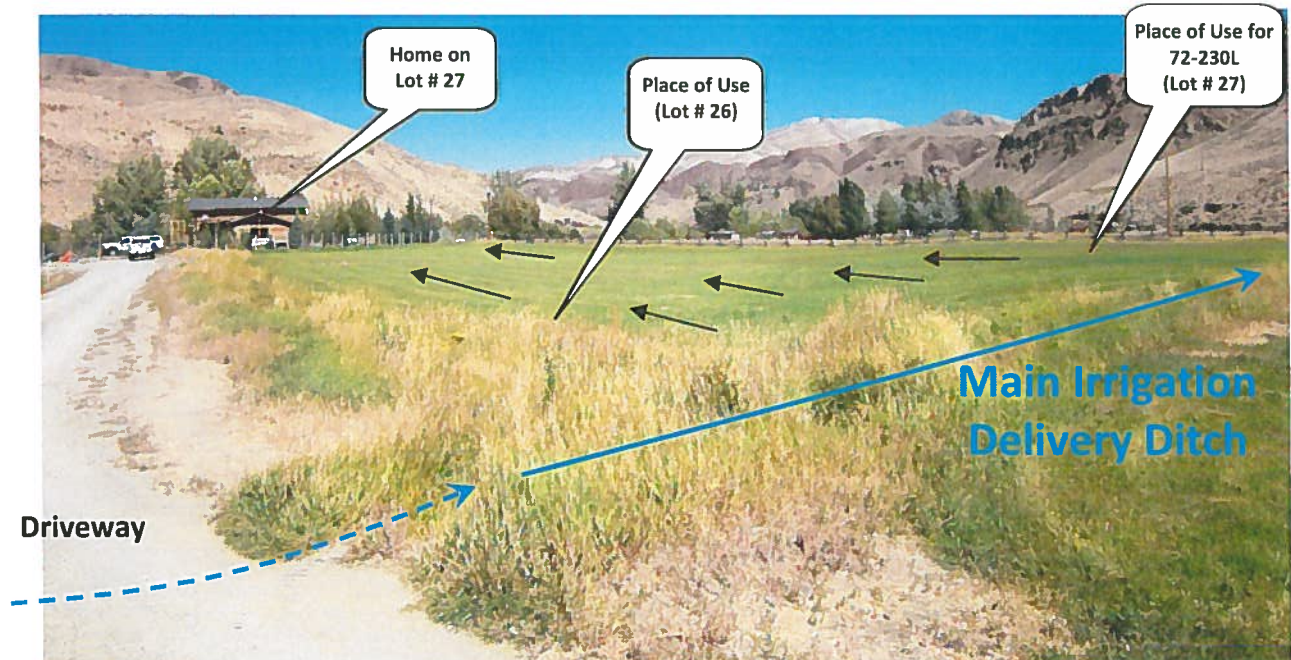


72-16703 Place of Use Photos



ABOVE: View from driveway to the home on Lot #27, Blk 2, The East Fork Subdivision looking towards the southeast corner of Lot # 26 showing place of use and irrigation (damming of delivery ditch and flooding of land below ditch) on Lot # 26. Note that Lot #26 & #27 are owned by the same owners.

BELOW: View looking north from the driveway to the home on Lot #27, Blk 2, The East Fork Subdivision showing irrigated place of use north of driveway (Lot #26 foreground, Lot #27 background).

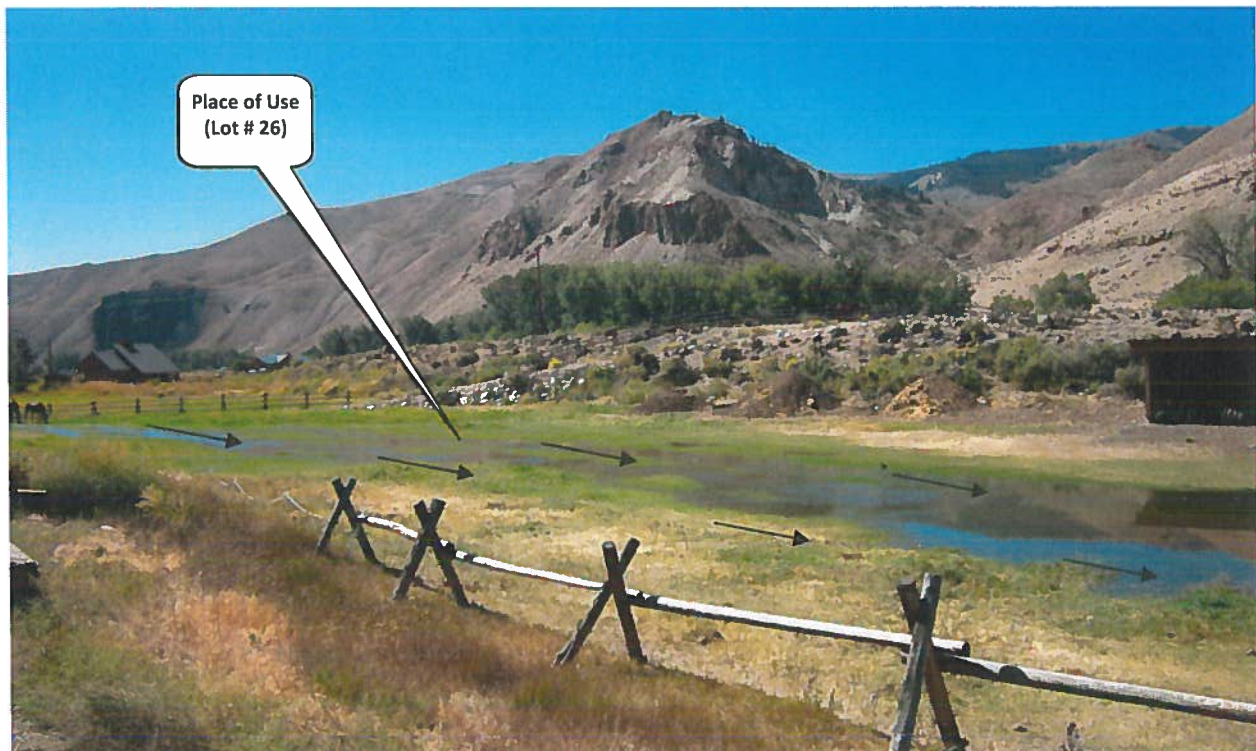


72-16703 Place of Use Photos



ABOVE: View from driveway to the home on Lot #27, Blk 2, The East Fork Subdivision looking south showing irrigation on Lot # 26.

BELOW: View looking southwest showing the western extent of the irrigation place of use on Lot #26, Blk 2, The East Fork Subdivision.



Basin	Sequence Suffix	Process	Basis	Status	Priority Date	Diversion Rate	Source List	Water Use List	Current Owner
72	230 A	Water Right	Decreed	Active	5/1/1880	0.250	EAST FORK SALMON RIVER	IRRIGATION	JULIAN, ANITA L
72	230 AA	Water Right	Decreed	Active	5/1/1880	0.152	EAST FORK SALMON RIVER	IRRIGATION	MAC MILLEN , RICHARD E; MAC MILLEN, BARBARA J
72	230 B	Water Right	Decreed	Active	5/1/1880	0.460	EAST FORK SALMON RIVER	IRRIGATION	DEININGER, CYNTHIA T
72	230 C	Water Right	Decreed	Active	5/1/1880	0.100	EAST FORK SALMON RIVER	IRRIGATION	DEININGER, CYNTHIA T
72	230 D	Water Right	Decreed	Active	5/1/1880	0.200	EAST FORK SALMON RIVER	IRRIGATION	MALONEY, MICHAEL M; MALONEY, PATRICIA A
72	230 E	Water Right	Decreed	Active	5/1/1880	0.300	EAST FORK SALMON RIVER	IRRIGATION	GARMAN, BONNIE LYNN; GARMAN, STEVEN P
72	230 G	Water Right	Decreed	Active	5/1/1880	0.160	EAST FORK SALMON RIVER	IRRIGATION	WILLIAMS, CARLA; WILLIAMS, TOBIN
72	230 H	Water Right	Decreed	Active	5/1/1880	0.150	EAST FORK SALMON RIVER	IRRIGATION	COYNE, COLLEEN A
72	230 J	Water Right	Decreed	Active	5/1/1880	0.080	EAST FORK SALMON RIVER	IRRIGATION	FOX , MICHELLE DIANE; FOX JR, ALBERT RAY
72	230 K	Water Right	Decreed	Active	5/1/1880	0.150	EAST FORK SALMON RIVER	IRRIGATION	GARMAN, STEVEN P; VINCENT, BONNIE L
72	230 L	Water Right	Decreed	Active	5/1/1880	0.150	EAST FORK SALMON RIVER	IRRIGATION	CAMPBELL, CHARLES E; MC GINLEY, MICHELLE
72	230 M	Water Right	Decreed	Active	5/1/1880	0.150	EAST FORK SALMON RIVER	IRRIGATION	O CONNOR, JOHN; O CONNOR, PATRICIA
72	230 P	Water Right	Decreed	Active	5/1/1880	0.150	EAST FORK SALMON RIVER	IRRIGATION	BRUNKER, BRENT J; BRUNKER, RUTH E ROUNDS
72	230 R	Water Right	Decreed	Active	5/1/1880	0.360	EAST FORK SALMON RIVER	IRRIGATION, STOCKWATER	K F & LILLIAN B MORGAN REVOCABLE TRUST
72	230 T	Water Right	Decreed	Active	5/1/1880	0.140	EAST FORK SALMON RIVER	IRRIGATION, STOCKWATER	MALONEY, MICHAEL M; MALONEY, PATRICIA A
72	230 U	Water Right	Decreed	Active	5/1/1880	0.200	EAST FORK SALMON RIVER	IRRIGATION	STANLEY FAMILY REVOCABLE TRUST
72	230 X	Water Right	Decreed	Active	5/1/1880	0.360	EAST FORK SALMON RIVER	IRRIGATION, STOCKWATER	MAC MILLEN , RICHARD E; MAC MILLEN, BARBARA J
72	230 Y	Water Right	Decreed	Active	5/1/1880	0.172	EAST FORK SALMON RIVER	IRRIGATION	MAC MILLEN , RICHARD E; MAC MILLEN, BARBARA J
72	10539	Water Right	Decreed	Active	5/1/1880	0.169	EAST FORK SALMON RIVER	IRRIGATION	STATE OF IDAHO
72	16646	Water Right	Decreed	Active	4/1/1963	0.770	EAST FORK SALMON RIVER	FISH PROPAGATION	GARMAN, BONNIE LYNN; GARMAN, STEVEN P
72	16702	Water Permit	Decreed	Active	5/1/1880	0.150	EAST FORK SALMON RIVER	IRRIGATION	COYNE, COLLEEN A
72	16703	Water Permit	Active	Active	2/7/2006	0.120	EAST FORK SALMON RIVER	IRRIGATION	CAMPBELL, CHARLES E; MC GINLEY, MICHELLE
72	16703	Water Permit	Active	Active	3/29/2006	0.200	EAST FORK SALMON RIVER	IRRIGATION	

Total = 4.943

1/23/13 Query of all IDWR records with PODs within NESW Sec 24 T10N, R18E

Annual Summary for Water District 72D Clayton Area Sub-district 72290005 - D - EF05

DISCHARGE, CUBIC FEET PER SECOND, CALENDAR YEAR 01/01/2009 - 12/31/2009

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	--	--	--	--	--	5.00	4.48	5.14	4.54	1.17	--	--
2	--	--	--	--	--	5.00	4.44	5.19	4.43	1.06	--	--
3	--	--	--	--	--	5.00	4.41	5.24	4.32	0.95	--	--
4	--	--	--	--	--	5.00	4.37	5.29	4.20	0.84	--	--
5	--	--	--	--	--	5.00	4.33	5.33	4.09	0.72	--	--
6	--	--	--	--	--	5.00	4.30	5.38	3.98	0.61	--	--
7	--	--	--	--	--	5.00	4.26	5.43	3.87	0.50	--	--
8	--	--	--	--	--	5.00	4.22	5.48	3.76	0.48	--	--
9	--	--	--	--	--	5.00	4.19	5.52	3.64	0.45	--	--
10	--	--	--	--	--	5.00	4.15	5.57	3.53	0.43	--	--
11	--	--	--	--	--	5.00	4.11	5.62	3.42	0.41	--	--
12	--	--	--	--	--	5.00	4.07	5.67	3.31	0.39	--	--
13	--	--	--	--	--	5.00	4.04	5.71	3.19	0.36	--	--
14	--	--	--	--	--	5.00	4.00	5.76	3.08	0.34	--	--
15	--	--	--	--	--	5.00	4.07	5.81	2.97	0.32	--	--
16	--	--	--	--	--	5.00	4.13	5.86	2.86	0.30	--	--
17	--	--	--	--	--	5.00	4.20	5.90	2.74	0.27	--	--
18	--	--	--	--	--	4.96	4.27	5.95	2.63	0.25	--	--
19	--	--	--	--	--	4.93	4.33	6.00	2.52	0.23	--	--
20	--	--	--	--	5.00	4.89	4.40	5.89	2.41	0.20	--	--
21	--	--	--	--	5.00	4.85	4.47	5.78	2.30	0.18	--	--
22	--	--	--	--	5.00	4.81	4.53	5.66	2.18	0.16	--	--
23	--	--	--	--	5.00	4.78	4.60	5.55	2.07	0.14	--	--
24	--	--	--	--	5.00	4.74	4.67	5.44	1.96	0.11	--	--
25	--	--	--	--	5.00	4.70	4.73	5.33	1.85	0.09	--	--
26	--	--	--	--	5.00	4.67	4.80	5.21	1.73	0.07	--	--
27	--	--	--	--	5.00	4.63	4.87	5.10	1.62	0.05	--	--
28	--	--	--	--	5.00	4.59	4.93	4.99	1.51	0.02	--	--
29	--	--	--	--	5.00	4.56	5.00	4.88	1.40	0.00	--	--
30	--	--	--	--	5.00	4.52	5.05	4.77	1.29	--	--	--
31	--	--	--	--	5.00	--	5.10	4.65	--	--	--	--
Total:	--	--	--	--	60.0	146.6	137.5	169.1	87.4	11.1	--	--
Mean:	--	--	--	--	5.00	4.89	4.44	5.45	2.91	0.38	--	--
Min:	--	--	--	--	5.00	4.52	4.00	4.65	1.29	0.00	--	--
Max:	--	--	--	--	5.00	5.00	5.10	6.00	4.54	1.17	--	--
AC-FT:	--	--	--	--	119.0	290.8	272.8	335.4	173.4	22.0	--	--

CALENDAR YEAR 01/01/2009 - 12/31/2009

TOTAL CFS: 611.8

TOTAL AC-FT: 1213

REEVALUATION OF IRRIGATION RATES BASED UPON 1997 REVISED HUBBLE ANALYSIS PROCEDURES

CLAIM NUMBERS

72-230L

DATE: 11-20, 1998

REVIEWED BY

DA

TAKEN FROM
SRBA CLAIM
72-230L FILE

CHALLIS AREA SOIL REVIEW

SOIL TYPE	BORDER CFS/AC		FURROW CFS/AC		OPTIMUM ROTATION	
	PAST	ALFA	PAST	ALFA	PASTURE	ALFALFA
ATC	.15	.13			6.49	7.62
BB1	.09	.09			6.09	6.17
BC1	.16	.17			5.82	5.46
BK1	.07	.06			10.62	11.86
BT1	.18	.16			3.99	4.19
BT2	.41	.32			2.34	2.87
CB1	.06	.06			11.55	13.47
CHA	.21	.21			4.52	4.76
CP1	.36	.36			2.61	2.78
DAF	.18	.15			5.33	7.27
DB1	.13	.11			5.66	6.65
DBB	.13	.11			5.71	6.69
DBC	.13	.11			5.71	6.69
DMF	.18	.21			5.12	4.72
DRF	.18	.19			9.08	9.68
DT2	.05	.04			12.46	16.50
DWA	.14	.14			4.79	5.01
G01	.10	.12			12.47	10.51
KEG	.08	.07			8.73	10.06
MBF	.15	.12			7.65	5.81
MUG	.15	.14			4.54	4.98
NDL	.13	.12			5.30	6.06

SOIL TYPE	BORDER CFS/AC		FURROW CFS/AC		OPTIMUM ROTATION	
	PAST	ALFA	PAST	ALFA	PASTURE	ALFALFA
PD2	.11	.12			5.15	4.74
Q	.26	.21			13.2	10.4
RE2	.29	.21			3.15	4.74
RP1	.19	.21			4.89	4.57
SH1	.06	.05			9.37	12.10
SOC	.08	.07			7.38	8.08
SSA	.15	.14			4.79	5.01
SXF	.12	.11			6.14	6.80
TC1	.06	.06			9.82	9.55
TD1	.04	.03			12.46	16.50
TS1	.08	.08			9.82	9.55
WB2	.13	.13			5.37	5.43
WAA	.19	.16			3.81	4.23
WBB	.17	.14			3.36	3.84
WC1	.07	.06			11.24	13.45
WPT	.19	.15			3.16	3.69
WV1	.07	.06			11.24	13.45
XHS						
YN1	.18	.14			5.38	6.92

The rate per acre calculations are based upon a 300 foot run at a 2% slope. An 8 hour set time was also used. Individual graded border evaluations, soil characteristics work sheets, and peak irrigation diversion requirement work sheets have been created and archived separately for each soil type.

Where actual rotation is shorter than the optimal rotation, optimal rotation is the criteria to be used for the recommendation analysis and, therefore, the rotation percentage adjustment is not necessary. The rate becomes the acres per soil type times the rate per acre from the above chart.

SOIL TYPE	OPTIMAL / ROTATION (chart)	ACTUAL / ROTATION (field)	ACRES PER SOIL TYPE (field)	RATE PER ACRE (chart)	TOTAL DIVERSION RATE
TS1	/		* 2.5	* .08	= .2 CFS
BK1	/		* 1.3	* .07	= .09 CFS
	/		*		= CFS
	/		*		= CFS

TOTAL ACRES 3.8

DECREED RATE =

CLAIMED DIVERSION RATE =

MEASURED DIVERSION RATE =

SCANNED
MAY 21 2002