

IN-OFFICE BENEFICIAL USE FIELD REPORT

Permit No: 65-23655

Examiner: A. Skinner

Date: 11/8/2017

In-office qualification (IDAPA 035.01.r): ☒ Irrigation ≤ 5 acres
☐ Stockwater storage ≤ 14.6 af
☐ Total diversion rate ≤ 0.24 cfs and not irrigation or storage

Current Owner Name: NANCY AND TERRY COFFIN Address: PO BOX 4652, MCCALL, ID 83638

Beneficial Use Fee Paid: \$50.00 Receipt: C103715

Source: LAKE FORK Source change? ☒ N ☐ Y Change clarifies originally intended source.
 If not – void permit.

Point of Diversion			NE				NW				SW				SE			
Twp	Rge	Sec	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE
18N	03E	24							X									

Method of Determination: Aerial imagery in Google Earth and ArcMap.

POD change? ☒ N ☐ Y

Place of Use			NE				NW				SW				SE				Totals
Twp	Rge	Sec	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
18N	03E	24							0.2										0.2

Method of Determination: Aerial imagery in Google Earth and ArcMap.

POU change? ☒ N ☐ Y

Purpose of Use: IRRIGATION

Purpose change? ☒ N ☐ Y

Method of Determination: Proof of Beneficial Use form

Standard Season of Use: 04/15 - 10/31

Update required on license? ☒ N ☐ YOverlap Review POD overlap? ☒ N ☐ Y WR's:Analysis Attached ☒ Comments:POU overlap? ☒ N ☐ Y WR's:

Comments:

Diversion Rate Permitted Rate: 0.02 cfs BU Standard Limit: 0.01 cfs
 BU Fee Limit: 0.20 cfs Theoretical (optional): cfs
Recommended Total Div Rate: 0.01 cfs

Annual Volume

For Irrigation: cfs x 1.9835 x days = af
 acres x af/ac (FHR) = af
 Smaller of two volumes = af

For other uses: NA per IDAPA 37.03.02.035.j.vii – natural stream does not require volume recommendation.

IN-OFFICE BENEFICIAL USE FIELD REPORT

Recommended Amounts

Beneficial Use	Season of Use	Diversion Rate (cfs)	Annual Volume (af)
IRRIGATION	04/15 - 10/31	0.01	
Totals		0.01 cfs	af

Amendments Required

☐ Change P.D. ☐ Add P.D. ☒ None
☐ Change P.U. ☐ Add P.U. ☐ Other:

Conditions: X31, R05, 01P, 01R, 185, and 103

Have conditions of permit been met? ☒ Y ☐ N

Narrative:

Permit 65-23655 authorized the diversion rate of 0.02 cfs from Lake Fork for IRRIGATION use purposes. Based on the small permitted diversion rate and POU, this qualifies for an in-office field exam as stated under IDAPA 37.03.02.035.01r. The exam was completed on November 8, 2017 by WRA Aaron Skinner.

System Description:

Water is diverted from Lake Fork via a Sta-Rite 2 Hp electric pump model # JHHG-53HL and a 2" flex steel foot hose. Water is pulled up to the pump house along the shoreline and is then pushed via a 2" PVC line that runs uphill from the pump to a sprinkler valve box that is located just east of the house. Water is distributed to three zones by 1" PVC pipe to irrigate 0.20 acres of land verified by Mr. Coffin over the phone and Google Earth Imagery.

Diversion Rate and Volume:

The permit authorized a rate of 0.02 cfs. A pump curve for the pump was found online and has a maximum diversion rate of roughly 75 gpm based off 45' of head. Mr. Coffin explained the system has three zones with 6 sprinklers on each zone. He mentioned he uses a Rain Bird rotary nozzle on each head. A nozzle chart was found online and included with this exam. It was determined that at 45 psi, each sprinker provides 1.51 gpm or a total of 9.06 gpm. Because only 0.2 acres was developed instead of the permitted 1.0 acre, 0.01 cfs will be recommended to licensing (0.2 acres X 0.03 cfs/acre). According to IDAPA 37.03.02.035.j.vii, natural streams do not require volume recommendations.

Overlap:

There are no is not POD overlap associated to this right. WR No. 65-17320 is a GW domestic right that overlaps with this right. It is described to be in parcel # RP001500000600A, while this right is labeled RP0015000006000. Because they have different use and source associated to their rights, no limiting conditions are warranted.

Ownership:

The current taxlot data for Valley County show the Coffin's as the parcel owner matching the permit.

Conditions:

Conditions R05, 01P, 01R, and 185 are forwarded to licensing. Condition R62 was changed to X31 since irrigation is less than 1.0 acre. Condition 121 was updated to 103 and forwarded to licensing.

Workflow

Exam Date Entered ☒
 POU/POD shapes ☒
 Combined Rights Entry ☐
 Wild & Scenic Entry ☐
 Draft License and Map ☒
 FE Database (N: drive) ☒

Supporting Documents

Aerial Photograph ☒ Well Log ☐
 POU/POD Map ☒ Diagrams ☐
 LandSat ☐ Theoretical ☐
 Photographs ☐ Other: ☐
 Site Visit Date: NA

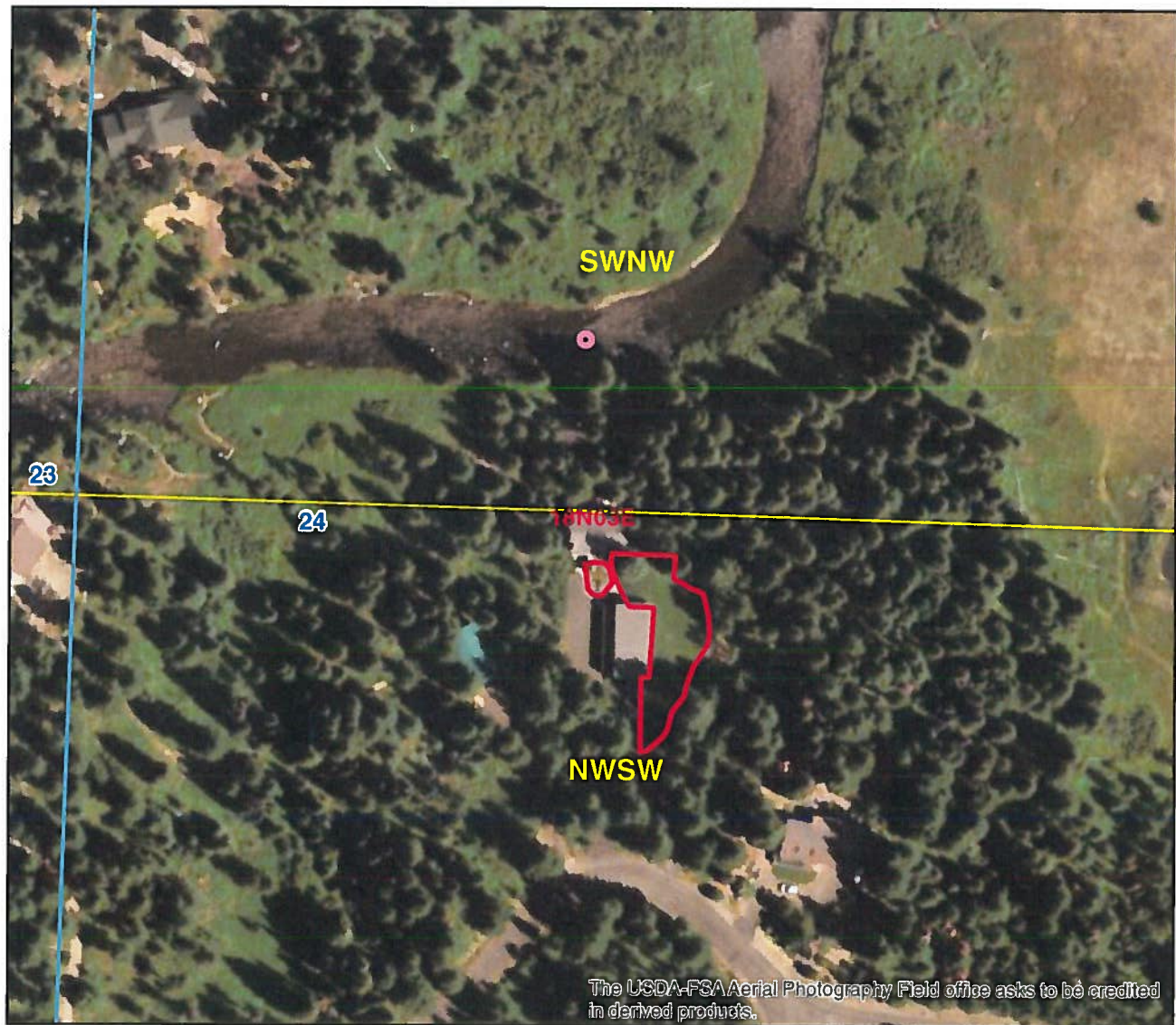
Authentication

Field Examiner's Name: Aaron Skinner Date: 11/8/2017

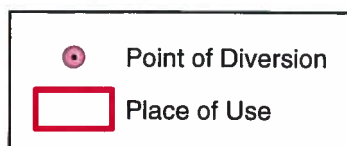
Reviewer: Angela M Gimm Date: 12/22/17

State of Idaho
Department of Water Resources
Point of Diversion and Place of Use
Water Permit No. 65-23655

This map depicts the IRRIGATION place of use boundary for this water right at the time of this approval and is attached to the approval document solely for illustrative purposes.



0 0.0175 0.035 0.07 Miles

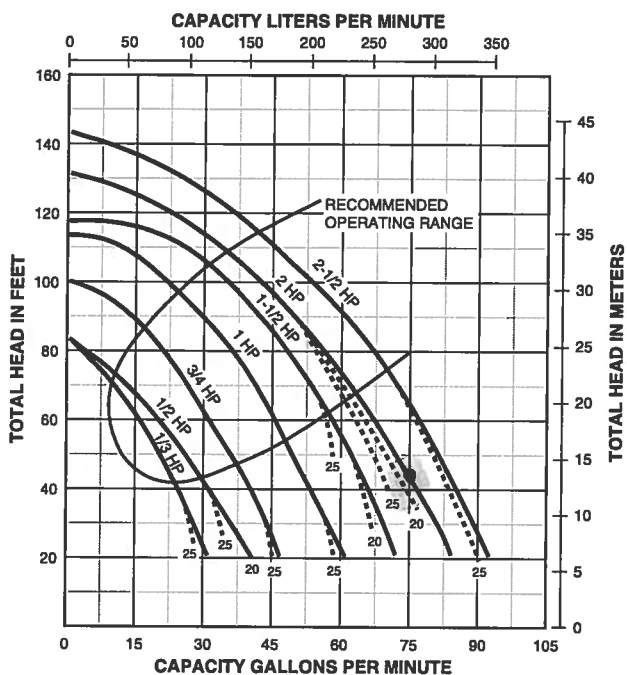


STA-RITE® J/JB Series

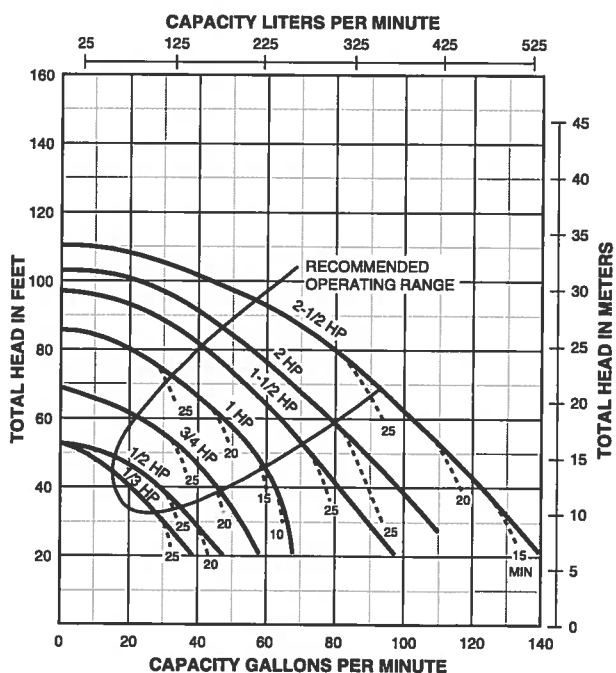
General purpose centrifugal pumps

PUMP PERFORMANCE

HIGH HEAD



MEDIUM HEAD



NOTE: Dotted lines indicate performance reduction at high suction lift.

PUMP PERFORMANCE (CAPACITY IN GALLONS PER MINUTE)

HIGH HEAD

HP	Discharge Pressure		Dynamic Suction Lift				
	PSI	Feet Head	5'	10'	15'	20'	25'
1/3	10	23.1	—	26	24	22	20
	20	46.2	20	18	15	11	10
	30	69.3	6	—	—	—	—
1/2	10	23.1	—	34	32	29	26
	20	46.2	25	21	18	15	11
	30	69.3	10	—	—	—	—
3/4	10	23.1	—	—	42	39	37
	20	46.2	35	32	30	28	26
	30	69.3	24	22	19	15	10
1	20	46.2	48	46	45	43	40
	30	69.3	38	35	31	28	25
	40	92.4	23	20	15	—	—
1-1/2	20	46.2	62	60	58	55	52
	30	69.3	50	48	44	40	37
	40	92.4	37	32	29	22	—
2	20	46.2	71	68	66	62	60
	30	69.3	60	57	52	59	45
	40	92.4	45	40	36	31	24
	50	115.5	22	15	—	—	—
	20	46.2	81	79	76	74	71
2-1/2	30	69.3	69	67	63	60	56
	40	92.4	56	51	47	44	38
	50	115.5	33	30	22	15	—

Tested and rated in accordance with Water Systems Council Standards.

NOTE: Pumps installed with a Pro-Source® tank require a 100 PSI relief valve. Pumps with a conventional tank require a 75 PSI relief valve. Relief valve must be capable of relieving entire flow of pump at relief pressure.

R-VAN1318 (Black)

Arc	Pressure (psi)	Radius* (ft)	Flow (gpm)	■ Precip (in/h)	▲ Precip (in/h)
270° 	20	13	0.95	0.72	0.83
	25	14	1.12	0.69	0.80
	30	16	1.26	0.65	0.75
	35	16	1.35	0.64	0.74
	40	17	1.42	0.63	0.73
	45	18	1.51	0.60	0.69
	50	18	1.57	0.60	0.69
180° 	55	18	1.62	0.60	0.69
	20	13	0.75	0.72	0.83
	25	14	0.83	0.69	0.80
	30	16	0.85	0.65	0.75
	35	16	0.91	0.64	0.74
	40	17	0.98	0.63	0.73
	45	18	1.01	0.60	0.69
90° 	50	18	1.07	0.60	0.69
	55	18	1.09	0.60	0.69
	20	13	0.37	0.72	0.83
	25	14	0.39	0.69	0.80
	30	16	0.42	0.65	0.75
	35	16	0.47	0.64	0.74
	40	17	0.50	0.63	0.73
	45	18	0.50	0.60	0.69
	50	18	0.54	0.60	0.69
	55	18	0.58	0.60	0.69

R-VAN1724 (Yellow)

Arc	Pressure (psi)	Radius* (ft)	Flow (gpm)	■ Precip (in/h)	▲ Precip (in/h)
270° 	20	17	1.77	0.76	0.88
	25	19	1.99	0.72	0.83
	30	21	2.26	0.70	0.81
	35	22	2.39	0.66	0.76
	40	23	2.55	0.63	0.73
	45	23	2.73	0.61	0.70
	50	24	2.76	0.61	0.70
180° 	55	24	2.80	0.61	0.70
	20	17	1.24	0.76	0.88
	25	19	1.30	0.72	0.83
	30	21	1.41	0.70	0.81
	35	22	1.55	0.66	0.76
	40	23	1.69	0.63	0.73
	45	23	1.83	0.61	0.70
90° 	50	24	1.91	0.61	0.70
	55	24	1.98	0.61	0.70
	20	17	0.59	0.76	0.88
	25	19	0.67	0.72	0.83
	30	21	0.73	0.70	0.81
	35	22	0.78	0.66	0.76
	40	23	0.85	0.63	0.73
	45	23	0.91	0.61	0.70
	50	24	0.98	0.61	0.70
	55	24	1.05	0.61	0.70

Note: All Rotary Nozzles tested on 4" pop-ups.

■ Square spacing based on 50% diameter of throw. ▲ Triangular spacing based on 50% diameter of throw.

Performance data taken in zero wind conditions.

*Radius refers to recommended spacing to achieve optimal precipitation rate and distribution uniformity with head-to-head spacing. Single row applications are not recommended. Do not reduce radius below 13' on the R-VAN1318 model and below 17' on the R-VAN1724 model.

Installation on Rain Bird® 1800® SAM spray bodies recommended in sandy environments. Performance data derived from tests that conform with ASAE Standards; ASAE S398.1.

Overlap Analysis for Permit No. 65-23655 POD

Process	BasinSequence	Draft	Owner	Source	Use	NENE	NWNE	SWNE	SENE	NENW	NWNW	SWNW	SENW	NESW	NWSW	SWSW	SESW	NESE	NWSE	SWSE	SESE	TotalAcres
Water Right	65-12851	N	PICKENS, JAMES	GROUND WATER								X										
Water Right	65-12899	N	CRUPPER, DIANA M; CRUPPER, JOHN L; MC KELLAR, RAY A; MC KELLAR, SKIPPER E M	SPRING								X										
Water Right	65-12993	N	TLUCEK, JERRY L; TLUCEK, MARY LOUISE	UNNAMED STREAM								X										
Water Right	65-17234	N	FAHNESTOCK, BEVERLY; FAHNESTOCK, JOHN A	GROUND WATER								X										
Water Right	65-17320	N	NELSON, DELLA L; NELSON, KENNETH A	GROUND WATER								X										
Water Right	65-17354	N	LUDVIGSEN, ELIZABETH L; LUDVIGSEN, RODNEY P	GROUND WATER								X										
Water Right	65-17365	N	SCHLEGEL, DIANA L; SCHLEGEL, MICHAEL W	GROUND WATER								X										
Water Right	65-17477	N	THOMPSON, BILLY E; THOMPSON, MARIANNA B; WOOD, MICHAEL D; WOOD, NANCY J	GROUND WATER								X										
Water Right	65-17595	N	BANKS, STEVEN F; BARCUS, BONNIE J	GROUND WATER								X										
Water Right	65-17856	N	KEARNEY, ROBERT J	GROUND WATER								X										
Water Right	65-23655	Y	COFFIN, NANCY L; COFFIN, TERRY E	LAKE FORK								X										
Water Right	65-4989	N	SHAW, BERTHA E; SHAW, LEO S; TLUCEK, JERRY L; TLUCEK, MARY LOUISE	WASTE WATER								X										

no overlap; centroid. Parcel for Pickens is north
no overlap; p; POD is upstream of this permit.
no overlap; centroid, but assumed to be upstream

Overlap Analysis for Permit No. 65-23655 POU

Process	BasinSequence	Draft	Owner	Source	Use	NENE	NWNE	SWNE	SENE	NENW	NWNW	SWNW	SENW	NESW	NWSW	SWSW	SESW	NESE	NWSE	SWSE	SESE	TotalAcres
Water Right	65-12344	N	BENTON, KRISTINE; CAZA, DALE; JOHNSON, CONNIE I; JOHNSON, CRAIG H	SPRING	IRRIGATION												1					1
Water Right	65-12851	N	PICKENS, JAMES	GROUND WATER	DOMESTIC							X										
Water Right	65-12899	N	CRUPPER, DIANA M; CRUPPER, JOHN L; MC KELLAR, RAY A; MC KELLAR, SKIPPER E M	SPRING	AESTHETIC STORAGE							X										
Water Right	65-12993	N	TLUCEK, JERRY L; TLUCEK, MARY LOUISE	UNNAMED STREAM	RECREATION							X										
Water Right	65-17234	N	FAHNESTOCK, BEVERLY; FAHNESTOCK, JOHN A	GROUND WATER	DOMESTIC							X										
Water Right	65-17320	N	NELSON, DELLA L; NELSON, KENNETH A	GROUND WATER	DOMESTIC							X										
Water Right	65-17354	N	LUDVIGSEN, ELIZABETH L; LUDVIGSEN, RODNEY P	GROUND WATER	DOMESTIC							X										
Water Right	65-17365	N	SCHLEGEL, DIANA L; SCHLEGEL, MICHAEL W	GROUND WATER	DOMESTIC							X										
Water Right	65-17477	N	THOMPSON, BILLY E; THOMPSON, MARIANNA B; WOOD, MICHAEL D; WOOD, NANCY J	GROUND WATER	DOMESTIC							X										
Water Right	65-17595	N	BANKS, STEVEN F; BARCUS, BONNIE J	GROUND WATER	DOMESTIC							X										
Water Right	65-17856	N	KEARNEY, ROBERT J	GROUND WATER	DOMESTIC							X										
Water Right	65-2316	N	SHAW, GERALDINE M; SHAW, JOHN H	BOULDER CREEK	IRRIGATION								33							8		41
Water Right	65-2316	N	SHAW, GERALDINE M; SHAW, JOHN H	BOULDER CREEK	IRRIGATION FROM STORAGE								33							8		41
Water Right	65-2316	N	SHAW, GERALDINE M; SHAW, JOHN H	BOULDER CREEK	IRRIGATION STORAGE								X							X		
Water Right	65-2316	N	SHAW, GERALDINE M; SHAW, JOHN H	BOULDER CREEK	STOCKWATER FROM STORAGE								X							X		
Water Right	65-2316	N	SHAW, GERALDINE M; SHAW, JOHN H	BOULDER CREEK	STOCKWATER STORAGE								X							X		
Water Right	65-2316	N	SHAW, GERALDINE M; SHAW, JOHN H	SHAW TWIN LAKES	IRRIGATION								33							8		41
Water Right	65-2316	N	SHAW, GERALDINE M; SHAW, JOHN H	SHAW TWIN LAKES	IRRIGATION FROM STORAGE								33							8		41
Water Right	65-2316	N	SHAW, GERALDINE M; SHAW, JOHN H	SHAW TWIN LAKES	IRRIGATION STORAGE								X							X		
Water Right	65-2316	N	SHAW, GERALDINE M; SHAW, JOHN H	SHAW TWIN LAKES	STOCKWATER FROM STORAGE								X							X		
Water Right	65-2316	N	SHAW, GERALDINE M; SHAW, JOHN H	SHAW TWIN LAKES	STOCKWATER STORAGE								X							X		
Water Right	65-23655	Y	COFFIN, NANCY L; COFFIN, TERRY E	LAKE FORK	IRRIGATION										0.2							0.2
Water Right	65-2967A	N	SHAW, GERALDINE M; SHAW, JOHN H	BOULDER CREEK	IRRIGATION								23				37			26		86
Water Right	65-2967A	N	SHAW, GERALDINE M; SHAW, JOHN H	BOULDER CREEK	IRRIGATION FROM STORAGE								23				37			26		86
Water Right	65-2967A	N	SHAW, GERALDINE M; SHAW, JOHN H	BOULDER CREEK	IRRIGATION STORAGE								X				X			X		
Water Right	65-2967A	N	SHAW, GERALDINE M; SHAW, JOHN H	JUG CREEK	IRRIGATION								23				37			26		86
Water Right	65-2967A	N	SHAW, GERALDINE M; SHAW, JOHN H	JUG CREEK	IRRIGATION FROM STORAGE								23				37			26		86
Water Right	65-2967A	N	SHAW, GERALDINE M; SHAW, JOHN H	JUG CREEK	IRRIGATION STORAGE								X				X			X		
Water Right	65-3218	N	LAKE IRRIGATION DISTRICT	LAKE FORK	IRRIGATION							X										
Water Right	65-3219A	N	LAKE IRRIGATION DISTRICT	LITTLE PAVETTE LAKE	IRRIGATION FROM STORAGE							X										
Water Right	65-3219X	N	LAKE IRRIGATION DISTRICT	LITTLE PAVETTE LAKE	IRRIGATION FROM STORAGE							X										
Water Right	65-4047	N	SHAW, GERALDINE M; SHAW, JOHN H	BOULDER CREEK	IRRIGATION												33			8		41
Water Right	65-4047	N	SHAW, GERALDINE M; SHAW, JOHN H	BOULDER CREEK	STOCKWATER												X			X		
Water Right	65-4989	N	SHAW, BERTHA E; SHAW, LEO S; TLUCEK, JERRY L; TLUCEK, MARY LOUISE	WASTE WATER	IRRIGATION								8									8

no overlap; parcel is off Jefferson Rd.
overlap, but different use/source.
no overlap; parcel is off Franklin Rd.