

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 1-10566
Exam Date: 07/28/2020

1. Current Owner:
SOUTHWEST IRRIGATION DISTRICT PO BOX 668 BURLEY ID 83318
2. Accompanied by:
Phone No: Brian Higgs
Address: 355 W 500 S, Burley ID 83318
Relationship to permit Holder: Representative for Southwest Irrigation District

3. **SOURCE:**
SNAKE RIVER

Tributary
COLUMBIA RIVER

Method of Determination: On-site inspection

B. OVERLAP REVIEW

1. Other water rights with the same place of use: YES Overlap

Water Right No.	Source	Purpose of Use	Basis
1-23A	Snake River	Irrigation	Decreed
1-10572	Waste Water	Irrigation	License
45-14183	Waste Water	Irrigation	License

Comments: 1-10572 & 45-14183 are currently permits that will be forwarded for licensing with this right

2. Other water rights with the same point-of-diversion: NO Overlap

Water Right No.	Source	Purpose of Use	Basis
1-23A	Snake River	Irrigation	Decreed

Comments:

C. DIVERSION AND DELIVERY SYSTEM

1. **LOCATION OF POINT(S) OF DIVERSION:**

SNAKE RIVER L2 (SW¼ NE¼), Sec. 20, Twp 10S, Rge 22E, B.M. CASSIA County

Method of Determination: On-site inspection

PLACE OF USE: GROUND WATER RECHARGE

Twp	Rng	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
10S	22E	20			X L2														
11S	21E	9																X	
11S	21E	11												X					
11S	21E	23										X							
11S	21E	26																X	
12S	21E	3										X	X						
12S	21E	4			X	X			X	X					X			X	
12S	21E	5			X L8	X		X L5	X L6		X L7								

12S	21E	9	X			X					X			X			X	
12S	21E	10						X	X			X	X					
12S	21E	12							X									
12S	21E	15			X			X	X	X		X	X					
12S	21E	16	X		X									X			X	
12S	21E	21	X			X								X			X	
12S	21E	22						X	X			X	X					
12S	21E	27						X	X			X						
12S	21E	28	X			X								X				
12S	22E	18										X						
												L4						

Method of Determination: On-site inspection, GPS coordinates and aerial imagery

PLACE OF USE: IRRIGATION

Southwest Irrigation District's Service Area/Digital Boundary (Large POU)

Method of Determination: On-site inspection, GPS coordinates and aerial imagery

3.

Delivery System Diagram Attached (required). Indicate all major components and distances between components.

X Indicate weir size/pipe as applicable.

Map Attached Showing Location(s) of point(s) of diversion and place(s) of use (required). Scale must be 1:24,000 or greater.

X

Aerial Photo Attached (required for irrigation of 10+ acres).

X

Photo of Diversion and System Attached

X

4.

Well or Diversion ID No.*	Motor Make	Hp		Pump Make	Pump Serial No. or Discharge Size
SWID Pumps	9 total pumps	Combined 4300Hp	8 @ 500 Hp 1 @ 300 Hp		

D. FLOW MEASUREMENTS

1.

Measurement Equipment	Type	Make	Model No.	Serial No.	Size	Calib. Date
5 Installed Meters	Magnetic	Sparling Tiger Mag				

2. Measurements: There are 5 pipelines in the system- three 24" pipelines and two 30" pipelines, each is metered. Flow rates are reported to Water District 01 as daily mean values. During the beneficial use development period (2010 – 2015) a maximum flow rate of **55 cfs was reported on 6/13/2014** (see Attachment #2).

E. FLOW CALCULATIONS

Additional Computation Sheets Attached

Measured Method: Direct measurement utilizing installed meters reported a high daily mean of **55 cfs on 6/13/2014**, Recommend licensing the full permitted flow rate of **50 cfs**.

F. VOLUME CALCULATIONS

1. Volume Calculations for irrigation: Southwest Irrigation District water right accounting reports submitted with Proof of Beneficial Use were utilized to determine the volumes for both ground water recharge and irrigation (soft conversion).

The highest volume reported for irrigation during the beneficial use development period was **6455.6 acre feet in 2011** (see Attachment #1).

2. Volume Calculations for Other Uses:

The highest volume reported for **ground water recharge** during the beneficial use development period was **1638 acre feet in 2014** (see Attachment #1).

G. NARRATIVE/REMARKS/COMMENTS

I met with Brian Higgs of Water Well Consultants who was representing Southwest Irrigation District (SWID) on 7/28/2020 to conduct the field exam for this permit. When I met up with Mr. Higgs (Brian) near the location of the point of diversion (POD), the first question I asked him was in relation to the place of use (POU), how much of the SWID's POU could water diverted for irrigation from this POD be delivered to, since the POU or service area is large and has multiple PODs along the Snake River? He indicated that water from this POD, which is located in Lot 2 (SWNE1/4) of Sec. 20, Twp 10S, Rge 22E, could be delivered to any irrigated ground throughout the service as needed. This irrigation use is for "soft conversions" of ground water when water is available for delivery under this right. More simply, if there is extra water, more than is required to fulfill all senior rights along the river during the irrigation season, it can be diverted and delivered to farms within the service area and used in lieu of pumping ground water under this right. Those who take delivery of these soft conversions are required to have a valid ground water right. Typically, water diverted under this right is usually available early in the irrigation season during good water years. During the development period for this right (2010 – 2015), records show that there was water delivered for irrigation on 4 out of the 5 years (see Attachment #1).

Brian and I walked out (north) to the mouth of the canal channel on the river (the POD) and then we walked back south along the canal where he showed me how the debris screens on the canal operate to capture debris from the river before the river water reaches the pumping station. The canal also delivers waste water from the Burley Irrigation District (BID) to the pumping station and/or to the river. There are head gates on the BID waste water side (south side of pumping station) used to control return flows. There is also another debris screen and a headgate on the BID side. There is also an engineered wetland to northeast of the pumping station that a portion of BID return flows are delivered into and then returned to the main canal through a headgate above the north debris screen. For purposes of this field exam it is important to understand that both BID waste water and Snake River water is comingled in the canal prior to being diverted at the pumping station. This means that the volumes reported by SWID include both waste water and Snake River water. There are two companion irrigation permits for the waste water, 01-10572 and 45-14183 (two permits for the same use to facilitate regulation by Water District 01 to prevent injury to senior Snake River water right holders) that will be licensed with this license and assigned the same overall volume with a combined limit of 6455.6 acre feet on all three rights.

Next, we went into the pumping station and there were 9 pumps (8 @ 500 Hp and 1 @ 300 Hp) that divert the water into 5

pipelines (three 24" pipes and two 30" pipes) with a meter installed on each pipe. The meter readouts were installed just inside the door to the building for convenience. Since the system was energized and running, I did not collect additional information on the pumps.

After that, Brian and I drove out to see and record gps coordinates of all of the injection sites for the ground water recharge portion of this field exam. On this pipeline system, there are 10 injection wells and two irrigation ponds used for recharge outside of the irrigation season and a large channel (approximately 50' wide in the southern portion) that runs roughly about 6.75 miles in length (4.75 miles south to north and then 2 miles east to west) with two injection points. At the northwest end of the channel is a gravel pit with a fairly large storage capacity. One of the injection points is near the south end (12S 21E S27 SWNW) and the other is towards the north end (12S 21E S3 SWSW) of the channel. The channel has only been used once (2010) before all the injection wells were developed. All of the injection wells have meters installed and SWID has insert-able meters they can install on the two injection points for the channel when they choose to utilize it.

Recommend licensing volume based on the SWID water right accounting data provided for the developmental use period; Flow rate based on SWID data reported to Water District 01 during the developmental use period. The Ground Water Recharge POU was amended based on the findings from the field exam and recommend licensing the POU as amended and reflected above.

H. RECOMMENDATIONS

1. Recommended Amounts

<u>Beneficial Use</u>	<u>Period of Use</u>	<u>Rate of Diversion</u>	<u>Annual Volume</u>
IRRIGATION	03/15 to 11/15	50.00 CFS	6,455.6 AF
GROUND WATER RECHARGE	01/01 to 12/31	50.00 CFS	1,638.0 AF
<u>Totals:</u>		50.00 CFS	8,093.6 AF

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 ☐ None

I. AUTHENTICATION

Bill Mills - Water Resource Agent, Senior

Field Examiner's Name Bill Mills Date 10-22-20

Reviewer _____ Date _____



Figure 1: POD on Snake River



Figure 2: SWID Pump Station



Figure 3: Pumps inside the pump station



Figure 4: Readout displays for installed meters on pipelines



Figure 5: Pump station control



Figure 6: Injection well and meter



Figure 7: And another injection well with meter installed



Figure 8: And a third injection well



Figure 9: Southern point of injection into open channel

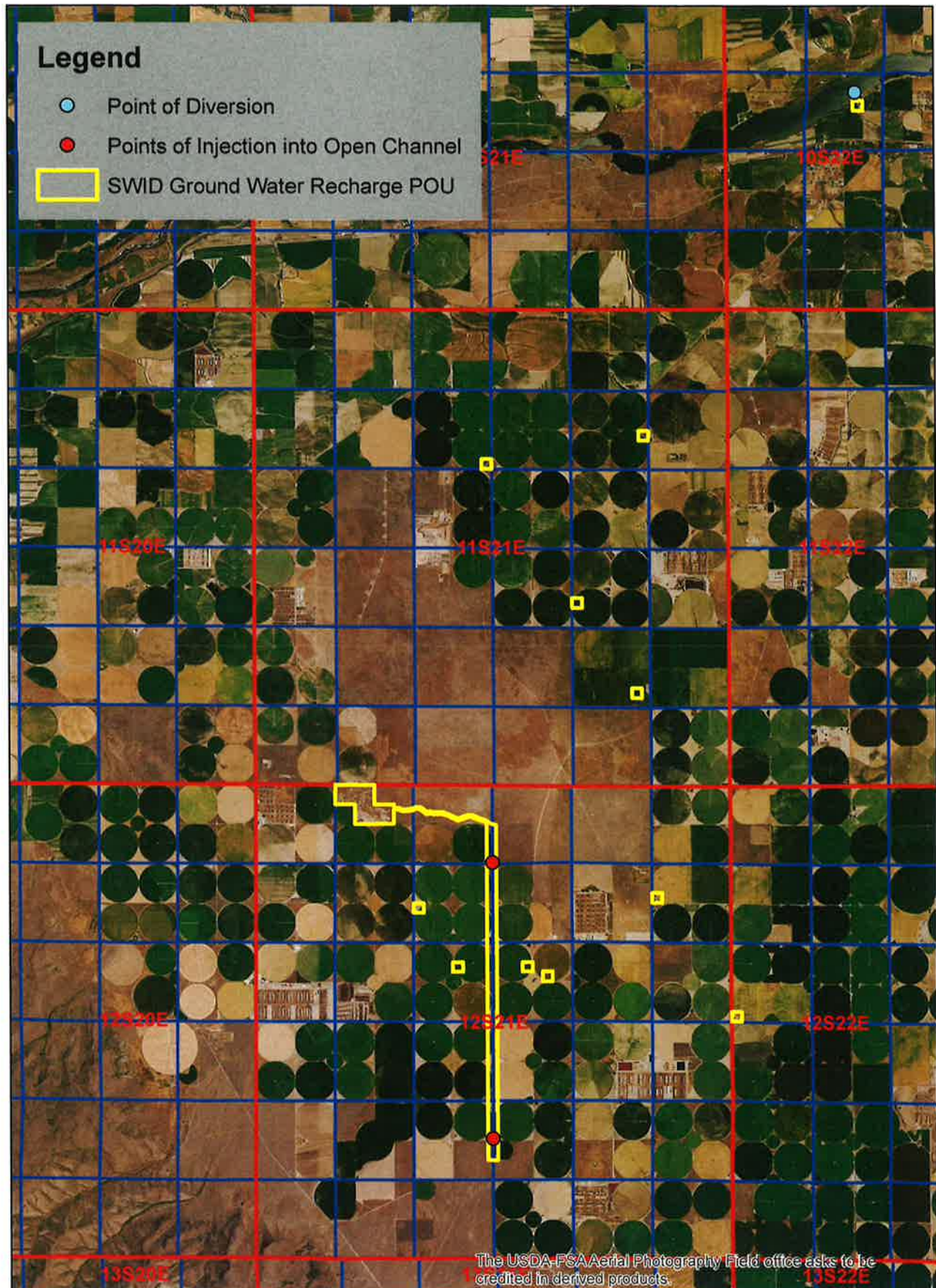


Figure 10: Irrigation pond that is also used for ground water recharge outside of irrigation season (1 of 2 ponds used for recharge)

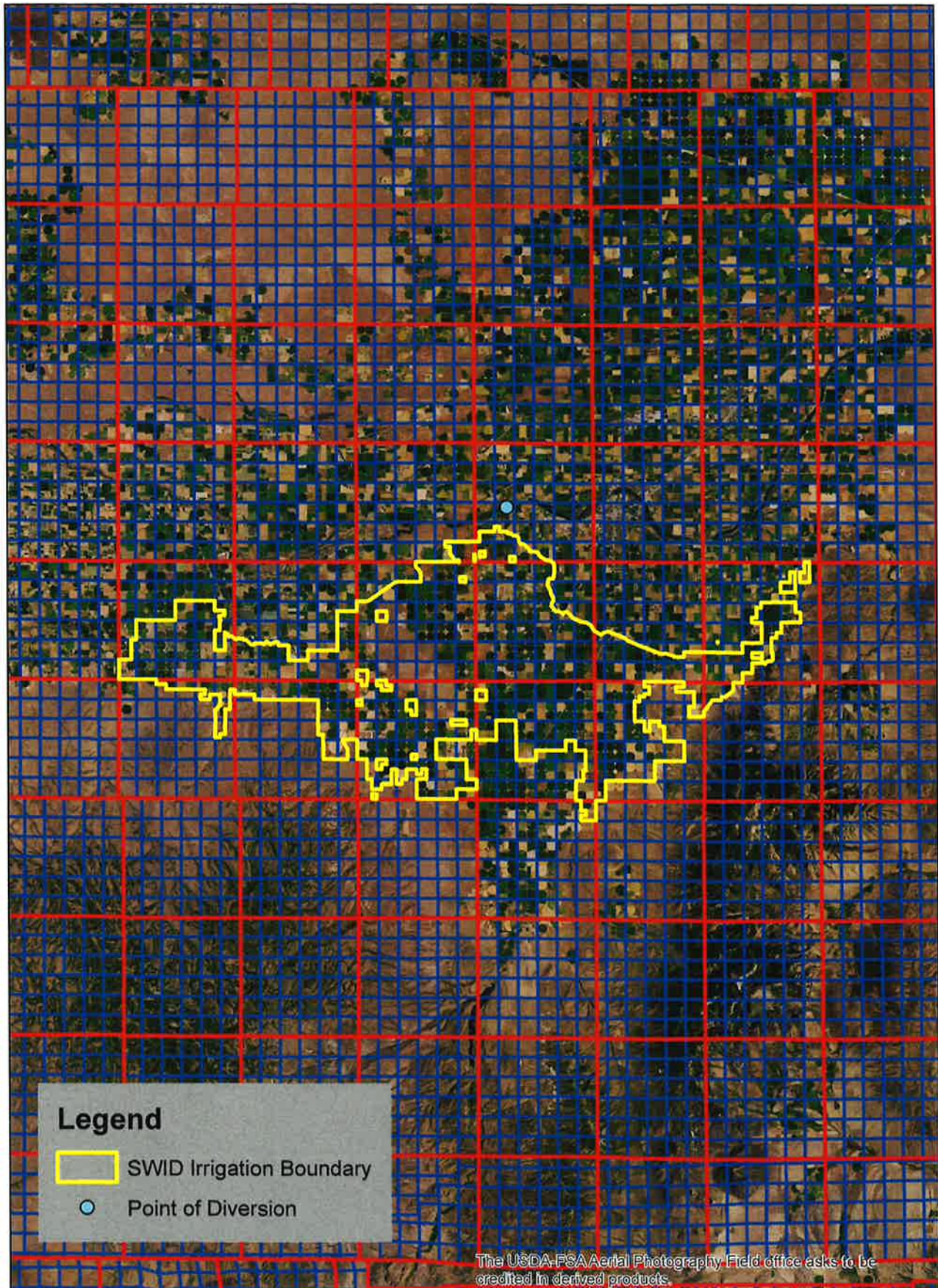
System Diagram: 01-10566 Diversion System



Ground Water Recharge POU 01-10566



Irrigation POU 01-10566



Attachment #1

SWID Water Right Accounting
1-10566 and 1-10572



Jaxon Higgs 6-15-2015 email attachment #1

Attachment #1

SWID Water Right Accounting
1-10566 and 1-10572

[illegible]

Attachment #1

ESPA Recharge Volume (ac-ft)																						* N. Farmer added year 2006 data frc	
Year	Requies	Damian	Riverside	Idaho	Grt Western/Farmer	ASCC	United	FMID	GFCC	SFAC	IID	SRVID	NSCC	AFRD2	TFCC	SWID	SWCC	Total	above AF	Below AF	% above AF	% Below AF	
2006*	3035	34	46	528	3058	14890							5800	8950				21,591	9,950	68	12		
2007						27360							27360	0				27,360	0	100	0		
2008						0		4,860	0		0	0	0	0				4,860	4,860	100	0		
2009						18,563		37,317	20,944		1,004	0	6,519	38,698		1,491	0	54,974	77,828	62	38		
2010						5,322		49,466	0		0	1,125	0	2,002		3,436	257	56,886	55,913	91	9		
2011						15,213	2,740	18,286		4,181			34,842	37,252		3,915	3,025	58,044	40,430	77,514	34	66	
2012						7,824		23,903	18,861	19,459			96,050	6,817		341	23,443	124,973	70,147	54,671	56	44	
2013						0	0	0	0	0	0	0	0	2711		1156	0	3,867	0	3,867	0	100	
2014						0		0	0	0	0	0	3564	49667		1504	0	52,439	0	50,435	0	100	
2014fall-2015spr						1349		1349	1349				2380	25466	3582	692	0	34,166	4,947	30,114	9	91	
Total (ac-ft)						48,271	2,740	135,181	41,254	23,650	1,004	1,125	83,455	119,427	9,082	10,915	26,625	251,126	251,224	228,422	52	47	
% of total						9.8	0.6	27.5	8.4	4.8	0.2	0.2	17.0	24.3	1.8	2.2	5.3	100	100	100	52	47	

all figures except percentages in acre-feet

ESPA Recharge Costs (\$)																					
Year				ASCC	United	FMID	GFCC	SFAC	IID	SRVID	NSCC	AFRD1	TFCC	SWID	SWCC	Total	above AF	below AF	% above AF	% below AF	
2008				0		14,580	0		0	0	0	0		0	0	14,580	0	100	0		
2009				40,438		30,878	62,966		3,012	0	19,257	116,094		4,473	0	277,819	137,294	140,124	49	51	
2010				15,967		148,399	0		0	3,375	0	6,006		10,308	460	164,519	167,741	16,774	91	9	
2011				45,000	5,000	46,535		12,573	0	0	45,800	118,298		5,425	3,025	167,128	109,108	173,016	38	62	
2012				23,472	0	50,000	36,500	30,200	0	0	99,258	20,511		1,671	14,319	120,273	140,272	155,131	47	53	
2013				0	0	0	0	0	0	0	0	1,111		1462	0	1,160	0	11,401	0	100	
2014												14900.1		6722	0	21,494	0	51,804	0	100	
2014Fall-2015spr				7140		7930	28746				2740	28746		2076	0	43,246	0	117,342	0	100	
Total \$				124,877	5,000	290,392	99,466	42,773	3,012	3,375	181,632	358,288	28,240	22,745	42,854	152,717	568,895	616,546	47	53	
% of Total \$				10.3	0.4	23.9	8.2	3.5	0.2	0.3	15.0	29.5	2.4	2.7	3.8	100	100	100	47	53	

all figures except percentages in dollars

ASCC
AFRD2
SWCC
FMID

Aberdeen-Springfield Canal Co.
American Falls Reservoir Dist. No. 2 (Müller-Gooding Canal)
Big Wood Canal Co. (non-Snake)
Fremont-Madison Irrigation Dist

GFCC Great Feeder Canals
IID Idaho Irrigation Dist
NSCC North Side Canal Co.
SRVID Snake River Valley Irrigation Dist

SWID Southwest Irrigation dist.
SFAC South Fork area canals (Enterprise, Farmer's Friend, Progressive)

Attachment #2

28-JAN-2019

13085350 SWID PUMPS

DAILY MEAN VALUES FOR FLOW IN CUBIC FEET PER SECOND, CALENDAR YEAR, JANUARY 2010 To DECEMBER 2010

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	--	--	--	0	0	0	0	0	30	0	--	--
2	--	--	--	0	0	0	0	0	36	20	--	--
3	--	--	--	0	0	0	0	0	31	28	--	--
4	--	--	--	0	0	0	0	0	34	28	--	--
5	--	--	--	0	0	0	0	0	37	1.5	--	--
6	--	--	--	0	0	0	0	0	30	0	--	--
7	--	--	--	0	0	0	0	0	33	0	--	--
8	--	--	--	0	0	0	0	0	30	0	--	--
9	--	--	--	0	0	0	0	0	31	0	--	--
10	--	--	--	0	0	0	0	0	20	0	--	--
11	--	--	--	0	0	0	0	0	29	0	--	--
12	--	--	--	0	0	0	0	0	16	0	--	--
13	--	--	--	0	0	0	0	0	26	0	--	--
14	--	--	--	0	0	0	0	0	31	0	--	--
15	--	--	--	0	0	0	0	0	0	0	--	--
16	--	--	--	0	0	0	0	0	0	0	--	--
17	--	--	--	0	0	0	0	0	0	0	--	--
18	--	--	--	0	0	0	0	0	0.5	0	--	--
19	--	--	--	0	0	0	0	0	23	0	--	--
20	--	--	--	0	0	0	0	0	8.6	0	--	--
21	--	--	--	0	0	0	0	0	0	0	--	--
22	--	--	--	0	0	0	0	0	16	0	--	--
23	--	--	--	0	0	0	0	0	31	0	--	--
24	--	--	--	0	0	0	0	0	31	0	--	--
25	--	--	--	0	0	0	0	0	16	0	--	--
26	--	--	--	0	0	0	0	28	0	0	--	--
27	--	--	--	0	0	0	0	29	41	0	--	--
28	--	--	--	0	0	0	0	33	43	0	--	--
29	--	--	--	0	0	0	0	32	40	0	--	--
30	--	--	--	0	0	0	0	35	27	0	--	--
31	--	--	--	--	0	--	0	32	--	0	--	--
TOTAL	--	--	--	0.00	0.00	0.00	0.00	188.80	691.20	77.80	--	--
MEAN	--	--	--	0.0	0.0	0.0	0.0	6.1	23	2.5	--	--
MAX	--	--	--	0	0	0	0	35.1	42.9	28.3	--	--
MIN	--	--	--	0	0	0	0	0	0	0	--	--
AC-FT	--	--	--	0.0	0.0	0.0	0.0	374	1371	154	--	--

CALENDAR YEAR 2010 TOTAL 958 MEAN 10 AC-FT 1900

Field Exam 01-10566

2007

Attachment #2

28-JAN-2019

13085350 SWID PUMPS

DAILY MEAN VALUES FOR FLOW IN CUBIC FEET PER SECOND, CALENDAR YEAR, JANUARY 2011 To DECEMBER 2011

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	--	--	--	0	19	23	23	41	47	47	0	0
2	--	--	--	0	18	30	28	44	47	49	0	0
3	--	--	--	0	19	33	40	46	47	46	0	0
4	--	--	--	0	9.1	21	40	44	47	44	0	0
5	--	--	--	0	12	30	41	44	45	45	0	0
6	--	--	--	0	7	30	40	42	46	45	0	0
7	--	--	--	0	20	28	46	47	48	46	0	0
8	--	--	--	0	26	17	45	46	46	45	0	0
9	--	--	--	0	37	35	48	46	46	45	0	0
10	--	--	--	0	44	44	46	46	48	45	0	0
11	--	--	--	0	28	38	44	47	47	45	0	0
12	--	--	--	0	0.3	40	45	47	45	44	0	0
13	--	--	--	0	0.2	42	47	47	45	45	0	0
14	--	--	--	0	0	41	46	46	46	46	0	0
15	--	--	--	0	0	40	45	47	45	46	0	0
16	--	--	--	2	0	43	44	46	45	45	0	0
17	--	--	--	29	23	36	46	46	44	44	0	0
18	--	--	--	35	43	45	47	46	43	44	0	0
19	--	--	--	16	45	43	46	48	43	46	0	0
20	--	--	--	33	45	43	46	48	45	34	0	0
21	--	--	--	39	43	45	45	47	46	44	0	0
22	--	--	0	31	40	45	46	47	43	42	0	0
23	--	--	0	0	30	45	45	48	40	25	0	0
24	--	--	0	0	31	47	46	48	41	0.3	0	0
25	--	--	0	0	35	46	48	49	50	16	0	0
26	--	--	0	0	37	47	46	47	50	41	0	0
27	--	--	0	0	13	45	29	46	49	24	0	0
28	--	--	0	17	2.1	44	47	48	50	0	0	0
29	--	--	0	18	0.2	45	42	48	50	0	0	0
30	--	--	0	21	0	44	40	49	48	0	0	0
31	--	--	0	--	0	--	39	49	--	0	--	0
TOTAL	--	--	0.00	240.80	626.10	1153.00	1323.50	1440.40	1379.80	1088.80	0.00	0.00
MEAN	--	--	0.0	8.0	20	38	43	46	46	35	0.0	0.0
MAX	--	--	0	39.4	45.4	47	47.7	49	50.2	49.3	0	0
MIN	--	--	0	0	0	17.1	23.1	41.3	40.3	0	0	0
AC-FT	--	--	0.0	478	1242	2287	2625	2857	2737	2160	0.0	0.0

CALENDAR YEAR ~~2011~~ TOTAL 7252 MEAN 34 AC-FT 14385

2010

Attachment #2

28-JAN-2019

13085350 SWID PUMPS

DAILY MEAN VALUES FOR FLOW IN CUBIC FEET PER SECOND, CALENDAR YEAR, JANUARY 2011 To DECEMBER 2011

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	0	0	8.8	25	0	34	47	14	47	39	0	--
2	0	0	0	25	0	35	47	47	47	36	0	--
3	0	0	0	25	0	35	44	47	47	32	0	--
4	0	0	12	25	12	46	42	46	47	33	0	--
5	0	0	22	25	27	46	39	41	47	27	0	--
6	0	0	23	25	33	47	41	47	47	21	0	--
7	0	0	22	25	34	44	32	39	44	20	0	--
8	0	0	23	25	14	46	45	44	46	20	0	--
9	0	0	23	25	2.4	41	44	44	46	18	0	--
10	0	0	14	25	0	43	48	44	50	15	0	--
11	0	0	6.8	25	0	39	46	44	49	15	0	--
12	0	0	23	25	0	41	48	45	48	19	0	--
13	0	0	23	25	15	43	46	46	47	21	0	--
14	0	0	18	18	24	45	46	47	48	19	0	--
15	0	0	11	25	17	47	45	44	46	22	0	--
16	0	0	0	18	11	45	48	46	47	26	0	--
17	0	0	0	0	23	45	49	46	44	26	--	--
18	0	0	0	0	22	48	48	45	42	24	--	--
19	0	0	0	0	17	47	49	45	42	24	--	--
20	0	0	0	0	17	46	46	45	47	25	--	--
21	0	0	0	0	23	46	46	44	46	23	--	--
22	0	0	0	0	22	36	46	45	42	24	--	--
23	0	0	0	0	24	31	47	46	43	24	--	--
24	0	0	13	0	22	47	47	46	41	8.4	--	--
25	0	0	24	0	22	47	30	45	37	20	--	--
26	0	0	24	0	25	43	43	46	43	6	--	--
27	0	0	24	0	26	46	38	47	47	0	--	--
28	0	21	24	0	26	48	44	45	45	0	--	--
29	0	--	25	0	26	47	44	44	44	0	--	--
30	0	--	25	0	24	47	41	46	41	0	--	--
31	0	--	25	--	26	--	18	48	--	0	--	--
TOTAL	0.00	21.30	411.70	384.70	535.50	1299.50	1342.20	1366.80	1356.80	586.86	0.00	--
MEAN	0.0	0.8	13	13	17	43	43	44	45	19	0.0	--
MAX	0	21.3	25	25.2	34.4	48.2	49.1	47.6	50.1	39.2	0	--
MIN	0	0	0	0	0	31	18.1	14.2	37.3	0	0	--
AC-FT	0.0	42	817	763	1062	2578	2662	2711	2691	1164	0.0	--

CALENDAR YEAR 2011 TOTAL 7305 MEAN 27 AC-FT 14490

Attachment #2

28-JAN-2019

13085350 SWID PUMPS

DAILY MEAN VALUES FOR FLOW IN CUBIC FEET PER SECOND, CALENDAR YEAR, JANUARY 2013 TO DECEMBER 2013

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	--	--	--	23	41	46	45	44	41	40	0	--
2	--	--	0	23	45	49	46	47	42	39	0	--
3	--	--	15	0	47	36	49	51	39	31	0	--
4	--	--	15	0	47	41	52	50	42	31	0	--
5	--	--	15	0	46	36	52	45	42	35	0	--
6	--	--	5.7	0	47	42	50	44	43	30	0	--
7	--	--	5.7	0	49	43	48	50	40	17	0	--
8	--	--	5.7	0	50	47	49	49	42	17	0	--
9	--	--	5.7	8.9	49	47	48	47	41	24	0	--
10	--	--	5.7	33	48	39	50	46	42	33	0	--
11	--	--	20	32	42	44	48	46	41	37	0	--
12	--	--	20	38	50	49	45	39	43	35	5.9	--
13	--	--	14	42	51	48	50	40	44	32	9.6	--
14	--	--	11	44	51	48	47	45	42	29	9.4	--
15	--	--	12	48	50	50	42	48	41	30	11	--
16	--	--	3	40	49	49	47	43	41	27	12	--
17	--	--	16	15	49	48	48	45	38	21	18	--
18	--	--	24	0	45	48	49	45	40	22	27	--
19	--	--	0.03	0	45	47	51	33	38	17	14	--
20	--	--	0.03	12	49	47	51	46	36	7.4	10	--
21	--	--	0.03	45	40	46	50	46	35	0	16	--
22	--	--	11	44	41	46	49	38	37	0	28	--
23	--	--	10	44	45	47	48	38	37	0	11	--
24	--	--	16	45	46	46	48	38	35	0.32	0	--
25	--	--	29	44	48	43	49	38	33	0.32	--	--
26	--	--	16	45	43	47	48	38	34	0	--	--
27	--	--	14	34	28	47	48	28	35	0	--	--
28	--	--	14	6.5	15	44	48	36	34	0	--	--
29	--	--	14	7.7	33	47	43	44	37	0	--	--
30	--	--	13	34	42	41	45	42	38	0	--	--
31	--	--	11	--	44	--	46	44	--	0	--	--
TOTAL	--	--	340.59	708.30	1373.00	1357.70	1488.30	1331.30	1172.60	554.14	172.16	--
MEAN	--	--	11	24	44	45	48	43	39	18	7.2	--
MAX	--	--	29.3	48	51	49.7	51.5	50.5	44	40.4	28.37	--
MIN	--	--	0	0	15.2	35.7	41.5	28.1	33.2	0	0	--
AC-FT	--	--	676	1405	2723	2693	2952	2641	2326	1099	341	--

CALENDAR YEAR ~~2013~~ TOTAL 8498 MEAN 32 AC-FT 16856

2012

Attachment #2

28-JAN-2019

13085350 SWID PUMPS

DAILY MEAN VALUES FOR FLOW IN CUBIC FEET PER SECOND, CALENDAR YEAR, JANUARY 2014 To DECEMBER 2014

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	--	--	--	0	33	51	23	30	0	0	0	23
2	--	--	--	0	33	49	23	30	0	0	0	7.7
3	--	--	--	0	25	47	21	31	0	0	0	--
4	--	--	--	0	42	49	0.56	30	0	0	0	--
5	--	--	--	0	43	50	9	30	0	0	12	--
6	--	--	--	0	49	52	19	30	0	0	14	--
7	--	--	--	0	50	52	18	31	0	0	11	--
8	--	--	--	0	50	37	22	30	0	0	12	--
9	--	--	--	0	51	44	26	29	0	0	13	--
10	--	--	--	0	51	50	26	29	0	0	9.5	--
11	--	--	--	0	51	49	27	20	0	0	11	--
12	--	--	--	0	51	47	24	10	0	0	13	--
13	--	--	0	0	33	46	23	0	0	0	8.9	--
14	--	--	22	0	43	25	22	26	0	0	14	--
15	--	--	22	0	53	9.3	21	25	0	0	14	--
16	--	--	22	0	52	16	22	10	0	0	9	--
17	--	--	22	0	51	15	22	0	0	0	8.4	--
18	--	--	22	0	45	15	22	0	0	0	15	--
19	--	--	22	0	46	15	23	25	0	0	13	--
20	--	--	22	0	47	15	22	25	0	0	12	--
21	--	--	22	0	50	16	22	25	0	0	12	--
22	--	--	0	0	52	16	21	24	0	0	14	--
23	--	--	0	33	51	16	21	24	0	0	14	--
24	--	--	0	33	50	15	21	24	0	0	14	--
25	--	--	0	33	50	18	25	25	0	0	14	--
26	--	--	0	33	50	23	25	24	0	0	18	--
27	--	--	0	33	50	24	29	24	0	0	25	--
28	--	--	0	33	49	24	31	25	0	0	25	--
29	--	--	0	33	49	23	30	17	0	0	25	--
30	--	--	0	33	51	24	31	0	0	0	25	--
31	--	--	0	--	51	--	31	0	--	0	--	--
TOTAL	--	--	177.90	261.60	1454.49	932.03	703.84	653.29	0.00	0.00	373.80	30.90
MEAN	--	--	9.4	8.7	47	31	23	21	0.0	0.0	12	15
MAX	--	--	22.3	32.7	53.46	52.1	31.11	30.86	0	0	25.4	23.2
MIN	--	--	0	0	24.95	9.29	0.56	0	0	0	0	7.7
AC-FT	--	--	353	519	2885	1849	1396	1296	0.0	0.0	741	61

CALENDAR YEAR ~~2014~~ TOTAL 4588 MEAN 22 AC-FT 9100

2013