STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 36-16390
Exam Date: 07/13/2020

1. Current Owner:
   MYRON A HUETTIG 1369 S 2000 E HAZELTON ID 83335-5469 AND/OR
   STEVEN C HUETTIG 1908 E 1300 S HAZELTON ID 83335-5428

2. Accompanied by: STEVEN C HUETTIG
   Phone No: 208-308-3718
   Relationship to permit Holder: Current Owner

3. **SOURCE:**
WASTE WATER

Method of Determination: Aerial photography, site visit and verified by Steve Huettig

B. OVERLAP REVIEW

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

Water Right No.	Source	Purpose of Use	Basis
36-2184	Ground Water	Irrigation	Decree
36-2117	Ground Water	Irrigation	Decree
36-2156B	Ground Water	Irrigation	Decree
36-2594	Ground Water	Irrigation	Decree
36-7639	Ground Water	Irrigation	Decree
36-8147	Ground Water	Irrigation	License
36-8289	Ground Water	Irrigation	License
36-2227	Unnamed Stream	Irrigation	Decree
36-2701	Unnamed Stream	Storage	Decree
36-16947	Ground Water	Irrigation	Decree
36-17042	Ground Water	Stockwater	License

2. Other water rights with the same point-of-diversion: None NO Overlap

Comments: No water rights with the same point of diversion

C. DIVERSION AND DELIVERY SYSTEM

1. **LOCATION OF POINT(S) OF DIVERSION:**
WASTE WATER SW¼ SW¼ NW¼, Sec. 20, Twp 10S, Rge 20E, B.M. JEROME County

Method of Determination: Aerial photography, site visit and verified by Steve Huettig

PLACE OF USE: IRRIGATION

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	20E	20									40.0	39.0	36.0	39.0	39.0	40.0	39.0	38.0	310.0
10S	20E	28						40.0	40.0										80.0
10S	20E	29							38.0	40.0	40.0	36.0	39.0	39.0	40.0	40.0	39.0	40.0	391.0

Total Acres: 781.0

Method of Determination: Aerial photography, site visit and verified by Steve Huettig

3.

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

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

✓ Photo of Diversion and System Attached

4.

Well or Diversion ID No.*	Motor Make	Hp	Motor Serial No.	Pump Make	Pump Serial No. or Discharge Size

D. FLOW MEASUREMENTS

A weir box turnout with a 2 foot Cipolletti weir has been installed adjacent to the supply canal. From the weir box turnout water flows into an 18" pipe under the road then turns south along the edge of the field to a collection pond. The high water mark on the 2 foot Cipolletti weir measured 0.62 ft was used to determine the amount of flow which equates to 3.29 cfs. See attached page A-11.

E. FLOW CALCULATIONS

_____ Additional Computation Sheets Attached

Measured Method: None Taken

Flow was determined by using the high water mark on the 2 foot Cipolletti weir. A measurement was taken from the weir crest to the high water mark on the staff gage on the face of the weir. Using the discharge of standard Cipolletti weirs in ft^3/sec, table A7-5 from the water measurement manual page A-11(page attached), the measured height of 0.62 ft equates to 3.29 cfs. This is more than the permitted amount of 3.0 cfs.

Therefore I recommend licensing 3.0 cfs.

F. VOLUME CALCULATIONS

1. Volume Calculations for irrigation:

$V_{I.R.}$ = (Acres Irrigated) x (Irrigation Requirement) = 781 acres x 4 af/a = 3124 af

$V_{D.R.}$ = [Diversion Rate (cfs)] x (Days in Irrigation season) x 1.9835 = 3 cfs x 246 days x 1.9835 = 1463.8 af

V = Smaller of $V_{I.R.}$ and $V_{D.R.}$ =

Recommended licensing Volume of 1463.8 AF

G. NARRATIVE/REMARKS/COMMENTS

Application for permit 36-1639 was filed on March 23, 2006 by Myron Huettig for 3.0 cfs from waste water for irrigation of 821 acres. On April 24, 2007 the permit was issued with proof of beneficial use to be submitted on or before April 1, 2008. The applicant submitted a statement of completion for proof of beneficial use on March ~~18~~ 19, 2008. On January 12, 2015 the department received a relinquishment of water right to reduce the current place of use of permit 36-16390 to 781.0 acres by relinquishing a 40.0 acre parcel.

On July 13, 2020 I met with Steven Huettig, permit holder, to conduct a beneficial use field exam. I reviewed the information on the proof report with Mr.Huettig. He indicated that the phone numbers were incorrect. A minor change to reflect current phone numbers will be updated at licensing. I discussed the measuring device and lockable controlling works condition with him. He then explained how the system works and showed me the turnout box from the canal where a 2' cipolletti weir measuring device is installed. He then explained the waste water is captured in a collection pond. The collection pond is the point of diversion whereby water is diverted through a buried pipe by gravity flow approximately 1000 yards to a secondary storage pond (water right 36-2701) with a re-lift station. It is then pumped into the irrigation system of several pivots, hand lines, and wheel lines to irrigate 781.0 acres. Mr. Huettig verified the place of use on the aerial photo.

Have conditions of permit approval been met? ✓ Yes ____ No

H. RECOMMENDATIONS

1. Recommended Amounts

Beneficial Use	Period of Use	Rate of Diversion	Volume
IRRIGATION	03/15 to 11/15	3.00 CFS	1463.8 AF
	Totals:	3.00 CFS	

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

Benny Walker - Water Resource Agent, Senior

Field Examiner's Name Benny Walker Date 8/13/2020

Reviewer _____ Date _____

Table A7-5 [continued]. Discharge of standard Cipolletti weirs in ft^3/sec. Shaded entries determined experimentally. Others computed from the formula $Q=3.367Lh_1^{1.5}$

Head	Weir Length, L, ft				Head	Weir Length, L, ft			Head	L
H, ft	2.0	3.0	4.0	5.0	H, ft	3.0	4.0	5.0	H, ft	5.0
0.61	3.21	4.81	6.42	8.02	1.06	11.3	14.7	18.4	1.51	31.2
.62	3.29	4.93	6.57	8.22	1.07	11.4	14.9	18.6	1.52	31.5
.63	3.37	5.05	6.73	8.42	1.08	11.6	15.1	18.9	1.53	31.9
.64	3.45	5.17	6.90	8.62	1.09	11.7	15.3	19.2	1.54	32.2
.65	3.53	5.29	7.06	8.82	1.10	11.9	15.5	19.4	1.55	32.5
.66	3.61	5.42	7.22	9.03	1.11	12.1	15.8	19.7	1.56	32.8
.67	3.69	5.54	7.39	9.23	1.12	12.2	16.0	20.0	1.57	33.1
.68	3.81	5.66	7.55	9.44	1.13	12.4	16.2	20.2	1.58	33.4
.69	3.90	5.79	7.72	9.65	1.14	12.5	16.4	20.5	1.59	33.8
.70	3.98	5.92	7.89	9.86	1.15	12.7	16.6	20.8	1.60	34.1
.71	4.06	6.04	8.06	10.1	1.16	12.9	16.8	21.0	1.61	34.4
.72	4.15	6.17	8.23	10.3	1.17	13.0	17.0	21.3	1.62	34.7
.73	4.24	6.30	8.40	10.5	1.18	13.2	17.3	21.6	1.63	35.0
.74	4.33	6.43	8.57	10.7	1.19	13.4	17.5	21.9	1.64	35.4
.75	4.42	6.56	8.75	10.9	1.20	13.6	17.7	22.1	1.65	35.7
.76	4.51	6.69	8.92	11.2	1.21	13.7	17.9	22.4	1.66	36.0
.77	4.60	6.82	9.10	11.4	1.22	13.9	18.1	22.7	1.67	36.3
.78	4.69	6.96	9.28	11.6	1.23	14.1	18.4	23.0		
.79	4.78	7.09	9.46	11.8	1.24	14.3	18.6	23.2		
.80	4.87	7.23	9.64	12.0	1.25	14.4	18.8	23.5		
.81	4.96	7.36	9.82	12.3	1.26	14.6	19.0	23.8		
.82	5.05	7.50	10.0	12.5	1.27	14.8	19.3	24.1		
.83	5.14	7.64	10.2	12.7	1.28	15.0	19.5	24.4		
.84	5.24	7.78	10.4	13.0	1.29	15.2	19.7	24.7		
.85	5.34	7.92	10.6	13.2	1.30	15.4	20.0	25.0		
.86	5.44	8.06	10.7	13.4	1.31	15.5	20.2	25.2		
.87	5.54	8.20	10.9	13.7	1.32	15.7	20.4	25.5		
.88	5.64	8.34	11.1	13.9	1.33	15.9	20.7	25.8		
.89	5.74	8.48	11.3	14.1	1.34	16.1	-----	26.1		
.90	5.84	8.62	11.5	14.4	1.35	16.2	-----	26.4		
.91	5.94	8.77	11.7	14.6	1.36	16.4	-----	26.7		
.92	6.04	8.91	11.9	14.9	1.37	16.6	-----	27.0		
.93	6.14	9.06	12.1	15.1	1.38	16.8	-----	27.3		
.94	6.25	9.21	12.3	15.3	1.39	17.0	-----	27.6		
.95	6.36	9.35	12.5	15.6	1.40	17.2	-----	27.9		
.96	6.47	9.50	12.7	15.8	1.41	17.4	-----	28.2		
.97	6.58	9.65	12.9	16.1	1.42	17.6	-----	28.5		
.98	6.69	9.80	13.1	16.3	1.43	17.8	-----	28.8		
.99	6.80	9.95	13.3	16.6	1.44	18.0	-----	29.1		
1.00	6.91	10.1	13.5	16.8	1.45	18.2	-----	29.4		
1.01	-----	10.5	13.7	17.1	1.46	18.3	-----	29.7		
1.02	-----	10.6	13.9	17.3	1.47	18.5	-----	30.0		
1.03	-----	10.8	14.1	17.6	1.48	18.7	-----	30.3		
1.04	-----	10.9	14.3	17.9	1.49	18.9	-----	30.6		
1.05	-----	11.1	14.5	18.1	1.50	19.1	-----	30.9		

Permit 36-16390

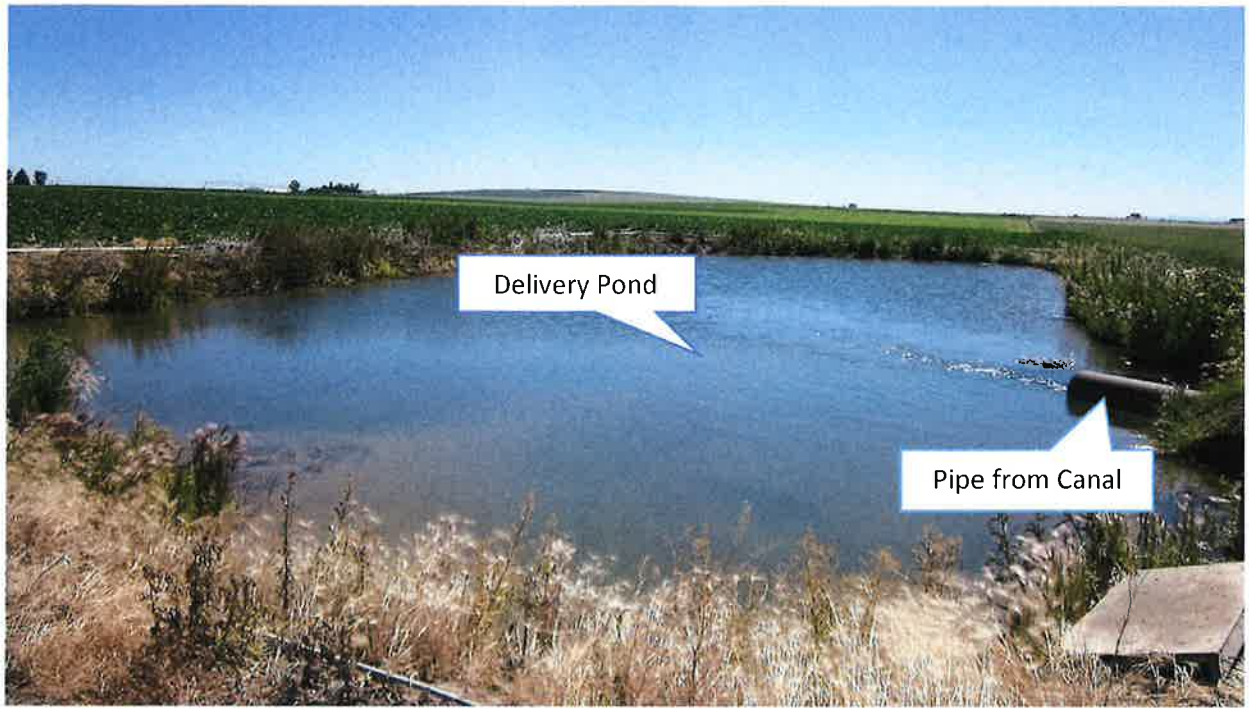
Above: End of Delivery Canal

Field Exam 36-16390

Permit 36-16390

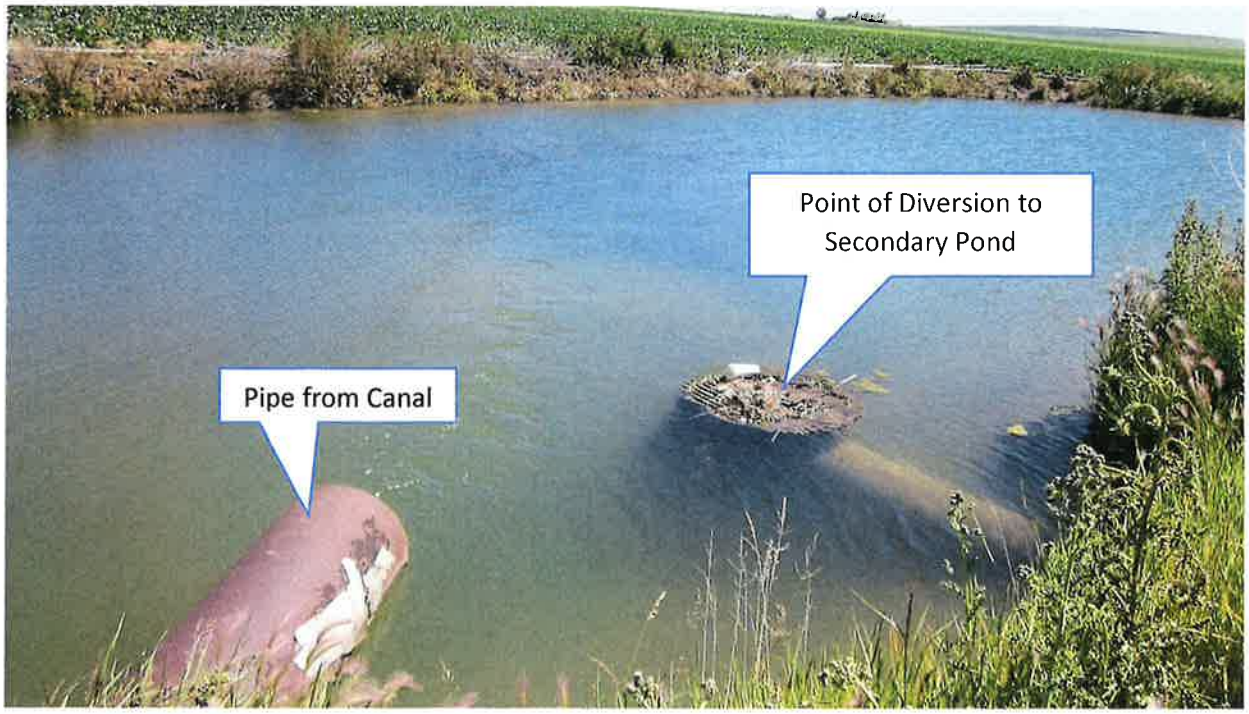
Weir Measurement

Field Exam 36-16390



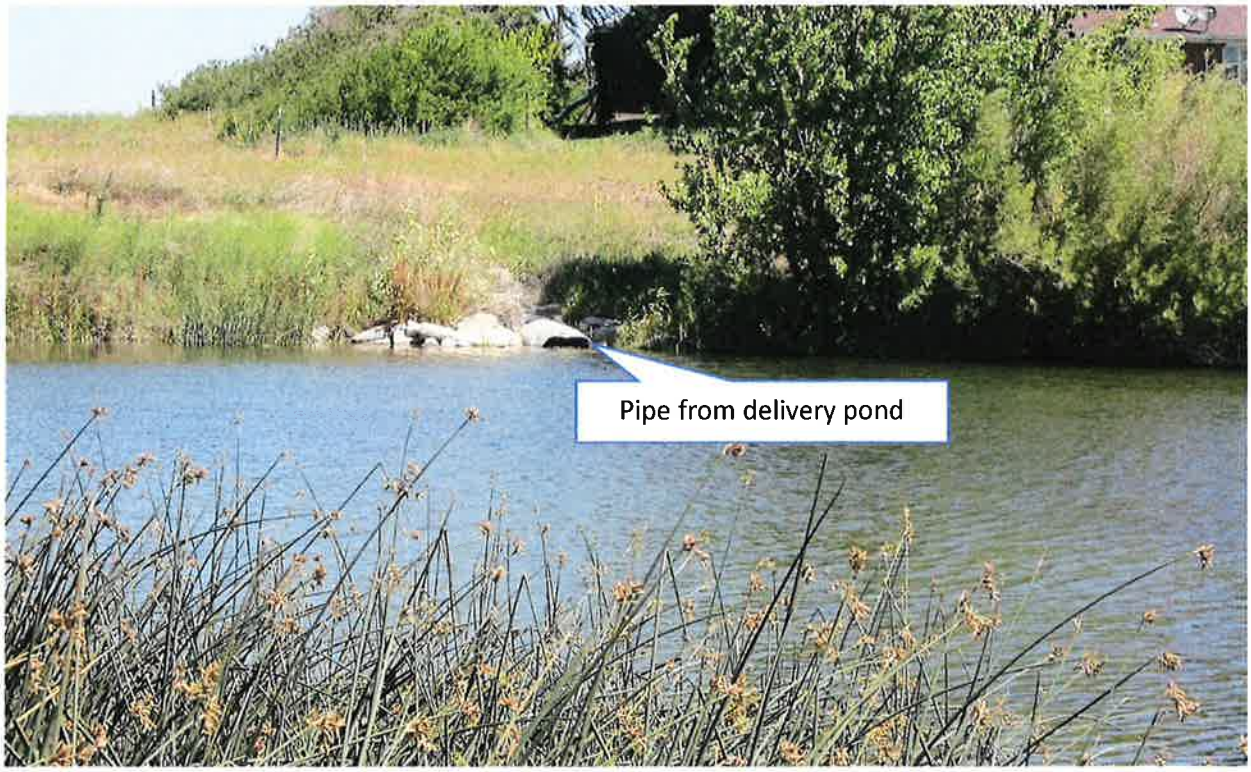
Above: Waste Water from the canal is captured in the delivery pond

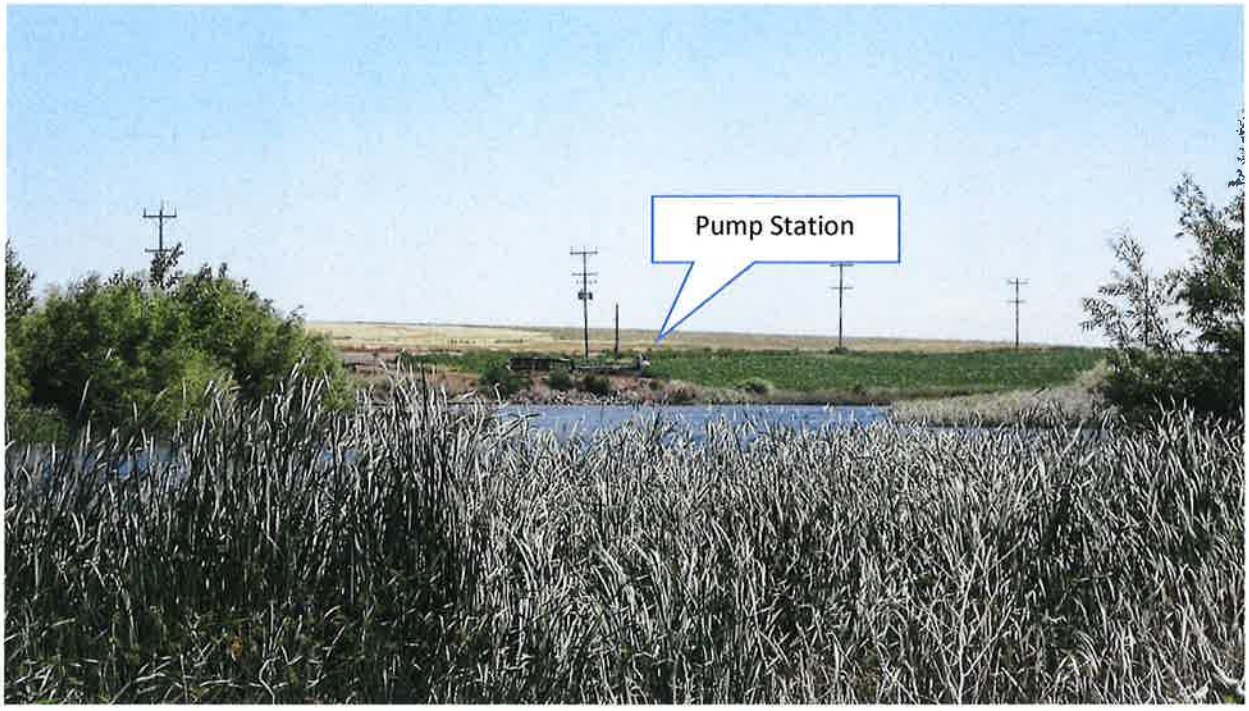
Below: Waste Water is diverted from delivery pond to a secondary pond



Above: Secondary Pond

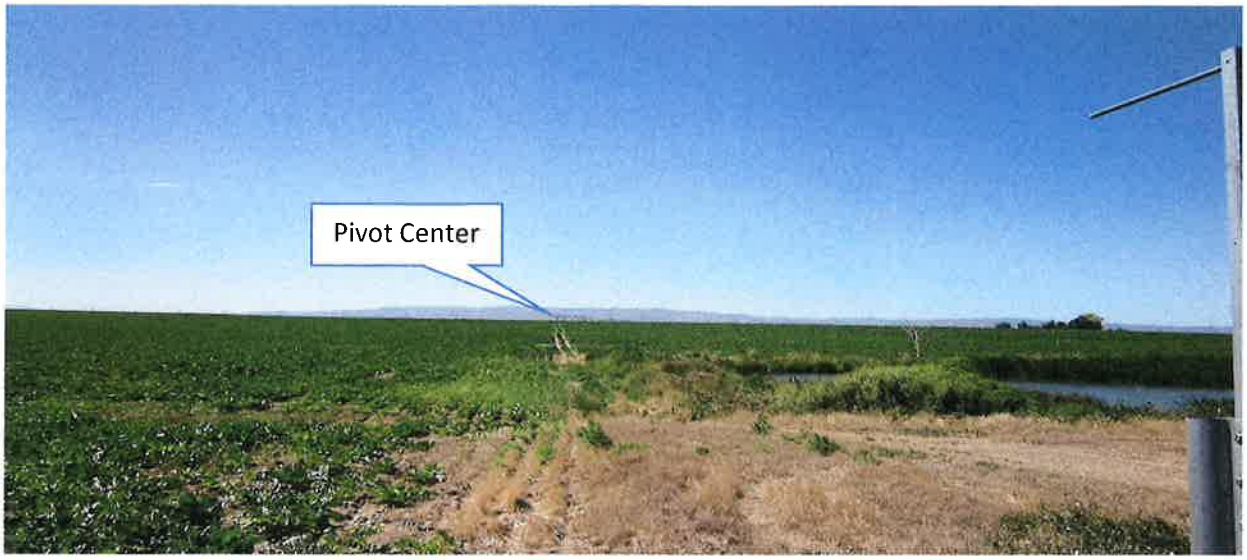
Below: Waste Water enters Secondary pond from delivery pond





Above: Re-lift pump station from Secondary pond

Below: Re-lift pump station to irrigation systems



Irrigation Place of Use, pivots

Irrigation Place of Use, pivot and hand lines


NENE
NWNW
NENW
NWNE
NENE
NWNW
NENW
Permit 36-16390
Canal
SENE
SWNW
SENW
SWNE
SENE
SWNW
SENW
Pipe from Canal to Delevery Pond
Pond, POD
19
NESE
NESW
NWSE
NESE
21
NWSW
NESW
NWSW
20
Pipeline to Secondary Pond
Place of Use
SESE
SESW
SWSE
SESE
SWSW
SESW
SWSW
System Diagram
Re-Lift Pump Station
Secondary Pond
NENE
NWNW
NENW
10S20E
NWNE
NENE
NWNW
NENW
SENE
SWNW
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