

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 87-10072

Exam Date: 9/17/2018

1. Current Owner:
CITY OF POTLATCH PO BOX 525
195 6TH STREET POTLATCH ID 83855 (208) 875-0708

2. Accompanied by: City Employee

3. **SOURCE:**
TREATED MUNICIPAL WASTEWATER

TRIBUTARY:
SINKS

B. OVERLAP REVIEW

1. Other water rights with the same place of use: None
2. Other water rights with the same point-of-diversion: None

C. DIVERSION AND DELIVERY SYSTEM1. **LOCATION OF POINT(S) OF DIVERSION:**

TREATED MUNICIPAL WASTEWATER NW¼SW¼ Sec. 1, Twp 41N, Rge 05W, B.M. LATAH County

Method of Determination: Maps and GPS. POD located at -116° 54.843, 46°55.359

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	
41N	05W	1									0.1			15.0					15.1

Total Acres: 15.1

Method of Determination: Google Maps and Arcmap.

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

*Code to correspond with No. on map and aerial photo

D. FLOW MEASUREMENTS

1.

Measurement Equipment	Type	Make	Model No.	Serial No.	Size	Calib. Date
SIEMENS	MAGFLO	SITRANS F M	MAG500	7ME6910-1AA10-1AA0		

2. Measurements: Readout on system showed 88gpm being diverted. See attached photos of readout.

E. FLOW CALCULATIONS

Measured Method: N/A

____ Additional Computation Sheets Attached

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V_{IR} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 15.1 \text{ AC} \times 3.0 \text{ AF} = 45.3 \text{ AF}$$

$$V_{DR} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.2 \text{ CFS} \times 214 \times 1.9835 = 84.9 \text{ AF}$$

$$V = \text{Smaller of } V_{IR} \text{ and } V_{DR} = 45.3 \text{ AF}$$

2. Volume Calculations for Other Uses:

G. NARRATIVE/REMARKS/COMMENTS

Field exam with a city employee and operator of system showed water used from sewage lagoons for irrigation purposes. Water was diverted from lagoons to two different places of use. A center pivot irrigation system had a storage tank to run uninterrupted in a half circle. Above the center pivot there were hand lines with 11/64 inch heads running off direct flow from the pump. The system had a pump house with control panels with digital read outs. The direct flow to hand lines and the storage tank was equal to 88gpm or 0.20 cfs. The employee stated they don't regularly use the system except every month or so to make sure everything still works correctly. He stated they still had enough on their discharge permit into the river and the system was planned for future growth.

The irrigated area was traced out to be 15.1 acres. It was at first unclear to me why municipal had been applied for on the permit as well as irrigation. It was decided that the use of this right was solely for irrigation purposes and not a municipal use. Municipal will be removed from the license because treated municipal waste water will not be used for municipal purposes. The license will be issued for a diversion rate of 0.20 cfs for the irrigation use of 15.1 acres with no annual volume. The source will be treated like a surface water source and condition R62 will limit the extent of the irrigation use.

Conditions 134, 26A, 180, and 124 will be removed from the license as they are no longer relevant. All other conditions will remain on the license. There are no overlap concerns.

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

H. 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	0.20 CFS	

Totals: 0.200 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

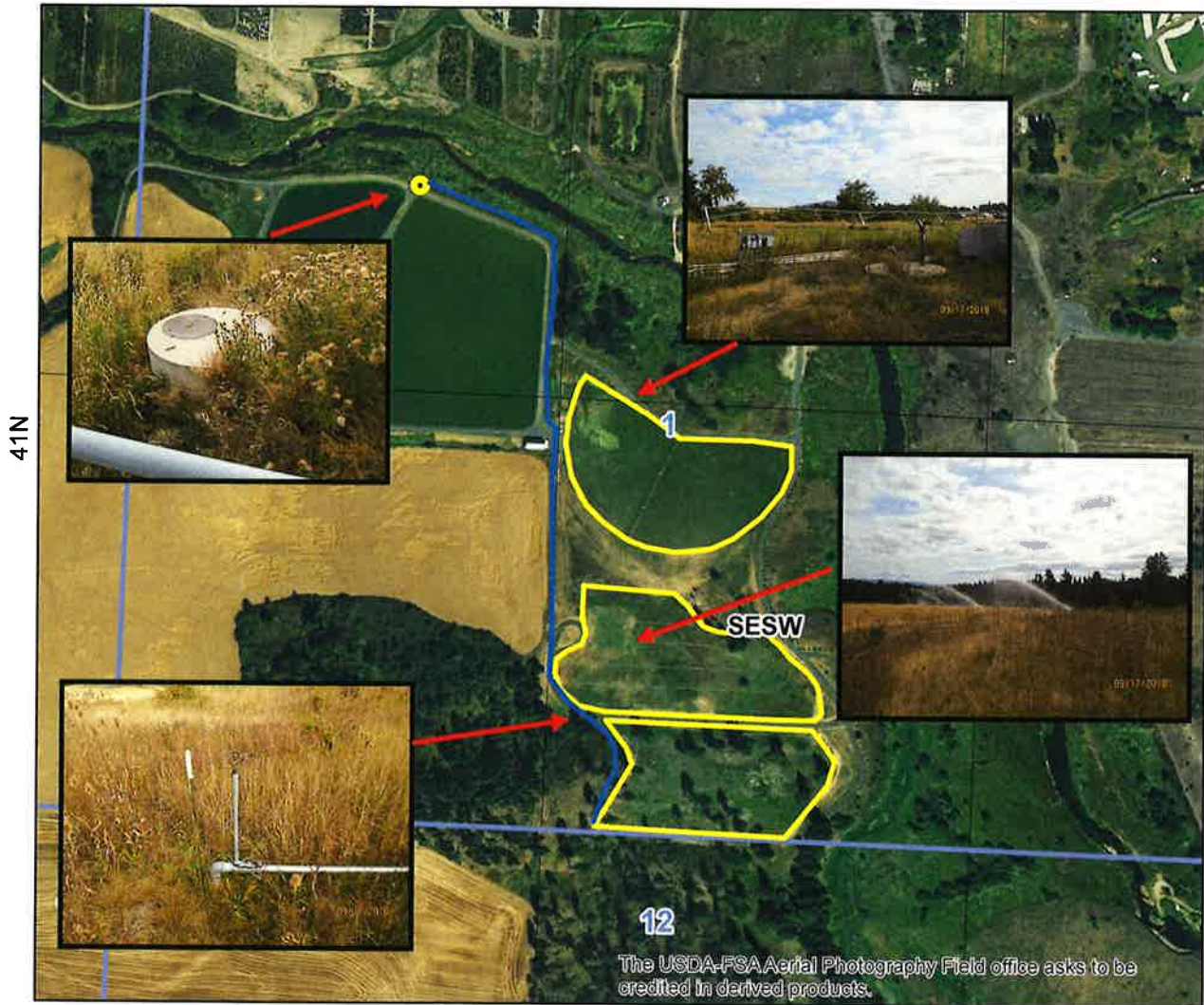
Field Examiner's Name Adam Fink Date 2/4/2019

Reviewer Douglas Jones P.E. Date 2/28/2019

State of Idaho
Department of Water Resources
Attachment to Field Exam
87-10072

~~MUNICIPAL~~ IRRIGATION / SYSTEM DIAGRAM

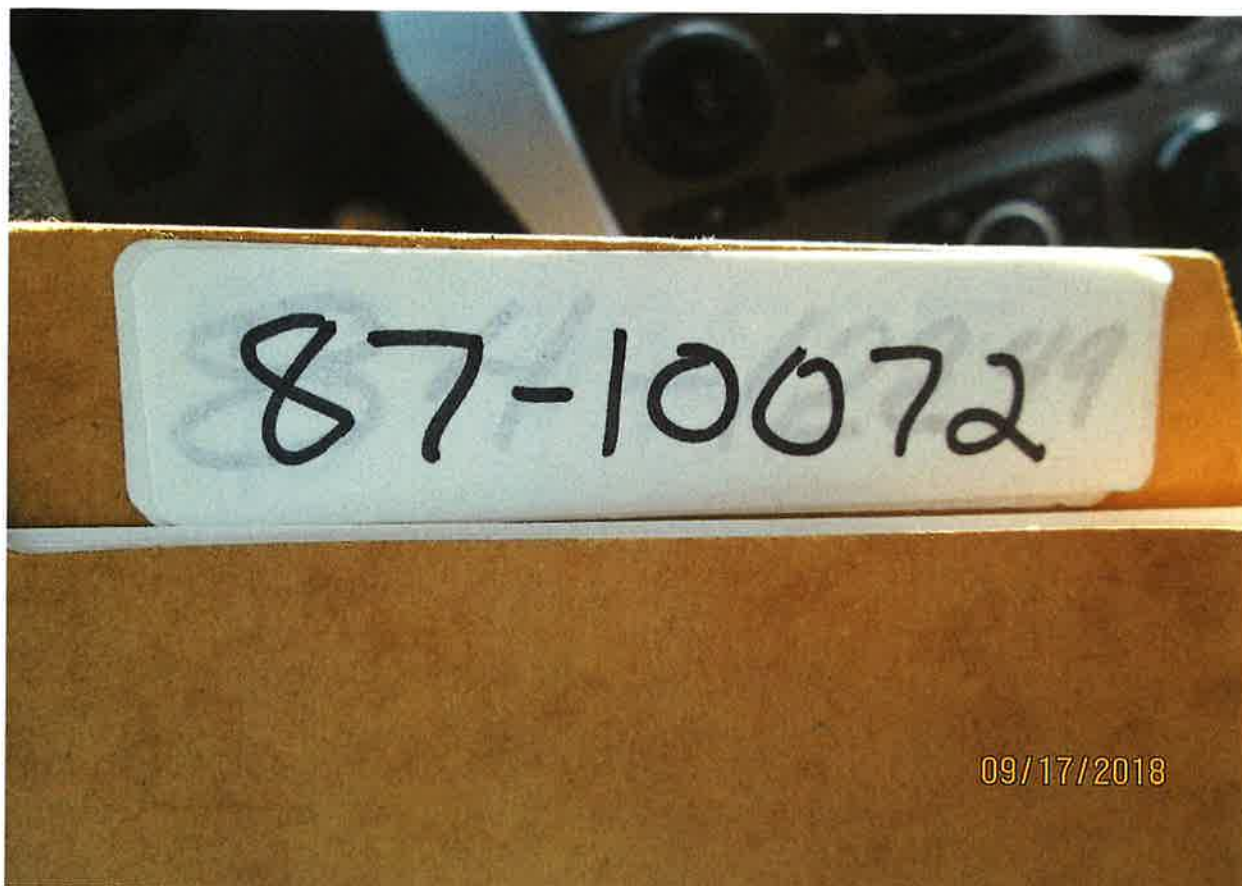
05W



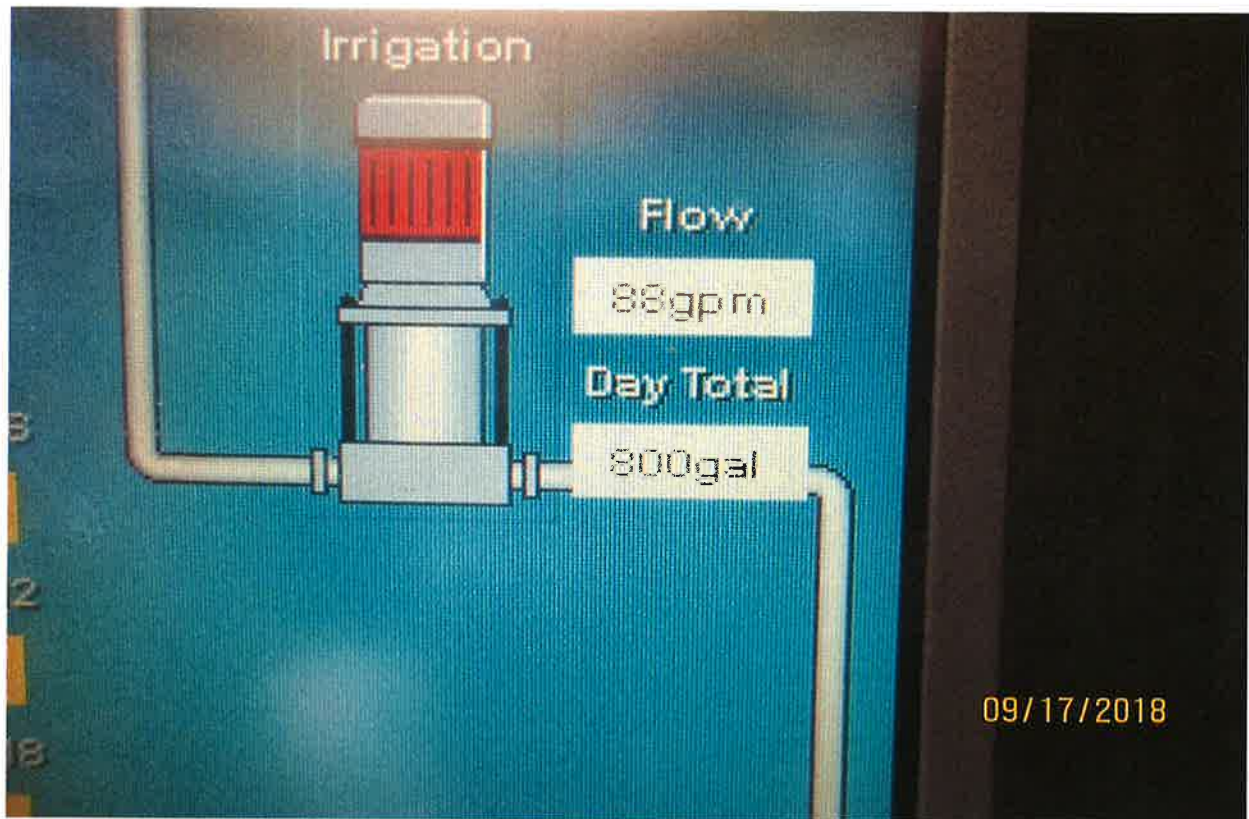
- Point of Diversion
- Water Service Area Boundary
- Townships
- PLS Sections

0 0.05 0.1 0.2 Miles





Irrigation system control panel.



Diversion rate for irrigation.



Pump information.



Lagoons.





Pumping facility from lagoons.





Pivot irrigation system with buried storage tank for that system.





Direct flow irrigation system.





Irrigation POU.

