

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 63-12575

Exam Date: 7/30/2008

1. Current Owner: CITY OF BOISE
PUBLIC WORKS DEPT
PO BOX 500
BOISE ID 83701-0500
(208)384-3901
2. Accompanied by: Nick @ the Landers St WWTP
Phone No: 384-4261
Relationship to Permit Holder: Employee

3. SOURCE
GROUND WATER

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

GROUND WATER L3 NE1/4SW1/4 Sec. 32, Twp 04N, Rge 02E, B.M. ADA County

Method of Determination: GPS

2.

PLACE OF USE: MUNICIPAL

Twp	Rge	Sec	NE				NW				SW				SE				Totals
04N	02E	32	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
					X						X					X			
											L 3					L 2			

Method of Determination: Site Visit/Imagery

Description

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

☐ 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 DiversionID No.*
A0014147Motor MakeHp
10Motor Serial No.Pump MakePump Serial No. or Discharge Size

D. FLOW MEASUREMENTS

1.

<u>Measurement Equipment</u>	<u>Type</u>	<u>Make</u>	<u>Model No.</u>	<u>Serial No.</u>	<u>Size</u>	<u>Calib. Date</u>
Polysonic	Tyme-Flyte					

2. Measurements: 10 measurements were taken in 1 minute intervals using the polysonic.

E. FLOW CALCULATIONS x Additional Computation Sheets Attached

Measured Method: The 10 readings averaged 61.2 gpm or 0.14 cfs.

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 3 \text{ acres} \times 4.5 = 13.5 \text{ afa}$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.09 \text{ cfs} \times 260 \text{ days} \times 1.9835 = 46.41 \text{ afa}$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 13.5 \text{ afa}$$

G. NARRATIVE/REMARKS/COMMENTSSystem

The are 4 zones with 2" pipe running to 10-12 sprinkler heads that have a discharge capability of 3-5 gpm. In summary, there is an average of 11 sprinklers per zone with a discharge of 4 gpm on average or 44 gpm total per zone (0.098 cfs).

Licensing

The permit was approved as municipal despite the use being for 3 acres of irrigation along the greenbelt next to the Landers St WWTP. The mitigation plan has been met (see attached Lander effluent data spreadsheet) so the license can be approved for municipal use, however, it will be limited in volume and will not be assigned a large place of use. The place where the irrigation is actually occurring is what the license will be limited to.

Have conditions of permit approval been met? x Yes No**H. RECOMMENDATIONS****1. Recommended Amounts**

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>DIVERSION RATE</u>	<u>ANNUAL VOLUME</u>
MUNICIPAL	03/01 to 11/15	0.090 CFS	13.50 AF
<u>Totals:</u>		0.090 CFS	

2. Recommended Amendments Change P.D. as reflected above Add P.D. as reflected above None x Change P.U. as reflected above Add P.U. as reflected above Other**I. AUTHENTICATION**Field Examiner's Name Cherie Padilla Date 7/30/08Reviewer Cherie Padilla Date 8/8/2008

DATA SET
MODE SELECT
DATA SET

DATA SET MODE
? PRINTER

12:08-622.653E-1GPM 00R
+000000 *10 G 00R
-000000 *10 G 00R

= 62.27 gpm

12:09-598.878E-1GPM 00R
+000000 *10 G 00R
-000006 *10 G 00R
= 59.89 gpm

12:09-627.408E-1GPM 00R
+000000 *10 G 00H
= 62.74 gpm

-000007 *10 G 00H

12:12-607.860E-1GPM 00R
+000000 *10 G 00R
-000020 *10 G 00R
= 60.79 gpm

12:12-612.615E-1GPM 00R
+000000 *10 G 00R
-000026 *10 G 00R
= 61.26 gpm

12:13-602.048E-1GPM 00R
+000000 *10 G 00R
-000033 *10 G 00R
= 60.2 gpm

12:14-598.878E-1GPM 00R
+000000 *10 G 00R
-000039 *10 G 00R
= 59.89 gpm

12:15-625.295E-1GPM 00R
+000000 *10 G 00R
-000045 *10 G 00R
= 62.53 gpm

12:16-599.934E-1GPM 00R
+000000 *10 G 00R
-000051 *10 G 00R
= 59.99 gpm

12:17-620.540E-1GPM 00R
+000000 *10 G 00R
-000057 *10 G 00R
= 62.10 gpm

AVG
61.26 gpm
0.14 cfs

Lander Effluent Flow Data- All values in million gallons																																		
Jan 2000 - July 2008 As Part of mitigation at Least 3,424,436 gallons/year need to be returned to Boise River																																		
2000	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31			
January	13.44	14.08	14.43	14.75	14.31	14.2	14.13	14.63	14.13	14.25	14.77	14.28	13.93	13.97	13.78	13.72	14.48	14.03	12.78	12.52	12.35	11.8	12.71	12.91	12.92	13.3	13.85	13.31	12.73	12.81	12.71			
February	12.48	12.77	13.21	11.48	12.6	12.91	12.64	12.22	13.65	12.93	13.88	14.21	14.22	14.24	13.97	12.5	12.88	12.85	11.35	12.2	12.24	11.81	12.18	11.88	11.38	11.51	10.58	10.39	10.83	12.81				
March	10.89	11.33	11.71	11.05	10.95	11.13	11.27	12.18	11.78	11.24	11.51	10.87	11.4	11.08	11.26	12.07	11.1	11.72	11.31	10.78	11.18	11.16	11.09	11.26	11.01	10.32	8.94	12.12	12.34	12.07				
April	12.26	12.48	12.54	13.7	12.08	12.03	12.12	11.76	12.32	11.97	11.9	12.38	12.77	12.7	12.38	11.38	11.81	13.08	13.13	13.16	12.88	13.04	12.88	13.69	13.81	13.22	13.49	13.33	13.88	13.18				
May	12.81	13.41	13.99	14.33	14.68	14.43	14.47	14.85	14.51	14.83	15.38	15	14.81	14.45	15.16	14.4	14.48	13.92	13.68	13.44	13.32	13.63	13.7	13.85	14.65	14.45	18.02	18.84	16.85	16.11				
June	14.89	14.58	14.35	14.48	15.08	15.12	15	15.24	14.95	14.54	14.83	15.32	15.15	15.28	15.27	14.82	14.21	14.23	15.12	15.11	14.59	14.51	14.8	13.91	13.38	14.87	14.5	14.43	13.85	12.78				
July	13.05	13.1	14.08	13.38	14.08	14.18	13.84	13.38	13.49	14.1	13.99	13.97	15.2	14.95	14.28	14.48	14.81	14.68	14.57	14.62	14.48	13.84	13.96	15.08	15.88	15.21	14.77	14.83	14.3	15.52				
August	18.49	15.32	15.15	14.85	14.34	14.23	14.99	15.04	15.11	14.92	14.7	14.33	14.97	15.38	15.55	15.1	14.98	13.41	14.23	14.18	14.75	14.51	14.3	14.48	14.84	14.8	15.12	15.05	15.44	15.69				
September	12.54	12.12	14.85	15.87	14.84	11.7	12.18	13.54	13.22	13.83	13.27	13.01	13.12	13.13	13.12	13.06	13.38	13.37	13.33	13.81	13.85	13.68	13.49	13.77	13.69	13.45	13.59	13.47	13.37					
October	13.35	14.81	15.07	14.59	14.82	14.56	14.22	14.16	14.39	14.7	15	15.31	14.31	13.86	13.11	13.77	13.3	12.95	12.46	12.15	12.94	12.78	13.49	14.48	13.44	13.39	13.08	14.21	13.34	13.91				
November	13.68	13.65	14.01	14.63	14.09	14.01	15.25	14.97	15.42	15.48	15.47	15.22	15.62	16.29	15.77	15.31	15.41	15.29	16.39	16.74	15.31	15.18	14.32	14.89	14.53	15.76	16.49	15.82	15.89	16.85				
December	13.33	13.29	13.22	13.43	12.84	12.84	13.19	12.14	12.99	13.11	13.13	13.11	13.1	13.11	12.98	12.72	12.75	13.75	13.92	13.84	13.66	13.77	12.88	11.87	11.62	12.89	13.03	12.87	12.83	12.5				
Total returned to Boise River 2000 = 5438.29																																		
2001	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31			
January	12.31	12.94	12.48	12.83	11.89	12.79	12.76	12.85	12.99	12.22	12.72	13.01	12.52	12.34	13.44	13.38	13.37	13.2	13.15	13.35	13.48	13.87	13.89	13.02	12.21	12.92	12.89	13.04	12.98	12.84				
February	12.95	12.73	12.01	12.87	12.87	12.91	13.54	13.43	12.84	12.77	12.74	12.98	12.83	12.81	12.71	12.55	12.41	12.15	12.13	12.77	12.49	12.84	12.58	12.51	12.96	12.13	12.69	12.63						
March	12.55	12.72	12.49	12.2	12.8	12.35	13.73	14.37	14.22	13.99	13.83	13.22	14.19	14.27	14.4	14.4	13.84	13.85	14.31	14.39	14.03	14.15	12.88	11.83	11.89	12.19	12.09	11.07	11.82	11.89				
April	12.69	13.01	12.92	12.78	12.82	12.88	13.46	13.05	13	13.12	13.38	12.8	11.88	10.98	10.28	10.05	10.47	12.22	12.53	11.96	11.4	12.04	11.73	11.88	11.42	11.44	11.68	11.33	11.59	11.72				
May	12.12	10.74	11.49	11.45	11.4	11.63	11.73	11.71	12.33	12.88	13.89	13.61	13.48	14.05	13.88	12.55	13.1	12.512	12.07	12.49	13.05	12.87	12.76	12.37	12.1	12.28	11.24	12.57	13.51	13.11				
June	11.99	12.22	12.61	13.63	13.42	13.32	12.89	13.26	12.97	13.24	14.08	14.42	13.93	14.81	14.56	13.88	14.24	14.81	14.78	14.54	14.59	14.49	14.19	14.08	15.46	15.37	15.83	15.34	15.24	14.83				
July	14.81	13.47	12.87	13.75	15	14.43	14.42	14.23	14.8	14.88	14.97	15.06	14.41	13.31	13.37	14.2	13.74	13.78	13.77	12.69	12.11	12.27	12.67	12.97	13.19	12.96	12.44	12.11	12.33	13.08				
August	12.73	12.83	12.35	12.3	11.95	12.83	13.87	13.95	14.18	13.83	13.16	13.84	14.31	14.2	14.23	14.13	13.99	13.08	13.22	13.84	13.98	14	13.7	13.28	13.29	13.41	13.63	12.32	13.81	14.2				
September	14.37	12.54	13.48	13.84	14.19	14.2	13.44	12.59	12.27	13.21	13.51	13.71	14.07	13.5	13.68	13.38	13.84	13.4	13.72	13.87	13.53	13.38	13.27	11.18	13.17	13.36	13.55	13.37	13.29	13.08				
October	13.11	12.9	12.9	12.5	12.8	12.59	12.8	12.57	12.69	12.7	12.8	12.69	12.8	12.7	12.8	12.69	12.8	12.7	12.8	12.69	12.8	12.7	12.8	12.69	12.8	12.7	12.8	12.69	12.8	12.7	12.8			
November	13.01	12.79	13.02	13.06	13.62	10.52	12.36	12.71	12.82	12.81	12.83	12.86	12.91	12.77	12.95	13.89	14.42	13.81	14.08	13.89	13.95	13.1	12.85	14.16	13.49	13.9	13.82	14.01	14.3	14.03				
December	13.48	12.39	13.73	14.05	13.82	14.16	13.95	13.38	13.24	12.53	13.79	14.1	14.83	14.48	14.1	14.07	14.38	14.35	14.27	13.13	13.75	13.49	12.87	16.26	11.09	13.9	13.82	13.32	13.32	13.32				
Total returned to Boise River in 2001 = 4789.922																																		
2002	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31			
January	13.23	13.74	13.65	13.74	13.5	13.23	13.79	13.71	13.93	13.8	13.66	13.55	13.34	13.77	13.67	13.76	13.72	13.61	13.52	13.09	13.99	13.89	13.71	13.83	14.45	13.4	13.3	13.88	13.77	13.65	12.9			
February	13.44	13.11	13.09	13.49	13.58	13.47	13.38	13.38	13.38	13.15	13.58	13.48	13.28	13.39	13.42	13.33	12.83	13.48	13.58	13.24	13.32	12.92	13.3	12.83	13.48	13.37	13.05	13.51	13.68	13.72	12.51			
March	13.05	13.08	13.04	13.14	12.83	12.59	13.08	13.05	14.5	13.19	13.24	13.25	13.56	13.52	13.58	13.3	13.21	13.52	13.59	13.16	13.38	13.05	13.89	11.89	12.74	12.82	12.74	12.77	12.51					
April	13.05	13.07	13.04	13.14	12.83	12.59	13.08	13.05	14.5	13.19	13.24	13.25	13.56	13.52	13.58	13.3	13.21	13.52	13.59	13.16	13.38	13.05	13.89	11.89	12.74	12.82	12.74	12.77	12.51					
May	13.81	13.8	14.32	13.87	13.75	14.7	13.58	13.74	13.89	14.07	15.18	12.15	14.36	14.45	14.53	14.53	14.13	13.57	13.81	14.41	14.82	14.87	14.99	14.4	14.38	13.97	14.41	14.31	14.33	14.34				
June	14.33	14.18	14.54	14.42	14.48	13.15	15.42	14.69	14.08	14.31	14.38	14.23	14.25	14.3	12.54	13.81	14.2	14.44	14.3	14.27	13.9	13.82	13.61	14.39	14.19	14.18	14.28	14.28	13.84	13.93				
July	14.48	14.44	14.07	13.12	13.55	13.26	13.81	14.38	14.37	14.23	14.29	14.19	13.86	13.92	14.38	14.5	14.28	14.21	14.02	13.87	13.58	11.59	13.81	14.08	14.04	13.88	14.37	13.33	13.81	13.97				
August	13.75	13.74	13.38	13.58	13.87	13.91	13.52	13.53	14.03	13.51	13.69	14.18	14.04	14.1	14.18	14.21	14.09	13.79	14.24	14.16	14.4	14.32	14.5	14.18	13.68	14.43	14.62	14.77	14.52	14.22				
September	13.34	13.89	14.35	14.72	16.8	18.19	15.05	15.44	18.11	15.8	15.62	15.84	15.	15.1	15.1	15.1	15.1	15.1	15.1	15.1	15.1	15.1	15.1	15.1	15.1	15.1	15.1	15.1						

63-12575 POU and POD

7/30/2008 Recorded at Field Exam by Cherie Padilla



Legend

-  Sections
-  QQ



Pump is tucked
back in the corner.



Place of use facing
SE



Place of use facing
parking lot of Landers
St WWTP (NE)



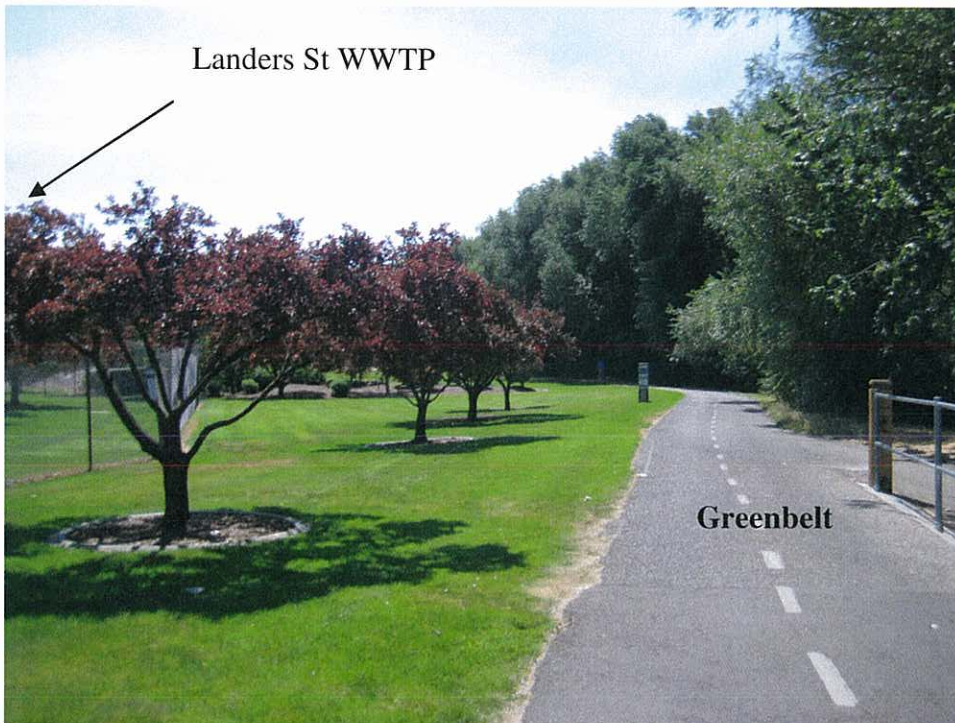
Place of use facing
NE



Place of use facing
NE



Place of use facing
NW



Place of use along
the greenbelt
facing SE



Well on Landers St
WWTP property



Water being treated by
UV rays

Treated water being
discharged into the
Boise River