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AUG 23 2007
DEPARTMENT OF WATER RESOURCES
63-31869

Permit No: 63-31869
Exam Date: 8/23/2007

1. Current Owner: JOHN B FERGUSON
PO BOX 140737
BOISE ID 83714
(208)362-2100

Relationship to Permit Holder:

SNAKE RIVER

1. Other water rights with the same place of use: NA
2. Other water rights with the same point of diversion: NA

1. LOCATION OF POINT(S) OF DIVERSION:

BOISE RIVER L6 SW1/4NE1/4 Sec. 23, Twp 04N, Rge 01E, B.M.

ADA County

2.

PLACE OF USE: AESTHETIC

[illegible]

Method of Determination:

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.

<u>Well or Diversion ID No.*</u>	<u>Motor Make</u>	<u>Hp</u>	<u>Motor Serial No.</u>	<u>Pump Make</u>	<u>Pump Serial No. or Discharge Size</u>
	Axial Flow	2		Carry Mfg.	

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

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>

2. Measurements: No measurements were obtained for waterfalls; calculations were based on performance curve for pump model and pipe size.

E. FLOW CALCULATIONS

____ Additional Computation Sheets Attached

Measured Method: Measurement based on flow curve from manufacture specs for stainless steel axial-flow submersible 4" discharge model with 2 horse power.

Total head approximately four feet with type "impeller 3" should yield roughly 425 gallons per minute, more than enough to provide the necessary rate.

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation: N/A

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) =$$

$$\rightarrow V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 =$$

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

2. Volume Calculations for Other Uses:

$$V_{D.R.} = (0.2 \text{ CFS}) \times (108) \times 1.9835 = 42.8 \text{ AF}$$

NOTE: Applicant said he used waterfall for entertaining a few times a week and not for a few months during winter. 3 x a week 9 months out of year = 108 days.

G. NARRATIVE/REMARKS/COMMENTS

Water being pulled from the Boise River was found to be put to beneficial use for two waterfalls. Conditions of the permit were met with the POD containing a locking cover, the waterfalls were non-consumptive, and the combined surface area was found to be 100 square feet (each fall being roughly 50 square feet). The waterfalls can be turned on and off by a switch and did not appear to run all of the time. A 2x2 pump box was located approximately 20 feet upstream of the falls. The plans state a two horse power pump pulls water through 4" PVC intake with perforated pipe. The pipe size was verified but no visual inspection of the pump could be made. These specs were used to calculate the flow rate.

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>
AESTHETIC	01/01 to 12/31	0.200 CFS	
<u>Totals:</u>		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 Other

I. AUTHENTICATION

Field Examiner's Name Jeff HARRIS Date 9/18/07

Reviewer Date

Comment Report

63-31869

1. jharris 8/28/2007 Field Report Narrative

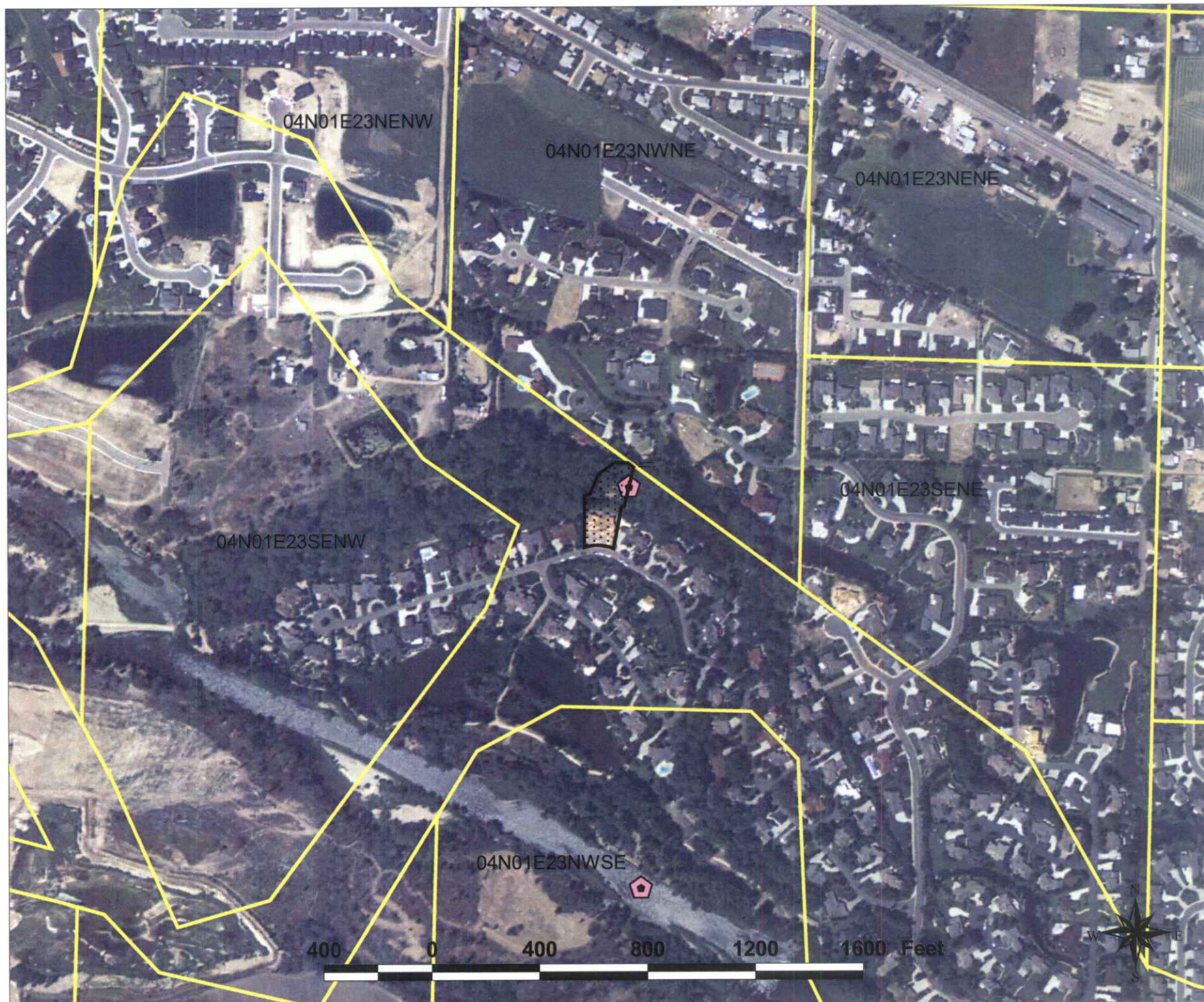
Comment: Water being pulled from the Boise River was found to be put to beneficial use for two waterfalls. Conditions of the permit were met with the POD containing a locking cover, the waterfalls were non-consumptive, and the combined surface area was found to be 100 square feet (each fall being roughly 50 square feet). The waterfalls can be turned on and off by a switch and did not appear to run all of the time. A 2x2 pump box was located approximately 20 feet upstream of the falls. The plans state a two horse power pump pulls water through 4" PVC intake with perforated pipe. The pipe size was verified but no visual inspection of the pump could be made. These specs were used to calculate the flow rate.

6. scurtis 3/23/2004 Legal Notice Remarks

Comment: Water is diverted from slough of the Boise River also known as Riverside Creek to create water falls along the banks of existing channel.

7. dnelson 3/23/2004 Comment/Analysis

Comment: This application is considered non-consumptive, because the applicant proposes to divert water for water falls along an existing channel. The water will be diverted from the channel and the water will flow directly back to the channel. The channel is known locally as Riverside Creek, but has described in previous water rights as a slough or unnamed drain of the Boise River system. The last few water rights approved for Riverside Creek used the Boise River as the source, which was followed in this application. I had no way to determine the evaporation rate of the water fall, but I would consider it fairly minimal, whereas the water will be flowing a very short distance (under 50 feet). Several subdivisions use Riverside Creek for aesthetic purposes. I have sent comment letters to the two main water user organizations in this area to ensure this use will not harm their water rights. There are no other water rights that should be significant to this diversion.





0.05 0 0.05 0.1 Miles

POD W/ LOCKING COVER



VALVE BOXES LOCATED IN GRASS BEHIND EACH WATERFALL.

