

STATE OF IDAHO  
DEPARTMENT OF WATER RESOURCES  
IN-OFFICE REVIEW/BENEFICIAL USE FIELD REPORT

**A. GENERAL INFORMATION**Permit No: 65-23051

Exam Date: 8/31/2016

1. Does this qualify for an in-office field exam (IDAPA 035.02.r)? X Y N
- Irrigation of 5 acres or less
  - Storage of up to 14.6 AF for stockwater purposes only
  - Any use other than irrigation or storage, if the combined diversion rate is 0.24 cfs or less
  - Other < >

2. Current Owner: Name: Michael G. Cleveland and Cynthia Petit
- Owner of Record Correct? X Y N
- Address of Record Correct? X Y N
- If No: Address

Tax lot data shows Mr. Cleveland and Ms. Petit as the owners of the property.

3. Beneficial Use Fees have been paid: X Y N Receipt No: C0

4. **SOURCE** TRIBUTARY

Middle Fork Payette River

Payette River

Method of Determination: GIS and Taxlot DataChange in Source: Y X N**B. OVERLAP REVIEW**

1. Other water rights with the same place of use: NO Overlap

| Water Right No. | Source | Purpose of Use | Basis |
|-----------------|--------|----------------|-------|
| NONE            |        |                |       |
|                 |        |                |       |

Comments: Water rights 65-3222 and 65-8290 are for irrigation of the property north of the permit holders property. Water rights 65-22987 and 65-22988 are lands west of the permit holder's property. License 65-8285 appears to be an overlapping water right, but was disallowed in the SRBA, and reclaimed under another permit in a different 40 acre tract. Permit 65-8286 is a permit for domestic use, but appears to be for the original farm house. The decree claims a priority date of 1981, and the only home in the 40 acre tract was on the property west of the permit holders property. It also appears as though the home associated with 65-8286 has since been torn down. The in-house use appears to be supplied by an exempt domestic well drilled in 2014.

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

| Water Right No. | Source | Purpose of Use | Basis |
|-----------------|--------|----------------|-------|
| NONE            |        |                |       |
|                 |        |                |       |

Comments: No other water rights share this point of diversion. The only other water right with a point of diversion in this 40 acre tract is ground water right 65-8286, which appears to have been abandoned.

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

| Source     | Govt. Lot | 1/4 | 1/4 | 1/4 | Sec. | Twp. | Rge. |      | County |
|------------|-----------|-----|-----|-----|------|------|------|------|--------|
| River Pump | 4         |     | SW  | SW  | 23   | 10N  | 4E   | B.M. | BOISE  |
|            |           |     |     |     |      |      |      | B.M. |        |
|            |           |     |     |     |      |      |      | B.M. |        |

Method of Determination: GIS and Tax Lot data.Change in POD?   X   N Amendment Required?   X   N**2. PLACE OF USE:** 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 |        |
| 10N           | 4E  | 23    |    |    |    |    |    |    |    |    |    |    | 0.4 |    |    |    |    |    | 0.4    |
|               |     | Lot # |    |    |    |    |    |    |    |    |    |    | 4   |    |    |    |    |    |        |
| Total Acres = |     |       |    |    |    |    |    |    |    |    |    |    |     |    |    |    |    |    | 0.4    |

Method of Determination: GIS, Parcel Data, and a map sent in by the permit holder.Change in POU?   X   N Amendment Required?   X   N   Delivery System Diagram Attached (required). Indicate all major components and distances between components.

Indicate weir size/pipe as applicable.

  X   Aerial Photo Attached (required for irrigation of 10+ acres).   Photo of Diversion and System Attached

| 4. Well or Diversion Identification No.* | Motor Make        | Hp | Motor Serial No. | Pump Make         | Pump Serial No. or Discharge Size |
|------------------------------------------|-------------------|----|------------------|-------------------|-----------------------------------|
| River Pump                               | Franklin Electric | 1  | Unknown          | Franklin Electric | Unkown                            |
|                                          |                   |    |                  |                   |                                   |

\*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 |
|-------------------------|------|------|-----------|------------|------|-------------|
| NONE                    |      |      |           |            |      |             |
|                         |      |      |           |            |      |             |

2. Measurements: No measurement is required for an in-house exam. A theoretical was used to determine if the pump could supply the needed diversion rate.

**E. FLOW CALCULATIONS**  X   Additional Computation Sheets Attached

Measured Method:

A theoretical calculation was used to estimate the pumping capacity. Please see the attached theoretical pumping sheet.

Acre Limits = 0.4 acres X 0.03 cfs per acre = 0.012 cfs

Permit allowed = 0.03 cfs

I am recommending a diversion rate of 0.03 cfs for this permit. The acre limitation does limit the permit to 0.01 cfs, but that diversion rate would be too low to operate the sprinkler system used on the property. The permit allowed 0.03 cfs, and it appears as though the system was designed to use that amount of water.

**F. VOLUME CALCULATIONS**

## 1. Volume Calculations for Irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 0.4 \text{ acres} \times 3.5 = 1.4 \text{ af}$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.03 \text{ cfs} \times 231 \times 1.9835 = 13.7 \text{ af}$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 1.4 \text{ af}$$

## 2. Volume Calculations for Other Uses:

N/A

**G. PURPOSE OF USE**Irrigation   X     Y     N   # Stock \_\_\_\_\_ Domestic # of Homes   1  

Other: &lt; &gt;

Change in Purpose of Use?   Y     N  Method of Determination: Taxlot data and letter from the permit holder.

If Yes: From Use \_\_\_\_\_ To Use \_\_\_\_\_ Amount \_\_\_\_\_ CFS \_\_\_\_\_ AFA \_\_\_\_\_

**H. NARRATIVE/REMARKS/COMMENTS**

This permit is qualified for an in-house exam. The permit holder provided documentation that shows that 0.4 acres have been irrigated under this permit from the river. The owner provided the horsepower of the river pump, which appears to be consistent with the permit. I can find no reason to not move forward with the licensing of this permit.

Condition 3 (R67) will be changed to X31 as is standard on irrigation uses under 1 acre. Condition 6 (WB9) will be altered to include the water right number 65-12733 for the Payette Minimum Stream Flow. Condition 7 (26A) will be removed as is standard. Condition 8 (121) will be changed to condition 103 as is standard. The remaining conditions will be continued forward to licensing.

Have conditions of permit approval been met?   X   Yes        No

**I. RECOMMENDATIONS****1. Recommended Amounts**

| <u>BENEFICIAL USE</u> | <u>PERIOD OF USE</u> | <u>DIVERSION RATE</u> | <u>ANNUAL VOLUME</u> |
|-----------------------|----------------------|-----------------------|----------------------|
| Irrigation            | 03/15 to 10/31       | 0.03 CFS              | 1.4 AF               |
| <u>Totals:</u>        |                      | 0.03 CFS              | 1.4 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

Other: <   >

**J. AUTHENTICATION – DANIEL A. NELSON – STAFF HYDROLOGIST**

Field Examiner's Name



Date

8-30-16

Reviewer

Date



### Field Exam Map -- Permit 65-23051

Water is diverted from the Middle Fork of the Payette River and run into a buried sprinkler system. The place of use for this permit is outlined in yellow (0.4 acres). The point of diversion for this permit is the yellow dot. The green lines are the parcels. The brown lines are the contour lines.

THEORETICAL HORSEPOWER EQUATION WORKSHEET (cjh 1/92)

Water Right No.: 65-23051  
 Reviewer: Dan Nelson  
 Date of Review: 8/30/2016

P/D No.:

|                    | Scenario 1 | Scenario 2 | Scenario 2 |
|--------------------|------------|------------|------------|
| PUMP HORSEPOWER    | 1          | 1          | 1          |
| BOOSTER HORSEPOWER | 0          | 0          | 0          |
| PUMPING LEVEL      | 40         | 40         | 40         |
| DISCHARGE PRESSURE | 40         | 50         | 60         |
| RATE OF FLOW (cfs) | 0.05       | 0.04       | 0.03       |
|                    | 21         | 18         | 15         |

**Average**  
 0.04  
 19.33

The above calculates the formula =

$$Q = \frac{8.8 * (\text{Efficiency}) * \text{hp}}{\text{depth to water} + 2.31 * (\text{psi}) + \text{friction}}$$

Assumptions: %70 efficiency.  
 No Friction

**Examiners Notes:**

The permit holder informed me that the River Pump has a 1 Hp pump. According to the contour lines in Arcmap, the lift for this pump is approximately 40 feet to get the water from the river to the lands being irrigated. I used a standard 40 to 60 psi range for the sprinkler system, which is the same as the standard home. The pump should be able to produce between 0.03 cfs and 0.05 cfs.

Respectfully,

RECEIVED

AUG 29 2016

DEPARTMENT OF  
WATER RESOURCES

Daniel Nelson

Staff Hydrologist

Idaho Department of Water Resources

Telephone (208) 287-4856

Fax (208) 287-6700 (attn: Dan Nelson)

 65-23051.pdf  
754K

*Hopefully this satisfies the  
requirements as specified.*

*Mike Cleveland and Cindy Pettit*

*The pump is a Franklin Electric Submersible  
1 hp and is currently in the river.*

*Please find attached - copy of irrigated area  
and copies of individual zones with photos  
of zones operating.*



Mike Cleveland <mikecleveland22@gmail.com>

## Licensing of permit 65-23051

1 message

Nelson, Dan <Dan.Nelson@idwr.idaho.gov>

Thu, Aug 18, 2016 at 3:52 PM

To: "mikecleveland22@gmail.com" <mikecleveland22@gmail.com>, "Cindyp2922@gmail.com" <Cindyp2922@gmail.com>

Dear Mr. Cleveland and Ms. Petit;

Our office received your proof of beneficial use statement on August 4, 2016 for permit 65-23051. This permit allowed you to develop up to 1 acre of irrigation to be diverted from a single pump on the Middle Fork of the Payette River. The permit is small enough, that with a little assistance from you, we can verify the water use without actually visiting the site, unless you wish to have someone meet with you on sight to verify the water use.

I have been asked to review this permit to verify the water use so it can be licensed. None of the aerial photos available to the Department show any irrigation of your property. I have attached our most current map of your property with your parcel outlined. I want to make sure that I allow all of the ground that you are currently irrigating is included on the license. If you could provide the following, we will not be required to meet and verify what has been done:

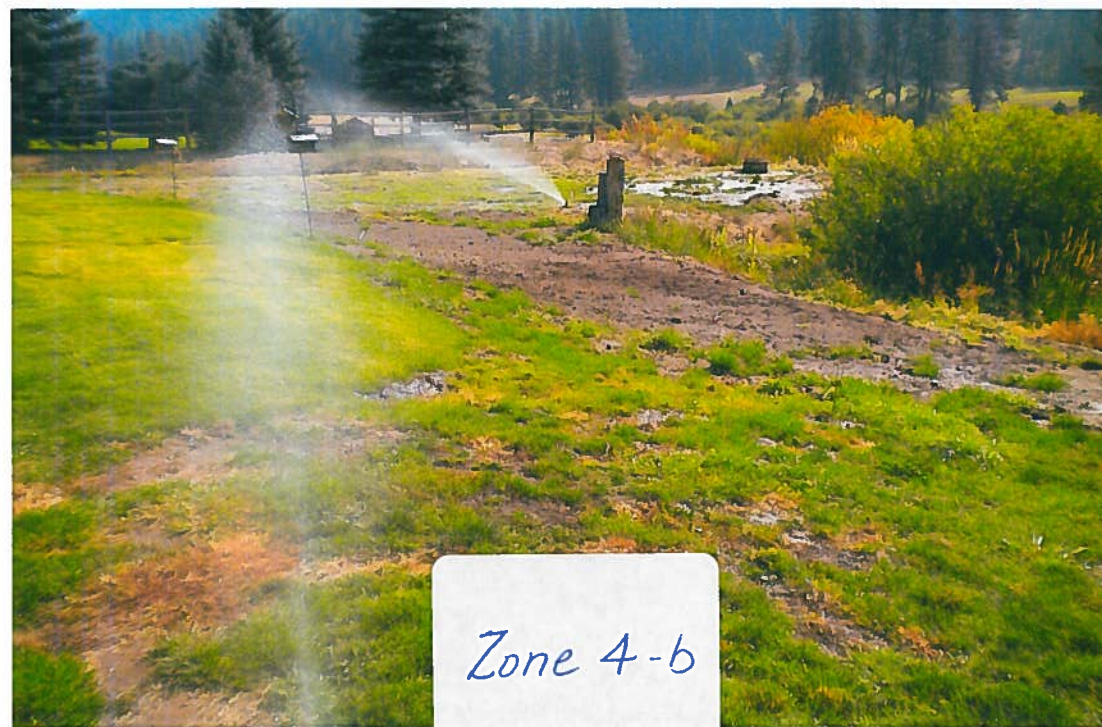
- 1.) Please mark on the attached map the area that is currently being irrigated.
- 2.) Please provide photos that verifies that the irrigation system is operational and irrigating lawn or garden areas.

I also would like to know a bit more about your pump. If you could take a picture of your pump and send me copies of any information you may have describing the pump size and the amount of water it can divert.

As I stated at the beginning of this email, if you wish to have someone come to your property to verify the use we are more than willing to accommodate that request. Please supply the information requested above or request that a Idaho Department of Water Resources employee within 30 days or by September 19, 2016. I would also be willing to meet with you to go over the information needed. If I do not receive the requested information or a request for a field verification from you within thirty (30) days, I am required to take action to void your permits under the provision of Section 42-219(8) of the Idaho Code.

Please feel free to contact me if you have any questions.





Zone 4-b



Zone 3-b



Zone 5-a



Zone 4-a



Zone 7a



Zone-5b



Zone-7b



Zone 6



Zone 7e



Zone-7c



Zone 8



Zone 7-d



The USDA-FSA Aerial Photography Field office asks to be credited in

IRRIGATION.



Google earth



ZONE # 1





feet

meters

300

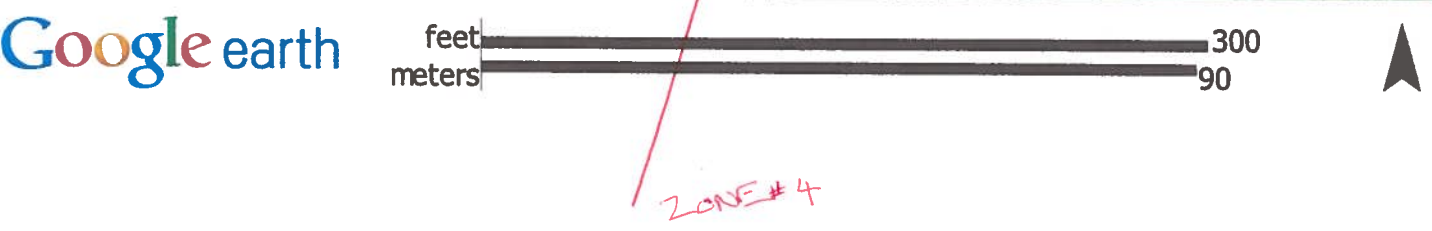
90



ZONE # 2



ZONE #3



feet  
meters

Google earth

300  
90



ZONE #5



Google earth

feet  
meters



ZONE # 6



Google earth

feet  
meters

300  
90



ZONE # 7 SHRUBS.



Google earth

feet  
meters

300  
90



ZONE # 8 GARDEN.

**Nelson, Dan**

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**From:** Nelson, Dan  
**Sent:** Thursday, August 18, 2016 3:53 PM  
**To:** 'mikecleveland22@gmail.com'; 'Cindyp2922@gmail.com'  
**Subject:** Licensing of permit 65-23051  
**Attachments:** 65-23051.pdf

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Respectfully,

Daniel Nelson  
Staff Hydrologist  
Idaho Department of Water Resources  
Telephone (208) 287-4856  
Fax (208) 287-6700 (attn: Dan Nelson)

