

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 67-7453

Exam Date: 6/12/2014

1. Current Owner: MICHAEL E PARADIS
2370 MILL CREEK RD
COUNCIL ID 83612-5221
(208)253-4458

JANICE M PARADIS
2370 MILL CREEK RD
COUNCIL ID 83612-5221
(208)253-4458

2. Accompanied by: Michael Paradis
Phone No: Same
Address: Same
Relationship to Permit Holder: Owner

3. SOURCE

WASTE WATER

TRIBUTARY

WEISER RIVER

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:

WASTE WATER NW1/4SW1/4
ADAMS County

Sec. 15, Twp 16N, Rge 01W, B.M.

Method of Determination: Arc Map (Aerial Photo)

2.

PLACE OF USE: IRRIGATION

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			<u>NE</u>	<u>NW</u>	<u>SW</u>	<u>SE</u>	<u>NE</u>	<u>NW</u>	<u>SW</u>	<u>SE</u>	<u>NE</u>	<u>NW</u>	<u>SW</u>	<u>SE</u>	<u>NE</u>	<u>NW</u>	<u>SW</u>	<u>SE</u>	
16N	01W	15									25.0	4.0							29.0

Total Acres: 29

Method of Determination: Arc Map (Aerial Photo); Tax Lots.

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>
N/A	Baldor	10	M18142	Berkeley	4"

*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>
N/A						

2. Measurements: No field measurements. Irrigation system not in operation due to preparation to cut hay.

E. FLOW CALCULATIONS

Additional Computation Sheets Attached

Measured Method: (Theoretical Horsepower Equation)

$$Q = 8.8 \times 0.7 \times 10/20 + (2.31 \times 60) = 61.60/158.60 = 0.39 \text{ cfs}$$

$$Q(\text{sprinklers}) = 29 \text{ sprinklers} \times 5.65 \text{ gpm} = 163.85 \text{ gpm} \sim 0.36 \text{ cfs}$$

$$Q(\text{theoretical}) = 0.39 \text{ cfs} > 0.36 \text{ cfs } Q(\text{sprinkler}) > 0.20 \text{ cfs } Q(\text{permit})$$

$$HP = 10$$

$$Z = 20' \text{ (Estimated)}$$

$$P = 60 \text{ psi (Per Right Holder)}$$

Appears that the current pumping system can attain the permit diversion rate of 0.20 cfs.

Recommend the permit diversion rate of 0.20 cfs.

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 29 \times 4.0 \text{ AFA} = 116.0 \text{ AFA}$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.20 \times 246 \times 1.9835 = 97.6 \text{ AFA}$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 97.6 \text{ AFA}$$

2. Volume Calculations for Other Uses: N/A

G. NARRATIVE/REMARKS/COMMENTS**WATER SUPPLY SYSTEM:**

The right holder collects waste water seepage from the Council Waste Water Treatment System in a 0.20 acre irrigation storage pond. A drain ditch conveys water to the irrigation storage pond from the north, and an 8" PVC perforated pipe from the west. A 10-hp centrifugal pump diverts water from the irrigation storage pond to irrigate approximately 29 acres of crops.

IRRIGATION SYSTEM:

A 5' diameter concrete manhole sump operates as a pumping station for the right holder. Water is conveyed to the concrete manhole sump through an 8" intake pipe in the storage pond, and an 8" perforated pipe which extends westerly in a localized drainage south of the Council Waste Water Treatment Plant.

A 10-hp centrifugal pump discharges water through a 4" irrigation main line. The right holder's field is irrigated by a wheel line. The wheel line operates 29 Rain Bird sprinklers with 5/32" nozzles. There are 20 risers on the 4" main line for connecting the wheel line. The right holder operates each of the 20 sets for 12 hours, and completing the irrigation cycle for the 29 acres in approximately 10 days.

STOCK WATER:

The water supply system is not being used for stock water use. Therefore, Water Right 67-7453 shall not be licensed for the beneficial use of stock water.

OVERLAP ANALYSIS:

Point of Diversion: There are no point of diversion overlaps for Water Right Permit No. 67-7453.

Place of Use: There are no place of use overlaps for Water Right Permit No. 67-7453.

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

CONDITION NO. 1 (001) – A measuring device of a type approved by the Department shall be permanently installed and maintained as part of the diverting works. The Department contacted Brandi Horton, District 67 Watermaster, requesting a waiver to Condition No.1. The Watermaster agreed with the Department's request, with the condition that the right holder may be required to install a measuring device in the future. Right holder is in compliance with Condition No.1.

RATE &/OR STORAGE RECOMMENDED FOR LICENSING

Description	Rate of Flow (cfs)		Storage (af)
Permit Amount	0.20	&/or	N/A
Beneficial Use Limit	0.58	&/or	N/A
System Measurement	0.39 (theoretical)	&/or	N/A
Proof Fee Amount	0.20	&/or	N/A
Recommended Amount	0.20	&/or	N/A

H. RECOMMENDATIONS

1. Recommended Amounts

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>DIVERSION RATE</u>	<u>ANNUAL VOLUME</u>
IRRIGATION	3/15 to 11/15	0.200 CFS	97.60 AFA
	<u>Totals:</u>	0.200 CFS	97.60 AFA

2. Recommended Amendments

___ Change P.D. as reflected above ___ Add P.D. as reflected above X None

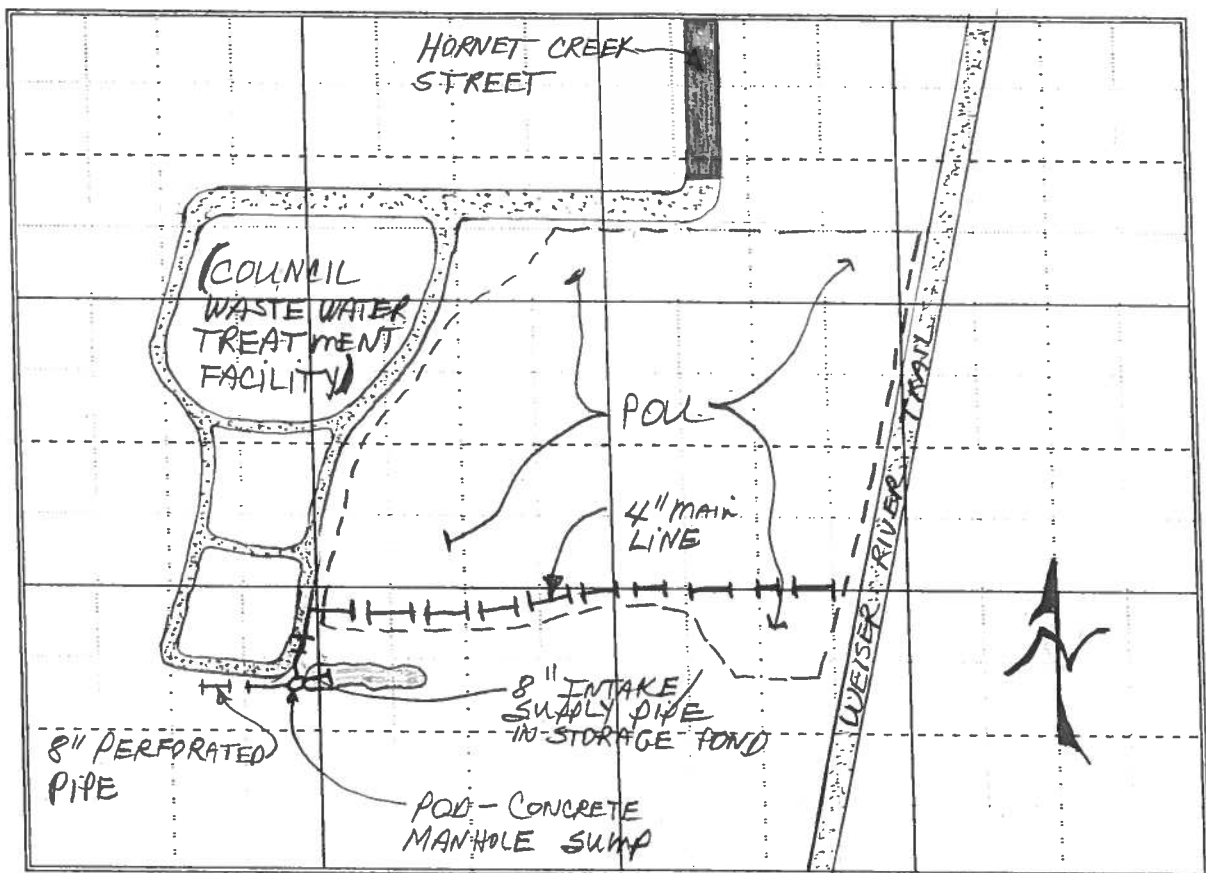
___ Change P.U. as reflected above ___ Add P.U. as reflected above ___ Other

I. AUTHENTICATION

Field Examiner's Name Rick Collingmore Date 7/11/14

Reviewer _____ Date _____

3. **Delivery System Diagram:** Indicate all major components and distances between components. Indicate weir size/ditch size/pipe diameter (inside), as applicable. Use the space provided or ☐ see attached.



Scale: 1" = NTS

- ☐ Copy of USGS Quadrangle attached showing location(s) of point(s) of diversion and place(s) of use (required)
☒ Aerial photo attached (required for irrigation of 10+ acres)
☒ Photo of diversion and system attached

FIELD EXAM PHOTOS

Water Right Permit: 67-7453

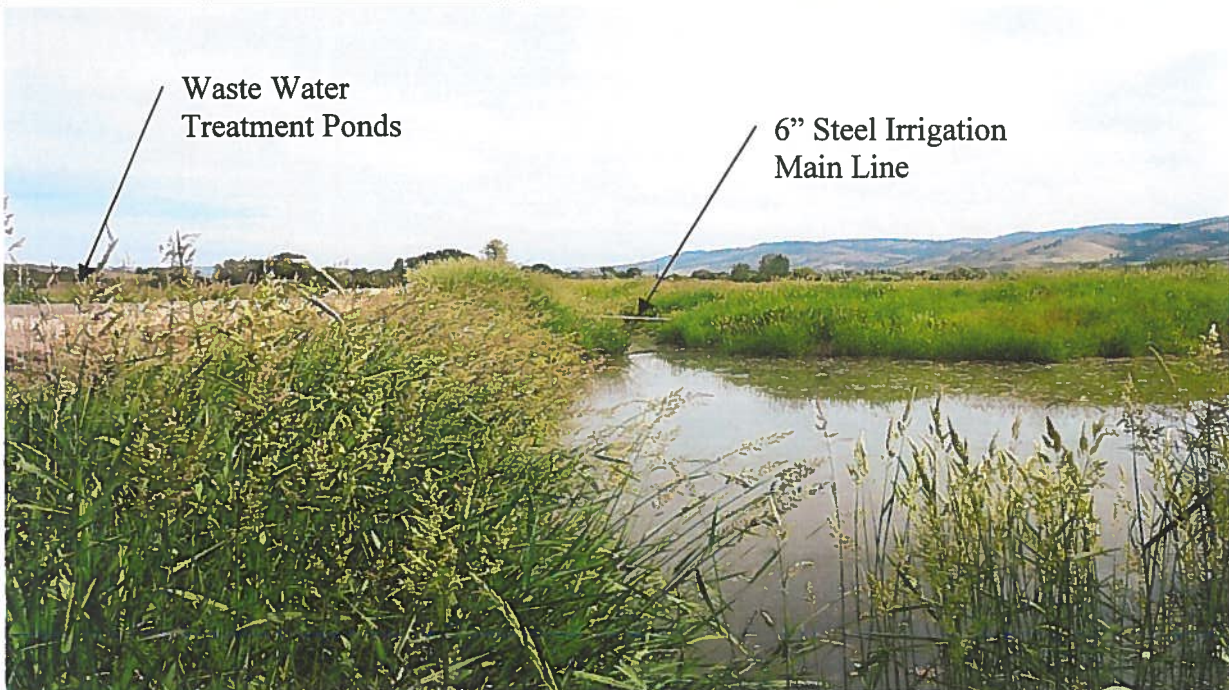
Field Exam Date: 6-12-14

PLS: NW1/4, SW1/4 Section 15, T.16N, R.01W

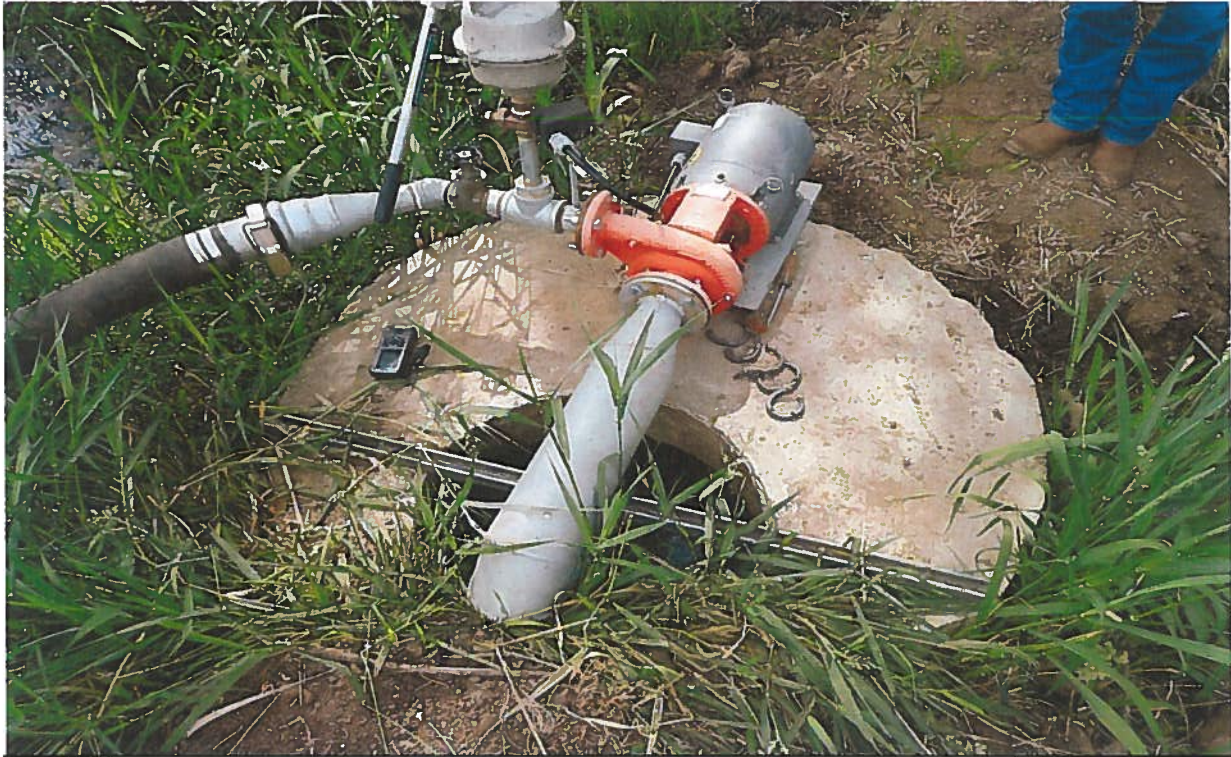
Field Examiner: RC



Point of Diversion: View easterly of the right holder's waste water/ground water irrigation storage pond near the City of Council's waste water treatment plant. An 8" supply line extends from a concrete manhole sump into the storage pond. The end of the 8" supply line is marked with a stake shown in the photo.



View northerly of a drain channel that conveys waste water/ground water to the irrigation storage pond. The 4" steel irrigation main line is shown crossing the drain channel. The 4" main line is comprised of risers spaced at 60' for connection to a wheel line.



Point of Diversion: View of the 5' diameter concrete manhole sump, 10-hp centrifugal pump, 6" steel suction line, and 4" flexible hose supply/discharge line. An 8" supply line in the irrigation storage pond and an 8" perforated supply line located in a drainage area behind the chlorination treatment building, convey water to the concrete manhole sump.



View westerly from the pumping station of the drainage area which discharges water to an 8" perforated pipe. The water is conveyed by the 8" perforated pipe to the concrete manhole sump. The building to the right is the chlorination treatment building.



Place of Use: View northeasterly of the right holder's irrigated field. The 4" steel supply line crossing the drain ditch is shown near the bottom of the photo. The 4" supply line extends easterly along the southern edge of the field.

Collingwood, Rick

From: Brandi Horton [watermaster67@hotmail.com]
Sent: Monday, June 30, 2014 12:00 PM
To: Collingwood, Rick
Subject: RE: Water Right Permit No. 67-7453 - Mike Paradis, Council

Good Afternoon Rick,

Counting heads and calculating gpm is what I've been doing, so I have no problem continuing to do so. A waiver of the requirement, with the condition that it maybe necessary in the future to install a measuring device, is fine with me.

Have a Great Day!

Brandi Horton
Watermaster-Dist 67

Sent from my Verizon Wireless 4G LTE Smartphone

----- Original message -----

From: "Collingwood, Rick"
Date: 06/30/2014 11:41 AM (GMT-07:00)
To: Brandi Horton
Subject: Water Right Permit No. 67-7453 - Mike Paradis, Council

Brandi,

One of the conditions of approval for the Paradis' water right permit is the installation of a measuring device. The discharge pipe is a 4" rubber hose, so installing a measuring device on the discharge line is not feasible. The line changes to steel when crossing a drain ditch, but access to a flow meter installed on the steel pipe would be difficult. Therefore, I am requesting a waiver of the Department's condition of approval for a measuring device. Based on an operating pressure of 60 psi, per the right holder, and the 29 Rain Birds with 5/32" nozzles, a flow can be determined based on manufacturer's flow data and flow calculations.

Thanks,

Rick Collingwood, P.E.
Staff Engineer



State of Idaho

DEPARTMENT OF WATER RESOURCES

Western Region, 2735 Airport Way, Boise, Idaho 83705-5082

PHONE: (208) 334-2190 FAX: (208) 334-2348 www.idwr.idaho.gov

C.L. "BUTCH" OTTER, Governor
May 22, 2014

GARY SPACKMAN, Director

Michael E. & Janice M. Paradis
2370 Mill Creek Road
Council, ID 83612-5221

RE: Scheduling Field Exam for Water Right Permit No. 67-7453

Dear Permit Holder:

The Idaho Department of Water Resources (IDWR) is planning to conduct water right field examinations in the vicinity of the above-referenced permit **during the week of June 9**. An examination is needed to verify water use(s) developed under the permit in order to issue a water right license.

Your permit authorizes the diversion of waste water for irrigation and stock water. If you developed a beneficial use of water and still own the place of use property identified in the permit, please contact me at your earliest convenience to schedule an examination.

If you developed a beneficial use of water under the permit but no longer own the place of use property, please use the enclosed Assignment of Permit form (\$25 fee). This will allow IDWR to work with the new permit owner through the water right licensure process.

A water right license cannot be issued if beneficial use of water was not developed or if use was developed but abandoned. If either of these cases has occurred, please relinquish the permit by using the enclosed Relinquishment of Permit form (no fee required). The permit will be voided if a relinquishment form is not submitted within thirty (30) days. If you no longer own the property and do not assign or relinquish your permit, IDWR will work with the current property owner to issue a license or to void the permit.

Please contact me to schedule a field examination for a day and time that is convenient for you. **Please call me at (208) 334-2190 by June 5 to conduct the field exam during the week of June 9.** If there is a problem with scheduling or conducting the field examination at this time, please let me know so we can reschedule.

Please call me at (208) 334-2190 if you have any questions. I appreciate your attention to this matter and look forward to hearing from you.

Sincerely,

Rick Collingwood, P.E.
Water Resource Agent, Sr.

Enclosure: Relinquishment and Assignment of Permit Forms



State of Idaho

DEPARTMENT OF WATER RESOURCES

Western Region, 2735 Airport Way • Boise, Idaho 83705-5082

Phone: (208) 334-2190 • Fax: (208) 334-2348 • Web Site: www.idwr.idaho.gov

C. L. "BUTCH" OTTER
Governor

GARY SPACKMAN
Interim Director

April 15, 2013

Michael E. & Janice M. Paradis
2370 Mill Creek Road
Council, ID 83612-5221

RE: Scheduling Field Exam for Water Right Permit No. 67-7453

We are planning to **conduct water right field examinations** in the vicinity of the above-referenced permit **during the week of May 20, 2013**. An examination is needed to verify your water use in order to issue a water right license.

Please be advised that you will need to operate your system under normal operating conditions during the examination. The permit authorizes the diversion of 0.20 cfs of waste water for irrigation of 36.0 acres and stock water for 30 head of cattle.

In order to conduct your exam as efficiently as possible, we ask that you call this office to schedule a day and time convenient for you. **Please call me at 208-334-2190 by May 17, 2013, to conduct the exam during the week of May 20, 2013.** If there is a problem with scheduling or conducting the examination at this time, please let me know so we can reschedule or make other arrangements.

I appreciate your attention to this matter and I look forward to hearing from you.

Sincerely,

A handwritten signature in black ink that reads "Rick Collingwood". The signature is written in a cursive, flowing style.

Rick Collingwood, P.E.
Water Resource Agent, Sr.