

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

A. GENERAL INFORMATIONPermit No: 65-24025Exam Date: 4/4/2022

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: Idaho Fish and Game Commission
- Owner of Record Correct? X Y N
- Address of Record Correct? Y N
- If No: Address

Tax lot data shows Idaho Department of Fish and Game as the owner of the property.

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

4. **SOURCE** **TRIBUTARY**

Ground water

Method of Determination: Well Driller's Report, GIS, and Tax Parcel Data

Change 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: There are no direct overlapping water rights for this campground. Water rights 65-2818, 65-2966, and 65-2954 are fish propagation and fish propagation storage rights for the reservoir in the name of Idaho Fish and Game Commission (IDFG). IDFG water right 65-18699 is a domestic right for the north end of the reservoir, and IDFG water rights 65-18698 and 65-12819 are fish and game rights for the other side (east side) of the reservoir. Water right 65-23071 is a water right for the Your Men's Christian Association of Boise (YMCA) camp at the southern end on the reservoir.

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

Water Right No.	Source	Purpose of Use	Basis
NONE			

Comments: There are no direct overlapping water rights for this campground. Water rights 65-2818, 65-2966, and 65-2954 are fish propagation and fish propagation storage rights for the reservoir in the name of Idaho Fish and Game Commission (IDFG). IDFG water right 65-18699 is a domestic right for the north end of the reservoir, and IDFG water rights 65-18698 and 65-12819 are fish and game rights for the other side (east side) of the reservoir. Water right 65-23071 is a water right for the Your Men's Christian Association of Boise (YMCA) camp at the southern end on the reservoir.

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
Well Tag # D0086850			NE	NW	36	14N	4E	B.M.	Valley
								B.M.	
								B.M.	

Method of Determination: GIS, Well Driller's Report, and Tax Lot Parcel.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	
14N	4E	36					D												
		Lot #																	
Total Acres =																			

Method of Determination: GIS and Tax Parcel DataChange 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
Well	Franklin	1	Unknown	Franklin	Unknown

*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.

E. FLOW CALCULATIONS

____ Additional Computation Sheets Attached

Measured Method:

Documentation submitted with the Statement of Completion for Submitting Proof of Beneficial Use (Proof) states that the pump installed is a 1 Hp 15 gpm pump. The documentation also shows that there was approximately 80 feet pipe purchased to set the pump on. Therefore, the pumping water level is between 60 to 80 feet. Based on the pump tables for this pump, at this depth the pump would supply between 17 to 20 gpm.

Pump Curve = 20 gpm / 448.8 = 0.04456 cfs rounded to 0.04 cfs

Theoretical = (1 X 8.8 X 0.700 / [60 feet + (50 psi X 2.31)]) = 0.04 cfs or 16 gpm

Permit allowed = 0.13 cfs

I am recommending a diversion rate of 0.04 cfs, since that appears to be the diversion rate that the pumping system was designed for per the records sent in with the Proof.

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

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

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

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

2. Volume Calculations for Other Uses:

Administrative Licensing Memorandum #4 recommends that the annual volume usage for U.S. Forest Service Campgrounds be limited to 0.6 af. This amount is based on 180 days at 10 gallons per day per person for 100 persons. The camp is open for most campers from May 1st to October 31st or approximately 184 days, and there are approximately 30 camping spots at this campground. Using a volume of 0.6 af or 195,510 gallons, this would allow approximately 35 gallons per camp site if all the sites were occupied all season (195,510 / (30 camps X 184 days) = 35.418 gallons per camp site).

The Planning Guide for Water Use table in the Field Examiner's Handbook shows a standard of 25 gallons per day per camper for with trailers with individual bath units no sewer connection, and the Non-Irrigation Water Requirement table in the Field Examiner's Handbook trailers with Individual Bath Units per camper at 50 gallons per day. Mr. Messener's April 6, 2022, email states that this is not used for restrooms or showers. This well only supplies 2 frost-free hydrants. It is also assumed that most camp trailers or Recreational Vehicles carry their own water into the campground, so the need for additional water would be limited.

I am recommending 0.6 acre-feet of water for this permit, since it appears as though 0.6 acre-feet will be more than adequate to supply the water for this campground.

G. PURPOSE OF USE

Irrigation ____ Y ____ N # Stock _____ Domestic # of Homes _____

Other: Campground

Change in Purpose of Use? ____ Y ____ N

Method of Determination: Tax data, GIS, and Well Driller's Report.

If Yes: From Use _____ To Use _____ Amount _____ CFS _____ AFA _____

H. NARRATIVE/REMARKS/COMMENTS

This permit is qualifies for an in-house exam. This permit is for a campground for the IDFG also known as Kings Point Campground. On April 6, 2022, I received an email response from Jordan Messner, the contact for IDFG, that supplied additional information concerning this permit. This information allowed me to review the standard volume allotted for U.S. Forest Service campgrounds to determine if this information seems reasonable. I have determined from this information that the volume recommended is reasonable.

In the April 6, 2022 email from Mr. Messner, he stated a possibility that there may be additional uses at this facility "many years down the road." I have given Mr. Messner information to determine whether a future water right application will be needed with the additional uses. There are a number of other rights already at the reservoir for the reservoir itself and other campgrounds. None of the overlapping water right should be in conflict with this permit.

Condition X01 2 should be carried over to licensing. Condition 121 should be changed to 103 as is standard. No further conditions should be needed.

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

I. RECOMMENDATIONS

1. Recommended Amounts

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>DIVERSION RATE</u>	<u>ANNUAL VOLUME</u>
Domestic	01/01 to 12/31	0.04 CFS	0.6 AF
	<u>Totals:</u>	0.04 CFS	0.6 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 - Analyst 3

Field Examiner's Name



Date

4-8-2022

Reviewer



Date

4/8/22

Field Report Map:

The following map shows the general area of the campground. The yellow point shows the point of diversion. The green border shows the tax parcels.



0.04

4" TRI-SEAL PUMPS - 15 GPM

PERFORMANCE

HP	PSI	Depth to Pumping Water Level (Lift) in Feet. Shaded Areas Indicate Most Efficient Performance.																				Shut-Off (ft)
		20	40	60	80	100	120	140	160	180	200	240	260	300	360	400	440	480	500	600	700	
1/2	0			20	18	16	13	9	4													170
	20	19	17	15	12	8																
	30	17	14	11	7																	
	40	14	11	6																		
	50	10	5																			
	60	4																				
	80																					
Shut-off PSI		65	56	48	39	30	22	13	4													
3/4	0			20	19	18	16	15	13	11												257
	20		20	19	17	16	14	12	10	7												
	30	20	18	17	16	14	12	10	6													
	40	18	17	15	14	12	9	6														
	50	17	15	13	11	9	5															
	60	15	13	11	8	4																
	80	10	7																			
Shut-off PSI		103	94	85	77	68	59	51	42	33	25											

HP	PSI	Depth to Pumping Water Level, or Lift, in Feet Shaded Areas Indicate Most Efficient Performance																				Shut-Off (ft)
		20	40	60	80	100	120	140	160	180	200	250	300	350	400	450	500	600	700	800	900	
1	0								19	19	18	16	12	6								392
	10								19	19	18	17	14	9	2							
	20					20	19	18	18	17	16	12	6									
	30				20	19	18	18	17	16	14	10	3									
	40			20	19	18	17	17	15	14	12	7										
	50		20	19	18	17	16	15	14	12	10	3										
	60	20	19	18	17	16	15	14	12	10	7											
	70	19	18	17	16	15	13	11	9	7	4											
	80	18	17	16	15	13	11	9	6	4	1											
	90	17	16	14	13	11	9	6	3													
	100	15	14	13	11	8	6	3														
	110	14	12	10	8	5	2															
	120	12	10	7	5	2																
	130	9	7	4	1																	
	140	7	4	1																		
	150	3																				
Shut-off psi		153	144	135	127	118	109	101	92	83	62	40	18									

HP	PSI	Depth to Pumping Water Level (Lift) in Feet. Shaded Areas Indicate Most Efficient Performance.																				Shut-Off (ft)				
		20	40	60	80	100	120	140	160	180	200	240	260	300	360	400	440	480	500	600	700		800	900	1000	1100
1.5	0					20	20	19	19	18	17	16	14	11	8	4										467
	20				20	20	19	18	18	17	16	15	14	12	7											
	30			20	20	19	18	18	17	16	15	14	13	10	5											
	40		20	19	19	18	18	17	16	15	15	13	11	9												
	50	20	19	19	18	17	17	16	15	14	13	11	10	7												
	60	19	19	18	17	17	16	15	14	13	12	10	8	4												
	80	18	17	16	16	15	14	13	12	11	9	6														
Shut-off PSI		193	185	176	167	159	150	141	133	124	115	98	89	72	46	29	11									
2	0						20	20	19	18	18	17	15	13	12	10	8								594	
	20						20	20	19	19	18	17	15	13	11	9	7	5								
	30						20	20	19	19	18	18	16	16	14	12	10	8	5							
	40			20	20	20	19	19	18	18	17	16	15	14	11	9	6									
	50		20	20	19	19	19	18	17	17	16	15	14	13	10	7	4									
	60	20	20	19	19	18	18	17	17	16	16	14	13	12	9	6										
	80	19	19	18	18	17	17	16	15	15	14	12	11	9	5											
Shut-off PSI		249	240	231	223	214	205	197	188	179	171	153	145	127	101	84	67	49	41							
3	0								20	20	20	19	18	17	16	15	15	12	8						802	
	20								20	20	20	19	19	18	17	16	15	14	13	10	5					
	30								20	20	20	19	19	18	18	16	15	14	13	13	9					
	40								20	20	20	19	19	18	18	17	16	15	14	13	12	8				
	50						20	20	20	20	19	19	19	18	18	17	15	14	13	12	11	7				
	60					20	20	20	19	19	19	18	17	17	16	15	14	12	11	10	5					
	80	20	20	20	20	19	19	19	18	18	17	16	16	15	13	12	11	9	8							
Shut-off PSI		339	330	321	313	304	295	287	278	269	261	243	235	217	191	174	157	139	131	87	44					

HP	PSI	Depth to Pumping Water Level (Lift) in Feet. Shaded Areas Indicate Most Efficient Performance.																		Shut-Off (ft)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
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NOTES: Performance shown does not include friction loss in the drop pipe. All performance data is based on rated motor nameplate voltage.

Nelson, Dan

From: Nelson, Dan
Sent: Wednesday, April 06, 2022 12:01 PM
To: Messner, Jordan
Subject: RE: Questions Concerning Water Right Permit 65-24025

Jordan,

The license I am reviewing can only be licensed for what has happened from the time the permit was issued until you filed the Statement of Completion for Submitting Proof of Beneficial Use. I can't address future use in this license. I am going to give you some additional information to give you the information you need to make a judgement call on what you will need to do in the future.

For campgrounds without bathrooms/showers connected to the water source (well or spring), we generally recommend a volume of 0.6 acre-feet or 195,510 gallons each season. This allows approximately 1,062 gallons per day for the season you mentioned below ($195,510 / 184 \text{ days} = 1,062 \text{ gallons per day}$). I counted approximately 30 campsites, so this would allow approximately 35 gallons per day per campsite ($1,062 \text{ gallons} / 30 \text{ campsites} = 35 \text{ gallons per campsite}$). This assumes that the campground is completely full all 184 days.

We generally allow 25 gallons per trailer without common bathrooms or individual trailer hookups for larger campgrounds. We also allow 25 gallons per day for overnight campers with flush toilets. However, if there are trailer hookups (water and sewer), flush toilets, and showers provided, then we can allow up to 50 gallons per day per camper.

As you can see from the information above, the 0.6 acre-feet per year I am planning on recommending for licensing should more than cover your current uses, and most possible uses for a campground of this size. If you plan expand the campground or the water and sewer availability to each campsite requiring water needs above the 0.6 acre-feet of water, then you would need to file another water right permit to cover the additional uses. There is also a timeline for developing a water right permit, so you would need to be ready to make these changes within the next 5 years.

I hope this answers your questions. If you need any additional information. I would be happy to talk with you about this a bit more.

Respectfully,

Daniel Nelson
Water Right Analyst 3
Idaho Department of Water Resources
Telephone (208) 287-4856
Fax (208) 287-6700 (attn: Dan Nelson)

From: Messner, Jordan <jordan.messner@idfg.idaho.gov>
Sent: Wednesday, April 06, 2022 9:48 AM

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

Subject: RE: Questions Concerning Water Right Permit 65-24025

Hey Dan. See below:

- 1.) The Statement of Completion for Submitting Proof of Beneficial Use states that this water use is a seasonal domestic use. What is the standard season of water use? Please supply the maximum time frame month and day that the water use begins and ends. For example, April 1st to November 31st.

The maximum time frame will be May 1 to Oct 31

- 2.) We also need to know if the water is used for this domestic use is used for restrooms/showers or if it is just used for a single frost-free hydrant.

This was is NOT used for any restrooms or showers. Currently it is only supplying two frost-free hydrants. However, future-use (many years down the road) may include additional hydrants. How do you recommend handling that?

Jordan Messner
Southwest Regional Fisheries Manager - McCall
Idaho Department of Fish and Game
555 Deinhard Lane
McCall, Idaho 83638
w: 208-634-8137
c: 208-993-1042
jordan.messner@idfg.idaho.gov

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

Sent: Wednesday, April 6, 2022 9:32 AM

To: Messner, Jordan <jordan.messner@idfg.idaho.gov>

Subject: Questions Concerning Water Right Permit 65-24025

Dear Mr. Jordon,

I have been asked to review water right permit 65-240259 for license purposes. This is the permit for the Kings Point Campground at Horsethief Reservoir in Cascade, Idaho. On smaller permits such as Idaho Fish and Game Commission's, we can generally verify the water use for licensing purpose by using aerial photography and various state and county records without setting a time with you to do an onsite verification. We refer to these reviews of smaller permits as in-house exams or desk top reviews. Performing these in-house exams avoids the time and costs to the Idaho Department of Water Resources (Department) and yourself from having to meet at the site to verify the water use. If you would prefer to have someone from our Western Region office to set up a time with you to come to the property and verify these issues, I can have someone from that office make an appointment with you to visit the property. Due to a backlog of water rights needing onsite verifications, it may be some time before our Western Region staff will be able to set up appointments in your area.

During my review, I have been able to determine most of the elements needed to license your permit. However, I will need additional information to determine the annual volume of water to assign the proposed license.

Please supply the answers to following questions:

- 1.) The Statement of Completion for Submitting Proof of Beneficial Use states that this water use is a seasonal domestic use. What is the standard season of water use? Please supply the maximum time frame month and day that the water use begins and ends. For example, April 1st to November 31st.
- 2.) We also need to know if the water is used for this domestic use is used for restrooms/showers or if it is just used for a single frost-free hydrant.

With answers to the above questions, I believe I can make a recommendation for your water right reasonably quickly. Once I receive this information, I can make a recommendation for issuing a water right license for your domestic water use within a couple of days. That should allow us to issue a subsequent license within the next couple of weeks if all turns out well.

As I stated above, you can request an agent from the Department to visit your property to verify these issues if you wish. You or a representative will need to be present during that inspection to show them your system. Please provide the requested information or inform me that you would rather have Department staff visit your property to verify the above issues by May 6, 2022. If I do not receive the requested information or I have not been contacted by you to request an onsite field verification by May 6, 2022, I will need to take action to void your permit under the provision of Section 42-219(8) of the Idaho Code.

If you have any questions, please don't hesitate to contact me. I would be more than happy to discuss the above requests with you. Working through a water right process can be confusing sometimes, and I enjoy working with folks to ensure that we get through the process as easily as possible.

Respectfully,

Daniel Nelson
Water Right Analyst 3
Idaho Department of Water Resources
Telephone (208) 287-4856
Fax (208) 287-6700 (attn: Dan Nelson)