

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 65-23350
Exam Date: 05/19/2021

1. Current Owner:
JOHN BERILLA 4131 W QUAIL RIDGE DR BOISE ID 83703 AND
SALLIE BERILLA 4131 W QUAIL RIDGE DR BOISE ID 83703
2. Accompanied by: N/A
Phone No: N/A
Address: N/A
Relationship to permit Holder: N/A

3. **SOURCE:**
UNNAMED STREAM

Tributary
NORTH FORK PAYETTE RIVER

Method of Determination: Field observation

B. OVERLAP REVIEW

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

Water Right No.	Source	Purpose of Use	Basis
N/A	N/A	N/A	N/A

Comments: No overlapping water rights at place of use.

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

Water Right No.	Source	Purpose of Use	Basis
N/A	N/A	N/A	N/A

Comments: No overlapping water rights at point of diversion.

C. DIVERSION AND DELIVERY SYSTEM1. **LOCATION OF POINT(S) OF DIVERSION:**

UNNAMED STREAM SE¼ NE¼, Sec. 12, Twp 16N, Rge 02E, B.M. VALLEY County

Method of Determination: Handheld Garmin GPS (N 44°44.506', W 116°09.199')

PLACE OF USE: AESTHETIC STORAGE, & FIRE PROTECTION STORAGE

Twp	Rng	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
16N	02E	12				X													

PLACE OF USE: FIRE PROTECTION FROM STORAGE

Twp	Rng	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
16N	02E	12				X													

Method of Determination: Field observation, use of satellite imagery, and ArcMap GIS tools.

3. X Delivery System Diagram Attached (required). Indicate all major components and distances between components. Indicate weir size/pipe as applicable.
- X Map Attached Showing Location(s) of point(s) of diversion and place(s) of use (required). Scale must be 1:24,000 or greater.
- N/A Aerial Photo Attached (required for irrigation of 10+ acres).
- X Photo of Diversion and System Attached

4.

Well or Diversion ID No.*	Motor Make	Hp	Motor Serial No.	Pump Make	Pump Serial No. or Discharge Size
N/A	N/A	N/A	N/A	N/A	N/A

D. FLOW MEASUREMENTS

1.

Measurement Equipment	Type	Make	Model No.	Serial No.	Size	Calib. Date
N/A	N/A	N/A	N/A	N/A	N/A	N/A

2. Measurements: N/A

E. FLOW CALCULATIONSX Additional Computation Sheets Attached

Measured Method: N/A

F. VOLUME CALCULATIONS

1. Volume Calculations for irrigation: N/A

2. Volume Calculations for Other Uses: Wildlife Storage, Fire Protection Storage, and Aesthetic Storage.

Surface area of the pond was determined to be 0.41 acres, with an average depth of 4 ft. giving a total pond capacity of 1.6 AF. With an estimated loss of 0.5 AF due to evaporative losses a total annual volume necessary to maintain would be 2.1 AF. No seepage losses were accounted for due to the on-stream nature of the system. See attached Ponds Spreadsheet.

G. NARRATIVE/REMARKS/COMMENTS

Field exam was conducted by agent Justin Shearer May 19, 2021, unaccompanied but with permission of landowner John Berilla. John and Sallie Berilla are the active permit owners and original applicants. The application was submitted on July 30, 2009, and proof of beneficial use was made April 25, 2011.

The applicant has a 0.41-acre pond that is fed by an unnamed stream coming in from the NW and an outlet that releases water at the SE end of the pond. Thus, the system should be considered on-stream. POD overlap did not find any other water rights associated with the unnamed stream that fills the pond. Aerial imagery was used to determine the surface area of the pond. The pond was at or near capacity at time of exam and average pond depth observed was approximately 4 ft

with a max depth no more than 10 ft. Thus, pond capacity was calculated to be 1.6 AF. With an estimated loss of 0.5 AF due to evaporative losses, I am recommending a total annual volume of 2.1 AF for all uses.

No other water rights were found to be overlapping for the storage uses POU's nor the Fire Protection from Storage POU. Place of use for the Fire Protection from Storage is the cabin and shed structures and surrounding maintained area on the parcel. I am recommending that the Wildlife Storage use be removed as though there are likely some secondary Wildlife benefits to having the pond, however the pond's primary purpose is to serve as Aesthetic Storage and was not developed for wildlife purposes.

Condition 121 was updated to 103 as per department standards. Condition 123 was removed since groundwater is not a source for this pond. Condition 004 was removed because the place of use and point of diversion lie entirely within the permit holder's property so there is no concern of right-of-way or trespass across the land of another. Conditions 219 and 220 were added to describe the storage limitations of the pond and the descriptive condition with similar yet limited language was removed. Condition R05 was added to describe the right as being within WD65.

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

H. RECOMMENDATIONS

1. Recommended Amounts

<u>Beneficial Use</u>	<u>Period of Use</u>	<u>Rate of Diversion</u>	<u>Annual Volume</u>
FIRE PROTECTION STORAGE	01/01 to 12/31		2.1 AF
FIRE PROTECTION FROM STORAGE	01/01 to 12/31		2.1 AF
AESTHETIC STORAGE	01/01 to 12/31		2.1 AF

Totals:

2.1 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

I. AUTHENTICATION

Justin Shearer - Water Resource Agent, Senior

Field Examiner's Name



Date

9/29/21

Reviewer

Date

Evaporation Loss Calculations

This spreadsheet has been designed by Idaho Department of Water Resources to estimate the annual evaporation losses from a pond.

FILE NUMBER	65-23350
REVIEWER	Justin Shearer
DATE	9/30/2021

User Input
Calculated value
Formula Explanations

The acronyms used on the Kimberly Research Center website are defined below:

P = Precipitation
ET= Evapotranspiration
P _d = Precipitation deficit
P _d =ET-P

USING THIS SPREADSHEET

Use the link below to access the Kimberly Research Center website. This website provides the Precipitation Deficit for a station most representative of the pond under examination. The Precipitation Deficit is the total amount of free water surface evaporation minus the precipitation for a given area, which gives the total amount of evaporative losses incurred by the pond. There are several weather sites that are used throughout the state. IDWR staff can find the nearest site using Arc Map. The shape file containing the sites can be found at <X:/Spatial/Climate/ETIdahostations.shp>.

Instructions:

1. Use the link below to navigate to ET Idaho 2012.
2. Select the station which is most representative to your pond location.
3. Click Submit Query.
4. Under "Land Covers with Evapotranspiration Estimates," select "Open Water - Shallow Systems (ponds, streams)" or "Open Water - small stock ponds" depending on the pond size.
5. Click the link to "Precipitation Deficit."
6. Reference and copy (ctrl + C) the first subheading "Mean" values.
7. Click the "Paste Values from ET Idaho" button. The table will automatically enter a zero (0) for any negative precipitation deficit values.

Found at: <http://data.kimberly.uidaho.edu/ETIdaho/>

Precipitation Deficit

Station: McCall (NWS -- USC00105708)

Month	mm/day ¹	Days per month	mm/Month
Jan	-1.98	31	0.00
Feb	-1.22	28	0.00
March	-1.12	31	0.00
April	0.41	30	12.30
May	0.97	31	30.07
June	1.79	30	53.70
July	3.57	31	110.67
August	3.07	31	95.17
September	1.73	30	51.90
October	0.13	31	4.03
November	-2.00	30	0.00
December	-2.20	31	0.00

PLEASE NOTE: The seasonal average for precipitation deficit should not be used for calculations because precipitation often exceeds evaporation during wetter months of the year. If the pond is kept full, excess precipitation during wetter months does not serve to refill the pond during drier months.

For example, see Sandpoint KSPT (NWS -- 108137), the annual precipitation deficit is -106 mm. However, April through September have positive precipitation deficit values. To properly estimate the annual volume of water necessary to refill a pond due to evaporation losses, the table will automatically enter a zero (0) for each month that the precipitation value is reported as a negative value.

As described above, precipitation offsets evaporation in winter months, so the net effect is that wintertime precipitation deficit is usually zero.

Total mm/year = 357.84

$$((357.84) \div (304.8)) \times (0.41) = 0.5 \text{ AFA}$$

Total Storage Calculations

FILE NUMBER	65-23350
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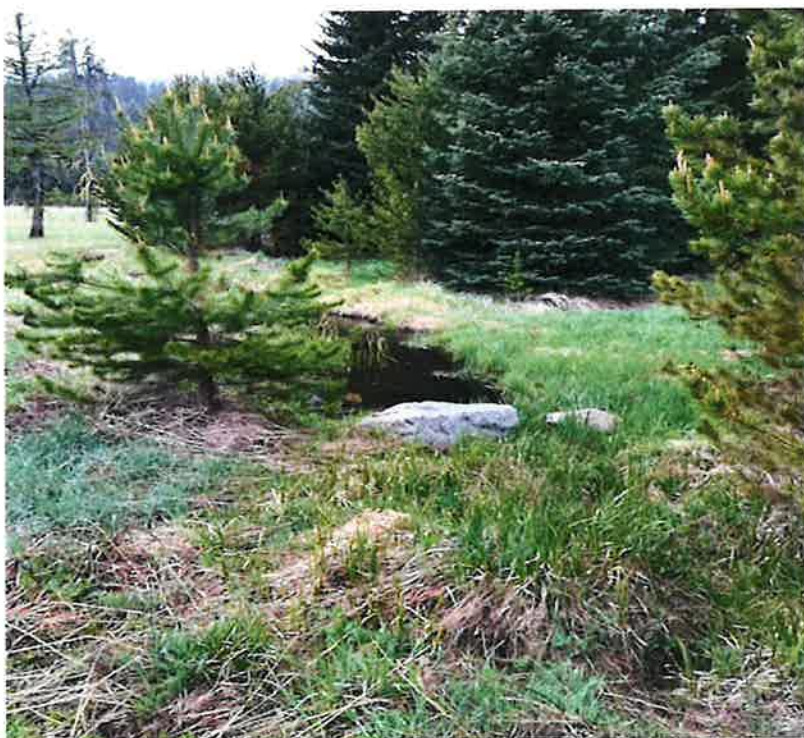
This spreadsheet has been designed by Idaho Department of Water Resources to estimate the total seepage, evaporation and fill capacity required for a pond.

User Input
Calculated value
Formula Explanations

Surface Area (AC.)	0.41	"Surface Area" is automatically carried over from the "Seepage Loss" sheet.
Average Pond Depth (FT.)	4	"Average Pond Depth" depicts the actual depth of the pond either measured or estimated. Note: If you know the maximum depth and not the average depth, the Field Examiner's Handbook suggests multiplying the maximum depth by 0.4 to get the average depth, or you can use any method that seems reasonable to attain average depth.
Pond Capacity (AF)	1.64	Pond Capacity is calculated by multiplying the Pond Surface Area by the Average Pond Depth. If you know the capacity, divide the capacity by surface area and enter the average pond depth in the space above. Note: If pond capacity is determined using a method shown on the "Pond Capacity" sheet, the user may need to modify the value of "Pond Capacity" (cell B9) manually. Note that if the value is modified manually, the formula will be altered for future use.
Multiple Fill Volume Above Initial Fill to Fulfill From Storage Needs- "Multiple Fills" (AF)	0	The "Multiple Fill Volume Above Initial Fill" is the acre-feet of water required to meet a <i>from storage</i> component if the <i>from storage</i> component exceeds a one time fill. This section should not include the amount of water needed to fill the pond initially or the amount of water needed to maintain the pond level due to evaporation or seepage. For example: if a pond has a capacity of 5 acre feet and 2.5 acre feet of seepage and evaporation, but the pond is used for irrigation that requires 10 acre feet of from storage for the irrigation use, then you would insert 5 acre feet into this location (10 acre feet needed - 5 acre feet from the initial fill = 5 acre feet of additional storage needed). Note: You must have a "From Storage" component exceeding the initial fill on the permit to include a volume in this space.
Estimated Seepage Loss (AF)	0.0	The "Estimated Seepage Loss" is automatically carried over from the "Seepage Loss" sheet.
Estimated Evaporation Loss (AF)	0.5	The "Estimated Evaporation Loss" is automatically carried over from the "Evaporation Loss" sheet.
Total Volume Required (AF)	2.1	The "Total Volume Required" is calculated by adding the Pond Capacity, Multiple Fills, Seepage Loss, and Evaporation Loss amounts to determine the total amount of storage required.



Pic of POD from
unnamed stream
into pond.



Pic looking
upstream at the
unnamed stream
from the POD.



Close up pic of
unnamed stream
just upstream of
POD.



Pic of pond looking
NE from POD.



Pic of pond looking
S from outlet of
pond.



Close up pic of
outlet looking
across the pond to
the W with
POD/inlet in the
distance.



Pic of unnamed stream heading E just downstream of outlet.



Pic of same unnamed stream entering a larger unnamed stream a little further downstream.

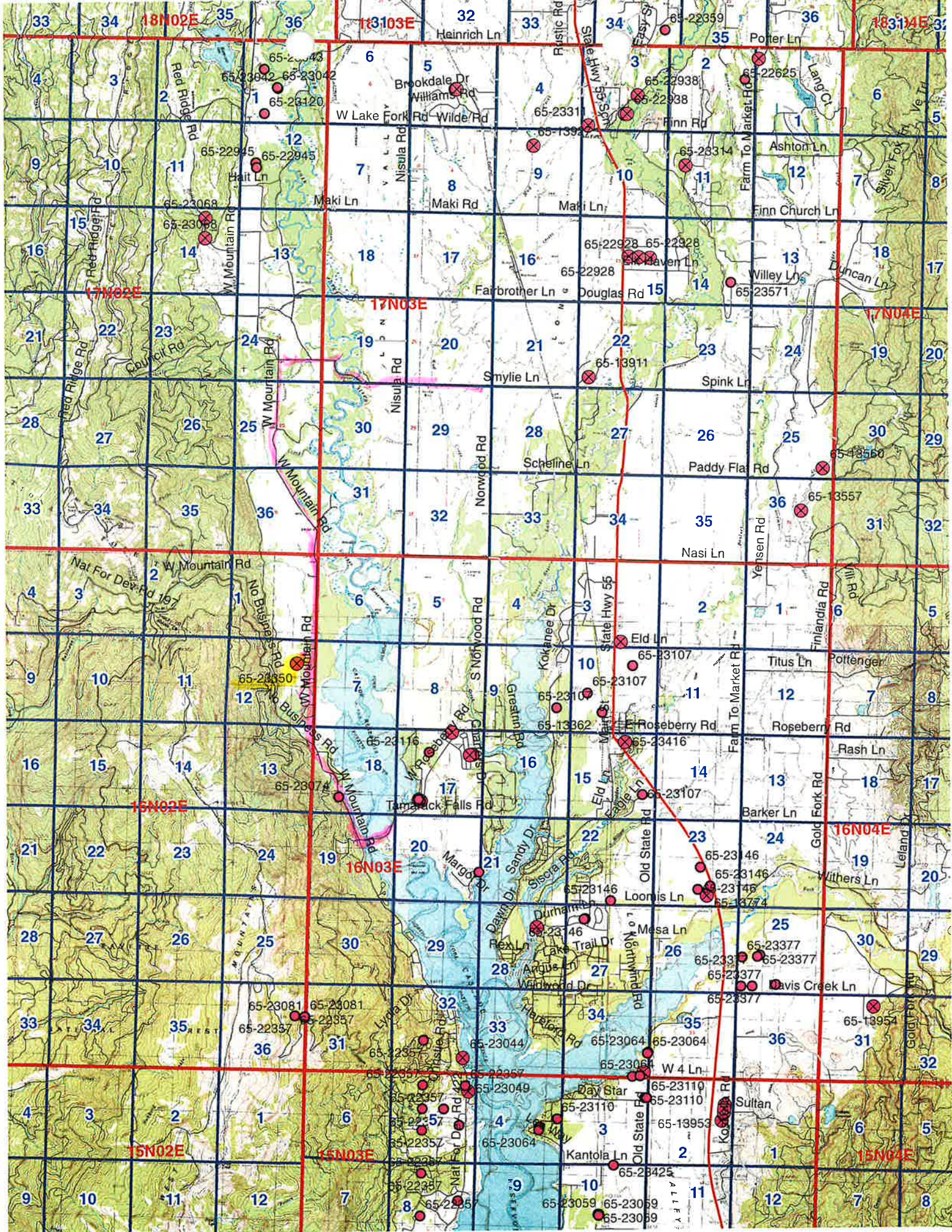


NENE

12

16N02E

NENE



16N02E12 SENE**POU**

Basin	Sequence	Process	Status	Draft	RightID	Priority	Date	Source List	Water Use List	Current Owner	Other Owner	Approval Date	Volume
65	23350	Water Permit	Active	N	633563	4/12/2010	UNNAMED STREAM	AESTHETIC STORAGE, FIRE PROTECTION FROM STORAGE, FIRE PROTECTION STORAGE, WILDLIFE STORAGE	BERILLA, JOHN; BERILLA, SALLIE	ERO RESOURCES CORP(Representative)	6/3/2010	6.2	

POD

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State of Idaho

DEPARTMENT OF WATER RESOURCES

Western Region • 2735 W Airport Way • Boise ID 83705-5082

Phone: (208) 334-2190 • Fax: (208) 334-2348

Website: idwr.idaho.gov • Email: westerninfo@idwr.idaho.gov

BRAD LITTLE
Governor

GARY SPACKMAN
Director

March 10, 2021

COPY

JOHN & SALLIE BERILLA
4131 QUAIL RIDGE DR
BOISE, ID 83703

RE: Scheduling Field Exam for Water Right Permit No. 65-23350

Dear Permit Holder:

We are planning to conduct water right examinations in the vicinity of the above-referenced permit **this season**. An examination is needed to verify the water use in order to issue a water right license.

The above-referenced permit authorizes **6.2 Acre Feet** from **UNNAMED STREAM** tributary to **NORTH FORK PAYETTE RIVER** for **WILDLIFE STORAGE, FIRE PROTECTION STORAGE, FIRE PROTECTION FROM STORAGE, & AESTHETIC STORAGE** uses. **If you have developed a beneficial use and still own the place of use property, please contact me at your earliest convenience to schedule an examination.**

If you did not develop a beneficial use of water under the permit during the beneficial use period, a license cannot be issued and the permit should be relinquished. If that use was developed, but have ceased using the water and you currently carry no interest in it, please relinquish the permit by submitting the enclosed Relinquishment of Permit form (no fee required).

If you did develop a beneficial use of water under the permit, but you no longer own the place of use property identified in the permit, please submit the enclosed Assignment of Permit form with the applicable \$25 processing fee.

Please contact me within the next thirty (30) days at (208) 334-2190 to either schedule an examination or submit a relinquishment or assignment form. If you no longer own the place of use property and/or do not respond to this letter, the department will work with the current property owner to issue a license or void the permit.

Sincerely,

Justin Shearer
Water Resource Agent, Sr.

Enclosures:

Relinquishment of Permit form
Assignment of Permit form
Water Permit Report and Map



State of Idaho

DEPARTMENT OF WATER RESOURCES

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

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

C.L. "BUTCH" OTTER
Governor

GARY SPACKMAN
Director

June 23, 2017

JOHN & SALLIE BERILLA
4131 QUAIL RIDGE DR
BOISE, ID 83703

COPY

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Sincerely,

Justin Shearer
Water Resource Agent

Enclosures: Relinquishment of Permit form
Assignment of Permit form
Water Permit Report and Map