

AUG 10 2020

IDWR / NORTH

84288

STATE OF IDAHO

DEPARTMENT OF WATER RESOURCES

APPLICATION FOR PERMIT

To appropriate the public waters of the State of Idaho

Ident. No. 98-8025

1. Name of applicant(s) Shem Johnson Phone 208-699-1596
 Name connector (check one): ☐ and ☐ or ☐ and/or
 Mailing address PO Box 1952 City Bonnars Ferry
 State ID ZIP 83805 Email shem@slunder.com
2. Name of representative, if any Northwest Groundwater Consultants, LLC Phone 208-755-1094
 Mailing address 2660 E Thomas Hill Drive City Coeur d'Alene
 State ID ZIP 83815 Email tfmullen@northwestgroundwater.com
- a. ☐ Send all correspondence for this application to the representative and not to the applicant OR
☒ Send original correspondence to the applicant and copies to the representative.
- b. ☒ The representative may submit information for the applicant but is not authorized to sign for the applicant OR
☐ The representative is authorized to sign for the applicant. Attach a Power of Attorney or other documentation.
3. Source of water supply unarmed stream which is a tributary of Kootenai River
4. Location of point(s) of diversion:

Twp	Rge	Sec	Govt Lot	1/4	1/4	1/4	County	Source	Local name or tag #
65N	01E	31			SE	NW	Boundary	Surface water	New pond

5. Water will be used for the following purposes:
- Amount 3.8 AF for Fire Protection Storage purposes from 1/1 to 12/31 (both dates inclusive)
 (cfs or acre-feet per year)
- Amount 3.8 AF for Fire Protection from Storage purposes from 1/1 to 12/31 (both dates inclusive)
 (cfs or acre-feet per year)
- Amount 120 AF for Irrigation Storage purposes from 1/1 to 12/31 (both dates inclusive)
 (cfs or acre-feet per year)
- Amount 120 AF for Irrigation from Storage purposes from 1/1 to 12/31 (both dates inclusive)
 (cfs or acre-feet per year)
6. Total quantity to be appropriated is (a) _____ cubic feet per second (cfs) and/or (b) 125.1 acre-feet per year (af).
7. Proposed diverting works:
- a. Describe type and size of devices used to divert water from the source. Pond to be constructed on north creek lined with clay. POD will include pumps and piping to distribute to irrigation system. Pond to provide stockwater.
- b. Height of storage dam <10 feet; active reservoir capacity 2.4 acre-feet; total reservoir capacity 6 acre-feet. If the reservoir will be filled more than once each year, describe the refill plan in item 12. For dams 10 feet or more in height AND having a storage capacity of 50 acre-feet or more, submit a separate Application for Construction or Enlargement of a New or Existing Dam. Application required? ☐ Yes ☒ No
- c. Proposed well diameter is _____ inches; proposed depth of well is _____ feet.
- d. Is ground water with a temperature of greater than 85°F being sought? ☐ Yes ☐ No
- e. If well is already drilled, when? _____; drilling firm _____; well was drilled for (well owner) _____; Drilling Permit No. _____.

For Department Use

Received by _____ Date _____ Time _____ Preliminary check by _____
 Fee \$ 2900 Receipted by JA Receipt No. N036320 Date 8-10-2020

8. Description of proposed uses (if irrigation only, go to item 9):
- Hydropower; show total feet of head and proposed capacity in kW. _____
 - Stockwatering; list number and kind of livestock. 100 head cattle
 - Municipal; must complete and attach the Municipal Water Right Application Checklist.
 - Domestic; show number of households _____
 - Other; describe fully. Aesthetic, wildlife, recreation (AWR)

9. Description of place of use:

- If water is for irrigation, indicate acreage in each subdivision in the tabulation below.
- If water is used for other purposes, place a symbol of the use (example: D for Domestic) in the corresponding place of use below. See instructions for standard symbols.

TWP	RGE	SEC	NE				NW				SW				SE				TOTALS
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
65N	01E	31			2		6	4		28									40
65N	01E	31					S	Lot 1		S									
65N	01E	31					F			F									
65N	01E	31					A			A									
65N	01E	31					W			W									

Total number of acres to be irrigated: 40

10. Describe any other water rights used for the same purposes as described above. Include water delivered by a municipality, canal company, or irrigation district. If this application is for domestic purposes, do you intend to use this water, water from another source, or both, to irrigate your lawn, garden, and/or landscaping? PODs for 98-4254 and 98-4248 are located the Johnson property. POU for 98-4248 is located on the Johnson property, but is not currently in use. POU for 98-4254 is located west of HWY 1.
11. a. Who owns the property at the point of diversion? Shem Johnson
- b. Who owns the land to be irrigated or place of use? Shem Johnson
- c. If the property is owned by a person other than the applicant, describe the arrangement enabling the applicant to make this filing: _____
12. Describe your proposal in narrative form, and provide additional explanation for any of the items above. Attach additional pages if necessary. See attached project details
13. Time required for completion of works and application of water to proposed beneficial use is 5 years (minimum 1 year).
14. **MAP OF PROPOSED PROJECT REQUIRED** - Attach an 8½" x 11" map or maps clearly identifying the proposed point of diversion, place of use, section #, township & range. The map scale shall not be less than two (2) inches equal to one (1) mile.

The information contained in this application is true to the best of my knowledge. I understand that any willful misrepresentations made in this application may result in rejection of the application or cancellation of an approval.

Shem Johnson
Signature of Applicant

Shem Johnson
Print Name (and title, if applicable)

Signature of Applicant

Print Name (and title, if applicable)

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

Ident. No. _____

Season of Use/Purpose of Use Supplement

Attachment to: ☒ Application for Permit to Appropriate Water ☐ Adjudication Claim ☐ Beneficial Use Field Report
☐ Application for Amendment of Permit ☐ Statutory Claim

Water will be used for the following purposes:

Amount	<u>1.3 AF</u>	for	<u>Stockwater Storage</u>	purposes from	<u>1/1</u>	to	<u>12/31</u>	(both dates inclusive)
	(cfs or acre-feet per year)							
Amount	<u>1.3 AF</u>	for	<u>Stockwater from Storage</u>	purposes from	<u>1/1</u>	to	<u>12/31</u>	(both dates inclusive)
	(cfs or acre-feet per year)							
Amount	<u>3.8 AF</u>	for	<u>Aesthetic</u>	purposes from	<u>1/1</u>	to	<u>12/31</u>	(both dates inclusive)
	(cfs or acre-feet per year)							
Amount	<u>3.8 AF</u>	for	<u>Wildlife</u>	purposes from	<u>1/1</u>	to	<u>12/31</u>	(both dates inclusive)
	(cfs or acre-feet per year)							
Amount	<u>3.8 AF</u>	for	<u>Recreation</u>	purposes from	<u>1/1</u>	to	<u>12/31</u>	(both dates inclusive)
	(cfs or acre-feet per year)							
Amount	_____	for	_____	purposes from	_____	to	_____	(both dates inclusive)
	(cfs or acre-feet per year)							
Amount	_____	for	_____	purposes from	_____	to	_____	(both dates inclusive)
	(cfs or acre-feet per year)							
Amount	_____	for	_____	purposes from	_____	to	_____	(both dates inclusive)
	(cfs or acre-feet per year)							
Amount	_____	for	_____	purposes from	_____	to	_____	(both dates inclusive)
	(cfs or acre-feet per year)							
Amount	_____	for	_____	purposes from	_____	to	_____	(both dates inclusive)
	(cfs or acre-feet per year)							
Amount	_____	for	_____	purposes from	_____	to	_____	(both dates inclusive)
	(cfs or acre-feet per year)							
Amount	_____	for	_____	purposes from	_____	to	_____	(both dates inclusive)
	(cfs or acre-feet per year)							
Amount	_____	for	_____	purposes from	_____	to	_____	(both dates inclusive)
	(cfs or acre-feet per year)							
Amount	_____	for	_____	purposes from	_____	to	_____	(both dates inclusive)
	(cfs or acre-feet per year)							
Amount	_____	for	_____	purposes from	_____	to	_____	(both dates inclusive)
	(cfs or acre-feet per year)							
Amount	_____	for	_____	purposes from	_____	to	_____	(both dates inclusive)
	(cfs or acre-feet per year)							

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

Ident. No. _____

Point of Diversion/Place of Use Supplement

Attachment to: ☒ Application for Permit to Appropriate Water ☐ Application for Transfer** ☐ Adjudication Claim
☐ Application for Amendment of Permit ☐ Beneficial Use Field Report ☐ Statutory Claim

Location of points of diversion (POD):

New POD?	Twp	Rge	Sec	Govt Lot	¼	¼	¼	County	Source	Local name or well/diversion tag #
<input type="checkbox"/> Yes										
<input type="checkbox"/> Yes										
<input type="checkbox"/> Yes										
<input type="checkbox"/> Yes										
<input type="checkbox"/> Yes										
<input type="checkbox"/> Yes										
<input type="checkbox"/> Yes										
<input type="checkbox"/> Yes										
<input type="checkbox"/> Yes										
<input type="checkbox"/> Yes										
<input type="checkbox"/> Yes										

Description of place of use (POU):






- a. If water is for irrigation, indicate acreage in each subdivision in the tabulation below.
b. If water is used for other purposes, place a symbol of the use (example: D for Domestic) in the corresponding place of use below.

TWP	RGE	SEC	NE				NW				SW				SE				TOTALS
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
65N	01E	31					R			R									

State of Idaho
Department of Water Resources
Application For Permit
98-8025

Application Place of Use Boundary for Aesthetic Storage, Recreation Storage, and Wildlife Storage.



-  Point of Diversion
-  Place Of Use Boundary
-  PLS Sections
-  Quarter Quarters
-  Taxlots

0 0.05 0.1 0.2 Miles








Tax parcel information provided by Boundary County.


State of Idaho
Department of Water Resources
Application For Permit
98-8025

Application Place Of Use Boundary for Fire Protection From Storage and Stockwater From Storage.

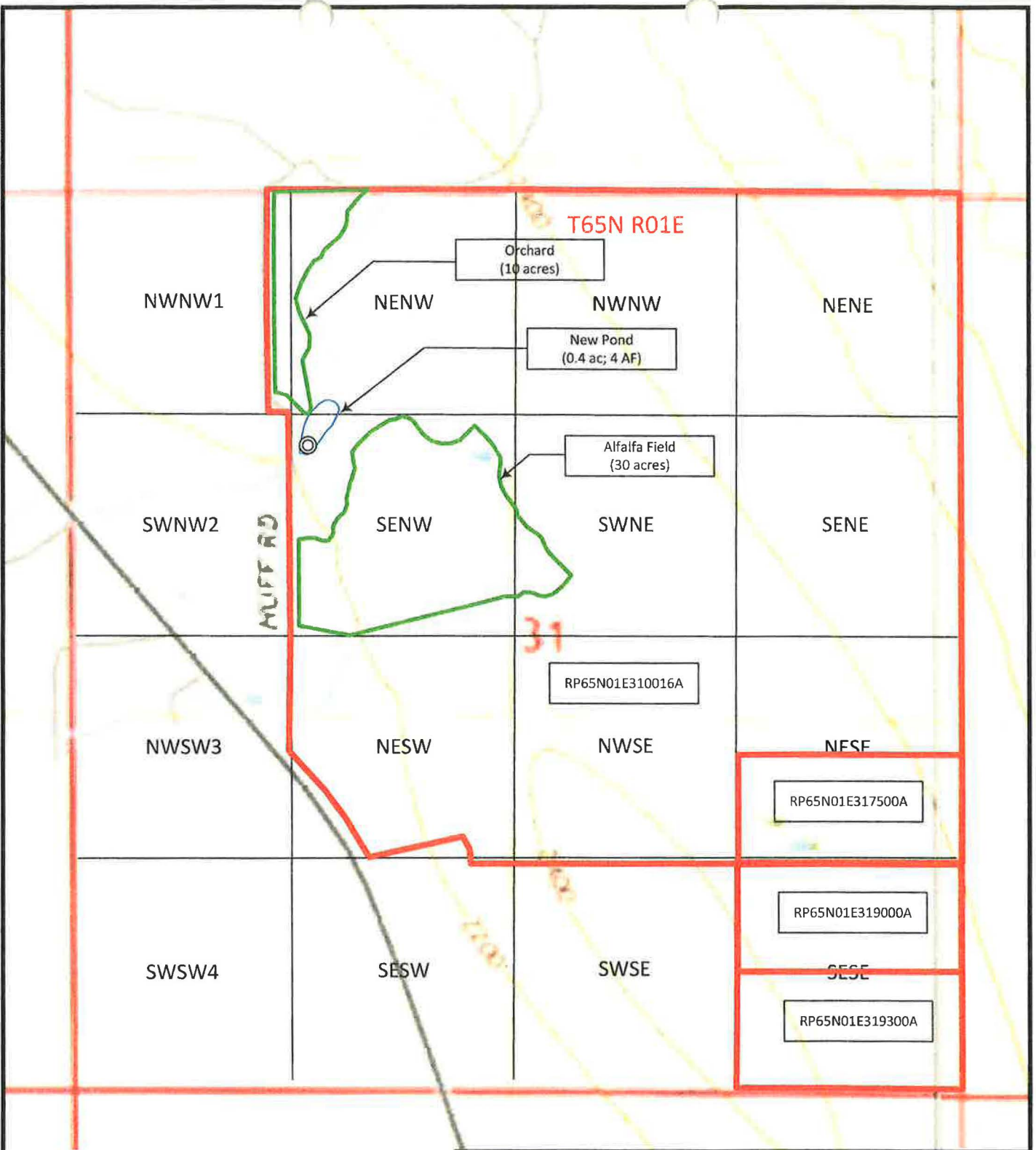


-  Point of Diversion
-  Place Of Use Boundary
-  PLS Sections
-  Quarter Quarters
-  Taxlots

0 0.05 0.1 0.2 Miles



Tax parcel information provided by Boundary County.



LEGEND

- ⊙ Point of Diversion (POD)
- Place of Use (POU)
- Johnson Parcels

0 2000 feet

Source: USGS Copeland and Hall Mountain, Idaho (2020) 7.5-Minute Series Quadrangles



Northwest Groundwater Consultants, LLC

01161-01

JULY 2020

SITE LOCATION MAP

Application for Water Right Permit
Johnson Property
Boundary County, Idaho

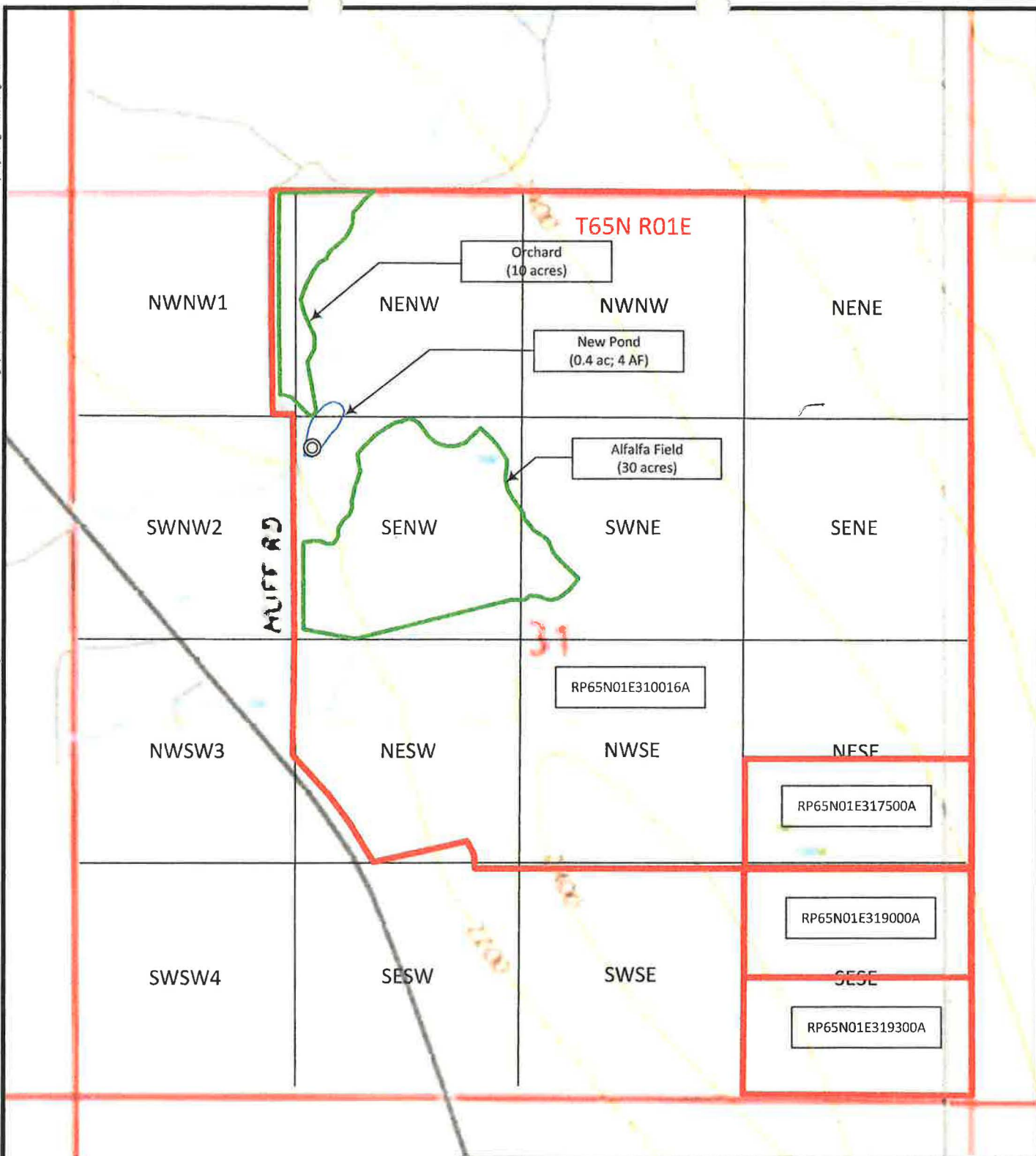
FIGURE

1

The information included on this graphic representation was compiled from a variety of sources and is subject to change without notice. NWGC makes no representations or warranties, express or implied, as to accuracy, completeness, timeliness, or rights to the use of such information. This document is not intended for use as a land survey product nor is it designed or intended as a construction design document. The use or misuse of the information contained on this graphic representation is at the sole risk of the party using or misusing the information.

July 22, 2020

C:\Users\lmu\OneDrive\NWGC\Projects\01161-01



LEGEND

- ⊙ Point of Diversion (POD)
- Place of Use (POU)
- Johnson Parcels



0 2000 feet

Source: USGS Copeland and Hall Mountain, Idaho (2020) 7.5-Minute Series Quadrangles



**Northwest Groundwater
Consultants, LLC**

01161-01

JULY 2020

SITE LOCATION MAP

Application for Water Right Permit
Johnson Property
Boundary County, Idaho

FIGURE

1

North Pond Seepage Loss Calculations

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

FILE NUMBER	01161-01
REVIEWER	NWGC
DATE	8/3/2020

User Input
Calculated value
Formula Explanations

INPUTS

Pond Surface Area (AC.)	0.6	AC.
-------------------------	-----	-----

925.5

Pond Surface Area (SQ. FT.)	26136	SQ. FT.
-----------------------------	-------	---------

I used the following method to obtain my Soil Classification information:	NRCS Web Soil Survey	
My Soil Classification is	CL	
Suggested Seepage Rate (FT./DAY)	0.0030	FT./DAY

Formula: (Surface Area X Seepage Rate) X 7.48 = Gallons Per Day Loss
--

Convert to GPD	586	GPD
----------------	-----	-----

Total Seepage Loss (AFA)	0.7	AFA
--------------------------	-----	-----

Though sand and gravel seepage rates may actually be higher, the maximum allowable rate is 0.2 ft/day, pursuant to Administrative Memo "Seepage Loss Standards for Ponds and Reservoirs."

Suggested Seepage Rates for Different Soil Types:

GW, GP, GM, GC, SW, SP and SM (silty sand, sand silt mixtures and gravel mixtures) = 0.2 ft per day

OL and ML (inorganic silts - very fine sands, silty, or clayey fine sands) = 0.02 ft per day

SC (clayey sands, sand clay mixtures) = 0.007 ft per day

CL (Low to medium plasticity clays) = 0.003 ft per day

MH, OH, PT and CH (high plasticity clays) = 0.0003 ft per day

LINED PONDS (liners can be chemical, fabric, or bentonite) = 0 ft per day

Ponds Intercepting Groundwater (excavated ponds filled by ground water) = 0 ft per day

PLEASE NOTE: The initial basis for the Suggested Seepage Rates in the table above is found on Page 16 of Seepage from Fish Ponds, Bulletin 599, August 1989 Alabama Agricultural experiment Station, Auburn University, Auburn University Alabama. If you don't know the soil type, please refer to the map provided at the NRCS Web Soil Survey (Tab #1), an ArcMap Soil Classification Map (Tab #1.1), or published NRCS Soil Survey (Tab #1.2). Use "0" if the pond fill relies on the water table.

North Pond Seepage Loss Calculations

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

FILE NUMBER	01161-01
REVIEWER	NWGC
DATE	8/3/2020

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: Porthill (NWS -- USC00107264)

Month	mm/day ¹	Days per month	mm/Month
Jan	-1.61	31	0.00
Feb	-1.10	28	0.00
March	-0.29	31	0.00
April	1.01	30	30.30
May	1.44	31	44.64
June	1.89	30	56.70
July	3.17	31	98.27
August	2.65	31	82.15
September	1.28	30	38.40
October	-0.31	31	0.00
November	-2.22	30	0.00
December	-2.02	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 = 350.46

$[(\text{mm/yr}) \div (\text{convert to feet})] \times (\text{Surface area of pond, in acres}) = \text{Evaporation Loss in Acre Feet}$

$$(350.46 \div 304.8) \times 0.60 = 0.7 \text{ AFA}$$

North Pond Seepage Loss Calculations

FILE NUMBER	01161-01
REVIEWER	NWGC
DATE	8/3/2020

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.)	0.6	"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)	2.4	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)	121.3	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 " <u>From Storage</u> " component exceeding the initial fill on the permit to include a volume in this space.
Estimated Seepage Loss (AF)	0.7	The "Estimated Seepage Loss" is automatically carried over from the "Seepage Loss" sheet.
Estimated Evaporation Loss (AF)	0.7	The "Estimated Evaporation Loss" is automatically carried over from the "Evaporation Loss" sheet.
Total Volume Required (AF)	125.0	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.

Flow Rate into Pond (CFS)	0.13	The "Flow Rate into Pond" depicts the actual flow, either measured or estimated, into the pond. For offstream facilities, this will be equivalent to "diversion to storage" rate.
Highest Daily Evaporation Rate From Evaporation Tab. (mm/Day)	3.17	This number is carried over from the "Evaporation Loss" sheet. It is the highest recorded number in the "Precipitation Deficit Table".
Required Daily Maintenance Volume (AF/Day)	0.01	"Required Daily Maintenance Volume" is the maximum volume of water needed on any given day during the year to maintain pond volume. It is calculated by adding the highest daily evaporation loss to the average daily seepage loss in acre feet. The average daily seepage loss is calculated by dividing the "Estimated Seepage Loss" by 365 days. This is acceptable, since the seepage rate shouldn't vary throughout the season unless the pond completely freezes over during the winter months. The highest daily evaporation loss is calculated by dividing the Highest Daily Evaporation Rate by the 304.8 conversion factor and multiplying this number by the pond surface area to attain a combined daily acre feet requirement.
Minimum Maintenance Flow (CFS)	0.00	The "Minimum Maintenance Flow" is the minimum amount of flow required to maintain the level of the pond. This number is determined by dividing the "Maximum Required Daily Maintenance Volume" by 1.9835. This flow can be used to determine if the flow rate into the pond is adequate to maintain the pond level.
Days Required to Fill the Pond	10	The "Days Required to Fill the Pond" is calculated by dividing the "Pond Capacity" by the "Flow Rate" minus "Minimum Maintenance Flow" multiplied by 1.9835. This section will assist you in determining if the flow rate being diverted to the pond is adequate to fill the pond while maintaining the pond level. The length of time to fill the pond will help determine if the flow rate is adequate for the size of pond being proposed. If this number is <i>approximately 6 months (180 days) or more</i> , the reviewer should have a discussion with the applicant to make sure he/she understands that it will take a significant length of time to fill the pond.
Days Required to Fill the Pond at 13,000 Gallons per Day	75	Some water users may want to fill a pond under the 13,000 gallons per day domestic exemption. The "Days Required to Fill the Pond at 13,000 Gallons per Day" is calculated by converting the "Pond Capacity" and the "Required Daily Maintenance Volume" to gallons. The "Pond Capacity" is then divided by 13,000 gallons minus the "Required Daily Maintenance Volume" in gallons to determine the number of days to fill pond. If this number is <i>approximately 6 months (180 days) or more</i> , the reviewer should have a discussion with the applicant to make sure he/she understands that it will take a significant length of time to fill the pond. Negative values indicate that the supply of 13,000 gallons per day is not enough volume to overcome the required daily maintenance volume; the pond will never fill.



University of Idaho

Kimberly Research
and Extension Center

Water Resources Program

ETIdaho 2017

Evapotranspiration and Consumptive
Irrigation Water Requirements
for Idaho

Please send suggestions for
improving this site to robison at
uidaho dot edu

2020-07-14 10:06

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Idaho.

Porthill (NWS -- USC00107264)

Statistics based on thirty year normal spans 1976 to 2015 years

For a different land cover or crop click on the above link.

You can highlight this table and copy via the clipboard to a Microsoft Excel or OpenOffice spreadsheet to plot or otherwise work with this data.

Open water - small stock ponds Precipitation Deficit (Click here for a graph)														
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Growing Season ^a	Non Growing Season ^b
Mean ^j	mm/day												mm	
Monthly ^c	-1.61	-1.10	-0.29	1.01	1.44	1.89	3.17	2.65	1.28	-0.31	-2.22	-2.02	121	0
15-Day Moving Average ^d	-1.49	-1.23	-0.39	1.06	1.52	1.81	3.19	2.53	1.23	-0.25	-2.20	-1.94		
7-Day Moving Average ^e	-1.53	-1.13	-0.35	1.04	1.46	1.88	3.18	2.60	1.26	-0.24	-2.15	-2.03		
3-Day Moving Average ^f	-1.58	-1.11	-0.29	1.02	1.43	1.88	3.19	2.64	1.29	-0.29	-2.18	-2.02		
Standard														

APPLICATION FOR PERMIT
JOHNSON PROPERTIES PROJECT DETAILS
NORTH POND AND FIELDS

Mr. Shem Johnson of Bonners Ferry, Idaho owns a total of 400 acres in the northeast quarter (NE ¼), the east half (E ½) of the northwest quarter (NW ¼), a portion of the northwest quarter (NW ¼) of the northwest quarter (NW ¼) (Lot 1), the northeast (NE ¼) of the southwest (SW ¼), the north half (N ½) of the southeast quarter (SE ¼), and the southeast quarter (SE ¼) of the southwest quarter (SE ¼) of Section 31, Township 65 North, Range 1 East, Boise Meridian in Kootenai County, Idaho.

Parcels include Nos. RP65N01E310016A, RP65N01E317500A, RP65N01E319000A, and RP65N01E319300A. Two creeks cross the property generally flowing from east to west. Creeks are estimated to flow at approximately 60 (north creek) and 50 (south creek) gallons per minute (gpm) (0.13 and 0.11 cubic feet per second [cfs], respectively).

A new pond is proposed to be located on the north creek. Its size will be approximately 0.6 acre in size with an embankment less than 10 feet high. The pond will be lined with clay. Water will be diverted from the new pond to irrigate the 30 acres of alfalfa and 10 acres of orchard and provide stockwater for 100 head of cattle. Anticipated build out is within 5 years.

WATER USE CALCULATIONS

Storage (see attached pond calculations)

- Total Pond Capacity = 6 AF
- Maximum Depth = 10 ft
- Surface Area = 0.6 ac
- Seepage loss = 0.7 AF
- Evaporation loss = 0.7 AFY
- Pond Capacity ("Average Pond Volume") = 2.4 AF

Fire Protection Storage (1/1 to 12/31)

- 2.4 AF (pond capacity) + 0.7 AF (seepage loss) + 0.7 AF (evaporation) = 3.8 AF

Irrigation Storage and Irrigation from Storage (1/1 to 12/31)

- 40 ac x 3 AF/ac = 120 AF

Stockwater Storage and Stockwater from Storage (1/1 to 12/31)

- 100 head cattle x 12 gpd x 365 days = 438,000 gpy
- 438,000 gpy / 325,851 gal/AF = 1.3 AF

Aesthetic, Wildlife, Recreation (AWR) Storage (1/1 to 12/31)

- 2.4 AF (pond capacity) + 0.7 AF (seepage loss) + 0.7 AF (evaporation) = 3.8 AF

Multiple Fill Volumes (above initial fill)

- Volume "needed" from storage = 120 AF (irrigation) + 1.3 AF (stockwater) = 121.3 AF

Total Amount to be Appropriated

- 3.8 AF (initial fill [includes seepage and evaporation loss]) + 121.3 AF = 125.1 AF

[Print](#) | [Close Window](#)**Subject:** Applications for Permit**From:** tfmullen@northwestgroundwater.com**Date:** Tue, Aug 04, 2020 8:51 am**To:** <shem@slunder.com>**Attach:** image001.jpg

Johnson North - application-for-permit PDF Files.pdf

Johnson South - application-for-permit PDF Files.pdf

Hi Shem,

Attached are the two applications. Will need your original signature on the second page of each one of the applications and mailed back to me. Filing fees are based on storage volume and are as follows:

North – 125.1 AF	\$290
South – 91.9 AF	\$250

Either I can write the two checks and include on my invoice or you can include two checks with the mailed signed pages.

Let me know if you have any questions. Got to leave town later today, but will follow up with you tomorrow.

Thanks

Tom

Thomas F. Mullen, PG, LHG | *Principal Hydrogeologist*

Northwest Groundwater Consultants, LLC

(M): 208-755-1094

tfmullen@northwestgroundwater.com



Northwest Groundwater
Consultants, LLC

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Brad Little
Governor

State of Idaho

DEPARTMENT OF WATER RESOURCES

NORTHERN Region • 7600 N MINERAL DR STE 100 • COEUR D ALENE, ID 83815-7763
Phone: (208)762-2800 • Fax: (208)769-2819 • Website: www.idwr.idaho.gov

Gary Spackman
Director

August 28, 2020

SHEM JOHNSON
PO BOX 1952
BONNERS FERRY, ID 83805-1952

RE: Application for Permit No. 98-8025 & 98-8026

Dear Applicant:

The Department of Water Resources has received your water right applications. Please refer to the numbers referenced above in all future correspondence regarding these applications.

A legal notice of the applications has been prepared and is scheduled for publication in the BONNERS FERRY HERALD on 9/3/2020 and 9/10/2020. Protests to these applications may be submitted for a period ending ten (10) days after the second publication.

If the application(s) is/are protested, you will be sent a copy of each protest. All protests must be resolved before the application(s) can be considered for approval. If the protest(s) cannot be resolved voluntarily, the Department will conduct a conference and/or hearing on the matter(s).

If the applications are not protested, the Department will process your applications and notify you of any action taken on the applications. If your applications are approved, the Department will send you a copy of the permits.

Please contact this office if you have any questions regarding the applications.

Sincerely,

Tammy Alleman
Administrative Assistant

CC:
NORTHWEST GROUNDWATER CONSULTANTS LLC
2660 E THOMAS HILL DR
COEUR D ALENE, ID 83815-6335

Alleman, Tammy

From: Alleman, Tammy
Sent: Friday, August 28, 2020 9:10 AM
To: 'Chantilly.Higbee@deq.idaho.gov'; 'Anna.Moody@deq.idaho.gov'; 'Horsmon,Merritt'
Subject: Request for Comments for WR#98-8025

Dear Interested Agencies:

The Department of Water Resources is seeking written comment and/or recommendations from your agency regarding the above referenced Water Right applications. You can find copies of the applications at: <http://www.idwr.idaho.gov/apps/ExtSearch/WRAJSearch/WRADJSearch.aspx>.

This office can publish notice of the application as soon as the initial review is completed; therefore, your prompt response to this request is appreciated. If your agency desires to formally protest the approval of the application(s), you may do so after the notice is published by filing a written protest along with a \$25.00 filing fee within 10 days after final publication. The deadline for comments on the applications is September 21, 2020.

Please contact the Northern Region Office at (208) 762-2800 if you have any questions regarding the applications.

Thank you,

Tammy

*Tammy Alleman
Administrative Assistant
Idaho Department of Water Resources
7600 N Mineral Drive, Suite 100
Coeur d'Alene, ID 83815-7763
Phone: (208) 762-2800
Fax (208) 762-2819*

Alleman, Tammy

From: Alleman, Tammy
Sent: Friday, August 28, 2020 9:05 AM
To: 'BFHLegals@bonnersferryherald.com'
Subject: Legal Notice
Attachments: Legal Notice Transfer 84319, 98-8025-98-8026.docx

Please publish the enclosed legal notice in the **Bonners Ferry Herald** on the dates indicated **September 3rd & September 10th, 2020** (once a week for two consecutive weekly issues). If you cannot publish the notice on the proposed dates, please contact us immediately. Please send a proof once you have the article ready for print for our review.

An affidavit of publication must be submitted to the Department along with the publication bill. Please send the affidavit and bill to this office before **September 21, 2020**. Your cooperation is appreciated.

Thank you,

Tammy

*Tammy Alleman
Administrative Assistant
Idaho Department of Water Resources
7600 N Mineral Drive, Suite 100
Coeur d'Alene, ID 83815-7763
Phone: (208) 762-2800
Fax (208) 762-2819*

NOTICE OF PROPOSED CHANGE OF WATER RIGHT
TRANSFER NO. 84319

THREE MILE WATER DISTRICT, PO BOX 906, BONNERS FERRY, ID 83805 has filed Application No. 84319 for changes to the following water rights within BOUNDARY County(s): Right No(s). 98-7672, 98-7818, 98-7820, 98-7822; to see a full description of these rights and the proposed transfer, please see <https://research.idwr.idaho.gov/apps/waterrights/querynewtransfers>. The purpose of the transfer is to change a portion of the above rights as follows:

This transfer proposes to add all existing groundwater wells to all of Three Mile Water Districts groundwater rights 98-7672, 98-7818, 98-7820, & 98-7822.

For additional information concerning the property location, contact Northern Region office at (208)762-2800. Protests may be submitted based on the criteria of Idaho Code Sec. 42-222. Any protest against the proposed change must be filed with the Department of Water Resources, Northern Region, 7600 N MINERAL DR STE 100, COEUR D ALENE ID 83815-7763 together with a protest fee of \$25.00 for each application on or before 9/21/2020. The protestant must also send a copy of the protest to the applicant.

The following application(s) have been filed to appropriate the public waters of the State of Idaho:

98-8025

SHEM JOHNSON

PO BOX 1952

BONNERS FERRY, ID 83805-1952

Point of Diversion SENW

S31 T65N R01E

BOUNDARY County

Source UNNAMED STREAM

Tributary HALL CREEK

Use: FIRE PROTECTION STORAGE

01/01 to 12/31 3.8 AF

Use: FIRE PROTECTION FROM STORAGE

01/01 to 12/31 3.8 AF

Use: IRRIGATION STORAGE

01/01 to 12/31 120 AF

Use: IRRIGATION FROM STORAGE

04/01 to 10/31 120 AF

Use: STOCKWATER STORAGE

01/01 to 12/31 1.3 AF

Use: STOCKWATER FROM STORAGE

01/01 to 12/31 1.3 AF

Use: AESTHETIC STORAGE

01/01 to 12/31 3.8 AF

Use: WILDLIFE STORAGE

01/01 to 12/31 3.8 AF

Use: RECREATION STORAGE

01/01 to 12/31 3.8 AF

Total Diversion: 125.1 AF

Date Filed: 08-10-2020

Place Of Use: AESTHETIC STORAGE, FIRE PROTECTION FROM STORAGE, FIRE PROTECTION STORAGE, IRRIGATION STORAGE, RECREATION STORAGE, STOCKWATER FROM STORAGE, STOCKWATER STORAGE, WILDLIFE STORAGE

T65N R01E S31

NENW, SENW

Place Of Use: IRRIGATION FROM STORAGE

T65N R01E S31

NENW, L1(NWNW), SWNE, SENW

Total Acres: 40

98-8026

SHEM JOHNSON

PO BOX 1952

BONNERS FERRY, ID 83805-1952

Point of Diversion SWNE

S31 T65N R01E

BOUNDARY County

Source UNNAMED STREAM

Tributary SINKS

Use: IRRIGATION STORAGE

01/01 to 12/31 90 AF

Use: IRRIGATION FROM STORAGE

04/01 to 10/31 90 AF

Use: STOCKWATER STORAGE

01/01 to 12/31 0.7 AF

Use: STOCKWATER FROM STORAGE

01/01 to 12/31 0.7 AF

Use: WILDLIFE STORAGE

01/01 to 12/31 1.2 AF

Use: RECREATION STORAGE

01/01 to 12/31 1.2 AF

Use: FIRE PROTECTION STORAGE

01/01 to 12/31 1.2 AF

Use: FIRE PROTECTION FROM STORAGE

01/01 to 12/31 1.2 AF

Use: AESTHETIC STORAGE

01/01 to 12/31 1.2 AF

Total Diversion: 91.9 AF

Date Filed: 08-10-2020

Place Of Use: AESTHETIC STORAGE, FIRE PROTECTION FROM STORAGE, FIRE PROTECTION STORAGE, IRRIGATION STORAGE, RECREATION STORAGE, STOCKWATER FROM STORAGE, STOCKWATER STORAGE, WILDLIFE STORAGE
T65N R01E S31

SWNE, SENW

Place Of Use: IRRIGATION FROM STORAGE

T65N R01E S31

NESW, SENW

Total Acres: 30

Permits will be subject to all prior water rights. For additional information concerning the property location, contact the Northern office at (208)762-2800; or for a full description of the right(s), please see <https://idwr.idaho.gov/apps/ExtSearch/WRAApplicationResults/>. Protests may be submitted based on the criteria of Idaho Code § 42-203A. Any protest against the approval of this application must be filed with the Director, Dept. of Water Resources, Northern Region, 7600 N MINERAL DR STE 100, COEUR D ALENE ID 83815-7763 together with a protest fee of \$25.00 for each application on or before 9/21/2020. The protestant must also send a copy of the protest to the applicant.

GARY SPACKMAN, Director Published on 9/3/2020 and 9/10/2020

Maxey, Shaun

From: tfmullen@northwestgroundwater.com
Sent: Monday, August 17, 2020 5:00 PM
To: Maxey, Shaun
Subject: RE: Recreation use & corrections for Johnson Applications for Permit (95-8025 & 98-8026)

Hi Shaun,

The corrections you sent regarding the Shem Johnson Applications look good. Recreation uses for the two ponds include Hunting, Fishing, Swimming, Boating.

Thanks

Tom

From: Maxey, Shaun <Shaun.Maxey@idwr.idaho.gov>
Sent: Monday, August 17, 2020 4:45 PM
To: Tom Mullen <tfmullen@northwestgroundwater.com>
Subject: Recreation use & corrections for Johnson Applications for Permit (95-8025 & 98-8026)

Mr. Mullen:

Attached is a copy of letter going out via U.S. mail today on the second (98-8026) of the two Applications for Shem Johnson. You should receive a CC copy in U.S. mail.

Please reply to this e-mail to indicate what the recreation use is for the two ponds. A brief reply like '... Hunting..., '...Fishing..., '...Boating....', will be enough.

Thanks,

Shaun Maxey

Shaun M. Maxey
Sr. Water Resource Agent
Idaho Department of Water Resources, Northern Region
Coeur d'Alene, ID 83815
(208) 762.2816

MEMORANDUM

Date: August 17, 2020
To: Water Right File 98-8025
From: smaxey
Re: Season of Use Correction: Admin Memo No. 9

<u>DOCUMENT</u>	<u>PRIORITY DATE</u>	<u>ISSUE</u>
APPLICATION RECVD	08/10/2020	08/10/2020 IDWR NORTH RECEIVED APPLICATION WITH INCORRECT IRRIGATION SEASON OF USE FOR PLACE OF USE PROPERTY. STANDARD SEASON OF USE (04-01 10-31) DATA ENTERED, APPLICANT & REPRESENTATIVE NOTIFIED WITH LETTER MAILED IN ACCORDANCE WITH APPLICATION PROCESSING MEMO. # 9.

MEMORANDUM

Date: August 17, 2020
To: Water Right File 98-8025
From: smaxey
Re: Tributary Correction:& Place of Use locations Admin Memo No. 9

<u>DOCUMENT</u>	<u>PRIORITY DATE</u>	<u>ISSUE</u>
APPLICATION RECVD	08/10/2020	<p>06/22/2020 IDWR NORTH RECEIVED APPLICATION WITH INCORRECT TRIBUTARY FOR SOURCE (UNNAMED STREAM). WATER FROM UNNAMED STREAM FLOWS INTO HALL CREEK (SHOWN ON USGS MAP) BEFORE REACHING KOOTENAI RIVER.</p> <p>APPLICATION WAS RECEIVED WITH MAP THAT DOES NOT SHOW STORAGE LOCATIONS (AESTHETIC STORAGE, WILDLIFE STORAGE & RECREATION STORAGE).</p> <p>CORRECT TRIBUTARY DATA ENTERED, APPLICANT & REPRESENTATIVE NOTIFIED WITH PHONE CALL AND LETTER, MAILED 8/12/2020 IN ACCORDANCE WITH APPLICATION PROCESSING MEMO. # 9.</p> <p>CORRECT STORAGE LOCATIONS DATA ENTERED, APPLICANT & REPRESENTATIVE NOTIFIED WITH LETTER, MAILED 8/13/2020 IN ACCORDANCE WITH APPLICATION PROCESSING MEMO. # 9.</p>



State of Idaho

DEPARTMENT OF WATER RESOURCES

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BRAD LITTLE
Governor

GARY SPACKMAN
Director

August 17, 2020

Shem Johnson
PO Box 1952
Bonners Ferry, ID 83815

Re: Irrigation Season Of Use on Application for Permit 98-8025

Dear Applicant:

Thank you for the Application for Permit that was received by Idaho Department of Water Resources (IDWR) on August 10, 2020 to divert water for fire protection and irrigation use from an unnamed stream in Boundary County. **Your Application has been assigned ID Number 98-8025.**

We are contacting you to inform you that IDWR is correcting the irrigation period of use on your Application. No further action is required from you to correct the irrigation period of use on your Application to the standard period of '...04-01 to 10-31...' for your area. A highlighted copy of the first two pages of your Application is enclosed.

Please phone me at (208) 762.2816 if you have any questions.

Respectfully,

A handwritten signature in cursive script that reads "Shaun M. Maxey". The signature is written in dark ink and is positioned above the printed name and title.

Shaun M. Maxey
Sr. Water Resource Agent
Idaho Department of Water Resources, Northern Region

Enclosures:

Copy of original signed Application for Permit (Pages 1-2)

CC
Northwest Groundwater Consultants



State of Idaho

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BRAD LITTLE
Governor

GARY SPACKMAN
Director

August 13, 2020

Shem Johnson
PO Box 1592
Bonners Ferry, ID 83805

Re: Place(s) Of Use & Acre Feet (AF) on Application & Map for Permit 98-8025 (Johnson)

Dear Applicant:

Idaho Department of Water Resources (IDWR) received your Application for Permit on August 10, 2020 to use water from an unnamed stream for storage and other purposes on Boundary County parcel RP65N01E310015A. Your Application has been assigned Identification number 98-8025 and is being processed by IDWR.

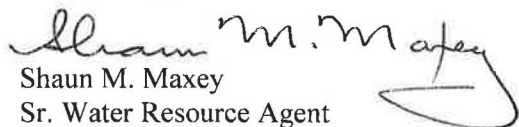
Please note that the Page 1 Purpose of Use Supplement for your Application indicated Aesthetic, Wildlife and Recreation uses but did not show the location for these uses on the Site Location Map. IDWR has data entered these uses as Aesthetic Storage, Wildlife Storage and Recreation Storage in the pond. **Please contact IDWR to indicate what recreation purpose is intended (fishing, swimming, etc.).**

The attached maps show how IDWR has data entered Place of Use locations, consistent with information on Page 2 of the Application, that are not shown on the Site Location Map. Please note that the Acre (0.4 AC) and Acre Feet (4 AF) information for the 'New Pond' differ for the 0.6 Acres and 6 AF used elsewhere in the Application. IDWR has data entered the higher numbers (0.6 Acres and 6 AF).

I have spoken with your consultant / representative; Thomas Mullen at Northwest Ground Water Consultants; at his Coeur d'Alene office about these corrections.

Please contact me at (208) 762.2816 if you have any questions.

Respectfully,



Shaun M. Maxey
Sr. Water Resource Agent
Idaho Department of Water Resources, Northern Region

Enclosures
Copy of Application Site Location Map
Two IDWR maps

CC
Northwest Ground Water Consultants.



State of Idaho

DEPARTMENT OF WATER RESOURCES

Northern Region • 7600 N Mineral Drive, Suite 100 • Coeur D'Alene ID 83815-7763

Phone: (208) 762-2800 • Fax: (208) 762-2819

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

BRAD LITTLE
Governor

GARY SPACKMAN
Director

August 12, 2020

Shem Johnson
Po Box 1592
Bonners Ferry, ID 83805

Re: Tributary correction on Application for Permit 98-8025 (Johnson)

Dear Applicant:

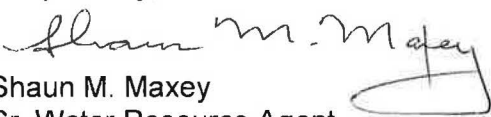
Idaho Department of Water Resources (IDWR) received your Application for Permit on August 10, 2020 to use water from an unnamed stream for storage and other purposes on Boundary County parcel RP65N01E310015A. Your Application has been assigned Identification number 98-8025 and is being processed by IDWR.

Please note that your Application indicated that the tributary for the unnamed stream is the Kootenai River. IDWR is required to use the first named downstream body of water that appears connected to the source on the applicable U.S. Geological Survey map (Copeland Quadrangle 7.5 minutes) as the tributary. The Copeland quadrangle map shows the applicable tributary as Hall Creek. IDWR has data entered Hall Creek as the tributary for upcoming legal notices on your Application.

A copy of this letter is being mailed to your consultant / representative; Northwest Ground Water Consultants; at their Coeur d'Alene office.

Please contact me at (208) 762.2816 if you have any questions.

Respectfully,



Shaun M. Maxey
Sr. Water Resource Agent
Idaho Department of Water Resources, Northern Region

CC

Northwest Ground Water Consultants.