STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 96-9580
Exam Date: 09/24/2020

1. Current Owner:
   ROB JEDINY CMR 405 BOX 6462 APO AE 09034-0065

2. Accompanied by: Steve Allen
   Phone No: 208-304-3127
   Address: 2819 W Spring Creek Road
   Relationship to permit Holder: Neighbor and Representative

3. **SOURCE:**	**Tributary**
GROUND WATER	
SPRING	SINKS

Method of Determination: Arcmap and DRG.

B. OVERLAP REVIEW

1. Other water rights with the same place of use: YES Overlap

Water Right No.	Source	Purpose of Use	Basis
96-4318	SPRING CREEK	IRRIGATION	STATUTORY CLAIM
96-4545	COUGAR CREEK	DOMESTIC	STATUTORY CLAIM

Comments: Both rights 96-4318 and 96-4545 are statutory claims from surface water sources that have POUs that overlap this right's POU, but are not associated with the applicant's parcel and not a concern for overlap.

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

Water Right No.	Source	Purpose of Use	Basis

Comments: _____

C. DIVERSION AND DELIVERY SYSTEM

1. **LOCATION OF POINT(S) OF DIVERSION:**
GROUND WATER SE¼ SW¼, Sec. 9, Twp 56N, Rge 02E, B.M. BONNER County
SPRING SE¼ SE¼ SW¼, Sec. 9, Twp 56N, Rge 02E, B.M. BONNER County

Method of Determination: GPS. POD(s) are a spring located at -116°12.975, 48°12.544, and groundwater within the pond's bank located at approximately -116°12.934, 48°12.532.

PLACE OF USE: WILDLIFE STORAGE, DOMESTIC STORAGE, DOMESTIC FROM STORAGE, RECREATION STORAGE, and 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	
56N	02E	9												X					

Method of Determination: Field exam and Arcmap aerial imagery.

3.

Delivery System Diagram Attached (required). Indicate all major components and distances between components.
X 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
X 1:24,000 or greater.

X 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
NONE					

D. FLOW MEASUREMENTS

1.

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

2. Measurements: N/A

E. FLOW CALCULATIONS

Measured Method: N/A

F. VOLUME CALCULATIONS

1. Volume Calculations for irrigation: N/A

V_{IR} = (Acres Irrigated) x (Irrigation Requirement) =
V_{DR} = [Diversion Rate (cfs)] x (Days in Irrigation season) x 1.9835 =
V = Smaller of V_{IR} and V_{DR} =

2. Volume Calculations for Other Uses:

See attached pond analysis sheet.

G. NARRATIVE/REMARKS/COMMENTS

Field exam performed on 9/24/2020 with the applicant's neighbor and representative, Steve Allen, showed a pond influenced by groundwater and receiving spring water for multiple storage uses and domestic from storage use. The spring POD is just within the high water mark of the pond, and Mr. Allen stated it is only covered during spring runoff periods and into early summer. Once the water is used and or evaporates the spring daylights along the bank of the pond. The groundwater POD is located within the deepest pool within the pond. The pond itself has three varying depths of pools, with one deep pool and two shallower pool areas. There is no diversion rate applied to this water right.

The applicant's pond served the following beneficial uses at the pond POU: wildlife storage, domestic storage, recreation storage, and fire protection storage. The permit was approved for a combined storage volume of 7.1 af using an older pond analysis worksheet. Following the field exam pond sketches, notes, and Arcmap aerial imagery were used to trace out the pond surface area. A current and more accurate pond analysis sheet was computed to derive the pond's volume, which resulted in a reduction in overall diversion volume from the permit approved values. The pond has a surface area of 0.7 acres, a max depth of 11 feet, an average depth of 4.4 feet, a pond capacity of 3.1 af, an estimated evaporation loss of 0.6 af, and a multiple fill allowance of 0.6 af for domestic from storage use. The total annual volume required for the pond equals 4.3 af. For the multiple storage beneficial uses listed above, domestic storage equals **0.6 af** annually; wildlife storage, recreation storage, and fire protection storage annual volume equals **3.7 af**. The 3.7 af volume is not additive per beneficial use, and the volume is the sum of the pond capacity plus evaporation loss annually. The maximum diversion volume recommended for licensing equals **4.3 af.**

During field exam the domestic from storage use POU was sketched out on field maps, and during licensing review Arcmap aerial imagery was used to trace out the domestic from storage area equaling ½ acre. The applicant had permitted for domestic external use in order to water a small fenced in orchard and garden bed area. At time of exam, the applicant, Robert Jediny, had been deployed on military orders for the summer. As such, the orchard and garden area was not actively being irrigated or tended as observed by photographs taken. It is clearly evident that the applicant had developed the domestic external use area during the permit development period, and credit is recommended for **0.6 af** annual volume for the domestic form storage beneficial use component. The applicant's representative stated Mr. Jediny used a portable generator operated water transfer pump and hoses to draw water from the pond to irrigate the small garden boxes and orchard area, and that the generator had been put away prior to the applicant departing for military duty.

Conditions 082 and 26A were removed from the permit during licensing review. Condition 219 was replaced with 259 to update the pond volume factors and capture the multiple fill requirement. Condition 220 was updated to reflect current pond analysis values. Condition 004 was added to describe the right does not grant right of way or easement across the land of another. All other conditions on permit will remain on the license. Rights 96-4318 and 96-4545 are statutory claims from surface water sources that have POUs that overlap this right's POU, but are not associated with the applicant's parcel and not a concern for overlap. There are no other overlap concerns for this right.

Have conditions of permit approval been met? __X__ Yes ____ No

H. RECOMMENDATIONS

1. Recommended Amounts

Beneficial Use	Period of Use	Annual Volume
WILDLIFE STORAGE	01/01 to 12/31	3.7 AF
DOMESTIC STORAGE	01/01 to 12/31	0.6 AF
DOMESTIC FROM STORAGE	01/01 to 12/31	0.6 AF
RECREATION STORAGE	01/01 to 12/31	3.7 AF
FIRE PROTECTION STORAGE	01/01 to 12/31	3.7 AF
	Totals:	4.3 AF

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 __X__ None

I. **AUTHENTICATION** Luke Bates - Water Resource Agent

Field Examiner's Name _____ Date 10/23/2020

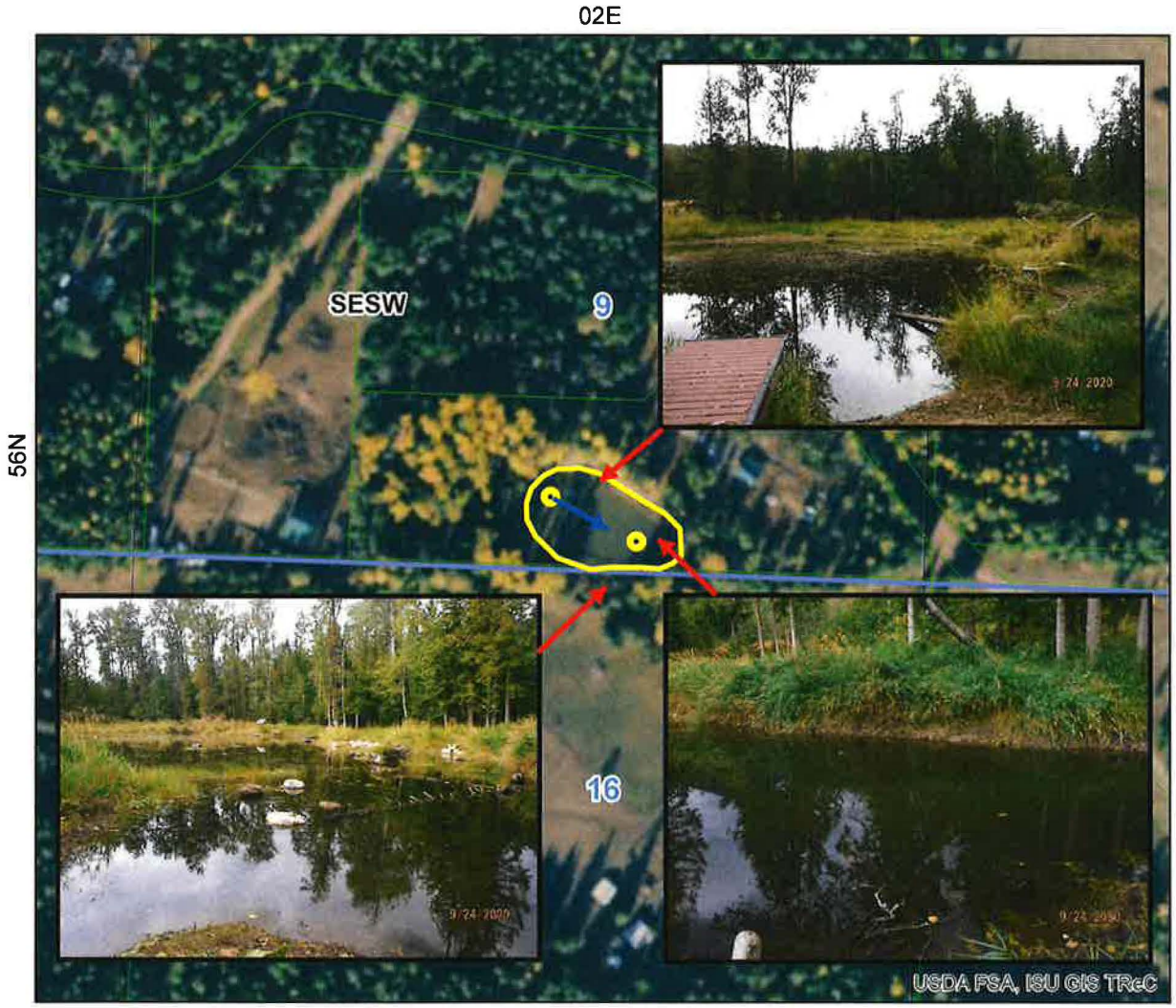
Reviewer _____ Date 10/30/2020

State of Idaho
Department of Water Resources

Attachment to Field Exam

96-9580

WILDLIFE STORAGE, DOMESTIC STORAGE, RECREATION STORAGE, and FIRE PROTECTION STORAGE system diagram.



Point of Diversion
Place Of Use Boundary
Townships
PLS Sections
Quarter Quarters

0 0.035 0.07 0.14 Miles

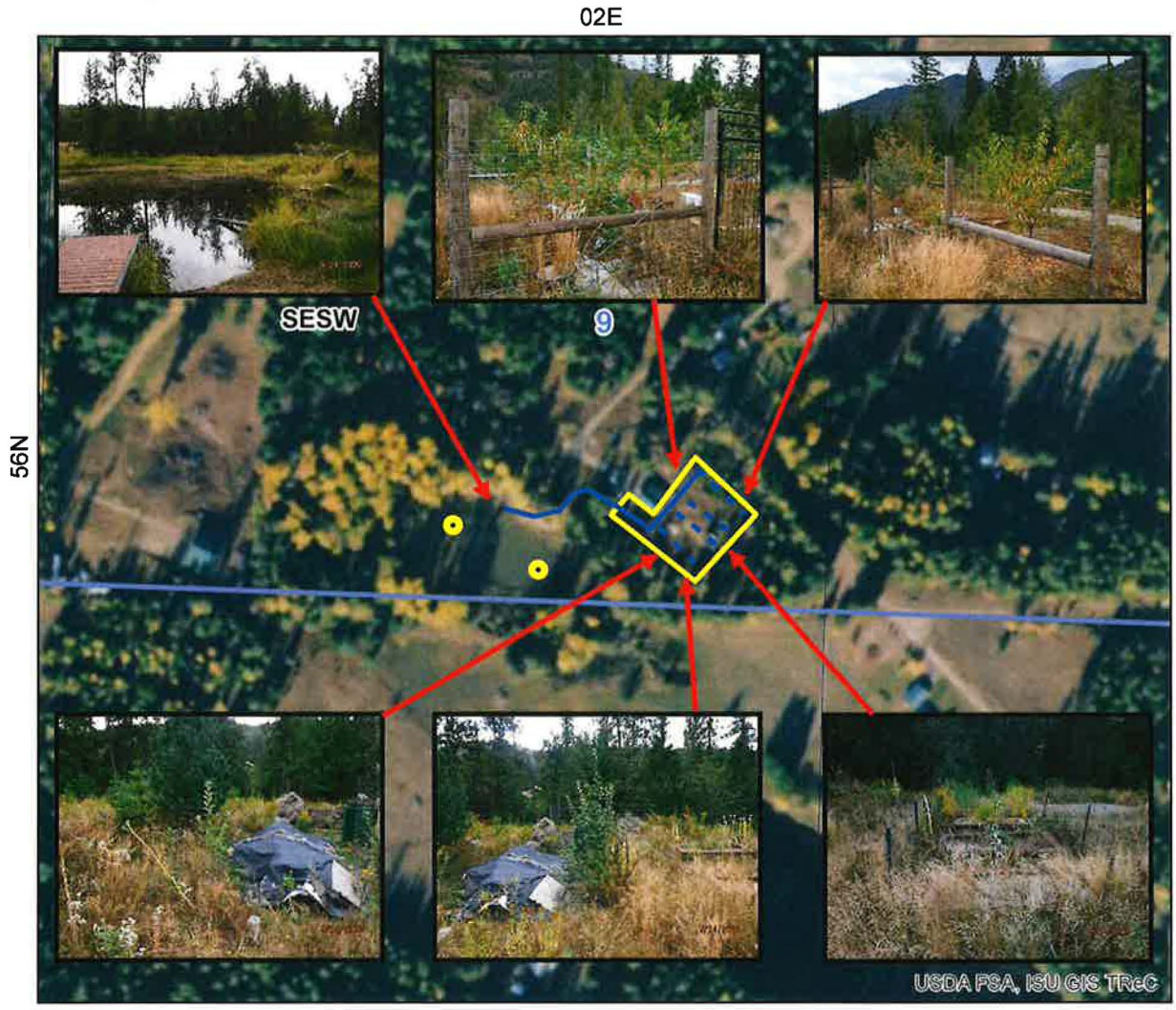
N

State of Idaho
Department of Water Resources

Attachment to Field Exam

96-9580

DOMESTIC FROM STORAGE system diagram.



Point of Diversion
Place Of Use Boundary
Townships
PLS Sections
Quarter Quarters

0 0.035 0.07 0.14 Miles

N

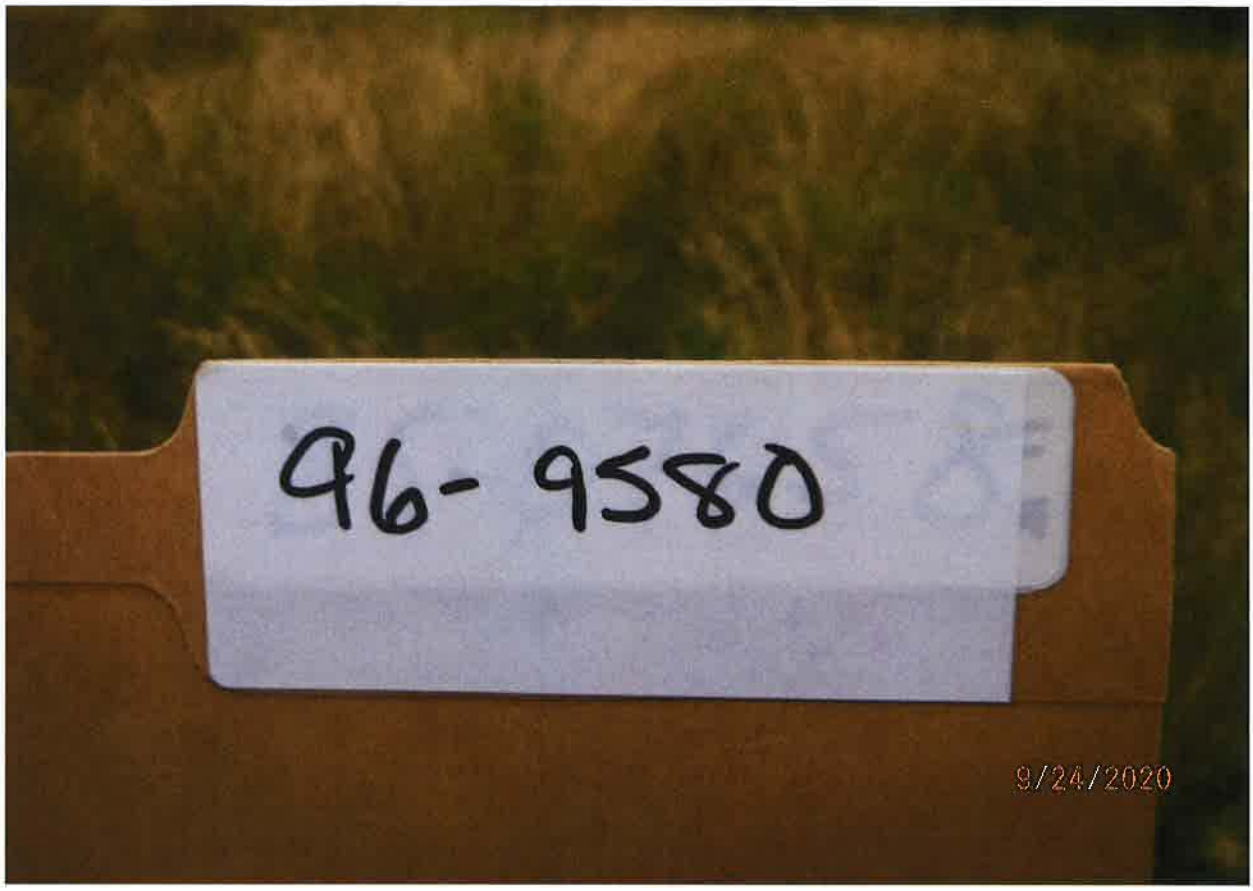
Total Storage Calculations

FILE NUMBER	96-9580
REVIEWER	Luke Bates
DATE	10/22/2020

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.)	0.7	"Surface Area" is automatically carried over from the "Seepage Loss" sheet.
Average Pond Depth (FT.)	4.4	"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)	3.1	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)	0.6	The "Multiple Fill Volume Above Initial Fill" is the acre-feet of water required to meet a *from storage* component if the *from storage* 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)	0.6	The "Estimated Evaporation Loss" is automatically carried over from the "Evaporation Loss" sheet.
Total Volume Required (AF)	4.3	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.



POD – SPRING WATER DIRECT OVERLAND FLOW INTO POND

POD – GROUNDWATER FILLS POND FROM WITHIN HIGH WATER MARK ON BANK

DOMESTIC STORAGE, FIRE PROTECTION STORAGE, WILDLIFE STORAGE, RECREATION STORAGE POU – POND

MULTIPLE STORAGE POU

DOMESTIC FROM STORAGE POU – EXTERNAL USE GARDEN BEDS

DOMESTIC FROM STORAGE POU – EXTERNAL USE GARDEN BEDS

SINGLE RESIDENCE LOCATED ADJACENT DOMESTIC EXTERNAL USE POU