

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 87-11360
Exam Date: 03/05/2021

1. Current Owner:
ESTHER J NOWACK LIFE ESTATE 1020 S NOWACK LN POTLATCH ID 83855-8753 AND
NOWACK FARM LLC 1020 S NOWACK LN POTLATCH ID 83855-8753
2. Accompanied by: Roger & Ronald Nowack
Phone No: 503-729-4915
Address: Same as above
Relationship to permit Holder: Representative(s)

3. **SOURCE:**
UNNAMED STREAM

Tributary
DEEP CREEK

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
87-7094	SPRING	STOCKWATER	LICENSE WITH ACTIVE RECOMMENDED CLAIM IN THE PRBA
87-11320	UNNAMED STREAM	STOCKWATER	B.U. CLAIM WITH ACTIVE RECOMMENDED CLAIM IN THE PRBA

Comments: 87-7094 uses a spring water source for stockwater usage, licensed with an active recommendation status in the PRBA for 25 head of cattle, which overlaps this permit's POU. 87-11320 is an instream stockwater beneficial use claim, active status recommendation claim in the PRBA for 400 head of cattle, which overlaps this permit's. Rights 87-7094, 87-11320, and 87-11360 all provide stockwater for the same herd of cattle on the applicant's property, X35 was added describing that the three rights when combined shall not exceed stockwater usage for 400 head of cattle.

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:**

UNNAMED STREAM NW¼ NW¼, Sec. 24, Twp 42N, Rge 05W, B.M. LATAH County

Method of Determination: GPS; POD is an earthen pond dam located at -116°54.785, 46°58.475.

PLACE OF USE: STOCKWATER 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	
42N	05W	24					X	X											

Method of Determination: Field exam and Arcmap aerial imagery.

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.

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

D. FLOW MEASUREMENTS

1.

Measurement Equipment	Type	Make	Model No.	Serial No.	Size	Calib. Date
NONE						

2. Measurements: N/A

E. FLOW CALCULATIONS

Measured Method: N/A

F. VOLUME CALCULATIONS

1. Volume Calculations for irrigation: N/A

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

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

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

2. Volume Calculations for Other Uses:

Stockwater storage volume = 400 head cattle x 12 gpd x 365 days per year = 1,752,000 gpy / 325,850 gal per af = 5.4 af, considering department rounding standards. Factoring pond seepage and evaporation rate equaling 1.6 af, the permit authorized **5.8 af** becomes the limiting volume value annually for stockwater storage.

$$\text{Fire protection Storage annual volume} = 4.2 \text{ af (pond capacity)} + 1.6 \text{ af (seepage and evaporation loss)} = \mathbf{5.8 \text{ af}}$$

G. NARRATIVE/REMARKS/COMMENTS

Field exam performed on 3/5/2021 with the applicant's representative(s), Robert and Roger Nowack, showed an instream pond receiving water from an unnamed stream, which is used for stockwater and fire protection storage use(s). An earthen dam serves as the POD, and a side channel was developed that allowed stream water to flow through the pond routing down grade. There is no diversion rate associated with the licensing of this permit.

Photographs were taken of the storage pond during the field exam, and Arcmap aerial imagery year 2019 was used to trace out the pond's surface area, equaling 0.7 acres. The pond has a maximum depth of 15 feet, an average depth of 6 feet, and estimated seepage & evaporation loss of 1.6 af. The Maximum diversion volume for this pond will be licensed for 5.8 af for stockwater storage, and 5.8 af fire protection storage. Each beneficial use is authorized 5.8 af annually, but are not additive toward the maximum diversion volume applied to the license. Stockwater storage in the pond is for up to 400 head of cattle that drink directly from the pond throughout the year; Roger Nowack stated that during winter operations, they break ice along one shore of the pond to allow cattle access to drink from the pond.

Conditions 029 and X02 were removed from the permit during licensing review. All other conditions on the permit will be carried forward to licensing. Condition X35 was added to describe combined stockwater usage for 400 head of cattle associated with the applicant's combined water right(s) (see below). Overlap concerns: 87-7094 uses a spring water source license for stockwater usage, with an active recommendation status in the PRBA for 25 head of cattle, which overlaps this permit's POU. 87-11320 is an instream stockwater beneficial use claim, active status recommendation claim in the PRBA for 400 head of cattle, which overlaps this permit's. Rights 87-7094, 87-11320, and 87-11360 all provide stockwater for the same herd of cattle on the applicant's property, X35 was added describing that the three rights when combined shall not exceed stockwater usage for 400 head of cattle. There are no further overlap concerns for this water right.

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

H. RECOMMENDATIONS**1. Recommended Amounts**

<u>Beneficial Use</u>	<u>Period of Use</u>	<u>Annual Volume</u>
STOCKWATER STORAGE	01/01 to 12/31	5.8 AF
FIRE PROTECTION STORAGE	01/01 to 12/31	5.8 AF

Totals: 5.8 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

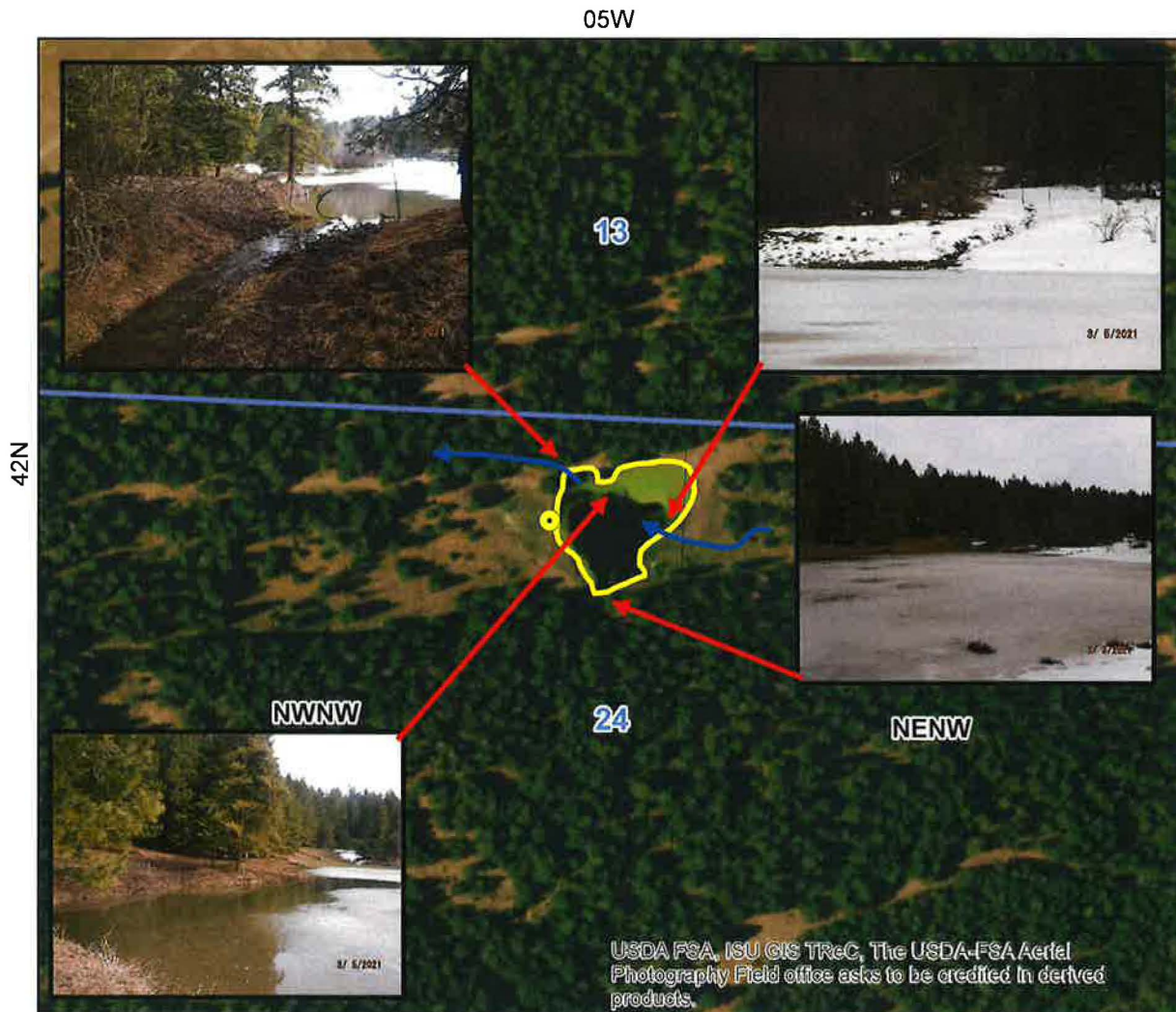
Luke Bates - Water Resource Agent

Field Examiner's Name [Signature] Date 3/8/2021

Reviewer [Signature] Date 3/15/2021

State of Idaho
Department of Water Resources
Attachment to Field Exam
87-11360

STOCKWATER 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



RECEIVED

JUN 22 2020

IDWR / NORTH

To whom it may concern: This pond was built in 1996 by Victor Beplate Charles Nowack and myself for watering our stock Thank You Rodger Nowack

R.E. Permit # 87-11360

Rodger Nowack

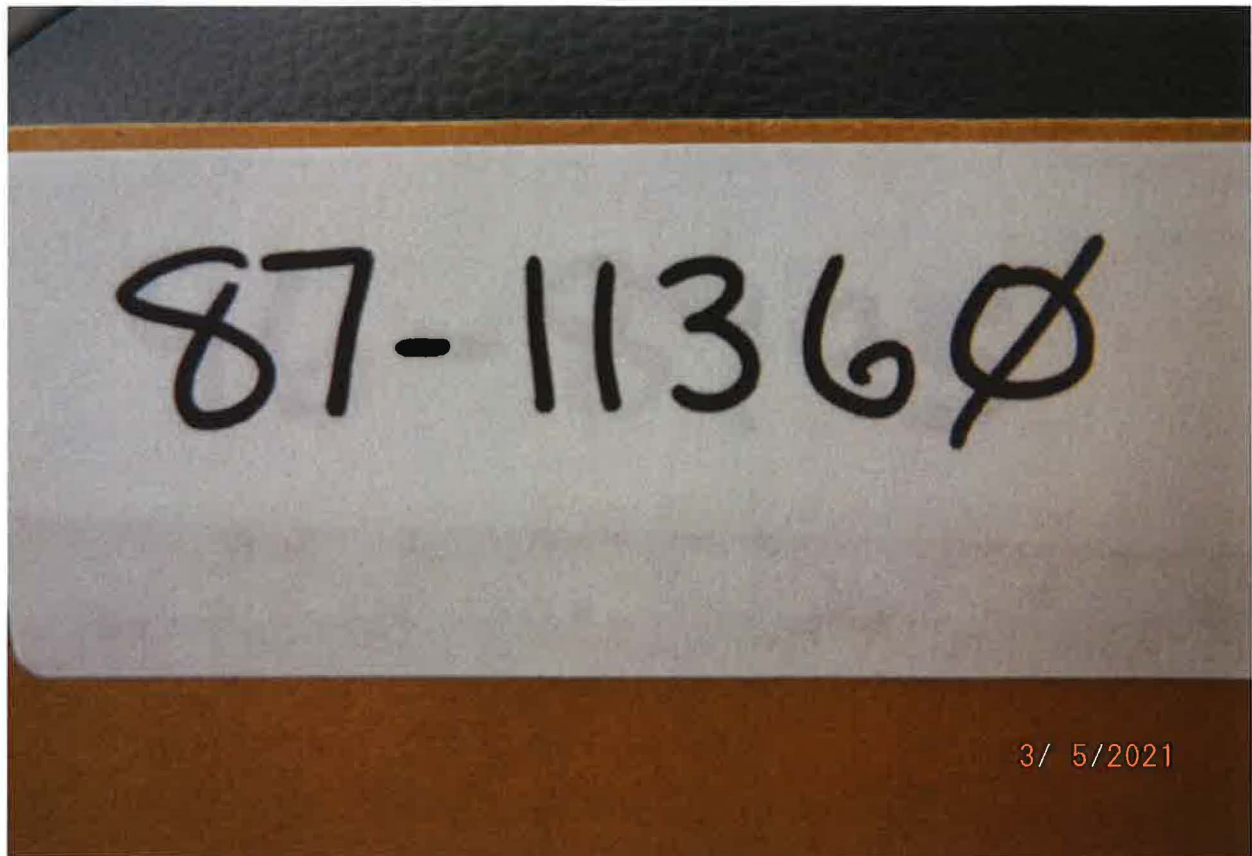
Total Storage Calculations

FILE NUMBER	87-11360
REVIEWER	Luke Bates
DATE	3/8/2021

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.)	6	"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)	4.2	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)	0.8	The "Estimated Seepage Loss" is automatically carried over from the "Seepage Loss" sheet.
Estimated Evaporation Loss (AF)	0.8	The "Estimated Evaporation Loss" is automatically carried over from the "Evaporation Loss" sheet.
Total Volume Required (AF)	5.8	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.



F.E. DATE 3/5/2021



POD – EARTHEN DAM CAPTURES UNNAMED STREAM WATER IN POND



INFLOW – UNNAMED STREAM FLOWS INTO IN-STREAM POND



OVERFLOW DISCHARGE CHANNEL FROM POND



POU – STOCKWATER STORAGE & FIRE PROTECTION STORAGE POND





POU – STOCKWATER STORAGE & FIRE PROTECTION STORAGE POND



STOCK DRINK DIRECTLY FROM POND ALL YEAR



STOCK THAT USE POND

