

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 98-8137
Exam Date: 08/19/2025

1. Current Owner:

REGEHR LOG WORKS LLC 978 TWENTY MILE CREEK RD NAPLES ID 83847 AND
REGEHR TIMBERLANDS LLC 978 TWENTY MILE CREEK RD NAPLES ID 83847

2. Accompanied by: Gary Regehr

Phone No: 208-290-1329

Address: Same as above

Relationship to permit Holder: Permit Holder

3. **SOURCE:**

UNNAMED STREAM
TWENTY MILE CREEK

Tributary

SINKS
BROWN CREEK

Method of Determination: ArcPro GIS and DRG Layer.

B. OVERLAP REVIEW1. Other water rights with the same place of use: YES Overlap

Water Right No.	Source	Purpose of Use	Basis
98-7750	GROUND WATER	MUNICIPAL	LICENSE

Comments: Licensed Right 98-7750 uses ground water source(s) for municipal water use by Cabinet Mountain Water District with a POU service area which overlaps this Permit's POU. There is no concern for overlaps between WRs as the sources are separate and the municipal system doesn't interact with this surface source water right.

2. Other water rights with the same point-of-diversion: YES Overlap

Water Right No.	Source	Purpose of Use	Basis
98-7937	TWENTY MILE CREEK, UNNAMED STREAM	RECREATION, RECREATION STORAGE, FIRE PROTECTION STORAGE, DIVERSION TO STORAGE	LICENSE

Comments: Licensed Right 98-7937 shares the same POD as this Permit along with common water conveyance system which inflows to multiple storage ponds. Due to the shared POD the maximum diversion rate found at time of field exam was 1.49 cfs from which I've deducted the 0.20 cfs maximum diversion rate for 98-7937; by recommending 1.29 cfs maximum diversion rate for this Permit I've negated overlapping water right concerns between the two water rights. Right 98-7937 accounts for Pond No.1 of 5 total and all beneficial use rates/volumes are not additive to the licensing recommendations for the current permit, which accounts for Pond(s) No.2-5. F06 remains on the Permit for licensing purposes annotating the shared POD between Rights.

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

TWENTY MILE CREEK SE¼ SE¼, Sec. 32, Twp 61N, Rge 01E, B.M. BOUNDARY County
UNNAMED STREAM NE¼ SE¼, Sec. 32, Twp 61N, Rge 01E, B.M. BOUNDARY County

Method of Determination: GPS. POD is a 8-inch corrugated poly pipe located at -116°21.3049, 48°35.3669 from Twenty Mile Creek and an earthen pond dam impounding unnamed stream source water located at -116°21.306, 48°35.438.

PLACE OF USE: RECREATION, 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	
61N	01E	32													X			X	

Method of Determination: beneficial use field examination and ArcPro GIS aerial imagery.

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.

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
TWENTY MILE CREEK	N/A	N/A	8-INCH CORRUGATED POLY PIPE WITH METAL PLATE HEADGATE DEVICE	N/A	GRAVITY FLOW – 8-INCH PIPELINE FOR 56 FT WITH 2.25-FT SLOPE
UNNAMED STREAM	N/A	N/A	EARTHEN DAM ON POND No.5 WITH OVERFLOW CHANNEL	N/A	EVALUATED AS IN-STREAM FLOW & INSTREAM POND(s) FOR THIS SOURCE

D. FLOW MEASUREMENTS

1.

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

2. Measurements: I was unable to complete a flow measurement due to the nature of the diverting works installed at the 20-Mile Creek POD and the Unnamed Stream POD not receiving a diversion rate as the earthen dam for Pond No.5 (end of pond(s) flowthrough water system) impounding unnamed stream water is considered to be "in-stream" for the system. A Manning's Equation was developed after evaluating the corrugated pipe at the 20-Mile Creek POD which derived a flow rate of 1.49 cfs.

E. FLOW CALCULATIONS

X Additional Computation Sheets Attached

Measured Method: See attached Manning's Equation calculation worksheet. The Manning's Equation derived a flow rate of 1.49 cfs considering the 8-inch corrugated polyethylene pipe with rise of 2.25 ft over run of 56 ft and slope of 0.0402 ft/ft.

- Permit authorized diversion rate = 1.50 cfs; 0.20 cfs for Recreation beneficial use and 1.50 cfs for Diversion to Storage beneficial use and maximum diversion rate.
- Field Exam resulting diversion rate = 1.49 cfs based on Manning Equation; the recreation flowthrough diversion rate was unable to be evaluated due to several areas of the pond overbanking at time of exam in rolling topography around sub-grade pond bank.

- License recommendation(s) =
 - Diversion to Storage = 1.49 cfs – 0.20 cfs (98-7937's max diversion rate) = **1.29 cfs**.
 - Recreation = **0.20 cfs**; considering attempted 5-gal bucket measurements equaled 163.65 gpm or 0.36 cfs at time of exam, it's reasonable that a rate of 0.20 cfs (98-8137) + 0.09 cfs (98-7937) = 0.29 cfs reaches the lowest pond No.5 overflow devices at some point in the season of use. Based on this logic I've recommended 0.20c cfs which is not considered for combined use between the two WRs.

F. VOLUME CALCULATIONS

1. Volume Calculations for irrigation: N/A
2. Volume Calculations for Other Uses:
 - See attached pond analysis worksheet for storage related beneficial use(s) volume analysis.
 - Recreation (flow through water) annual volume = 0.20cfs x 365 x 1.9835 = **208 af**.

G. NARRATIVE/REMARKS/COMMENTS

I conducted a beneficial use field examination with the applicant, Gary Regehr, which showed Twenty Mile Creek water being diverted along with Unnamed Stream water, which is impounded in 5 excavated ponds. The 4 lowest in elevation of 5 ponds are accounted for on this Permit numbered 2-5, for Recreation Storage, Fire Protection Storage, and Recreation beneficial uses. I've detailed the two water sources and corresponding POD(s) below:

- Twenty Mile (20-Mile) Creek POD – an 8-inch corrugated polyethylene pipe with metal headgate place diverts from the creek outflowing at an earthen ditch conveyance system that overland flows some distance before discharging into the storage pond via a second section of pipe. I was unable to complete flow measurements due to inadequate pipe requirements and a Manning's Equation was developed determining a flow rate of 1.49 cfs or 670 gpm. From the 56-ft run of pipe at the POD I observed both reduced flow with the metal headgate lowered to approximately 2 inches flow allowance in the pipe up to full pipe flow with headgate pipe removed. The applicant has installed a wooden log device in 20-Mile Creek which allows him to add pooled water in late summer to continue diverting during lower flow periods in the creek.
- Unnamed Stream POD – a separate water system user, Twenty Mile Creek Water Assn (Assn), diverts from a higher reach in the 20-Mile Creek drainage and the unnamed stream source designated in this filing is from overflow discharge exiting the Assn's storage facility where it overland flows intercepting the earthen conveyance ditch from the applicant's 20-Mile Creek diversion. Once joined unnamed stream water is co-mingled with 20-Mile Creek water inflowing to the storage ponds. I've assigned the Unnamed Stream POD as the overflow device for pond No.5 (last pond in water system).
 - I was uncertain if the overflow discharge from the Assn's water system should be characterized as an unnamed stream, but there is sufficient distance from overflow point to earthen ditch channel that additional unnamed stream water(s) may contribute to the flow depending on seasonal flow variations. As assigned, I've evaluated the Unnamed Stream as "in-stream" flow which doesn't benefit from a diversion rate prior to impoundment in the storage pond.

- The Permit authorized a maximum diversion rate of 1.50 cfs. The 1.49 cfs evaluated for licensing consists of 0.20 cfs associated with prior Right 98-7937, which has been deducted from my flow calculation resulting in a Diversion to Storage rate of 1.29 cfs for licensing purposes. I don't recommend combined use limitations between 98-7937 and 98-8137 as deducting the prior WRs rate mitigates stacking of water rights and negates overlapping water right concerns based on diversion rates.

From the 20-Mile Creek conveyance ditch water inflows by buried pipes into pond #1 (accounted for under Right 98-7937) and pond #2, which is the first pond associated with this Permit. I attempted to gain 5-gallon bucket measurements from the two corrugated pipes but the fill rate into pond #1 was less than 5 seconds making the measurement void for licensing purposes. I did utilize the measurement toward evaluating inflow to both ponds in relation to the Recreation beneficial use. The Permit authorized Recreation flow through water with 0.20 cfs rate. Prior WR 98-7937 was licensed with 0.09 cfs Recreation beneficial use flow rate; the combined total between two WRs equals 0.29 cfs for consideration toward licensing. At time of exam, I found that the two inflowing pipes flow rate(s) were 164 gpm or 0.36 cfs.

It's reasonable to assume that with 5 ponds which have high seepage rates due to excavation in gravel substrates, a proportionate amount of the 0.36 cfs is lost as it flows through the 5 stepped ponds prior to overflow discharging at pond #5. It's not possible to accurately determine the seepage on a daily basis and I recommend licensing this Permit's 0.20 cfs for Recreation flow through and have evaluated the prior WR's 0.09 cfs as being additive which negates combined use consideration toward licensing this Permit. At time of exam in August, late in summer, water was spilling from multiple low areas along the western extent of pond #5 making it impossible to accurately account for all the flow through waters. If a water measuring district were established some additional bank development would be required and/or additional spillways to facilitate measuring devices for the Recreation beneficial use.

Recreation flow through water overflows each of 4 ponds leading to the last pond in series by natural earthen flow channels that are not uniform which negate the ability to calculate flow rates. Once flow-through water spills from pond #5 it fans naturally into a small forest/field area where it sinks before rejoining Twenty Mile Creek. I've evaluated the Recreation use as consumptive because there isn't a dedicated flow channel back to the source, but due to the confining draw in this reach of Twenty Mile Creek it is likely the sinking flow through water in shallow substrate is in a gaining reach for the stream. I do recommend the Right Holder work to develop a common overflow ditch to channel water back to the stream in the future but can't mandate it as part of the Permit's approval.

The Recreation POU was designated as the 4 storage ponds which make up the other storage beneficial use POUs on the Permit, but the entirety of the water system incorporates pond #1 covered under 98-7937. The annual volume recommended equals **144 af** based on flowthrough occurring year-round to support fish stocked in the ponds.

The Recreation Storage and Fire Protection Storage POUs account for ponds 2, 3, 4, and 5 which are stocked with fish and provide stored water in preparation to suppress any active fires. I used Arc Pro GIS to designate the POU(s) and computed storage volume per pond (attached pond analysis worksheets). The Permitted **64 af** is being recommended for licensing each of the storage beneficial uses which are not additive toward maximum diversion volume which equals **208.0 af**. The pond(s) existed at time of application which facilitated accurate pond volume computations to be developed prior to permit approval which supports using similar pond analysis results for licensing purposes. Pond analysis sheet data described below:

- Pond #2: surface area of 0.16 acres, a maximum depth of 10 ft, an average depth of 4 ft, seepage of 11.7 af and evaporative loss rate equal to 0.2 af. The total volume required equals 12.5 af.
- Pond #3: surface area of 0.12 acres, a maximum depth of 10 ft, an average depth of 4 ft, seepage of 8.8 af and evaporative loss rate equal to 0.1 af. The total volume required equals 9.4 af.
- Pond #4: surface area of 0.3 acres, a maximum depth of 15 ft, an average depth of 6 ft, seepage of 21.9 af and evaporative loss rate equal to 0.3 af. The total volume required equals 24.0 af.
- Pond #5: surface area of 0.23 acres, a maximum depth of 12 ft, an average depth of 4.8 ft, seepage of 16.8 af and evaporative loss rate equal to 0.2 af. The total volume required equals 18.1 af.
- Total volume determined by the sum of four ponds = 12.5 af + 9.4 af + 24.0 af + 18.1 af = 64.0 af.

During licensing review, I removed condition 029 as no formal screen requirements were requested by IDFG during the permitting process. I removed condition 220 based on verbal directive from the Shelley Keen – Deputy Director. All other conditions on the Permit shall be carried forward to the license. Overlapping water right concerns have been discussed on PG 1 of this report and stacking concerns between the two WRs held by the Permit Holder have been mitigated in the licensing process for 98-8137. There are no outstanding overlapping WR concerns toward licensing 98-8137

Have conditions of permit approval been met? X 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>
RECREATION	01/01 to 12/31	0.20 CFS	144.0 AF
RECREATION STORAGE	01/01 to 12/31		64.0 AF
FIRE PROTECTION STORAGE	01/01 to 12/31		64.0 AF
DIVERSION TO STORAGE	01/01 to 12/31	1.29 CFS	

Totals: 1.29 CFS 208.0 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 – Sr Water Resource Agent

Field Examiner's Name ZBD Date 01/30/2026
 Reviewer Michelle Richman Date 8/7/2026

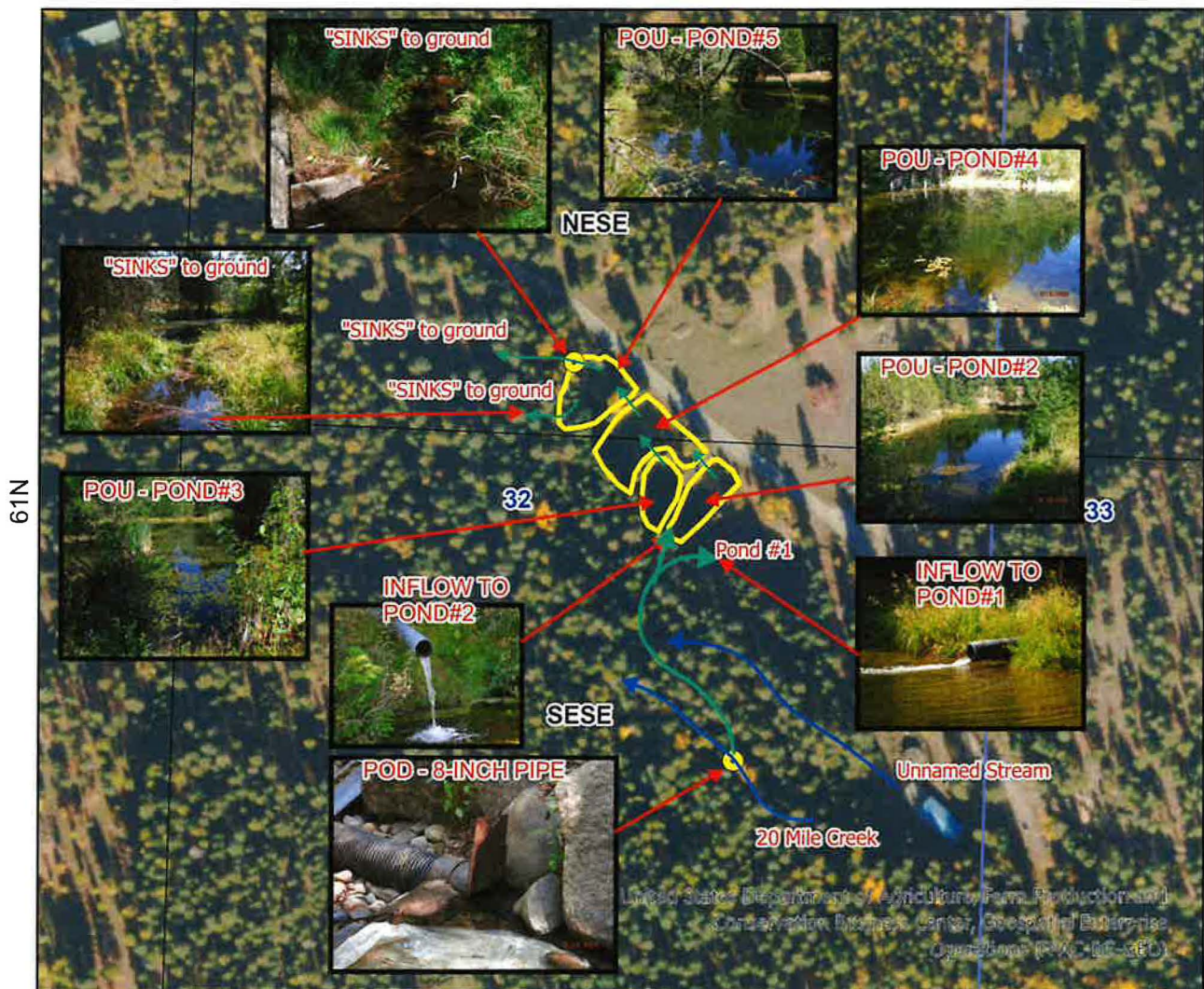
State of Idaho
Department of Water Resources

Attachment to Field Exam

98-8137

This map depicts the DIVERSION TO STORAGE, RECREATION, RECREATION STORAGE, and FIRE PROTECTION STORAGE system diagram.

01E



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



0 0.04 0.09 0.14 0.18 Miles

98-8137

BENEFICIAL USE FIELD EXAMINATION MANNING EQUATION

Manning's Equation Calculator for Flow Rate in a Circular Conduit Flowing Full

S = 0.0402 ft/ft

n = 0.021 manning's coefficient

d = 8.0 pipe diameter (inches)

D = 0.67 pipe diameter (feet)

r = 0.33 pipe radius (feet)

A = 0.35 area (ft²)

WP = 2.09 wetted perimeter (ft)

R = 0.17 hydraulic radius (ft)

Q = 1.49 flow rate (CFS)

Channel Slope Slope Options

☐ Manual Entry ☒ Slope Calculator

Slope Calculator

Rise = 2.25 feet

Run = 56 feet

Slope, S = 0.0402 ft/ft

Pipe Material, (n): corrugated polyethylene

Pipe Diameter (inches) 8.0 inches

Table 10—Manning's n Values for Culverts.*

Type of Culvert	Roughness or Corrugation	Manning's n	Reference
Concrete Pipe	Smooth	0.010-0.011	(64, 66, 67, 70)
Concrete Boxes	Smooth	0.012-0.015	(23)
Spiral Rib Metal Pipe	Smooth	0.012-0.013	(65, 69)
Corrugated Metal Pipe, Pipe-Arch and Box (Annular and Helical corrugations -- see Figure B-3, Manning's n varies with barrel size)	68 by 13 mm 2-2/3 by 1/2 in Annular	0.022-0.027	(25)
	68 by 13 mm 2-2/3 by 1/2 in Helical	0.011-0.023	(25, 68)
	150 by 25 mm 8 by 1 in Helical	0.022-0.025	(25)
	125 by 25 mm 5 by 1 in	0.025-0.026	(25)
	75 by 25 mm 3 by 1 in	0.027-0.028	(25)
	150 by 50 mm 6 by 2 in Structural Plate	0.033-0.035	(25)
	230 by 64 mm 9 by 2-1/2 in Structural Plate	0.033-0.037	(25)
Corrugated Polyethylene	Smooth	0.009-0.015	(71, 72)
Corrugated Polyethylene	Corrugated	0.018-0.025	(73, 74)
Polyvinyl chloride (PVC)	Smooth	0.009-0.011	(75, 76)

*NOTE: The Manning's n values indicated in this table were obtained in the laboratory and are supported by the provided reference. Actual field values for culverts may vary depending on the effect of abrasion, corrosion, deflection, and joint conditions.

Prepared on 8/20/2025 – L.Bates, Sr Water Resource Agent

Total Storage Calculations

FILE NUMBER	98-8137
REVIEWER	LUKE BATES
DATE	8/20/2025

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

POND #2

Surface Area (AC.)	0.16	"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)	0.64	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)	11.7	The "Estimated Seepage Loss" is automatically carried over from the "Seepage Loss" sheet.
Estimated Evaporation Loss (AF)	0.2	The "Estimated Evaporation Loss" is automatically carried over from the "Evaporation Loss" sheet.
Total Volume Required (AF)	12.5	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.

Total Storage Calculations

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User Input
Calculated value
Formula Explanations

POND #3

Surface Area (AC.)	0.12	"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)	0.48	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)	8.8	The "Estimated Seepage Loss" is automatically carried over from the "Seepage Loss" sheet.
Estimated Evaporation Loss (AF)	0.1	The "Estimated Evaporation Loss" is automatically carried over from the "Evaporation Loss" sheet.
Total Volume Required (AF)	9.4	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.

Total Storage Calculations

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User Input
Calculated value
Formula Explanations

POND #4

Surface Area (AC.)	0.3	"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)	1.8	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)	21.9	The "Estimated Seepage Loss" is automatically carried over from the "Seepage Loss" sheet.
Estimated Evaporation Loss (AF)	0.3	The "Estimated Evaporation Loss" is automatically carried over from the "Evaporation Loss" sheet.
Total Volume Required (AF)	24.0	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.

Total Storage Calculations

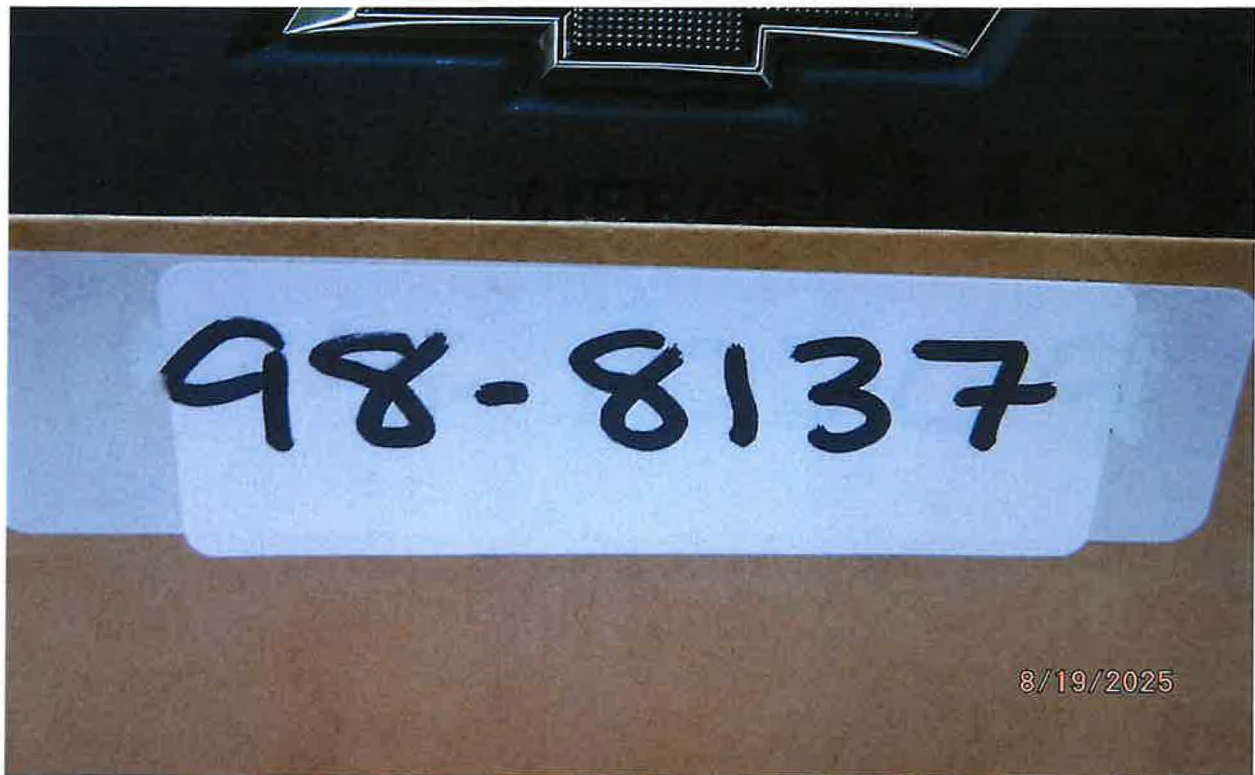
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User Input
Calculated value
Formula Explanations

POND #5

Surface Area (AC.)	0.23	"Surface Area" is automatically carried over from the "Seepage Loss" sheet.
Average Pond Depth (FT.)	4.8	"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)	1.1	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	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)	16.8	The "Estimated Seepage Loss" is automatically carried over from the "Seepage Loss" sheet.
Estimated Evaporation Loss (AF)	0.2	The "Estimated Evaporation Loss" is automatically carried over from the "Evaporation Loss" sheet.
Total Volume Required (AF)	18.1	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.



BENEFICIAL USE FIELD EXAM DATE 8/19/2025



POD – TWENTY MILE CREEK DIVERSION & DIVERSION TO STORAGE – 8 – INCH
CORRUGATED POLY PIPE WITH STEEL PLATE HEADGATE DEVICE



56-FT OF 8-INCH CORRUGATED POLY PIPE TRANSITIONS TO OPEN DITCH SERVING AS DIVERSION TO STORAGE CONVEYANCE SYSTEM OFF TWENTY MILE CREEK



CONVEYANCE DITCH ROUTES THROUGH FOREST FROM POD-TO-POU



POD – UNNAMED STREAM CONFLUENCE WITH CONVEYANCE DITCH – DITCH
WAS CUT TO INTERCEPT STREAM FLOW



CONVEYANCE DITCH DOWN REACH OF CONFLUENCE WITH UNNAMED STREAM



RECREATION POU – INFLOW TO EASTERN MOST STORAGE POND #1 (COVERED UNDER RIGHT 98-7937)



INFLOW 5-GAL BUCKET WAS MEASURED AT 2.94 SECONDS



RECREATON POU – FLOWTHROUGH WATER OVERFLOW EARTHEN CHANNEL
FROM EASTERN POND #1 TO NEXT POND #2 IN 5 POND SERIES



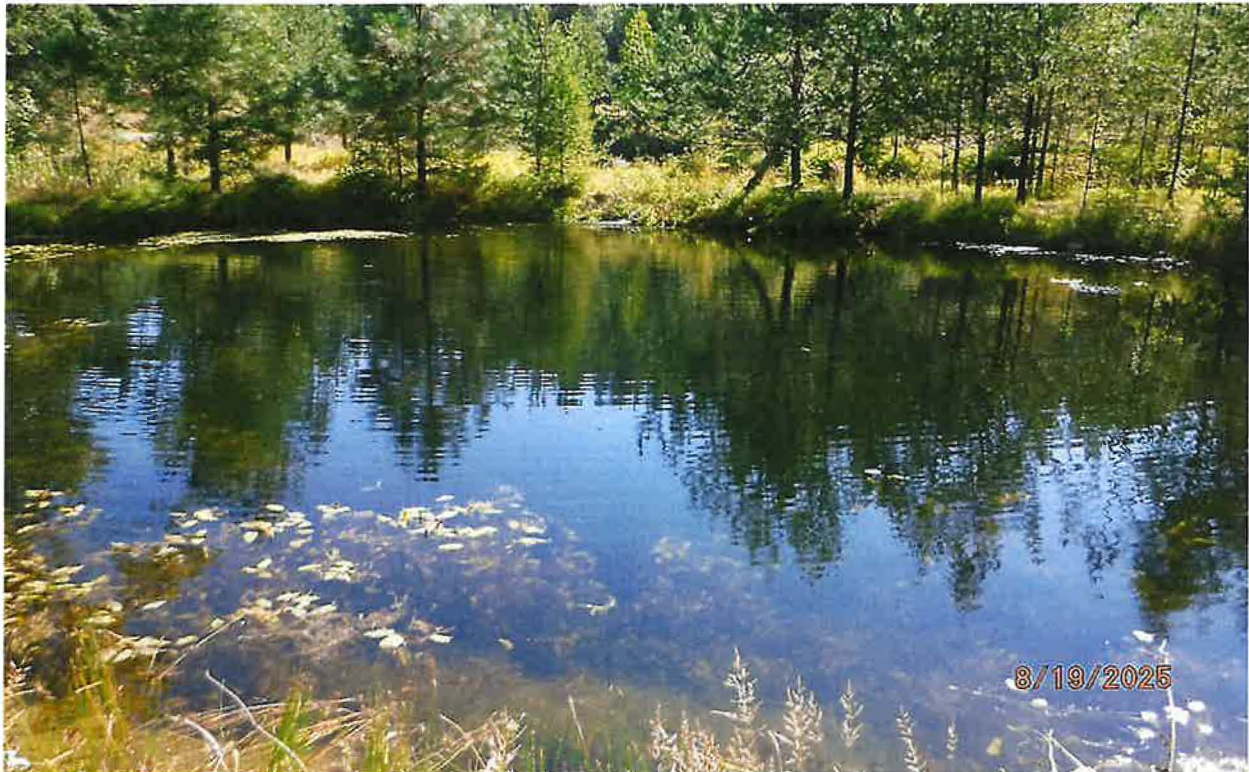
RECREATION POU – INFLOW FROM CONVEYANCE DITCH TO STORAGE **POND #2**;
INFLOW 5-GAL BUCKET WAS MEASURED AT 13.55 SECONDS



RECREATION STORAGE & FIRE PROTECTION STORAGE POU – POND #2 OUT OF 5;
FISH POND HISTORICALLY STOCKED BY IDFG



RECREATION POU – OVERFLOW NATURAL CHANNEL DISCHARGES FROM POND
#2 TO POND #3 IN SERIES



RECREATION STORAGE & FIRE PROTECTION STORAGE POU – **POND #3** OUT OF 5;
FISH POND HISTORICALLY STOCKED BY IDFG



RECREATION POU – OVERFLOW NATURAL CHANNEL DISCHARGES FROM POND
#3 TO POND #4 IN SERIES



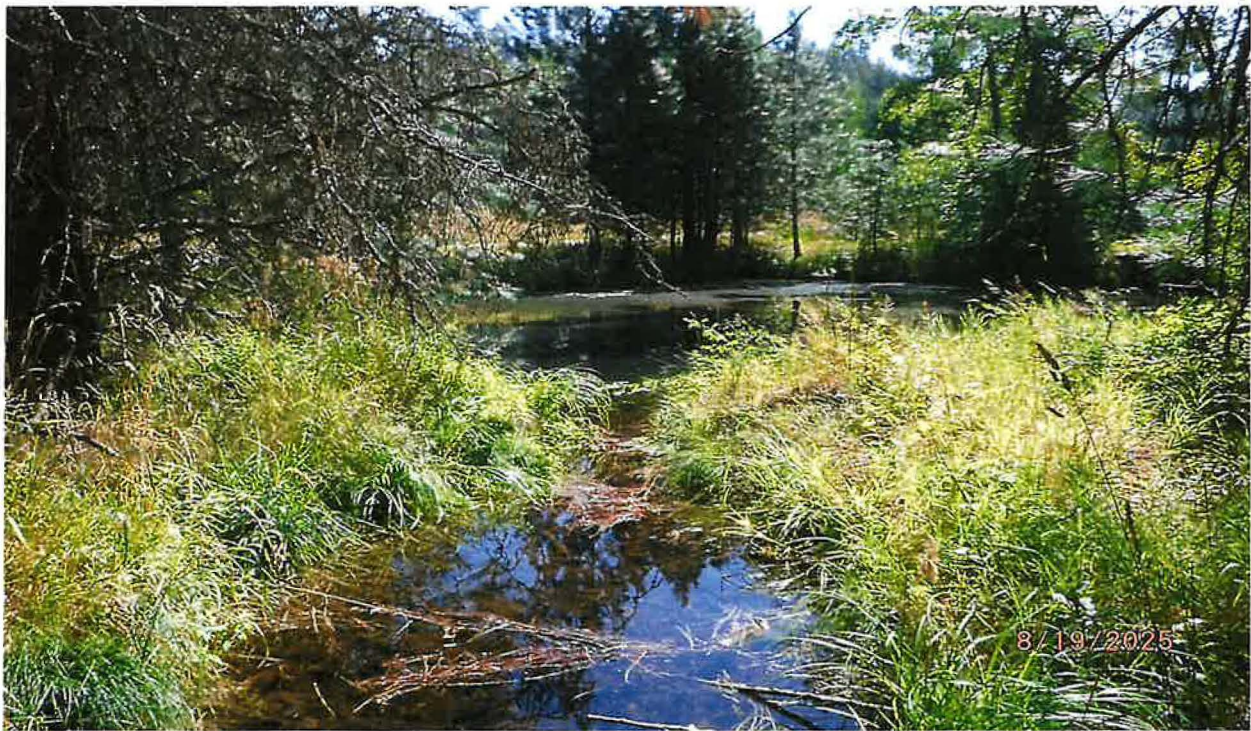
RECREATION STORAGE & FIRE PROTECTION STORAGE POU – **POND #4** OUT OF 5;
FISH POND HISTORICALLY STOCKED BY IDFG



RECREATION POU – OVERFLOW NATURAL CHANNEL DISCHARGES FROM POND
#4 TO POND #5 IN SERIES



RECREATION STORAGE & FIRE PROTECTION STORAGE POU – POND #5 OUT OF 5;
FISH POND HISTORICALLY STOCKED BY IDFG



RECREATION POU - SECONDARY OVERFLOW DEVICE POND #5 – NATURAL LOW
POINT ALLOWS OVERFLOW DISCHARGE TO FLOW INTO FOREST AND SINK
NATURALLY (SOUTHWESTERN CORNER OF POND)



RECREATION POU – PRIMARY OVERFLOW DEVICE POND #5 – 2-FT WIDE CHANNEL
BANDED WITH CONCRETE ALLOWS OVERFLOW DISCHARGE TO FLOW IN
EARTHEN CHANNEL A SHORT DISTANCE INTO A FIELD WHERE IT SINKS
(NORTHWEST BANK OF POND)



END OF OVERFLOW WATER FROM POND #5 SINKING TO GROUND PRIOR TO
REACHING TWENTY MILE CREEK