

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 94-08994

Exam Date: 6/30/2017

1. Current Owner:
ENAVILLE GOAT FARM LLC PO BOX 327 KINGSTON ID 83839

2. Accompanied by: Edward Anderson
Relationship to Permit Holder: Owner

3. **SOURCE:**
SPRINGS

TRIBUTARY:
BEAR CREEK

B. OVERLAP REVIEW

1. Other water rights with the same place of use: None
2. Other water rights with the same point-of-diversion: None

C. DIVERSION AND DELIVERY SYSTEM**1. LOCATION OF POINT(S) OF DIVERSION:**

SPRINGS SE¼SW¼NE¼ Sec. 28, Twp 49N, Rge 02E, B.M. SHOSHONE County

SPRINGS SW¼SW¼NE¼ Sec. 28, Twp 49N, Rge 02E, B.M. SHOSHONE County

SPRINGS SW¼SW¼NE¼ Sec. 28, Twp 49N, Rge 02E, B.M. SHOSHONE County

Method of Determination: Maps and GPS.

POD 1 (Pond 1) - 116° 12.400, 47° 34.011

POD 2 (Pond 2) - 116° 12.512, 47° 33.969

POD 3 (Pond 3) - 116° 12.542, 47° 33.938

2.

PLACE OF USE: FIRE PROTECTION STORAGE

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
49N	02E	28			X											X			

PLACE OF USE: RECREATION STORAGE

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
49N	02E	28			X											X			

PLACE OF USE: WILDLIFE STORAGE

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
49N	02E	28			X											X			

PLACE OF USE: STOCKWATER STORAGE

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
49N	02E	28			X											X			

Method of Determination: Google Earth and Arc map

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					

*Code to correspond with No. on map and aerial photo

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

_____ Additional Computation Sheets Attached

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: SEE ATTACHED POND ANALYSIS SHEETS

G. NARRATIVE/REMARKS/COMMENTS

Field exam with the Edward Anderson, the applicant, showed 3 ponds fed by springs in the bottom of each pond. The ponds were referenced on the application as 1, 2, & 3 which I will do during licensing.

Pond 1 was the smallest of all 3 with a surface area 0.13 acres with an average depth of 4 feet. Mr. Anderson said there was a spring or springs located in the bottom and that the pond never went dry and stayed full year round. Pond had an overflow culvert that fed Bear Creek.

Pond 2 had a surface area of 0.25 acres with an average depth of 5.5 feet. Pond has springs located in the bottom and stayed full year round. Overflow culvert led into pond 3.

Pond 3 was the largest with a surface area of 1.7 acres with an average depth of 9 feet. Pond has springs located in the bottom and had a substantial amount of water overflowing down a spillway into Bear Creek. Pond 3 had 2 overflows, a main spillway and a backup culvert, all flowing into Bear Creek.

When all the dimensions of the ponds are entered into the pond analysis sheet, the total storage amount is 19.7 acre-feet. This includes 17.2 acre-feet for the initial filling and 2.5 acre-feet for evaporation. Seepage will not be given because the springs are located in the bottom of each pond. Applicant had goats on the property that would drink out of the ponds while grazing. All of the ponds had fish in them and were used for swimming and boating. No overlap concern during license review.

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	19.7 AF
RECREATION STORAGE	01/01 to 12/31	19.7 AF
FIRE PROTECTION STORAGE	01/01 to 12/31	19.7 AF
WILDLIFE STORAGE	01/01 to 12/31	19.7 AF
<u>Totals:</u>		19.70 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

Field Examiner's Name Adam Fushard Date 8-17-2017

Reviewer _____ Date _____

Total Storage Calculations (Pond 1)

FILE NUMBER	94-8994
REVIEWER	Adam Frederick
DATE	8/16/2017

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.)	0.13	"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)	0.5	Pond Capacity is calculated by multiplying the Pond Surface Area by the Average Pond Depth. If you know the capacity, divide the capacity by surface area and enter the average pond depth in the space above. Note: If pond capacity is determined using a method shown on the "Pond Capacity" sheet, the user may need to modify the value of "Pond Capacity" (cell B9) manually. Note that if the value is modified manually, the formula will be altered for future use.
Multiple Fill Volume Above Initial Fill to Fulfill From Storage Needs- "Multiple Fills" (AF)	0	The "Multiple Fill Volume Above Initial Fill" is the acre-feet of water required to meet a <i>from storage</i> component if the <i>from storage</i> component exceeds a one time fill. This section should not include the amount of water needed to fill the pond initially or the amount of water needed to maintain the pond level due to evaporation or seepage. For example: if a pond has a capacity of 5 acre feet and 2.5 acre feet of seepage and evaporation, but the pond is used for irrigation that requires 10 acre feet of from storage for the irrigation use, then you would insert 5 acre feet into this location (10 acre feet needed - 5 acre feet from the initial fill = 5 acre feet of additional storage needed). Note: You must have a "From Storage" component exceeding the initial fill on the permit to include a volume in this space.
Estimated Seepage Loss (AF)	0.0	The "Estimated Seepage Loss" is automatically carried over from the "Seepage Loss" sheet.
Estimated Evaporation Loss (AF)	0.2	The "Estimated Evaporation Loss" is automatically carried over from the "Evaporation Loss" sheet.
Total Volume Required (AF)	0.7	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 (Pond 2)

FILE NUMBER	94-8994
REVIEWER	Adam Frederick
DATE	8/16/2017

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.)	0.25	"Surface Area" is automatically carried over from the "Seepage Loss" sheet.
Average Pond Depth (FT.)	5.5	"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)	1.4	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)	0	The "Multiple Fill Volume Above Initial Fill" is the acre-feet of water required to meet a <i>from storage</i> component if the <i>from storage</i> component exceeds a one time fill. This section should not include the amount of water needed to fill the pond initially or the amount of water needed to maintain the pond level due to evaporation or seepage. For example: if a pond has a capacity of 5 acre feet and 2.5 acre feet of seepage and evaporation, but the pond is used for irrigation that requires 10 acre feet of from storage for the irrigation use, then you would insert 5 acre feet into this location (10 acre feet needed - 5 acre feet from the initial fill = 5 acre feet of additional storage needed). Note: You must have a "From Storage" component exceeding the initial fill on the permit to include a volume in this space.
Estimated Seepage Loss (AF)	0.0	The "Estimated Seepage Loss" is automatically carried over from the "Seepage Loss" sheet.
Estimated Evaporation Loss (AF)	0.3	The "Estimated Evaporation Loss" is automatically carried over from the "Evaporation Loss" sheet.
Total Volume Required (AF)	1.7	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 (Pond 3)

FILE NUMBER	94-8994
REVIEWER	Adam Frederick
DATE	8/16/2017

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User Input
Calculated value
Formula Explanations

Surface Area (AC.)	1.7	"Surface Area" is automatically carried over from the "Seepage Loss" sheet.
Average Pond Depth (FT.)	9	"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)	15.3	Pond Capacity is calculated by multiplying the Pond Surface Area by the Average Pond Depth. If you know the capacity, divide the capacity by surface area and enter the average pond depth in the space above. Note: If pond capacity is determined using a method shown on the "Pond Capacity" sheet, the user may need to modify the value of "Pond Capacity" (cell B9) manually. Note that if the value is modified manually, the formula will be altered for future use.
Multiple Fill Volume Above Initial Fill to Fulfill From Storage Needs- "Multiple Fills" (AF)	0	The "Multiple Fill Volume Above Initial Fill" is the acre-feet of water required to meet a <i>from storage</i> component if the <i>from storage</i> component exceeds a one time fill. This section should not include the amount of water needed to fill the pond initially or the amount of water needed to maintain the pond level due to evaporation or seepage. For example: if a pond has a capacity of 5 acre feet and 2.5 acre feet of seepage and evaporation, but the pond is used for irrigation that requires 10 acre feet of from storage for the irrigation use, then you would insert 5 acre feet into this location (10 acre feet needed - 5 acre feet from the initial fill = 5 acre feet of additional storage needed). Note: You must have a "From Storage" component exceeding the initial fill on the permit to include a volume in this space.
Estimated Seepage Loss (AF)	0.0	The "Estimated Seepage Loss" is automatically carried over from the "Seepage Loss" sheet.
Estimated Evaporation Loss (AF)	2.0	The "Estimated Evaporation Loss" is automatically carried over from the "Evaporation Loss" sheet.
Total Volume Required (AF)	17.3	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.

State of Idaho
Department of Water Resources
Attachment to Field Exam
94-8994

RECREATION STORAGE, STOCKWATER STORAGE, FIRE PROTECTION STORAGE, and WILDLIFE STORAGE



-  Point of Diversion
-  Place Of Use Boundary
-  Townships
-  PLS Sections

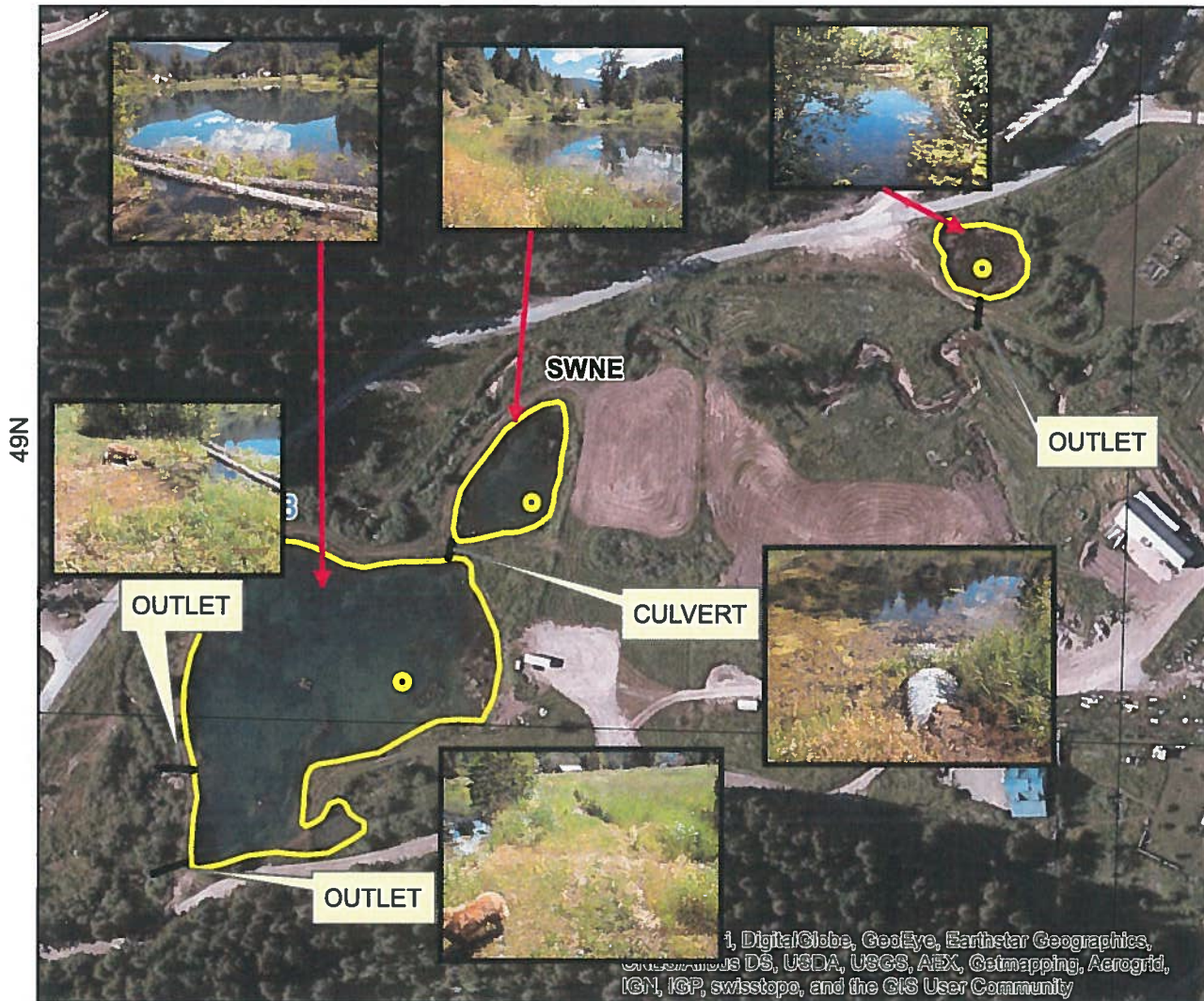
0 0.035 0.07 0.14 Miles



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SYSTEM DIAGRAM

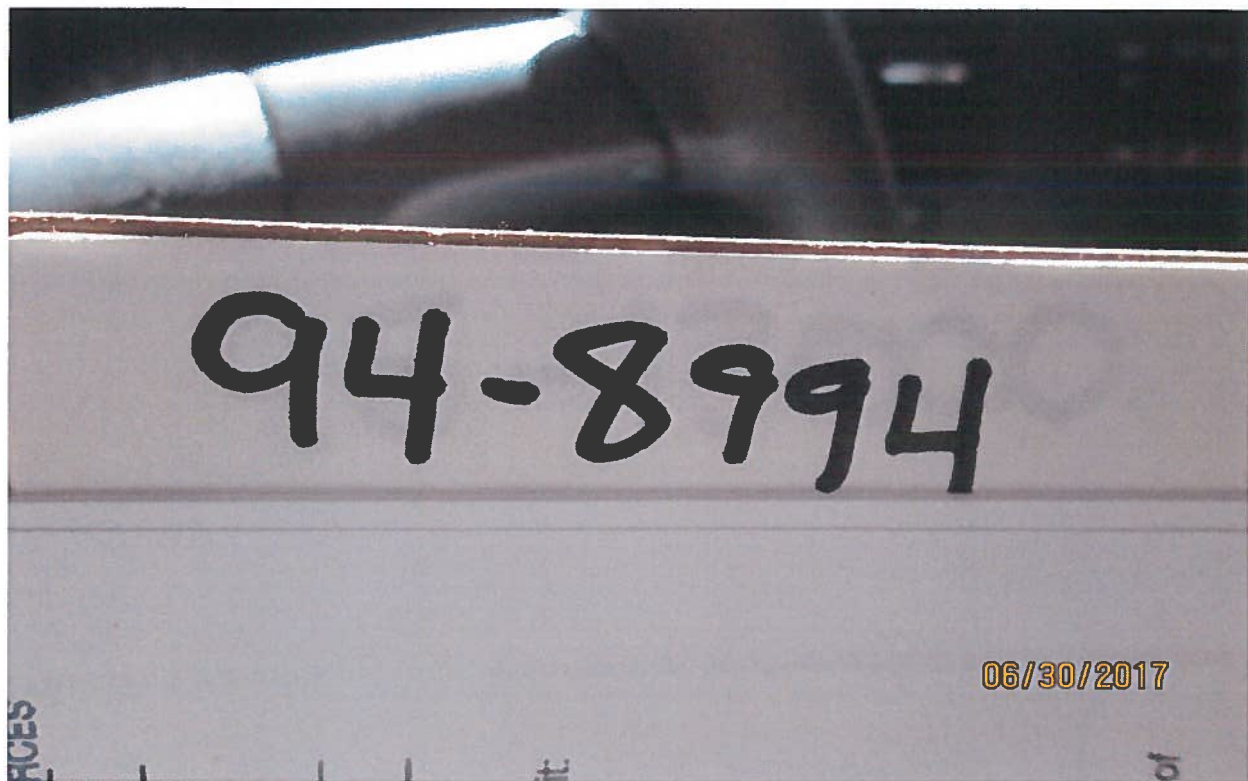
02E



- Point of Diversion
- Place Of Use Boundary
- Townships
- PLS Sections

0 0.0225 0.045 0.09 Miles





Pond 1, as referenced in application and will be on license. Pond surface area was 0.13 acres with an average depth of 4 feet. Spring was located in the bottom of the pond.



Pond 1 looking toward overflow culvert into Bear Creek.



Pond 2, as referenced in application and will be on license. Pond surface area was 0.25 acres with an average depth of 5.5 feet. Spring was located in the bottom of the pond.



Pond 2 place of use.



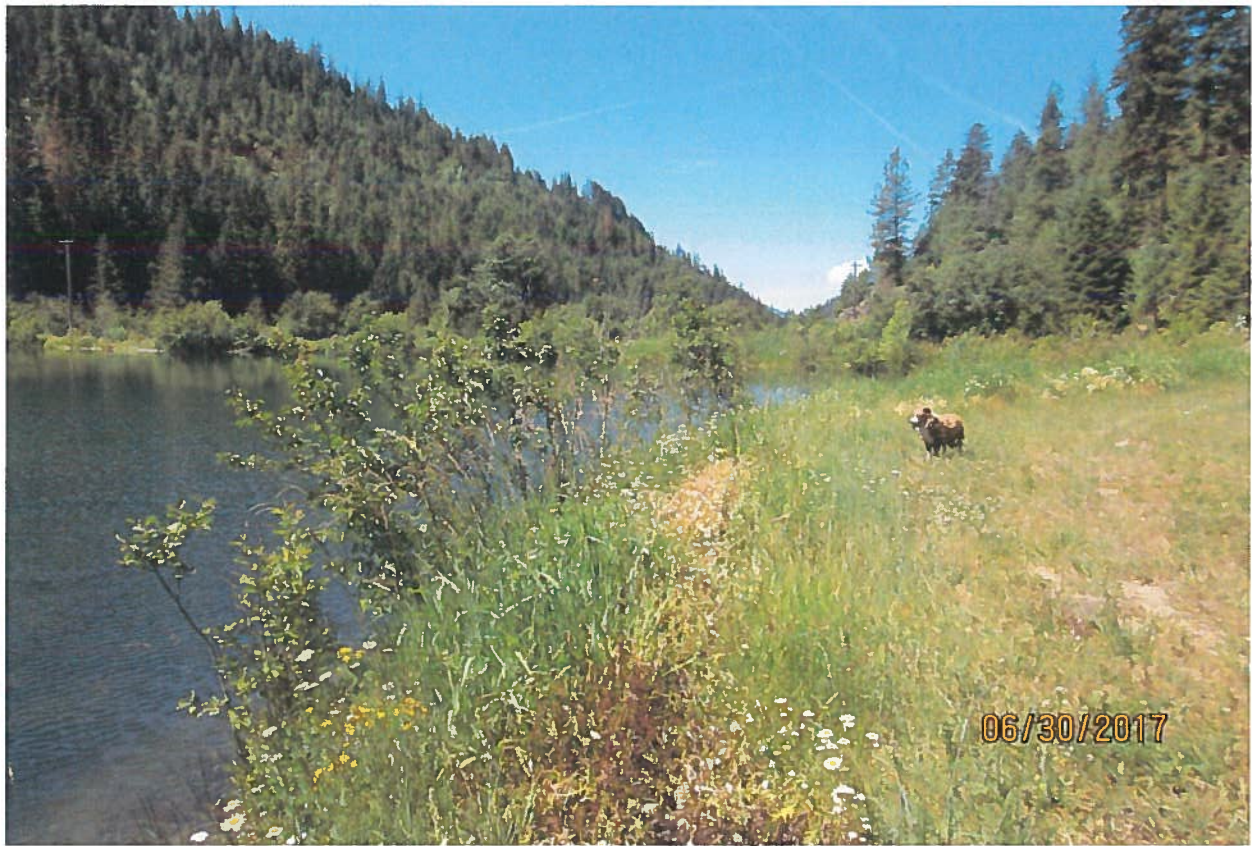
Overflow culvert in between pond 2 & 3. View is looking at pond 2.



Overflow culvert in between pond 2 & 3. View is looking at pond 3.



Pond 3, as referenced in application and will be on license. Pond surface area was 1.7 acres with an average depth of 9 feet. Spring was located in the bottom of the pond.



Pond 3 place of use.





1 of 2 outlets from pond 3 into Bear Creek.



2nd overflow from pond 3 into Bear Creek.



View looking down the 2nd overflow from pond 3 into Bear Creek.



View of pond 3 place of use.



Applicant had goats that would use ponds for water when grazing near them.

