

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 97-07279
Exam Date: 10/19/2016

1. Current Owner:
NOLAN CLARK PO BOX 1334 PRIEST RIVER ID 83856
And
ABRAM CLARK PO BOX 1334 PRIEST RIVER ID 83856
And
EVA MASIN PO BOX 1334 PRIEST RIVER ID 83856
2. Accompanied by: Daniel Clark, former owner and father of current owners
3. **SOURCE:** UNNAMED STREAM **TRIBUTARY:** ALDER CREEK

B. OVERLAP REVIEW

1. Other water rights with the same place of use: 97-7276
2. Other water rights with the same point-of-diversion: None

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

UNNAMED STREAM NW¼NW¼NE¼ Sec. 19, Twp 56N, Rge 04W, B.M. BONNER County

Method of Determination: GPS and maps. POD location at 48° 11.664, 116° 52.790

2.

PLACE OF USE: IRRIGATION FROM 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	
56N	04W	19		0.7															.7

Total Acres: 4

PLACE OF USE: IRRIGATION 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	
56N	04W	19		X															

Method of Determination: Google Earth and Arc map.

3.

Delivery System Diagram Attached (required). Indicate all major components and distances between components.

X

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

*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

2. Measurements:

E. FLOW**CALCULATIONS**

Measured Method:

_____ Additional Computation Sheets Attached

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V_{IR} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 0.7 \text{ AC} \times 3 \text{ AF} = 2.1 \text{ AF}$$

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

$$V = \text{Smaller of } V_{IR} \text{ and } V_{DR} =$$

2. Volume Calculations for Other Uses: POND SIZE

POND SIZE IS 0.19 ACRES WITH AVERAGE DEPTH OF 10 FEET. ACTIVE STORAGE CAPACITY OF 1.9 AF. EVAPORATION FOR POND THIS SIZE IS EQUAL TO 0.2 ACRE FEET.

G. NARRATIVE/REMARKS/COMMENTS

Field exam with father of current owners of permit Mr. Clark showed a pond with surface area of 0.19 acres with average depth of 10 feet. Dam height was around 10 feet with pond excavated in areas to be below dam height. Water would flow into pond from unnamed stream directly so there is no need to have diversion to storage on the license. There was a channel on the SE side of the dam that would take overflow water from pond and return the water to Alder Creek. Applicant did not use the unnamed stream for irrigation because there was not enough water to do so. Irrigation as a cfs will be removed from license. Applicant had a 4 inch pipe in SW corner of the pond that was used mainly to gravity feed water to orchards and garden area. The system also had the ability to put a pump on if sprinklers were need for irrigation. Applicant had frost free hydrants hooked up to system in various locations and drip irrigation. Irrigation was mainly on the SW side of the property equaling 0.7 acres. The unnamed stream does not have a large surface area for the source of its water. At time of exam in October, the unnamed stream was still not flowing and applicant said it usually only flows during the spring time. Because of the acreage irrigated and the size of the pond, 2.1 acre feet will be given at licensing. This will allow for the initial filling of the pond, an additional 4 acre feet can be supplied with water right 97-7276 from Alder Creek.

Water Right 97-7276 was issued in 2008 for irrigation of 2.8 acres and 4 acre feet of irrigation storage and irrigation from storage for the same land. The right was issued for 12.4 acre feet when it should have only been issued for 8.4 acre feet to match the irrigation given at time of licensing. Right 97-7279 adds 0.1 acres that wasn't covered under right 97-7276 which brings total amount of acres up to 2.9 total acres. Overlap condition will allow 2.1 acre feet from the unnamed stream but when both rights are combined they cannot divert more than 12.4 acre feet.

Have conditions of permit approval been met? X Yes No

H. RECOMMENDATIONS

1. Recommended Amounts

BENEFICIAL USE	PERIOD OF USE	DIVERSION RATE	ANNUAL VOLUME
IRRIGATION STORAGE	01/01 to 12/31		2.1 AF
IRRIGATION FROM STORAGE	04/01 to 10/31		2.1 AF
<u>Totals:</u>			2.10 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

Field Examiner's Name Adam Friedman Date 12-29-2016

Reviewer Morgan Case Date 1/12/2016



Google earth

feet
meters

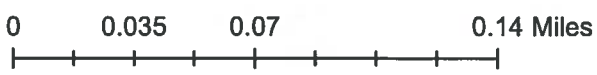


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IRRIGATION FROM STORAGE



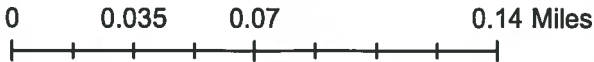
- Point of Diversion
- Place Of Use Boundary
- Townships
- PLS Sections



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IRRIGATION STORAGE

04W



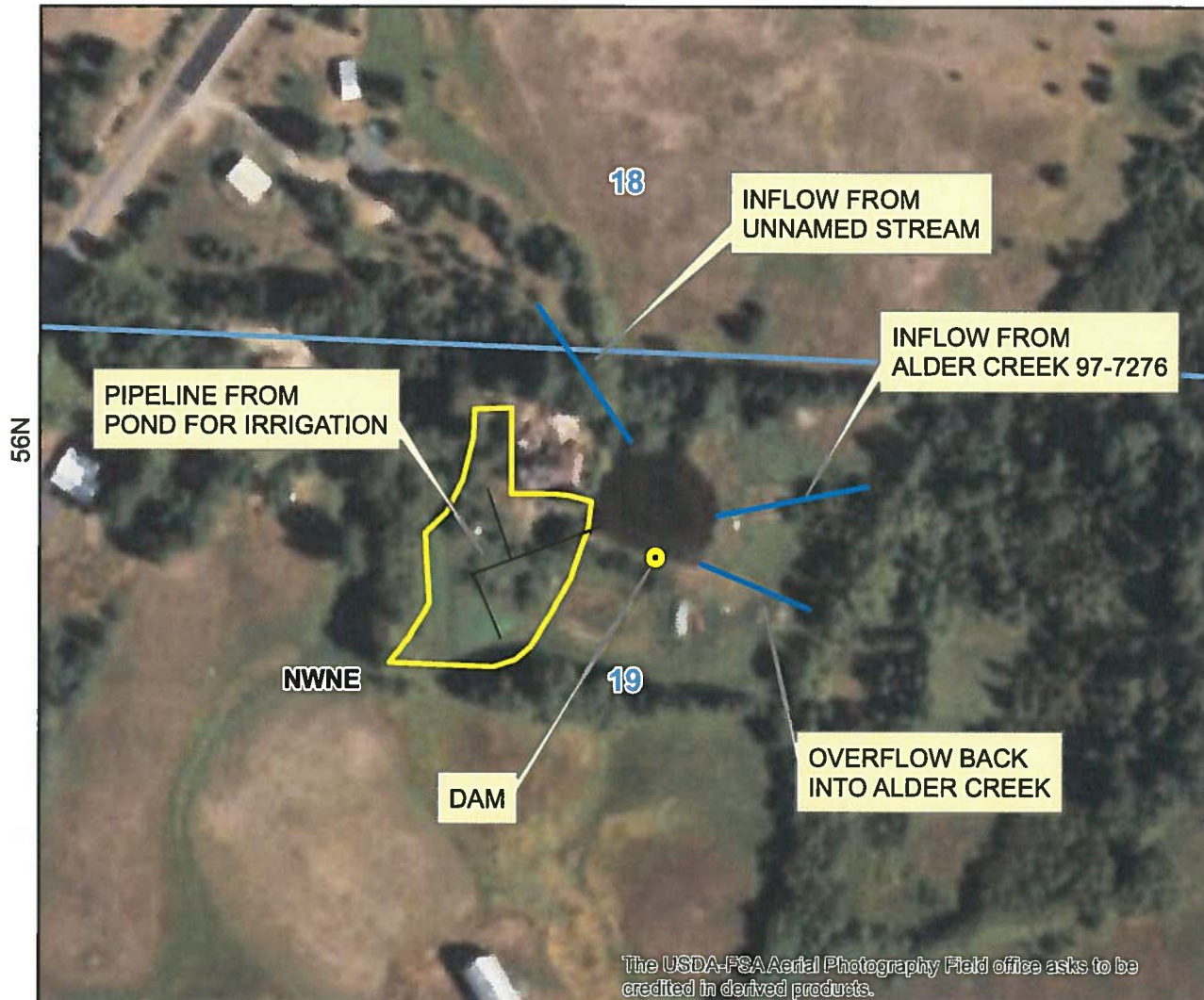
-  Point of Diversion
-  Place Of Use Boundary
-  Townships
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SYSTEM DIAGRAM

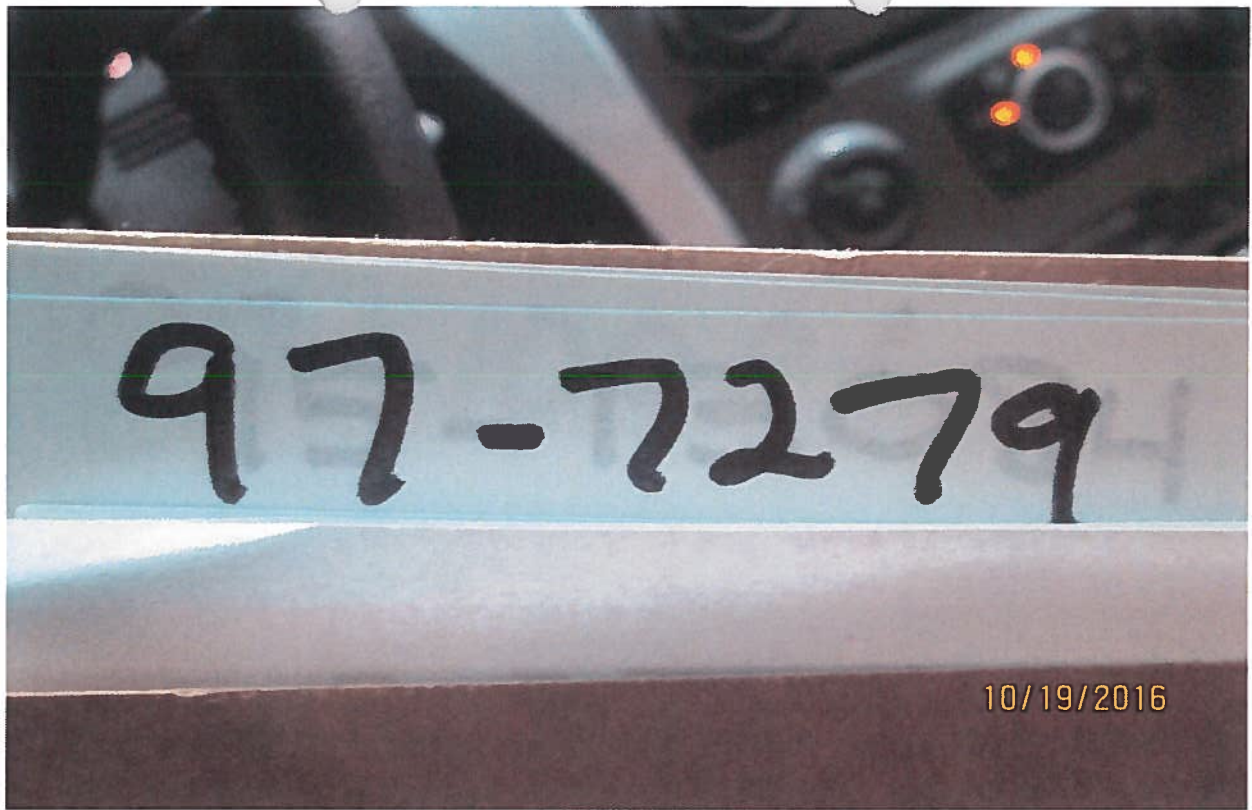
04W



0 0.0225 0.045 0.09 Miles

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





Pond



Piping from pond for irrigation.



Frost free for irrigation from pond.



Irrigation and orchard.







Inflow from unnamed stream. No diversion to storage.



Looking up unnamed stream from pond.



Channel diverting water from Alder Creek into pond, covered under Water Right 97-7276



View of dam, on left side is overflow back into Alder Creek.



Overflow channel next to dam that flows into Alder Creek.



Overflow channel from pond leading down to Alder Creek along trees.