

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 73-12146

Exam Date: 9/10/2012

1. Current Owner: FLYING JOSEPH RANCH LLC
C/O JOSEPH CLARK
7213 PERIMETER RD S
SEATTLE WA 98108
(206)762-1171
2. Accompanied by: Troy Zigler
Phone No: (208) 833-4242
Address: HC 61 Box 3080; Challis ID; 83226
Relationship to Permit Holder: Ranch employee

3. **SOURCE****TRIBUTARY**

GROUND WATER

B. OVERLAP REVIEW

1. Other water rights with the same place of use: 73-10041, 73-12110 and 73-147A
2. Other water rights with the same point of diversion: none

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

GROUND WATER SE1/4SE1/4 Sec. 19, Twp 13N, Rge 23E, B.M. CUSTER County

Method of Determination: GPS and Visual Inspection.

2.

PLACE OF USE: RECREATION, AESTHETIC WILDLIFE STORAGE and STORAGE

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			<u>NE</u>	<u>NW</u>	<u>SW</u>	<u>SE</u>	<u>NE</u>	<u>NW</u>	<u>SW</u>	<u>SE</u>	<u>NE</u>	<u>NW</u>	<u>SW</u>	<u>SE</u>	<u>NE</u>	<u>NW</u>	<u>SW</u>	<u>SE</u>	
13N	23E	19													X				X

Method of Determination: GIS Mapping and Visual Inspection.

3. YES Delivery System Diagram Attached (required). Indicate all major components and distances between components. Indicate weir size/pipe as applicable.
- YES Map Attached Showing Location(s) of point(s) of diversion and place(s) of use (required). Scale must be 1:24,000 or greater.
- YES Aerial Photo Attached
- YES Photo of Diversion and System Attached

4. none

Well or Diversion
ID No.***Motor Make****Hp****Motor Serial No.****Pump Make****Pump Serial No. or Discharge**
Size**D. FLOW MEASUREMENTS** none

1.

**Measurement
Equipment****Type****Make****Model No.****Serial No.****Size****Calib. Date**

2. Measurements:

E. FLOW CALCULATIONS

_____Additional Computation Sheets Attached

Measured Method:

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation: n/a

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

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

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

2. Volume Calculations for Other Uses:

Recreation, Aesthetic and Wildlife Storage

10.79 acres X 8 feet average depth = 86.32 AF pond volume

A transfer approved a total of 88 AF for 11 acres for all the overlapping water rights. The 10.79 acres and 86.32 are within 2% of these values. (See Narrative below)

Recommend a volume of 88 AF

Evaporation Loss Calculation: 21.98 AFA

(see attached sheet)

The 21.98 is also within 2% of the 22.9 AF evaporation loss identified by the transfer.

No seepage loss because the pond was excavated into the water table

$$88 (\text{pond volume}) + 22.9 (\text{evaporation loss}) = 110.9 \text{ AF}$$

Permit volume 148 AF

Recommend a total volume of 110.9 AF**G. NARRATIVE/REMARKS/COMMENTS**

The owners of Flying J Ranch excavated a pond in T13N R23E Section 19 SESE and NESE with the intent to intercept the water table and fill the pond with ground water. However, inflows have been insufficient to fill and maintain the pond. The pond is an average of 8 feet deep and is 11 acres.

A transfer changed the nature of use for 47.7 acre portions of rights 73-147A (Pahsimeroi River), 73-10041 (Big Creek) and 73-12110 (Big Creek) from irrigation to storage to cover annual fill and consumptive uses for the pond under this permit. The three rights under the transfer authorized the diversion of an annual total of 110.9 acres feet to be used for the initial filling of the pond and for the replacement of losses caused by evaporation from the pond.

A condition imposed by the transfer mentioned above limits the pond covered by the 3 water rights to a total capacity of 88 acre-feet or a total surface area of 11 acres.

Have conditions of permit approval been met? X Yes No

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>DIVERSION RATE</u>	<u>ANNUAL VOLUME</u>
RECREATION STORAGE	01/01 to 12/31		110.9 0 AF
AESTHETIC STORAGE	01/01 to 12/31		110.9 0 AF
WILDLIFE STORAGE	01/01 to 12/31		110.9 0 AF
<u>Totals:</u>			110.9 0 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 ☐ Other

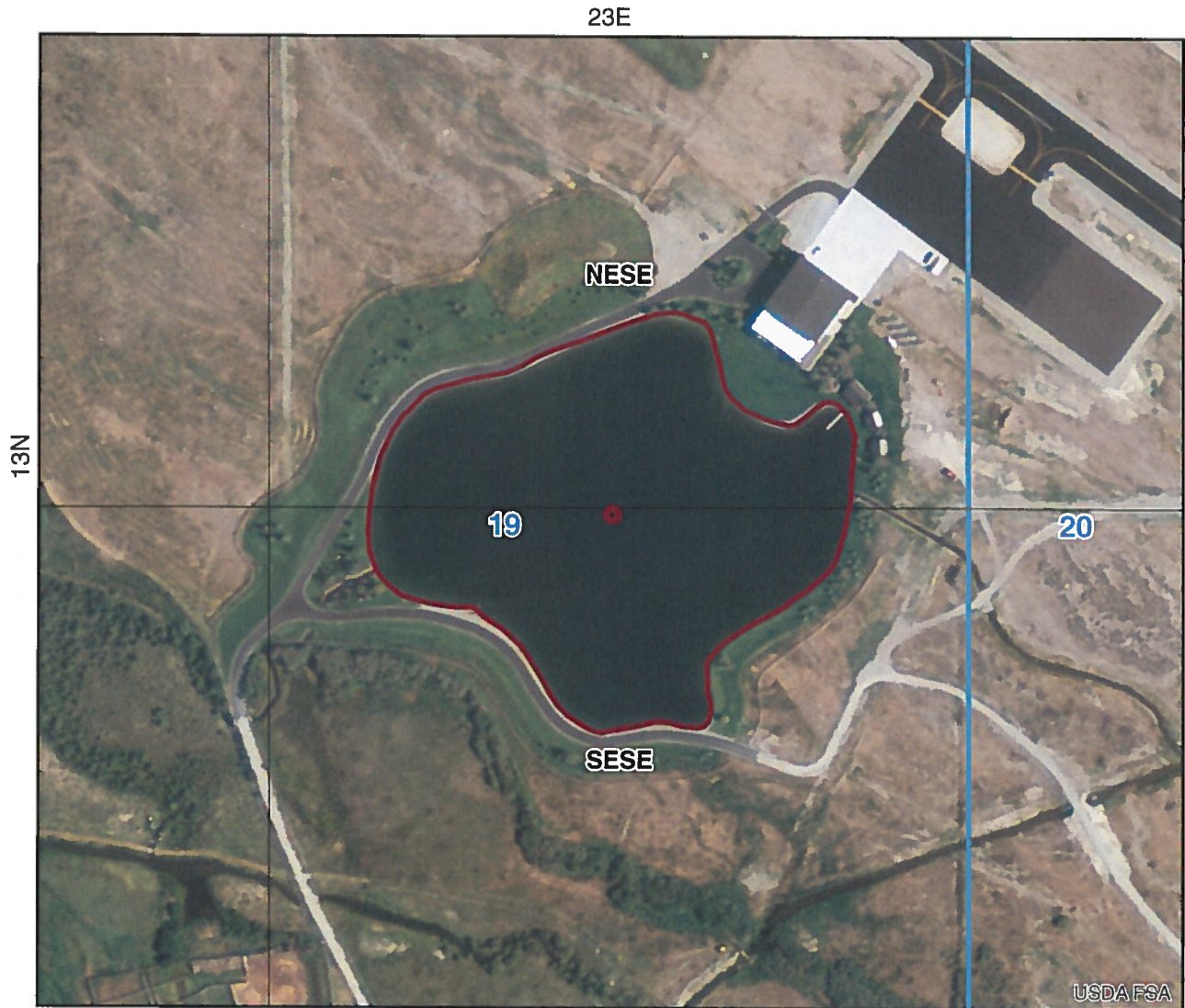
I. AUTHENTICATION

Field Examiner's Name Sandra Thiel Date 3/19/2013

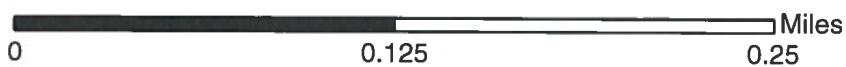
Reviewer _____ Date _____

State of Idaho
Department of Water Resources
Water Right License
73-12146

This map depicts the IRRIGATION, AESTHETIC and WILDLIFE STORAGE place of use boundary for this water right at the time of this approval and is attached to the approval document solely for illustrative purposes.



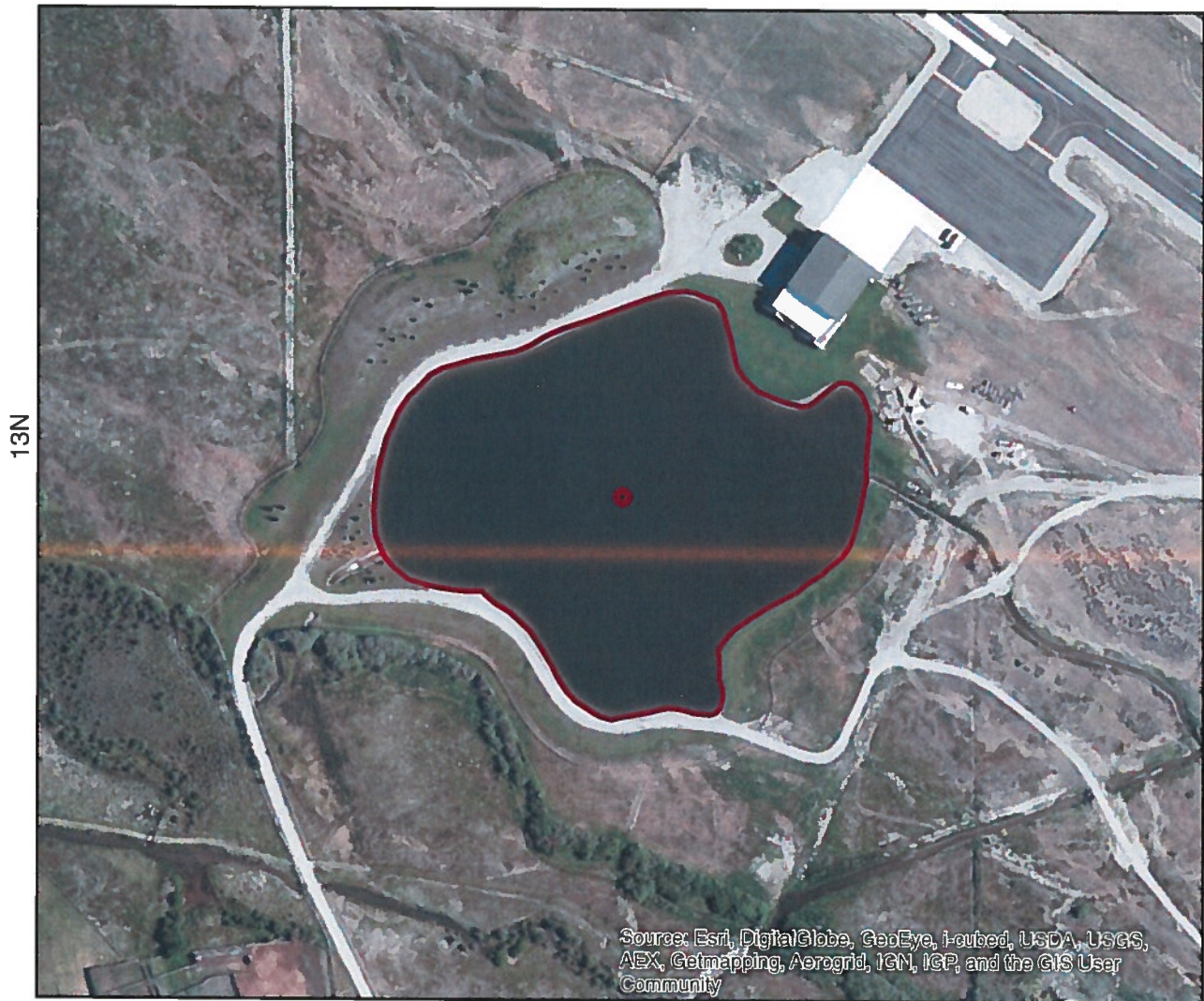
- Point of Diversion
- ▭ Place Of Use Boundary
- ▭ Townships
- ▭ PLS Sections
- ▭ Quarter Quarters



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23E



- Point of Diversion
- Place Of Use Boundary



0 0.125 0.25 Miles

FLYING JOSEPH RANCH, LLC
APPLICATION FOR TRANSFER
Attachment #8a - Part 5

FLYING JOSEPH HANGAR POND EVAPOTRANSPIRATION LOSS AND VOLUME
May, Idaho Weather Station Precipitation Deficit Values

MONTH	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
Precipitation deficit (avg daily value, mm)	0.03	0.44	1.23	2.13	2.49	3.25	4.07	3.51	2.08	1.39	0.14	0	
Days per month	31	28	31	30	31	30	31	31	30	31	30	31	
Pond loss (precip deficit, mm)	0.93	12.32	38.13	63.90	77.19	97.50	126.17	108.81	62.40	43.09	4.20	0.00	634.64
Pond loss (precip deficit, in)	0.04	0.49	1.50	2.52	3.04	3.84	4.97	4.28	2.46	1.70	0.17	0.00	24.99
Pond surface area (acres)	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00
Total pond loss (ac-in)	0.40	5.34	16.51	27.67	33.43	42.22	54.64	47.12	27.02	18.66	1.82	0.00	274.84
Total pond loss (ac-ft)	0.03	0.44	1.38	2.31	2.79	3.52	4.55	3.93	2.25	1.56	0.15	0.00	22.90
Pond volume	88.00												
Evaporation loss	22.90												
Transfer application volume	110.90												
Precipitation deficit (growing season, mm/A)	709.00												
Precipitation deficit (growing season, in/A)	27.91												
Precipitation deficit (growing season, AF/A)	2.33												
# acres for evaporation loss	9.85												
# acres for pond volume	37.83												
# acres total	47.68												

75708

From: Confidential

5/28/2009

Page 1

Claimfile for Water Right TB-147A Page 30.

Precipitation Loss Calculation

Date: March 15, 2013
Prepared by: Sandy Thiel
Water Right No: 73-12146

P = Precipitation
ET = Evapotranspiration
 P_d = Precipitation deficit
 P_d = P - ET

P_d

Found at: <http://www.kimberly.uidaho.edu/ETIdaho/>

P_d = convert to AFA: (mm/yr) / (convert to feet) x # acres =
621 / 304.8 x 10.79 =
(From ET Idaho)

P_d = 21.98 AFA

* Use the Precipitation Deficit for 'P' value

ET_{Idaho} 2012 -- Evapotranspiration and Consumptive Irrigation Water Requirements for Idaho

Please send suggestions for improving this site to robison at kimberly dot uidaho dot edu Copyright 2012, University of Idaho.

May (NWS -- 105685)

Statistics based on thirty year normal spans 1963 to 2010 years

For a different land cover or crop click on the above link.

You can highlight this table and copy via the clipboard to a Microsoft Excel or OpenOffice spreadsheet to plot or otherwise work with this data.

Open water - shallow systems (ponds, streams)															
Precipitation Deficit (Click here for a graph)															
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Growing Season ^a	Non Growing Season ^b	Annual
Mean ^j	mm/day												mm		
Monthly ^c	0.04	0.49	1.21	2.08	2.41	3.12	4.10	3.48	2.12	1.30	0.06	0.08	621	0	621
15-Day Moving Average ^d	0.08	0.46	1.21	2.10	2.39	3.06	4.11	3.44	1.95	1.33	0.04	0.07			
7-Day Moving Average ^e	0.05	0.48	1.22	2.09	2.36	3.08	4.08	3.47	2.01	1.30	0.04	0.07			
3-Day Moving Average ^f	0.04	0.49	1.22	2.08	2.40	3.10	4.10	3.49	2.09	1.29	0.06	0.08			
Standard Deviation ^k	mm/day												mm		
Monthly ^c	0.36	0.28	0.49	0.56	1.28	1.09	1.14	1.07	0.65	0.70	0.46	0.48	82	0	82
15-Day Moving Average ^d	0.33	0.40	0.45	0.69	1.21	1.39	1.10	1.12	1.06	0.66	0.63	0.43			
7-Day Moving Average ^e	0.49	0.47	0.61	1.00	1.68	1.82	1.54	1.37	1.45	0.97	0.84	0.53			
3-Day Moving Average ^f	0.72	0.61	0.84	1.49	2.30	2.44	2.06	1.76	1.94	1.36	1.22	0.76			
20% Exceedance ^l	mm/day												mm		
Monthly ^c	0.23	0.68	1.46	2.54	3.02	3.80	4.80	4.00	2.57	1.66	0.42	0.15	666	0	666
15-Day Moving Average ^d	0.38	0.82	1.98	2.91	4.07	4.75	5.18	4.59	3.30	2.17	0.75	0.34			
7-Day Moving Average ^e	0.49	0.99	2.20	3.44	4.82	5.20	5.43	5.05	3.81	2.61	1.00	0.47			
3-Day Moving Average ^f	0.61	1.17	2.55	3.95	5.21	5.68	5.68	5.24	4.06	2.81	1.22	0.55			

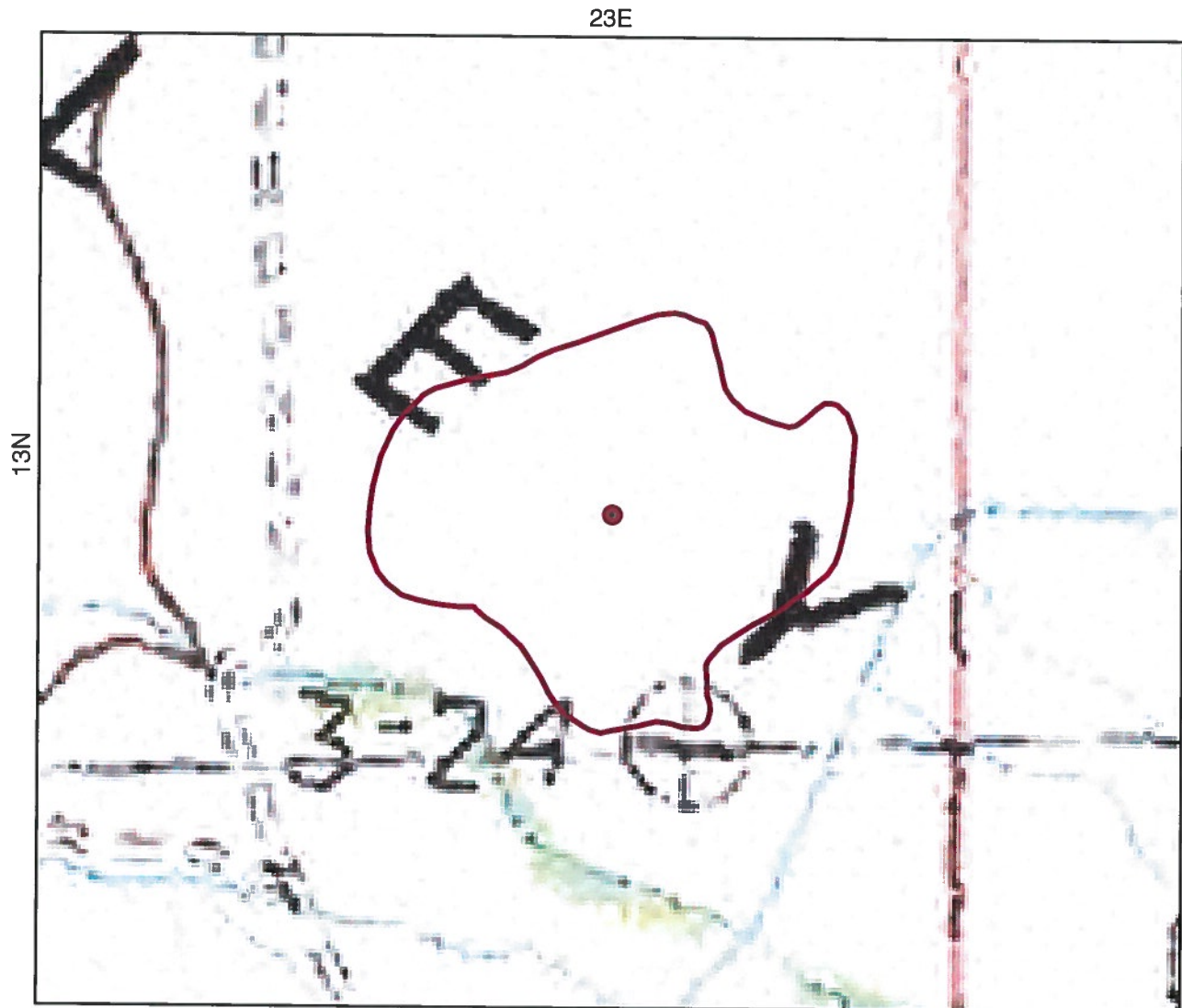
Water Distribution System Water Right 73-12146



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- Place Of Use Boundary



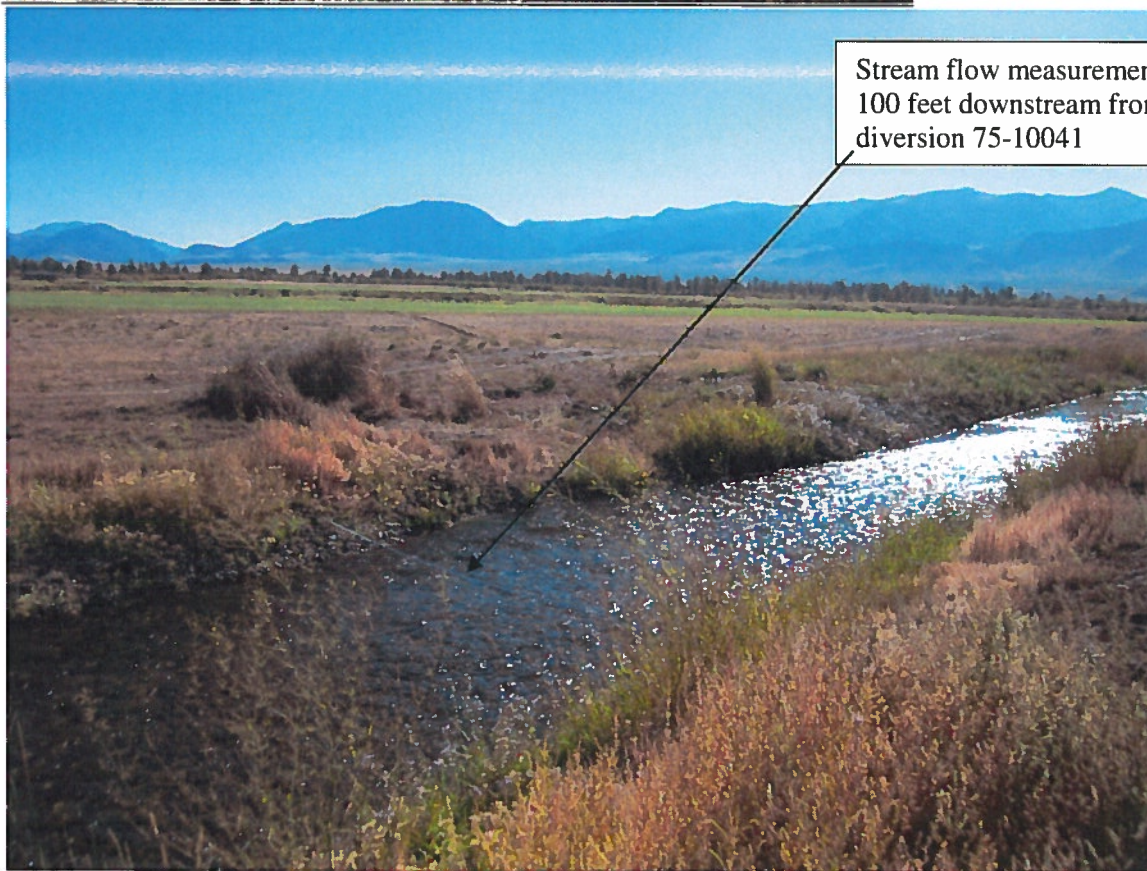
0 0.125 0.25 Miles

PHOTOGRAPHER AND DATE OF PHOTOS Sandy Thiel, August 28, 2012

FILE NUMBER 73-12146



This photo shows the diversion of water from a side channel of the Goldburg Creek



Stream flow measurement location, roughly 100 feet downstream from the above diversion 75-10041

Pond inlet



Pond outlet

View of pond taken from the southwest

Pahsimeroi River



Water flows out of the pond to a culvert under the road and returns to the main channel of the Pahsemeroi River