

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 21-13113

Exam Date: 6/19/2012

1. Current Owner: EAGLE RIDGE RANCH LLC
2880 N 55 W
PO BOX 50305
IDAHO FALLS ID 83402
(208)552-1162

2. SOURCE

BLUE LAKE

TRIBUTARY

SHEEP 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 SYSTEM1. LOCATION OF POINT(S) OF DIVERSION:

BLUE LAKE NW1/4SW1/4 Sec. 14, Twp 13N, Rge 42E, B.M. FREMONT County

Method of Determination: GPS and site visit.

2. 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	
13N	42E	14										X							

Method of Determination: Aerial photos and site visit.

D. FLOW MEASUREMENTS

Poor snowpack in 2012. System was already past peak flow at time of field exam. Pipe infrastructure between ponds can handle much more than 1.00 cfs and marks within the pipes showed that the system has conveyed greater flows in the past. License will be issued for permitted rate of 1.00 cfs.

E. VOLUME CALCULATIONS

Pond volume = max depth x 0.4 (sloped sides) x surface area

Pond #1 Volume = 8 feet x 0.4 x 1.2 acres = 3.8 acre-feet

Pond #2 Volume = 10 feet x 0.4 x 0.4 acres = 1.6 acre feet

Pond #1 Evaporation = 1.35 acre-feet, Pond #2 Evaporation = 0.45 acre-feet, Total Evaporation = 1.8 acre-feet

F. NARRATIVE/REMARKS/COMMENTS

Field exam completed in June 2012. Ponds are slightly smaller than described in permit. Mitigation plan covers evaporation losses from the pond. Evaporation from ponds is approximately 1.8 acre-feet per year. 1.4 acres of water right 21-4126 are held unused to mitigation for evaporation. Water right 21-4126 has been updated to reflect mitigation through non-use. Permit holder also provided mitigation for one-time fill of the ponds. Refills must be covered in some other way. WD01 confirmed that no measuring devices are needed at this time to regulate the water right.

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

G. RECOMMENDATIONS**1. Recommended Amounts**

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>DIVERSION RATE</u>	<u>ANNUAL VOLUME</u>
DIVERSION TO STORAGE	01/01 to 12/31	1.000 CFS	
RECREATION STORAGE	01/01 to 12/31		5.50 AF
	<u>Totals:</u>	1.000 CFS	5.50 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

H. AUTHENTICATION

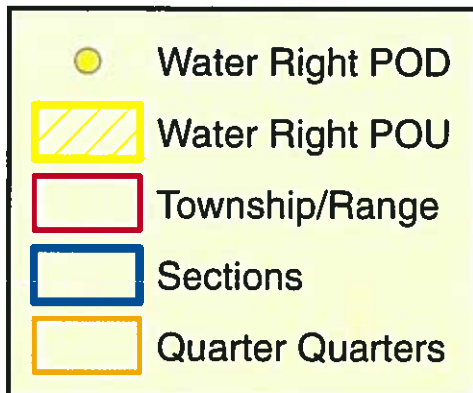
Field Examiner's Name Kerrie Mathews Date June 2012

Reviewer James Cefalo Date Jan 11, 2016

Water Right License 21-13113

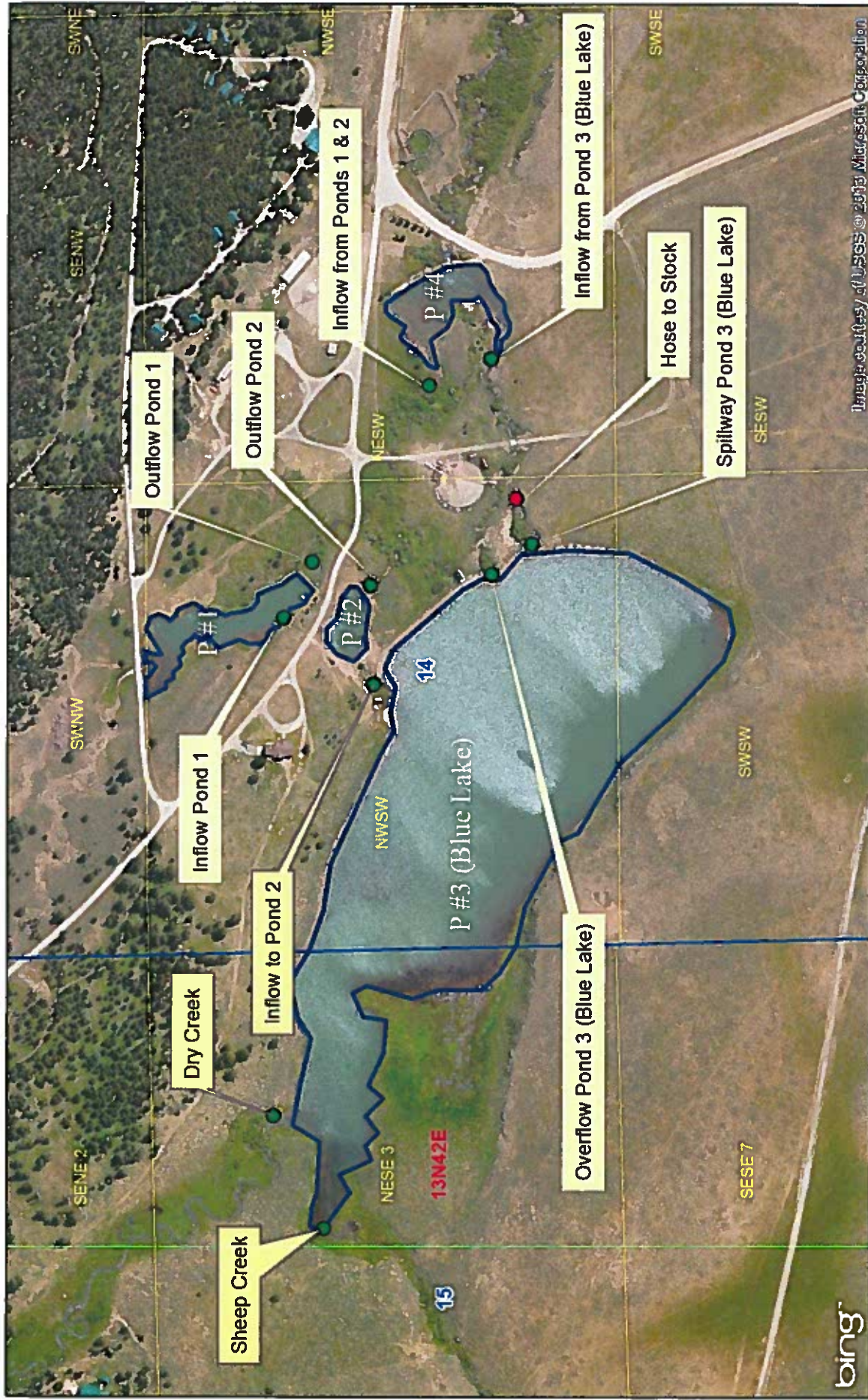


2013 Aerial Photo



0 200 400 Feet





- Ponds
- Township/Range
- Sections
- QQ



Eagleridge Ranch

21-13113, 21-13114 & 21-13115

Field Exam 06-19, 2012

Image courtesy of USGS © 2013 Microsoft Corporation

Pond Calculations

Permit 21-13113 (Pond #1)

Pond Size

Vol = surf area x max depth x slope factor

Surface Area 1.2 acres

Max Depth 8 feet

Sloped Sides Factor 0.4

Volume 3.84 acre-feet

Evaporation (Precipitation Deficit from ET Idaho Tables)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
mm/day	0	0	0	0.38	1.33	1.61	3.39	2.68	1.56	0.34	0	0
day/month	31	28	31	30	31	30	31	31	30	31	30	31
mm/month	0.00	0.00	0.00	11.40	41.23	48.30	105.09	83.08	46.80	10.54	0.00	0.00
ft/month	0.00	0.00	0.00	0.04	0.14	0.16	0.34	0.27	0.15	0.03	0.00	0.00
surface area	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
acre-feet	0.00	0.00	0.00	0.04	0.16	0.19	0.41	0.33	0.18	0.04	0.00	0.00

Total Evaporation Acre-Feet 1.36

Pond Calculations

Permit 21-13113 (Pond #2)

Pond Size

Vol = surf area x max depth x slope factor

Surface Area 0.4 acres

Max Depth 10 feet

Sloped Sides Factor 0.4

Volume 1.6 acre-feet

Evaporation (Precipitation Deficit from ET Idaho Tables)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
mm/day	0	0	0	0.38	1.33	1.61	3.39	2.68	1.56	0.34	0	0
day/month	31	28	31	30	31	30	31	31	30	31	30	31
mm/month	0.00	0.00	0.00	11.40	41.23	48.30	105.09	83.08	46.80	10.54	0.00	0.00
ft/month	0.00	0.00	0.00	0.04	0.14	0.16	0.34	0.27	0.15	0.03	0.00	0.00
surface area	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
acre-feet	0.00	0.00	0.00	0.01	0.05	0.06	0.14	0.11	0.06	0.01	0.00	0.00

Total Evaporation Acre-Feet 0.45

Please send suggestions for improving this site to robison@kimberlydotuidaho.edu Copyright 2012, University of Idaho.

Statistics based on thirty year normal spans 1955 to 2010 years

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

Open water - shallow systems (ponds, streams)

Precipitation Deficit [\(Click here for a graph\)](#)

<http://data.kimberly.uidaho.edu/ETIdaho/stcwrstats.py?station=104598&cover=55&stats=Deficit>

[illegible]

^a **Growing Season:** This is usually the time from green up or planting in the spring to a killing frost or harvest in the fall. It is not applicable for entries without a growing season and will be blank.

^b **Nongrowing Season:** This is usually the time from a killing frost or harvest in the fall to the of green up in the spring. It is not applicable for entries without a growing season.

^c Mean of the average daily value for month^d Mean of the fourteen 15-day period averages contained in the month^c Mean of the twenty three 7-day period averages contained in the month

^r Mean of the twenty seven 3-day period averages contained in the month

Mean of the highest/lowest 15-day period average in month

^h Mean of the highest/lowest 7-day period average in month

ⁱ Mean of the highest/lowest 3-day period average in month

^j This value represents the *mean value* for the parameter for the month over the 'normal' period of record. Generally, the 'normal' period is the last thirty years with data.

^k This value represents the *standard deviation* for the parameter for the month over the 'normal' period.

^l This value represents the *value* for the parameter that has a 20% chance of being exceeded that month during any particular year. Conversely, there is an 80% chance that the parameter value will be less than the *value* shown.

^m This value represents the *value* for the parameter that has a 80% chance of being exceeded that month during any particular year. Conversely, there is an 20% chance that the parameter value will be less than the *value* shown.

ⁿ This value represents the *skewness (asymmetry) of the distribution of the parameter values* for the month (year) over the 'normal' period. A value near zero indicates that the distribution approximates a normal (Gaussian) and symmetrical distribution. A negative skew indicates that the parameter distribution has relatively few low values compared to high values. A positive skew indicates that the distribution has relatively few high values compared to the number of low values. A skew value near 1 indicates that the underlying distribution approximates a lognormal distribution.

^o This value represents the *kurtosis* of the parameter value distribution for the month (year) over the 'normal' period. Kurtosis is a measurement of the height to width ratio of the probability distribution, or the *peakedness (slenderness)*. A normal (Gaussian) distribution has a kurtosis of 3. A high kurtosis distribution has a sharper peak and longer tails, while a low kurtosis distribution has a more rounded peak and shorter tails.

This work and report were prepared by the University of Idaho Research and Extension Center at Kimberly, Idaho under contract with the Idaho Department of Water Resources. Work was supported by funding from IDWR and the Idaho Agricultural Experiment Station and Idaho Engineering Experiment Station. The authors gratefully acknowledge the long-term evapotranspiration data collection and long-standing advice provided by Dr. James L. Wright, USDA-ARS Kimberly (ret.), the more than two decades of high quality agricultural weather data collection by the U.S. Bureau of Reclamation AgriMet system, and the very long-standing, routine data collection by the hundreds of cooperative weather station volunteers across the state who, for more than one-hundred years, have faithfully observed daily air temperature and precipitation.

The citation for the evapotranspiration data used from this site should be: *Allen, Richard G. and Clarence W. Robison, 2012. Evapotranspiration and Consumptive Irrigation Water Requirements for Idaho: Supplement updating the Time Series through December 2008, Research Technical Completion Report, Kimberly Research and Extension Center, University of Idaho, Moscow, ID.*

Questions regarding the data should be addressed to [Clarence W. Robison](#) or [Richard G. Allen](#), University of Idaho, Kimberly Research and Extension Center, 3793 North 3600 East, Kimberly, ID 83341. Telephone (208)-423-6610

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PERMIT 21-13113 – FIELD EXAM JUNE 19, 2012

INFLOWS TO POND 1



POND 1



OUTFLOWS POND 1



PERMIT 21-13113 – FIELD EXAM JUNE 19, 2012

INFLOWS TO POND 2



INFLOWS FROM POND 3 (BLUE LAKE)

POND 2



OUTFLOWS POND 2



To pond 1



To pond 4