

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

RECEIVED

DEC 13 2017

DEPARTMENT OF
WATER RESOURCES

A Beneficial Use Field Report is prepared by a water right examiner as the result of an examination to clearly confirm and establish the extent of the beneficial use of water established in connection with a permit during the development period authorized by the permit and any extensions of time previously approved.

A. GENERAL INFORMATIONPermit No. 37-8859

1. Owner SMOKEY DOME LLC C/O GREGORY VIK Phone No. _____
Current address PO BOX 1607 BELLEVUE, WA 98009
2. Examiner's name Greg Sullivan EXAM DATE 11/17/2017
3. Accompanied by Rusty Kramer (Water Master 37 B) Email greg.sullivan@brockwayeng.com
Address 2016 N Washington St Ste 4 Twin Falls, Idaho 83301
Relationship to permit holder Consultant Phone No. 208-736-8543
4. Source WEST FORK THREEMILE CREEK tributary to CAMAS CREEK

B. OVERLAP REVIEW

1. Other water rights with the same place of use 37-368A, 37-368B, 37-409A, 37-409B, 37-2076A, 37-409B, 37-8859
2. Other water rights with the same source and point of diversion 37-2076A, 37-368B, 37-2076B

C. DIVERSION AND DELIVERY SYSTEM

1. Point(s) of Diversion:

Ident. No.	Gov't Lot	¼	¼	¼	Sec	Twp	Rge	County	Method of Determination/Remarks
			NE	NW	23	1N	13E	Camas	Lat 43;24;47.6064
									Long 114;52;30.7963

2. Place(s) of Use: Method of determination _____

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
01N	13E	23								J									
01N	13E	23								JS									
01N	13E	23								W									
01N	13E	23								WS									

J=Aesthetic JS=Aesthetic Storage W=Wildlife WS=Wildlife Storage

E. NARRATIVE/REMARKS/COMMENTS

Field visit was performed on November 17, 2017. The POD is a cement head gate and calibrated flume. The control structure is lockable and is calibrate to measure discharge appropriately. The channel directs water into the 1st pond that has a surface area of 0.37 acres and has an average depth of 2.1 feet. The channel continues to the 2nd pond that has a surface area of 0.44 acres and has an average depth of 3.49 feet. The surface area of the two ponds was measured with a 100 foot tape. A measurement of the length and width of the water surface from the edge of the water to the other side of the pond was performed for each pond. The final width and lengths where adjusted by the field examiner based on shore line characteristics. The depths of the ponds were determined when the permit was applied for by stretching a tape across the ponds and using a calibrated board to determine the depths at various locations through out the ponds. The depths of 2.1 feet and 3.49 feet are calculated average based on those measurement.

The channel then flows south several hundred feet to the 2nd cement calibrated flume. It was observed that the 2nd flume was partially filled with sediment and a staff gauge reading would not be accurate at the time of the site visit. Work needs to be done upstream of the 2nd flume to pond the water to allow the sediment to settle out of the stream channel before the water enters the flume.

A portable 2 inch throat 45 degree flume was used to measure the channel flow downstream of the 1st flume. The measurement was recorded to be 0.85 feet or 1.06 cfs. The portable flume was used to measure the water flow in the channel upstream of the 2nd flume. The measurement was recorded to be 0.72 feet or 0.72 cfs.

The property manager indicated that Permit 37-8859 would be utilized year round when water is available.

Historically West Fork Threemile Creek runs dry through July and August and sometimes during the winter months ice prohibits diversion of water. The property manager estimated that water is consistently available 198 days out of the year.

Mitigation for this permit has been provided by drying up 1.7 acres from irrigation water rights 37-368A, 37-409A, 7-2076A, 37-2455 and 37-2157.

A discharge rating table for the cement flume is attached to this document.

A discharge rating table for the 2 inch 45 degree trapezoidal flume is attached to this document.

Has the permit holder met all conditions of permit approval, including any mitigation requirements and/or measuring device installation requirements? ☒ Yes ☐ No If no, what must be done to meet the permit requirements?

F. FLOW CALCULATIONS☐ Additional computation sheets attached

Measured Method:

2 inch throat 45 degree trapezoidal flume

G. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

 $V_{I,R} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) =$ _____ $V_{D,R} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation Season}) \times 1.9835 =$ _____ $V = \text{Smaller of } V_{I,R} \text{ and } V_{D,R} =$ _____

2. Volume Calculations for Other Uses:

April 1 to July 1 is 91 days and August 15 to November 30 is 107 days for 198 days. 198 days x 1.06 cfs = 416 acre feet. Pond 1 has a surface area of 0.37 acres x average depth of 2.1 feet = 0.8 acre feet. Pond 2 has a surface area of 0.43 acres x average depth of 3.49 feet = 1.5 acre feet. Total expected pond evaporation is 1.3 acre feet.

Total volume will be 0.8 acre feet + 1.5 acre feet + 1.3 acre feet = 3.6 acre feet.

H. RECOMMENDATIONS

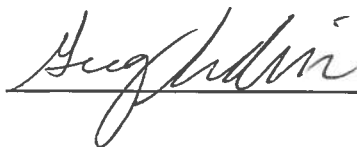
1. Recommended Amounts

Beneficial Use	Period of Use		Rate of Diversion Q (cfs)	Annual Volume V (afa)
	From	To		
Wildlife	1/01	12/31	1.06	416
Wildlife Storage	1/01	12/31	1.06	3.6
Aesthetic	1/01	12/31	1.06	416
Aesthetic Storage	1/01	12/31	1.06	3.6
Diversion to Storage	1/01	12/31	1.06	
Totals:			1.06	3.6 and 416

2. Recommended Amendments

☐ Change P.D. as reflected on page 1☐ Add P.D. as reflected on page 1☒ None☐ Change P.U. as reflected on page 1☐ Add P.U. as reflected on page 1☐ Other**I. AUTHENTICATION**

Field Examiner's Signature

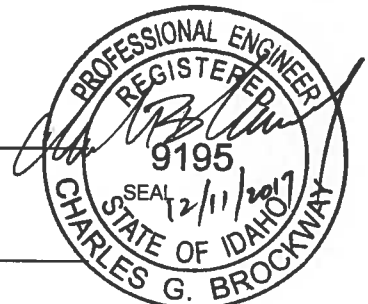


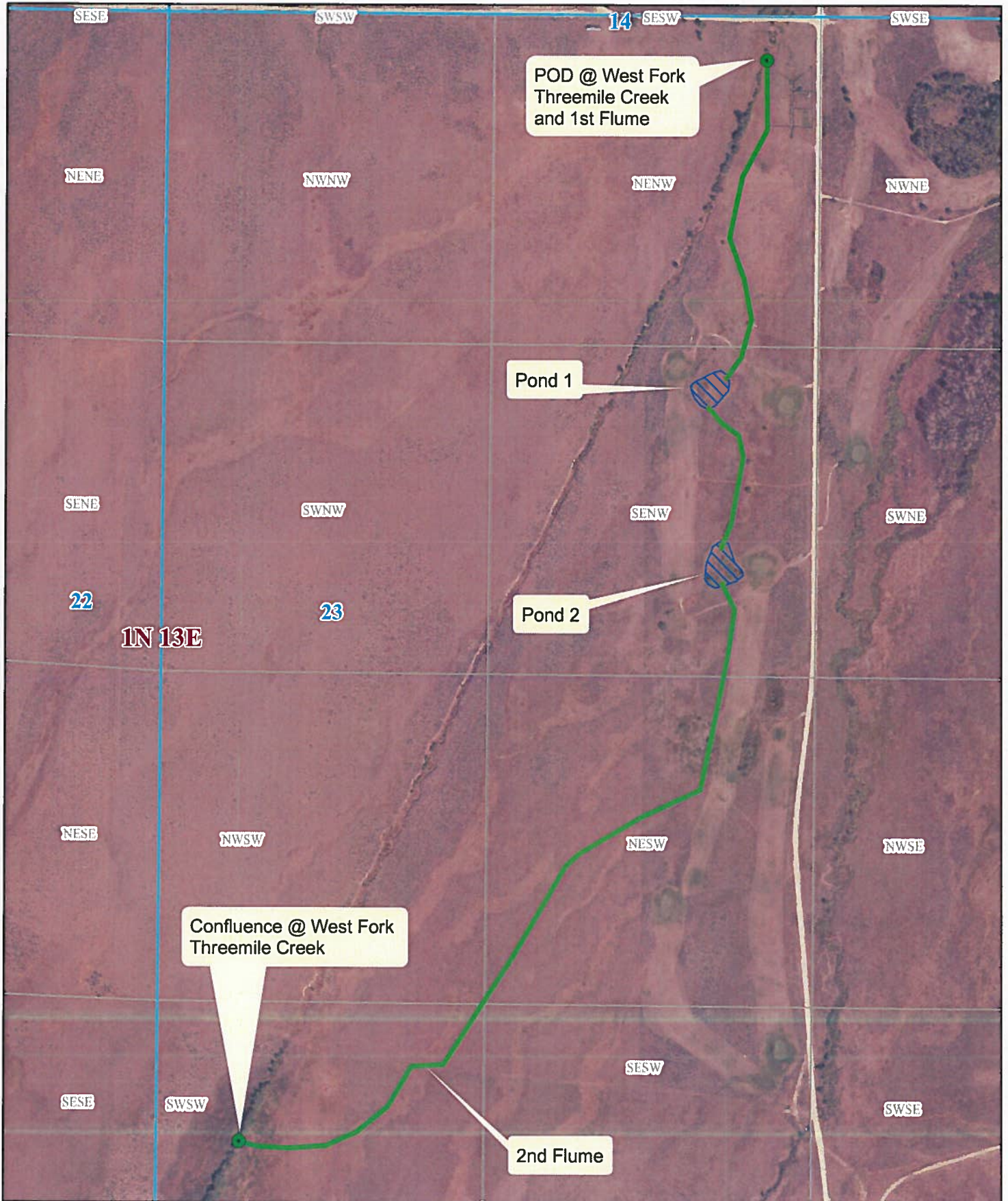
Date

12/12/17

Reviewer

Date





SMOKEY DOME LLC C/O GREGORY VIK

PERMIT 37-8859
2015 NAIP AERIAL

Legend

- POD 37-8859
- 37-8859 Channel
- ▨ POU 37-8859

Smokey Dome LLC
Mitigation Calculations
Brockway Engineering
GWS 12/8/17

Smokey Dome LLC

Pond	Surface Area Acres	Depth (ft)	Volume (AF)	Pond Evap (AF)
				1.71 ft
1	0.37	2.10	0.8	0.6
2	0.43	3.49	1.5	0.7
3				
4				
0.80 Acres			2.3 AF	1.3 AF

Total Pond Volumes
Acres needed to be dried up one time to fill the ponds
Acres needed to be dried up permanently to offset evaporation losses
Acres to be dried up permanently to offset seepage losses

3.6 AF	
1.1 Acres	0.6 Acres
1.7 Acres	
1 Time Dry Up Acres	Permanently Dried Up Acres
1.1 Acres	0.6 Acres

Evaporation data collected from ETIdaho 2012 Evapotranspiration and Consumptive Irrigation Water Requirements for Idaho.

<http://data.kimberly.uidaho.edu/ETIdaho/stcwrstats.py?station=3&cover=2&stats=Deficit>

Fairfield (Agrimet -- FAFI)

alfalfa 652 mm 2.14 ft

<http://data.kimberly.uidaho.edu/ETIdaho/stcwrstats.py?station=3&cover=55&stats=Deficit>

Fairfield (Agrimet -- FAFI)

pond 520 mm 1.71 ft

1st Flume



1st Flume Staff Gauge



2 inch Trapezoidal Flume



2 inch Trapezoidal Flume



2 inch Trapezoidal Flume



1st Pond



1st Pond



2nd Pond



2nd Pond



2nd Flume



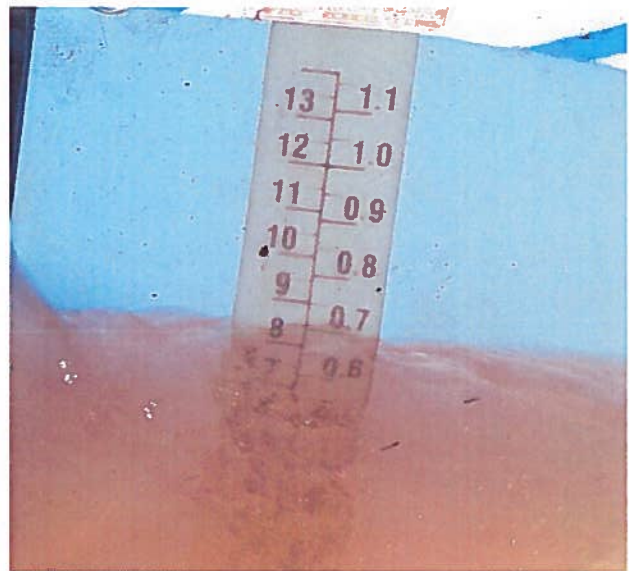
2 inch Trapezoidal Flume



2 inch Trapezoidal Flume



2 inch Trapezoidal Flume



Trapezoidal Flume Rating Tables

2-inch throat, 45-degree

 $Q \text{ (cfs)} = 1.36H^{2.5} + 0.20H^{1.5}$, H in feet

HEAD IS SLANT DISTANCE

CUBIC FEET PER SECOND

H (ft)	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
0.2	0.04	0.05	0.05	0.06	0.06	0.07	0.07	0.08	0.09	0.09
0.3	0.10	0.11	0.11	0.12	0.13	0.14	0.15	0.16	0.17	0.18
0.4	0.19	0.20	0.21	0.22	0.23	0.25	0.26	0.27	0.28	0.30
0.5	0.31	0.33	0.34	0.36	0.37	0.39	0.40	0.42	0.44	0.45
0.6	0.47	0.49	0.51	0.53	0.55	0.57	0.59	0.61	0.63	0.65
0.7	0.67	0.70	0.72	0.74	0.77	0.79	0.82	0.84	0.87	0.89
0.8	0.92	0.95	0.98	1.00	1.03	1.06	1.09	1.12	1.15	1.18
0.9	1.22	1.25	1.28	1.31	1.35	1.38	1.42	1.45	1.49	1.52
1.0	1.56	1.60	1.64	1.67	1.71	1.75	1.79	1.83	1.87	1.91
1.1	1.96	2.00	2.04	2.09	2.13	2.18	2.22	2.27	2.31	2.36
1.2	2.41	2.46	2.51	2.55	2.60	2.66	2.71	2.76	2.81	2.86

GALLONS PER MINUTE

H (ft)	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
0.2	19	21	23	25	28	30	33	36	39	42
0.3	45	48	52	55	59	63	67	71	75	80
0.4	84	89	94	99	105	110	116	121	127	133
0.5	140	146	153	159	166	174	181	188	196	204
0.6	212	220	229	237	246	255	264	273	283	293
0.7	303	313	323	334	345	356	367	378	390	402
0.8	414	426	438	451	464	477	490	504	518	531
0.9	546	560	575	590	605	620	636	651	667	684
1.0	700	717	734	751	768	786	804	822	841	859
1.1	878	897	917	936	956	976	997	1017	1038	1059
1.2	1081	1102	1124	1147	1169	1192	1215	1238	1261	1285

Upper West Fork
Ditchrider's Rating Table

	Head,h1				Discharges in cu. ft/s					
in	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9
=====										
2.	*0.232	0.250	0.269	0.288	0.307	0.327	0.348	0.368	0.389	0.411
3.	0.433	0.455	0.478	0.501	0.525	0.548	0.573	0.597	0.622	0.648
4.	0.673	0.699	0.725	0.752	0.779	0.806	0.834	0.862	0.890	0.919
5.	0.948	0.977	1.007	1.037	1.067	1.097	1.128	1.159	1.190	1.222
6.	1.254	1.286	1.318	1.351	1.384	1.417	1.451	1.485	1.519	1.553
7.	1.588	1.623	1.658	1.694	1.730	1.766	1.802	1.839	1.876	1.913
8.	1.950	1.988	2.026	2.064	2.102	2.141	2.180	2.219	2.258	2.298
9.	2.338	2.378	2.418	2.459	2.499	2.540	2.582	2.623	2.665	2.707
10.	2.749	2.791	2.834	2.877	2.920	2.963	3.006	3.050	3.094	3.138
11.	3.182	3.227	3.272	3.317	3.362	3.407	3.453	3.499	3.545	3.591
12.	3.638	3.684	3.731	3.778	3.826	3.873	3.921	3.969	4.017	4.065
13.	4.114	4.162	4.211	4.260	4.309	4.359	4.409	4.458	4.508	4.559
14.	4.609	4.660	4.711	4.762	4.813	4.864	4.916	4.968	5.019	--

5 - Upstream energy head / control section length is less than 0.07.

State of Idaho
Department of Water Resources

Permit to Appropriate Water

NO. 37-08859

Priority: October 18, 1996

Maximum Diversion Rate: 5.00 CFS
Maximum Storage Volume: 3.9 AF

This is to certify, that SMOKEY DOME LLC
C/O CHUCK HILL
PISTOL CREEK FINANCIAL
PO BOX 1607
BELLEVUE WA 98009

has applied for a permit to appropriate water from:

Source: WEST FORK THREEMILE CREEK **Tributary:** CAMAS CREEK

and a permit is APPROVED for development of water as follows:

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>RATE OF DIVERSION</u>	<u>ANNUAL STORAGE VOLUME</u>
WILDLIFE	01/01 to 12/31	5.00 CFS	
AESTHETIC	01/01 to 12/31	5.00 CFS	
WILDLIFE STORAGE	01/01 to 12/31		3.9 AF
DIVERSION TO STORAGE	01/01 to 12/31	5.00 CFS	
AESTHETIC STORAGE	01/01 to 12/31		3.9 AF

LOCATION OF POINT(S) OF DIVERSION:

WEST FORK THREEMILE CREEK NE1/4NW1/4
CAMAS County

Sec. 23, Twp 01N, Rge 13E, B.M.

PLACE OF USE: WILDLIFE

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
01N	13E	23					X				X	X	X	X	X				

PLACE OF USE: AESTHETIC

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
01N	13E	23					X				X	X	X	X	X				

State of Idaho
Department of Water Resources

Permit to Appropriate Water

NO. 37-08859

PLACE OF USE: WILDLIFE STORAGE

Twp	Rge	Sec	NE				NW				SW				SE				Totals
01N	13E	23	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
										X									

PLACE OF USE: AESTHETIC STORAGE

Twp	Rge	Sec	NE				NW				SW				SE				Totals
01N	13E	23	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
										X									

CONDITIONS OF APPROVAL

1. Proof of application of water to beneficial use shall be submitted on or before **January 01, 2015**.
2. Subject to all prior water rights.
3. Use of water under this right is subject to control by the watermaster of State Water District No. 37.
4. Prior to diversion of water under this right, the right holder shall install and maintain a measuring device and lockable controlling works of a type acceptable to the Department as part of the diverting works from the West fork of Threemile Creek and shall install a measuring device acceptable to the Department at the point where return flows from the project return to the West Fork of Threemile Creek.
5. Wildlife and Aesthetic uses shall be non-consumptive. The Director retains jurisdiction over this right to require further mitigation or other action if the use of this right is found to be consumptive or is not fully mitigated. Further mitigation or other action will be required only upon a determination of need and applicability by the Director.
6. Wildlife Storage and Aesthetic Storage use is in two ponds with a total surface area of 0.86 acres and total capacity of 2.4 acre feet. The total authorized storage under this right (3.9 afa) allows for filling the two ponds annually (2.4 afa) and for annual evaporation from the two ponds (1.5 afa). The total surface area of the ponds is limited to 0.86 acres.
7. To mitigate for the depletion of water resulting from the use of water for Wildlife Storage and Aesthetic Storage under this right and to prevent injury to senior water right holders, the right holder for right 37-368A shall cease diverting 0.04 cfs for the irrigation of 1.7 acres within the NENW of Section 23, T01N, R13E. Moreover, the official record for right 37-368A will be changed to show that 0.04 cfs on 1.7 acres will be dedicated to mitigation, and the permissible place of use for irrigation use for rights 37-368A, 37-409A, 37-2076A, 37-2455 and 37-2157 is being removed from these same 1.7 acres, which reduces the permissible place of use from 515.6 acres to 513.9 acres.
8. Any license issued by IDWR pursuant to the right or portion thereof for the use of trust water is subject to a term review of 20 years after the date of this approval to determine availability of water for the use and to re-evaluate the public interest at the end of the term.

This permit is issued pursuant to the provisions of Section 42-204, Idaho Code. Witness the signature of the Director, affixed at Boise, this 2nd day of January, 2013.

FOR



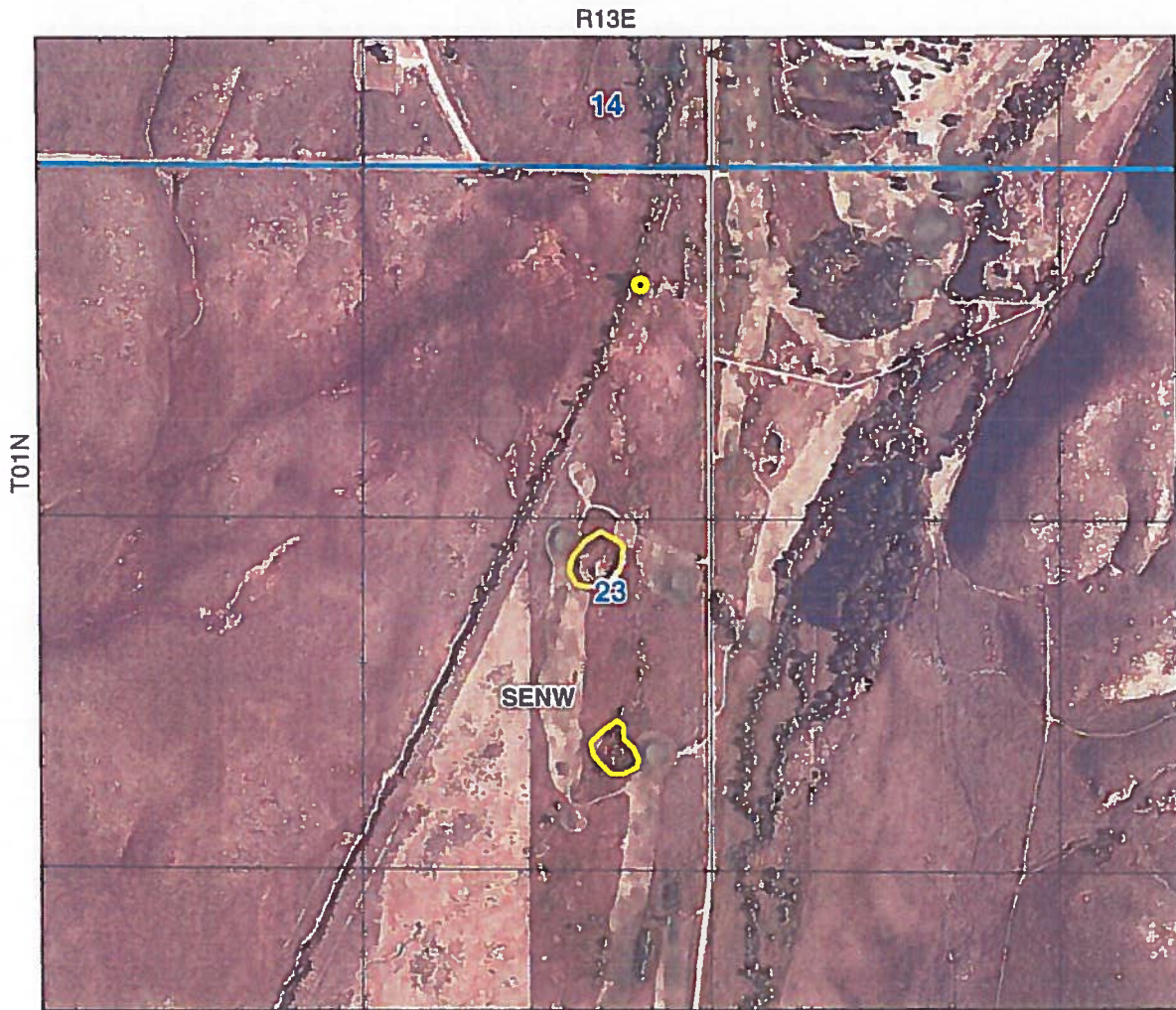
GARY SPACKMAN, Director

State of Idaho
Department of Water Resources

Attachment To Permit to Appropriate Water

37-8859

This map depicts the WILDLIFE STORAGE and AESTHETIC 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.



0 0.075 0.15 0.3 Miles

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

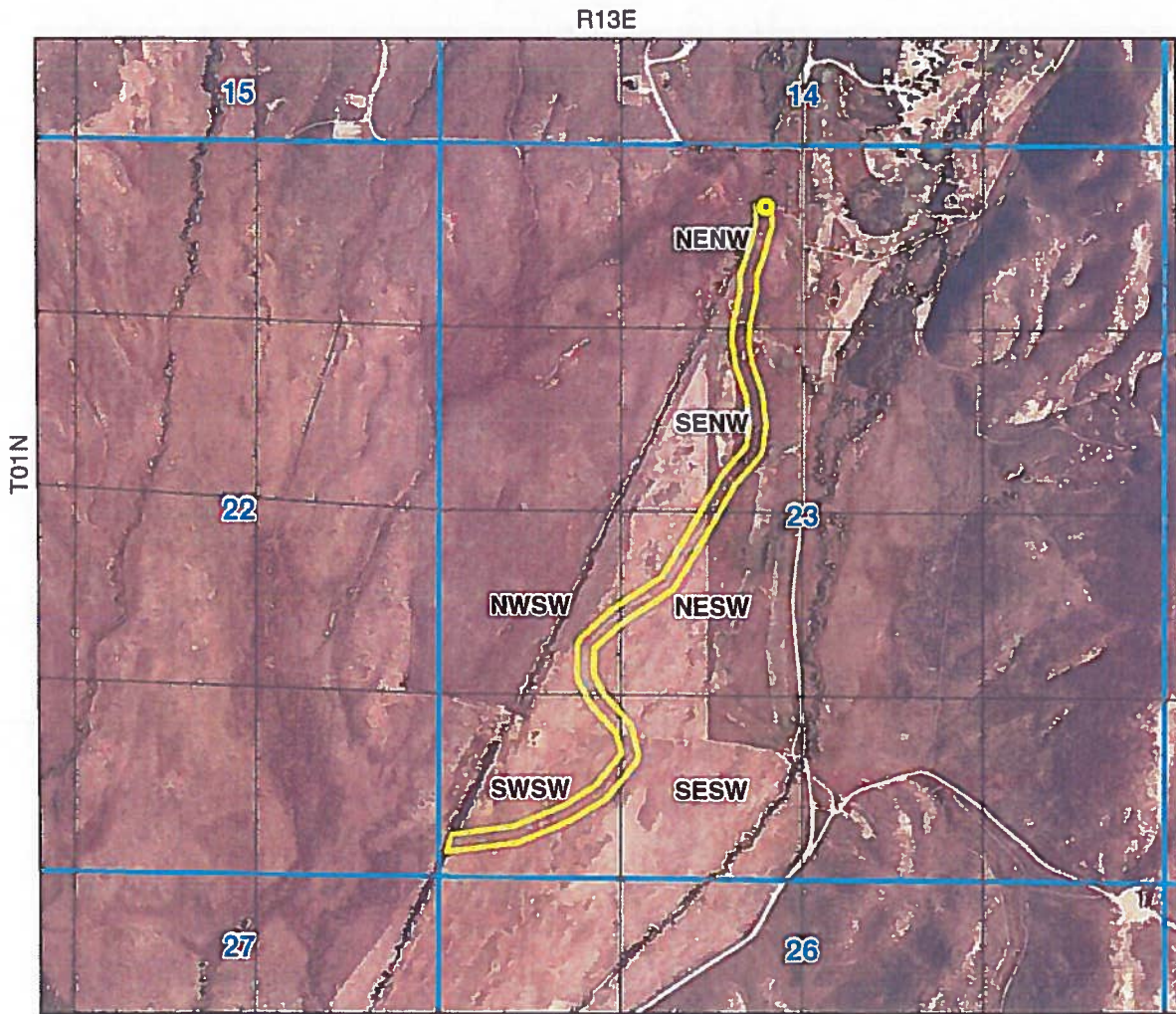


State of Idaho
Department of Water Resources

Attachment To Permit to Appropriate Water

37-8859

This map depicts the WILDLIFE & AESTHETIC 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.



0 0.15 0.3 0.6 Miles

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

