

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

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. 65-230981. Owner KDB LLCPhone No. 208-870-1306Current address 13 N Seabiscuit Ave, Nampa, ID 836872. Examiner's name Cody ParkerEXAM DATE 12/11/20173. Accompanied by Demar Burnett

Email _____

Address Same as aboveRelationship to permit holder Part ownerPhone No. Same4. Source Groundwatertributary to Big Creek**B. OVERLAP REVIEW**1. Other water rights with the same place of use None2. Other water rights with the same source and point of diversion None**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
			SE	SW	3	13N	04E	Valley	Aerial imagery, digital PLS map
									4 pond centroids
			NW	SW	3	13N	04E	Valley	Aerial imagery, digital PLS map
									2 pond centroids

2. Place(s) of Use:

Method of determination Aerial imagery, digital PLS map

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	04E	3									X	X		X					

3. **Delivery System Diagram:** Indicate all major components and distances between components. Indicate weir size/ditch size/pipe diameter (inside), as applicable. Use the space provided or ☒ see attached.

Scale: 1" = _____

- ☒ Copy of USGS Quadrangle attached showing location(s) of point(s) of diversion and place(s) of use (**required**)
☒ Aerial photo attached (required for irrigation of 10+ acres)
☒ Photo of diversion and system attached

4.

Well or Diversion Identification No.*	Motor Make	Hp	Motor Serial No.	Pump Make	Pump Serial No. or Discharge Size
NA					

*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
NA						

2. **Measurements:** _____

Ponds collect groundwater, no physical measurements made

This image shows a single sheet of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

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F. FLOW CALCULATIONS☐ Additional computation sheets attachedMeasured Method:
NA**G. VOLUME CALCULATIONS**

1. Volume Calculations for Irrigation:

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

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation Season}) \times 1.9835 = \text{NA}$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = \text{NA}$$

2. Volume Calculations for Other Uses:

POND 1 = 1.8 acres x 7 ft max depth x 0.4 = 5.0 afa

POND 2 = 0.1 acres x 6 ft mean depth = 0.6 afa

POND 3 = 0.8 acres x 9 ft max depth x 0.4 = 2.9 afa

POND 4 = 1.5 acres x 6 ft mean depth = 9 afa

POND 5 = 0.8 acres x 6 ft mean depth = 4.8 afa

POND 6 = 0.3 acres x 6 ft mean depth = 1.8 afa

TOTAL SURFACE AREA = 5.3 acres

CAPACITY = 24.1 afa

EVAPORATION = 6.8 afa

H. RECOMMENDATIONS

1. Recommended Amounts

Beneficial Use	Period of Use		Rate of Diversion Q (cfs)	Annual Volume V (afa)
	From	To		
Aesthetic Storage	01/01	12/31		30.9 afa
Totals:				30.9 afa

2. Recommended Amendments

☒ Change P.D. as reflected on page 1
☐ Change P.U. as reflected on page 1

☐ Add P.D. as reflected on page 1
☐ Add P.U. as reflected on page 1

☒ None - NO AMENDMENTS REQUIRED.
 SEE NARRATIVE FOR EXPLANATION. DECISION
 NO AMENDMENT REQUIRED
 MADE AFTER AMENDMENT
 REQUEST LETTER
 SENT 2/27/17.

I. AUTHENTICATION

Field Examiner's Signature

Date 12-27-17

Reviewer

Date 5/2/18

SEAL

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

Narrative

This permit authorizes the diversion and storage of 34 afa for aesthetic storage and aesthetic from storage uses. Proof was submitted on August 25, 2011. I completed the field examination on December 11, 2017, and was accompanied by Demar Burnett during the site visit.

Six shallow ponds were excavated which fill by intercepting shallow groundwater tributary to Big Creek. A small pump diverts water from the southernmost pond through 8" pvc to each of the other ponds for circulation.

The ponds are located within the SESW, NESW, and NWSW of Sec. 3, T13N, R04E, B.M. The points of diversion are pond centroids which lie in the SESW and the NWSW. The permit shows one of the PODs in the NESW. That POD will need to be changed to the NWSW. After reviewing the backfile, I can confirm that the ponds were developed as proposed. The discrepancy in the legal description was the result of PLS interpretation and not project development. Therefore, no amendment will be required to change the POD.

Conditions of the permit limit the ponds to a total capacity of 24 acre feet and 4.0 acres of surface area. 10 afa are provided for evaporation by rights 65-2399 and 65-3185 (combined 4 acres of irrigation given up for mitigation by non-use). Surface areas and capacities for each pond are shown on the field report. The total pond surface area, measured from aerial imagery, is 5.3 acres and the total capacity is 24.1 afa. The total evaporation estimated from the pond analysis spreadsheet using data from the Cascade 1 NW (NWS – 101514) station is 6.8 afa.

A letter from a consultant in the backfile states that the mitigating irrigation was historically used to grow grass hay. Calculating the consumptive use based on the McCall –105708 station for grass hay shows that the historical consumptive use from that irrigation was 6.8 afa. The values from the Cascade 1 NW (NWS—10578) station predict a consumptive use for irrigation of 7.3 afa. So, the mitigating right provided a sufficient volume of water to cover the evaporation from the ponds. The mitigating rights and mitigation condition will be updated to show a volume for mitigation by non-use of 6.8 afa. The acreage and diversion rate on the mitigating rights will stay the same.

The surface area limit on the permit is meant to limit the amount of evaporative loss from the ponds and define the consumptive use. The mitigation plan that was approved is sufficient to cover the evaporation from the ponds as they were developed so there is no net effect on the source. Therefore, the increased surface area may be approved.

Pond capacity was estimated using max or mean depths either provided by the owner at the time of the exam, or from the plans submitted with the application in the backfile. For the two large southern ponds (pond 1 and 3 in the report), the owner provided an estimate of the maximum depths. For the rest, he referred me to the information in the backfile. The plans in the backfile gave an estimate of 6 ft for mean depth for the rest of the ponds. The volume I have recommended for the license is 30.9 afa which includes the pond capacity (24.1 afa) and the evaporative losses (6.8 afa).

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At the time that the application was submitted, the applicant also applied separately to divert water from Big Creek for flow-through water into the ponds. The application was ultimately denied meaning the permit holder does not have the right to divert water from Big Creek into the ponds at this time. At the time of the exam, the recirculation pump was not running so water should not have been running from the PVC outlet pipes into the ponds. However, water was running from one PVC pipe at wpt 180 (seen on the map), which may suggest an illegal diversion from Big Creek. I was not able to find the inlet to that pipe so I cannot confirm that the source of that water was the Creek. When asked, the owner said that the source was "runoff" from the property. It is unclear to me how a non-perforated PVC pipe that is connected to the recirculation pump would collect and divert snow melt from the surrounding land.

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Figure 1 The vault with recirculation pump located at the southernmost pond at WPT 177 on the system diagram.

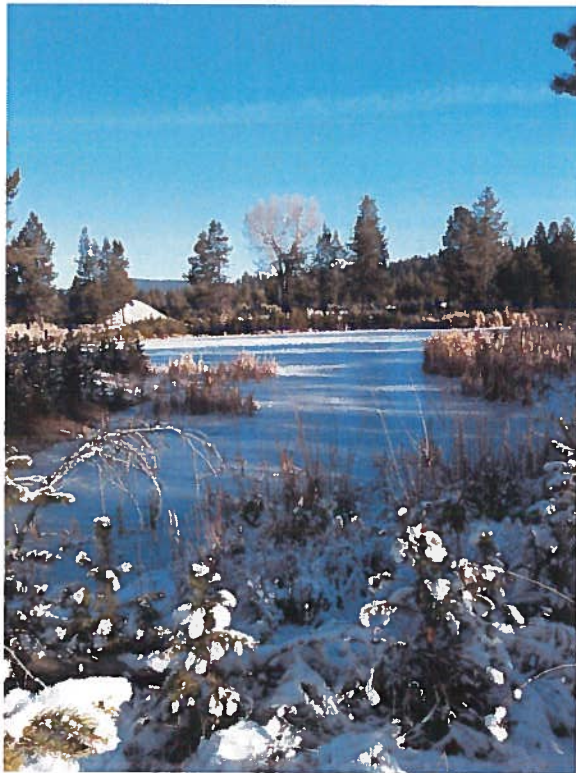


Figure 2 A view of the southernmost pond. Demar Burnett, estimates that the pond is a maximum of 7 ft deep.

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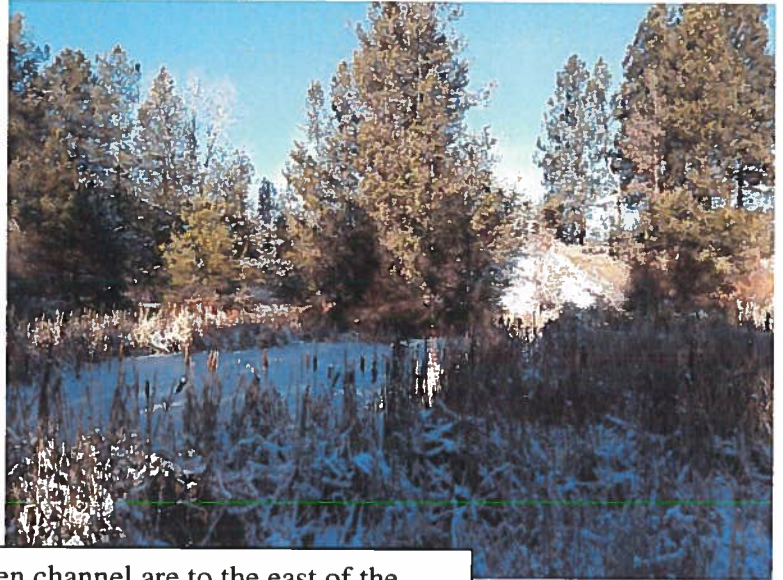


Figure 3 Two photos of the open channel are to the east of the southernmost pond. This channel connects the two ponds to the south and is included in the surface area and volume calculations.



Figure 4 The second pond as seen from WPT 179 on the system diagram.

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Figure 5 A PVC outlet running into the second pond at WPT 180. The pipe is supposedly hooked up to the recirculation pump to the south. The pump was not running at the time of the exam, but water was coming from this pipe. According to the owner, the source of the water is runoff from the surrounding landscape.



Figure 6 Two photos of the third pond from WPT 181. Another pipe from the recirculation pump feeds this pond. There was no water running from that pipe at the time of the exam.

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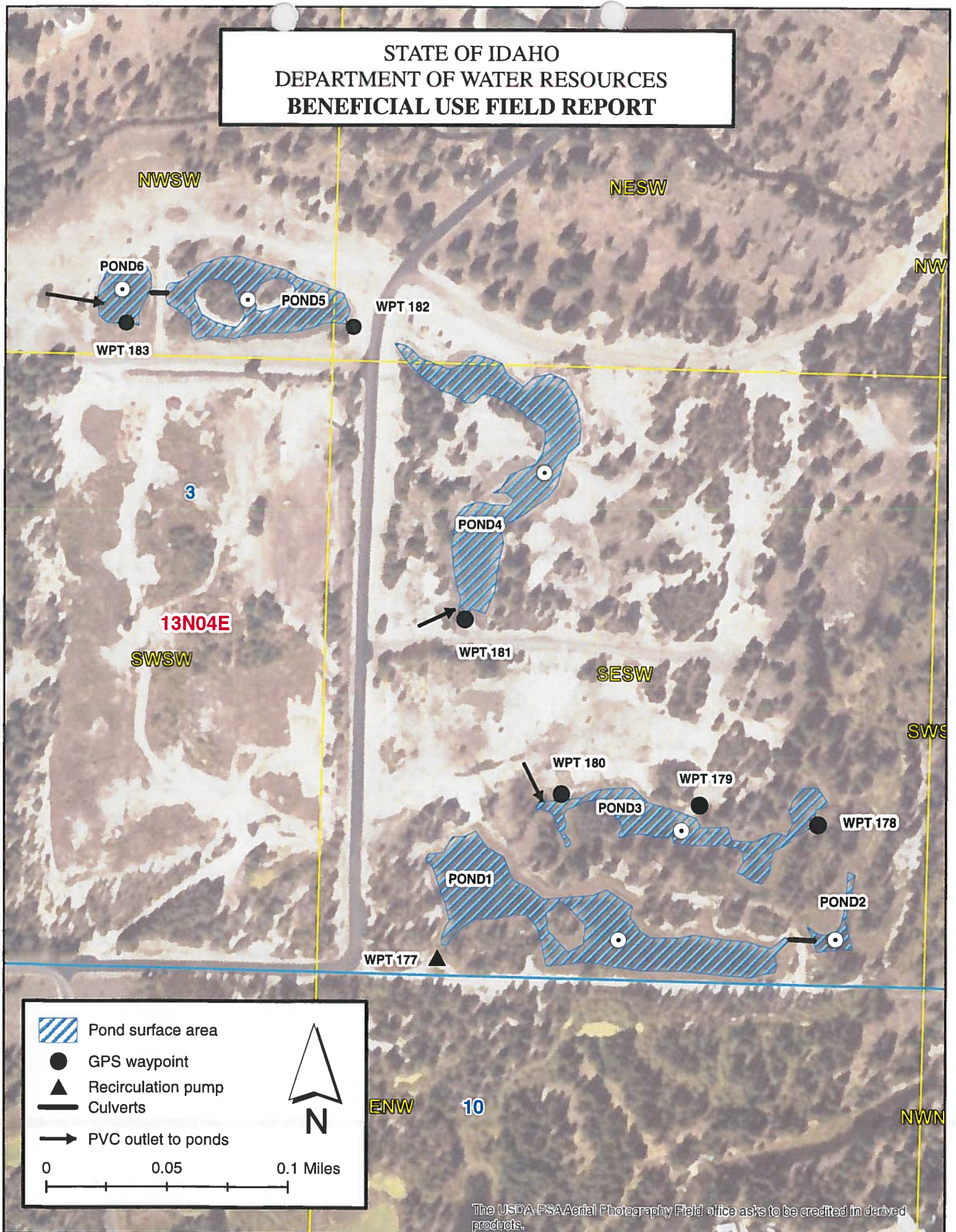


Figure 7 The fourth pond as seen from WPT 182. This pond is directly connected to the smaller pond directly west.



Figure 8 Two pics of the final pond to the northwest. LEFT: A pipe from the recirculation pump feeding the pond. ABOVE: the pond as seen from WPT 183.

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State of Idaho
Department of Water Resources
Attachment to Water Right License
65-23098

This map depicts the 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.



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

0 0.05 0.1 0.2 Miles



* Pond evaporation

Evaporation Loss Calculations

This spreadsheet has been designed by Idaho Department of Water Resources to estimate the annual evaporation losses from a pond.

FILE NUMBER	65-23098
REVIEWER	Cody Parker
DATE	12/27/2017

User Input
Calculated value
Formula Explanations

The acronyms used on the Kimberly Research Center website are defined below:

P = Precipitation
ET= Evapotranspiration
P _d = Precipitation deficit
P _d =ET-P

USING THIS SPREADSHEET

Use the link below to access the Kimberly Research Center website. This website provides the Precipitation Deficit for a station most representative of the pond under examination. The Precipitation Deficit is the total amount of free water surface evaporation minus the precipitation for a given area, which gives the total amount of evaporative losses incurred by the pond. There are several weather sites that are used throughout the state. IDWR staff can find the nearest site using Arc Map. The shape file containing the sites can be found at <X:/Spatial/Climate/ETIdahostations.shp>.

Instructions:

1. Use the link below to navigate to ET Idaho 2012.
2. Select the station which is most representative to your pond location.
3. Click Submit Query.
4. Under "Land Covers with Evapotranspiration Estimates," select "Open Water - Shallow Systems (ponds, streams)" or "Open Water - small stock ponds" depending on the pond size.
5. Click the link to "Precipitation Deficit."
6. Reference and copy (ctrl + C) the first subheading "Mean" values.
7. Click the "Paste Values from ET Idaho" button. The table will automatically enter a zero (0) for any negative precipitation deficit values.

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

Precipitation Deficit

Station: Cascade 1 NW NWS -- 105708 - Shallow System

Month	mm/day ¹	Days per month	mm/Month
Jan	-1.67	31	0.00
Feb	-1.30	28	0.00
March	-0.64	31	0.00
April	0.51	30	15.30
May	1.34	31	41.54
June	2.29	30	68.70
July	3.59	31	111.29
August	3.10	31	96.10
September	1.85	30	55.50
October	0.12	31	3.72
November	-1.93	30	0.00
December	-2.54	31	0.00

PLEASE NOTE: The seasonal average for precipitation deficit should not be used for calculations because precipitation often exceeds evaporation during wetter months of the year. If the pond is kept full, excess precipitation during wetter months does not serve to refill the pond during drier months.

For example, see Sandpoint KSPT (NWS -- 108137), the annual precipitation deficit is -106 mm. However, April through September have positive precipitation deficit values. To properly estimate the annual volume of water necessary to refill a pond due to evaporation losses, the table will automatically enter a zero (0) for each month that the precipitation value is reported as a negative value.

As described above, precipitation offsets evaporation in winter months, so the net effect is that wintertime precipitation deficit is usually zero.

Total mm/year = 392.15

$$((392.15 \div (\text{convert to feet})) \times (\text{Surface area of pond, in acres})) = \text{Evaporation Loss in Acre Feet}$$

(392.15 ÷ 304.8) X 5.30 = 6.8 AFA

Consumptive use from mitigated acreage (1st Station)

Evaporation Loss Calculations

This spreadsheet has been designed by Idaho Department of Water Resources to estimate the annual evaporation losses from a pond.

FILE NUMBER	65-23098
REVIEWER	Cody Parker
DATE	12/27/2017

User Input
Calculated value
Formula Explanations

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USING THIS SPREADSHEET

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Precipitation Deficit

Station: Cascade 1 NW NWS--105708 - Grass Hay

Month	mm/day ¹	Days per month	mm/Month
Jan	-0.01	31	0.00
Feb	0.01	28	0.28
March	0.03	31	0.93
April	0.06	30	1.80
May	1.16	31	35.96
June	3.95	30	118.50
July	6.00	31	186.00
August	4.79	31	148.49
September	2.15	30	64.50
October	-0.36	31	0.00
November	-0.53	30	0.00
December	-0.07	31	0.00

Total mm/year = 556.46

PLEASE NOTE: The seasonal average for precipitation deficit should not be used for calculations because precipitation often exceeds evaporation during wetter months of the year. If the pond is kept full, excess precipitation during wetter months does not serve to refill the pond during drier months.

For example, see Sandpoint KSPT (NWS -- 108137), the annual precipitation deficit is -106 mm. However, April through September have positive precipitation deficit values. To properly estimate the annual volume of water necessary to refill a pond due to evaporation losses, the table will automatically enter a zero (0) for each month that the precipitation value is reported as a negative value.

As described above, precipitation offsets evaporation in winter months, so the net effect is that wintertime precipitation deficit is usually zero.

$$[(556.46 \text{ mm/yr}) \div (\text{convert to feet})] \times (\text{Surface area of pond, in acres}) = \text{Evaporation Loss in Acre Feet}$$

$$(556.46 \div 304.8) \times 4.00 = 7.3 \text{ AFA}$$

* Consumptive use from mitigated acreage (Station 2)

Evaporation Loss Calculations

This spreadsheet has been designed by Idaho Department of Water Resources to estimate the annual evaporation losses from a pond.

FILE NUMBER	65-23098
REVIEWER	Cody Parker
DATE	12/27/2017

User Input
Calculated value
Formula Explanations

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P = Precipitation
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P _d = Precipitation deficit
P _d =ET-P

USING THIS SPREADSHEET

Use the link below to access the Kimberly Research Center website. This website provides the Precipitation Deficit for a station most representative of the pond under examination. The Precipitation Deficit is the total amount of free water surface evaporation minus the precipitation for a given area, which gives the total amount of evaporative losses incurred by the pond. There are several weather sites that are used throughout the state. IDWR staff can find the nearest site using Arc Map. The shape file containing the sites can be found at X:\Spatial\Climate\ETIdahostations.shp.

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7. Click the "Paste Values from ET Idaho" button. The table will automatically enter a zero (0) for any negative precipitation deficit values.

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

Precipitation Deficit

Station: McCall NWS-10578 - Grass Hay

Month	mm/day ¹	Days per month	mm/Month
Jan	0.00	31	0.00
Feb	0.02	28	0.56
March	0.01	31	0.31
April	0.11	30	3.30
May	1.19	31	36.89
June	3.59	30	107.70
July	5.96	31	184.76
August	4.50	31	139.50
September	1.42	30	42.60
October	-0.27	31	0.00
November	-0.24	30	0.00
December	-0.04	31	0.00

Total mm/year = 515.62

PLEASE NOTE: The seasonal average for precipitation deficit should not be used for calculations because precipitation often exceeds evaporation during wetter months of the year. If the pond is kept full, excess precipitation during wetter months does not serve to refill the pond during drier months.

For example, see Sandpoint KSPT (NWS -- 108137), the annual precipitation deficit is -106 mm. However, April through September have positive precipitation deficit values. To properly estimate the annual volume of water necessary to refill a pond due to evaporation losses, the table will automatically enter a zero (0) for each month that the precipitation value is reported as a negative value.

As described above, precipitation offsets evaporation in winter months, so the net effect is that wintertime precipitation deficit is usually zero.

$[(\text{mm/yr}) \div (\text{convert to feet})] \times (\text{Surface area of pond, in acres}) = \text{Evaporation Loss in Acre Feet}$

$$(515.62 \div 304.8) \times 4.00 = 6.8 \text{ AFA}$$

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT
OVERLAP ANALYSIS

13N04E3
BasinSeque Owner Source Use
65-23098 KDB LLC; SPF GROUND VAESTHETIC FROM S
65-23098 KDB LLC; SPF GROUND VAESTHETIC STORAG

NENE	NWNE	SWNE	SENE	NENW	NWNW	SWNW	SENW	NESW	NWSW	SWSW	SESW	NESE	NWSE	SWSE	TotalAcres
								X	X		X				
								X	X		X				



State of Idaho

DEPARTMENT OF WATER RESOURCES

Western Region • 2735 Airport Way • Boise, Idaho 83705-5082

Phone: (208) 334-2190 • Fax: (208) 334-2348 • Website: www.idwr.idaho.gov

C.L. "BUTCH" OTTER
Governor

GARY SPACKMAN
Director

December 27, 2017

KDB LLC
13 N SEABISCUIT AVE
NAMPA ID 83687

RE: Water Right Permit No. 65-23098

Dear Permit Holder(s):

The Department of Water Resources is reviewing the permit(s) referenced above prior to issuing water right license(s). By issuing a license, the Department confirms the extent of development that has been established in compliance with the terms of the permit.

The examiner who verified your water use reported that certain elements of the permit(s) have been developed differently than described on your permit(s). Changes that do not increase the authorized use of water under the permit(s) can be requested and approved in accordance with Section 42-211, Idaho Code. Before license(s) can be issued, your permit(s) must be amended to depict your water use as it was actually developed.

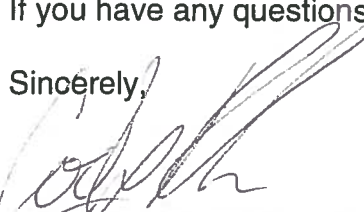
Based on the examiner's report, the following elements were developed differently than described on your permit(s):

- ☒ **Point(s) of Diversion**
- ☐ **Place(s) of Use**
- ☐ **Other**

The enclosed Application for Amendment form(s) depicts the elements of the water right(s) as they will appear on the license(s) when issued. Please review the amendment form(s) carefully. If you concur with the information presented, please sign and return the form(s) with the \$100.00 filing fee within 14 days.

If you have any questions, please call me at 208-334-2190.

Sincerely,


Cody Parker
Water Resource Agent

Enclosure(s): Application for Amendment



State of Idaho

DEPARTMENT OF WATER RESOURCES

Western Region • 2735 Airport Way • Boise, Idaho 83705-5082

Phone: (208) 334-2190 • Fax: (208) 334-2348 • Website: www.idwr.idaho.gov

C.L. "BUTCH" OTTER
Governor

GARY SPACKMAN
Director

December 1, 2017

KDB LLC
13 N SEABISCUIT AVE
NAMPA ID 83687

RE: Request to Schedule Field Exam for Water Right Permit No. 65-23098

Dear Permit Holder(s),

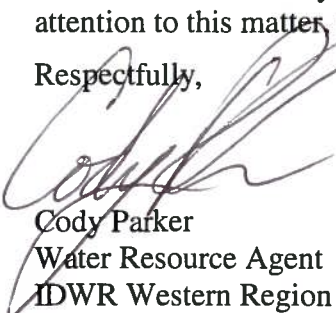
I am writing today in regard to the water right permit referenced above, which authorizes the diversion of **34.0 acre-feet** of water from **groundwater** for **aesthetic storage** and **aesthetic from storage** uses. On August 25, 2011, you submitted Proof of Beneficial Use for the permit indicating that your project is fully developed. The next step in the water appropriation process is to complete a Beneficial Use Field Examination to determine the extent to which water use was developed under the permit. The field examination is the final step needed before the Department can issue the final water right license.

If you did not develop a beneficial use of water under the permit during the beneficial use period, a license cannot be issued and the permit should be relinquished. If the use *was* developed, but you have ceased using the water and you have no interest in pursuing the water right license, please relinquish the permit by submitting the enclosed Relinquishment of Permit form (no fee required).

Please contact me within the next thirty (30) days to schedule a field examination for your water right permit. You can reach me by phone at 208-334-2190 or by email at cody.parker@idwr.idaho.gov. If you no longer own the place of use the department will work with the current property owner to issue a license or void the permit. If you still own the property in question, but do not make a timely response in this regard, the permit will be voided.

Please let me know if you have any questions regarding the content of this letter. I appreciate your attention to this matter, and I look forward to hearing from you

Respectfully,



Cody Parker
Water Resource Agent
IDWR Western Region

Enclosed: WR Report, WR Map, Relinquishment of Permit, Assignment of Permit