

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. 63-337721. Owner Carlton Bay Homeowners Association IncPhone No. 208-286-9666

Current address _____

2. Examiner's name Cody ParkerEXAM DATE 01/05/20183. Accompanied by Larry Rupp and Bill Werber

Email _____

Address _____

Relationship to permit holder Board members and landscape committee

Phone No. _____

4. Source Ground Watertributary to Boise River**B. OVERLAP REVIEW**1. Other water rights with the same place of use 63-1462. 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	1/4	1/4	1/4	Sec	Twp	Rge	County	Method of Determination/Remarks
			SW	SW	14	04N	01E	ADA	Aerial imagery, digital PLS map
									Centroids for 3 ponds

2. Place(s) of Use:

Method of determination Aerial imagery, digital PLS map, site visit

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
04N	01E	14											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:** _____

Pond 1: 0.7 acres surface area, 10 ft max depth

Pond 2: 0.6 acres surface area, 10 ft max depth

Pond 3: 0.7 acres surface area, 8 ft max depth

E. NARRATIVE/REMARKS/COMMENTS

The permit authorizes storage of 15.9 afa groundwater for aesthetic storage use for three ponds. The field exam was completed on January 5, 2018.

Three (3) PODs are pond centroids. Their locations were determined using aerial imagery and digital PLS mapping. The entire pond areas fall within the SWSW of Sec 14, T04N, R01E, B.M.

The three excavated ponds intercept shallow groundwater tributary to the Boise River. Evaporative losses from the ponds are mitigated by diverting surface water from the New Union Ditch Co. (right 63-146) into the ponds to evaporate. Irrigation water is also diverted into the ponds and is distributed throughout the subdivision via the pump station located at the western end of the pond to the northwest.

Mitigation volume was determined on a 1:1 basis, meaning that 6 acres irrigation were retired to cover 6 acres of pond surface area. The consumptive use volume for the area is 3.5 afa/acre, so $6 \times 3.5 = 21$ afa, which is listed as aesthetic storage on right 63-146. The mitigation diversion rate was based on the 0.02 cfs/acre standard (multiplied by 6 acres to give 0.12 cfs.) 6 ACRES TOTAL CONVERTED TO OFFSET EVAPORATION FOR 63-33722 + 63-33792.

The mitigating right is an older Stewart-Decree right which may be reduced to 60% of its value annually. The reduction must be accounted for when determining the required mitigation. The ponds as developed (for this permit and 63-33792) lose 10.3 afa to evaporation, which is equivalent to the consumptive use associated with 2.9 acres irrigation. The diversion rate for 2.9 acres is 0.057 cfs. $0.057 \text{ cfs} / 0.6 = 0.095 \text{ cfs}$, which is the diversion rate required for mitigation when accounting for annual reductions and is equal to 4.75 acres irrigation and a volume of 16.6 afa. So, 16.6 afa is required from the mitigating right to account for the 10.3 afa evaporation and is achieved by retiring ~4.8 acres of irrigation. The difference between the acres retired under the mitigation plan and the acres needed to offset evaporation is about 1.2. The difference is small enough that we don't necessarily need to encourage the right owner to transfer those acres back to irrigation.

Condition 220 of the permit limits the ponds to a combined surface area of 3 acres and a combined volume of 15.9 af. The ponds were developed with only 2.0 acres surface area and a capacity of 7.4 af. The condition will be updated on the final license to reflect the developed surface area and capacity.

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?

No lockable works or measuring device requirements.

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

1. Volume Calculations for Irrigation:

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

2. Volume Calculations for Other Uses:

Pond 1: 0.7 acres x 10 ft max depth x 0.4 = 2.8 af capacity

Pond 2: 0.6 acres x 10 ft max depth x 0.4 = 2.4 af capacity

Pond 3: 0.7 acres x 8 ft max depth x 0.4 = 2.2 af capacity

Total capacity = 7.4 af

Evaporation = 4.6 afa (per pond loss spreadsheet attached, covered by right 63-146)

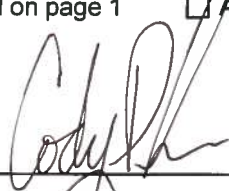
H. RECOMMENDATIONS

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		7.4 afa
Totals:				7.4 afa

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. AUTHENTICATIONField Examiner's Signature  Date 2-7-18Reviewer  Date 5/7/18

SEAL

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

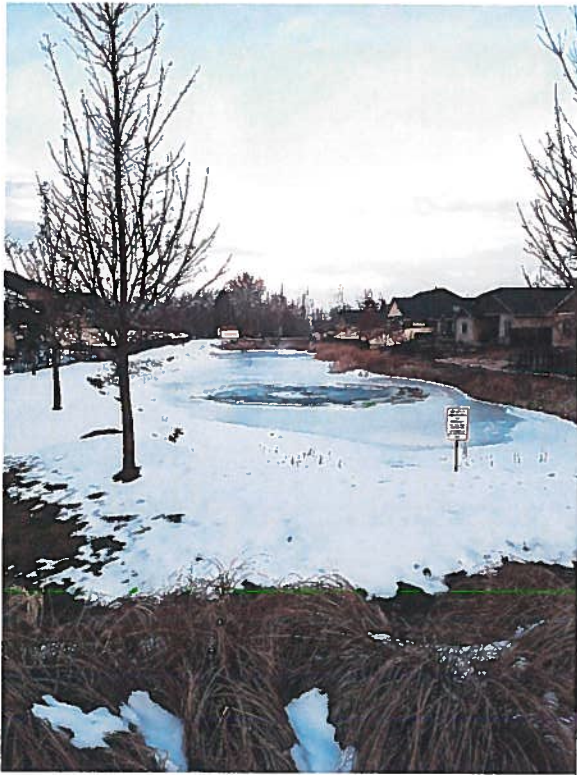


Figure 1 The northwestern pond is approximately 0.7 acres in surface area and 10 ft deep.

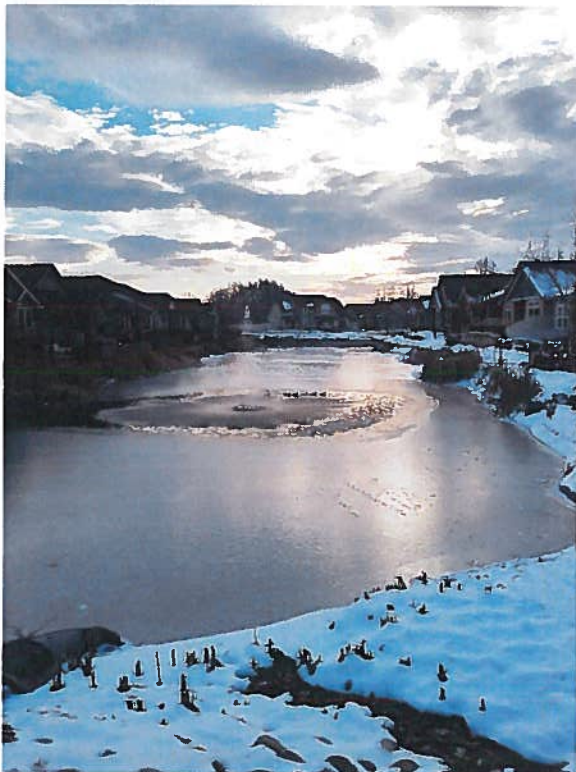


Figure 2 The northeastern pond is approximately 0.6 acres in surface area and 10 ft deep. The ponds shows in figures 1 and 2 are connected by a steel culvert that runs between them.

STATE OF IDAHO
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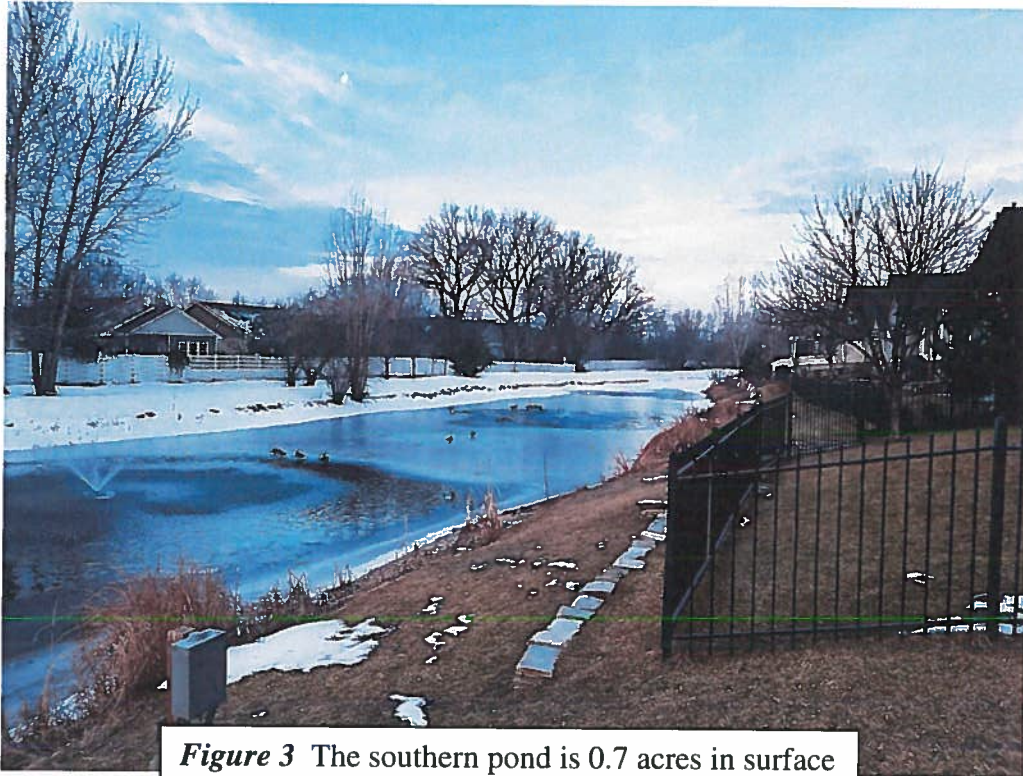


Figure 3 The southern pond is 0.7 acres in surface area and 8 ft deep. This pond is not connected to the other two.



Figure 4 The outlet of the pipe which carries water from the **LITTLE** Union Irrigation Canal to the pond system

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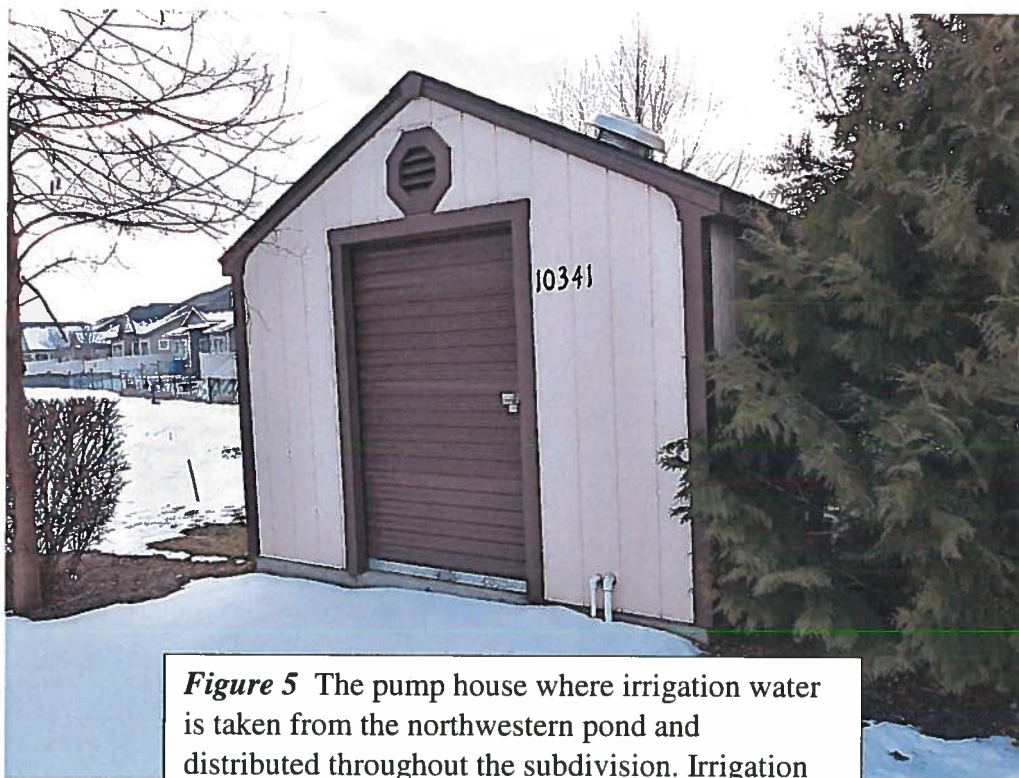


Figure 5 The pump house where irrigation water is taken from the northwestern pond and distributed throughout the subdivision. Irrigation and evaporation water is provided through surface water shares from the New Union Ditch Co.



Figure 6 The sliding headgate which allows evaporation and irrigation water to be diverted from the main irrigation canal. The location of the headgate is shown on the system diagram.

State of Idaho
Department of Water Resources
Beneficial Use Field Report
63-33772

AESTHETIC STORAGE

01E



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

0 0.035 0.07 0.14 Miles





 Ponds 2.0-acre combined surface area

 Little Union Canal

 Dry Creek Canal

 Boise Valley Canal

 Outlet into pond system from ditch

 Headgate from canal

 Irrigation pump house

0

0.1

0.2 Miles



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	63-33772
REVIEWER	Cody Parker
DATE	1/5/2018

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: Boise WSFO Airport (NWS -- 101022)

Month	mm/day ¹	Days per month	mm/Month
Jan	-0.66	31	0.00
Feb	0.08	28	2.24
March	0.74	31	22.94
April	2.01	30	60.30
May	2.65	31	82.15
June	4.05	30	121.50
July	4.79	31	148.49
August	4.05	31	125.55
September	2.79	30	83.70
October	1.54	31	47.74
November	-0.43	30	0.00
December	-0.89	31	0.00

Total mm/year = 694.61

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.

$$((694.61 \text{ mm/yr}) \div (\text{convert to feet})) \times (\text{Surface area of pond, in acres}) = \text{Evaporation Loss in Acre Feet}$$

$$(694.61 \div 304.8) \times 2.00 = 4.6 \text{ AFA}$$

1

[illegible]

STATE OF IDAHO
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	NENE	NWNE	SWNE	SENE	NENW	NWNW	SWNW	SESW	NESW	NWSW	SWSW	SESW	NESE	NWSE	SWSE	SESE	TotalAcres
63-17630 STARR, OWEN M. GROUND V DOMESTIC										X							
63-17633 SCHIEDEL, GLENN GROUND V DOMESTIC												X					
63-17636 MC COY, W KATH GROUND V DOMESTIC							X										
63-17638 STARR, OWEN M. GROUND V DOMESTIC										X							
63-17639 HALLYBURTON, P. GROUND V DOMESTIC							X										
63-17710 WOODYARD, ERN GROUND V DOMESTIC										X							
63-17747A SMITH, LORENA GROUND V DOMESTIC			X														
63-17747B MASON, KEVIN L. GROUND V DOMESTIC			X														
63-17778 PATTEN, JOHN GROUND V DOMESTIC					X												
63-17778 PATTEN, JOHN GROUND V STOCKWATER					X												
63-17779 CANDAU, MARY GROUND V DOMESTIC										X							
63-17933 CARLSON, ROBER GROUND V DOMESTIC									X							X	
63-18228 WILSON, FLOREN GROUND V DOMESTIC									X								
63-18652 PALMER, JUDITH I GROUND V DOMESTIC									X			X					
63-19069 WILKERSON, DICK GROUND V DOMESTIC											X						
63-19072 FRIEND, BRET W. GROUND V DOMESTIC							X										
63-19148 FRENCH, CONNIE GROUND V DOMESTIC									X								
63-19369 LE FAVE, JOHN R. GROUND V DOMESTIC										X							
63-19369 LE FAVE, JOHN R. GROUND V STOCKWATER										X							
63-19376 JEFFRIES, FRANCIS GROUND V DOMESTIC										X							
63-19376 JEFFRIES, FRANCIS GROUND V STOCKWATER										X							
63-19377 JEFFRIES, FRANCIS GROUND V DOMESTIC										X							
63-19377 JEFFRIES, FRANCIS GROUND V STOCKWATER										X							
63-19578 HOLMES, DORIS S GROUND V DOMESTIC							X										
63-19579 HOLMES, DORIS S GROUND V DOMESTIC							X										
63-19618 DRAHN, AUBURN GROUND V DOMESTIC													X				
63-19618 DRAHN, AUBURN GROUND V STOCKWATER													X				
63-198AG FARMERS UNION BOISE RIVE IRRIGATION	X	X	X	X	X	X	X	X									
63-20111 RYBKA, LOLA BER GROUND V DOMESTIC							X										
63-20168 GASKELL, ROBERT GROUND V DOMESTIC		X															
63-20168 GASKELL, ROBERT GROUND V STOCKWATER		X															
63-20253 MEINIKHEIM, ERII GROUND V DOMESTIC							X										
63-20410 DUNBAR, ALDEN. GROUND V DOMESTIC									X								
63-20495 KELLY, CAROLEE; I GROUND V DOMESTIC										X							
63-20817 BENSON, JACKIE GROUND V DOMESTIC																	
63-20830 DAVISON, CLINTC GROUND V DOMESTIC							X								X		
63-20830 DAVISON, CLINTC GROUND V STOCKWATER							X										
63-21442 WITTE, FRANZ; W GROUND V DOMESTIC																	
63-21727 DRAKE, VESTAL GROUND V DOMESTIC												X					
63-21729 FARMERS UNION WASTE W/ IRRIGATION	X	X	X	X	X	X	X	X									
63-21847 PETTIGREW, VERI GROUND V DOMESTIC																	
63-21847 PETTIGREW, VERI GROUND V STOCKWATER										X							
63-22029 THORNOCK, PHYI GROUND V DOMESTIC										X							
63-22036 THOMPSON, WAF GROUND V DOMESTIC				X													
63-22084 JANAK, BRENDA L GROUND V DOMESTIC																	
63-22271 ATKINSON, MART GROUND V DOMESTIC										X							
63-22271 ATKINSON, MART GROUND V STOCKWATER															X		
63-22283 TITUS, CHARLES V GROUND V DOMESTIC							X								X		
63-22378 BERNIER, JOE; BEI GROUND V DOMESTIC									X								
63-22428 BARTLETT, EILEEN GROUND V DOMESTIC							X										
63-22428 BARTLETT, EILEEN GROUND V STOCKWATER																	
63-22460 ECHEVARRIA, FLO GROUND V DOMESTIC							X										
63-22509 FELIX, GREGORY I GROUND V DOMESTIC																	
63-22521 HILL, DONALD J; I GROUND V DOMESTIC							X										
63-22567 RADFORD, EVA; R GROUND V DOMESTIC												X					
63-22567 RADFORD, EVA; R GROUND V STOCKWATER							X										
63-22609 LEIDING, ELEANO GROUND V DOMESTIC									X								
63-22628 LEIDING, JERRY L. GROUND V DOMESTIC									X								

BENEFICIAL USE FIELD REPORT

Overlapping right, provides volume for evaporation
Different use, no overlap
Same use, different ponds to the south and west

Same use, different ponds to the south and west



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 15, 2017

CARLTON BAY HOMEOWNERS ASSN INC
PO BOX 1350
MERIDIAN ID 83680

RE: Request to Schedule Field Exam for Water Right Permit No. 63-33772

Dear Permit Holder(s),

I am writing today in regard to the water right permit referenced above, which authorizes the diversion of **15.9 acre-feet** of water from **groundwater** for **aesthetic storage** use. On December 30, 2015, 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

IDAHO DEPARTMENT OF WATER RESOURCES

WESTERN REGION

2735 Airport Way

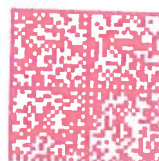
Boise, Idaho 83705-5082

RETURN SERVICE REQUESTED

NO LONGER AT
THIS ADDRESS

CARLTON BAY HOMEOWNERS ASSN INC
PO BOX 810
STAR ID 83669

PRESORTED
FIRST CLASS



U.S. POSTAGE PITNEY BOWES
ZIP 83702 \$ 000.373
02 1W
0001393370 NOV 28 2017

RECEIVED

DEC 06 2017

WATER RESOURCES
WESTERN REGION

NIXIE

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DE 1300

0012/04/17

RETURN TO SENDER
REFUSED
UNABLE TO FORWARD

83705508235
*Z689-05Z70-04-Z1



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

CARLTON BAY HOMEOWNERS ASSN INC
PO BOX 810
STAR ID 83669

RE: Request to Schedule Field Exam for Water Right Permit No. 63-33772

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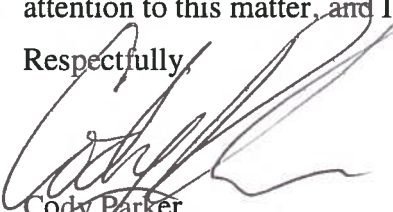
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Cody Parker
Water Resource Agent
IDWR Western Region

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