

IN-OFFICE BENEFICIAL USE FIELD REPORT

Permit No: 65-13560

Examiner: Patrick Kelly

Date: 12/1/2017

In-office qualification (IDAPA 035.01.r):

- ☐ Irrigation ≤ 5 acres
☒ Stockwater storage ≤ 14.6 af
☐ Total diversion rate ≤ 0.24 cfs and not irrigation or storage

Current Owner Name: Daniel E Jones

Address: PO Box 335, Donnelly ID 83615

Beneficial Use Fee Paid: \$50

Receipt: W021910

Source: Stover Creek

Source change? ☒ N ☐ Y Change clarifies originally intended source.
If not – void permit.

Point of Diversion			NE				NW				SW				SE			
Twp	Rge	Sec	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE
17N	03E	25																X

Method of Determination: Dam visible using aerial imagery within digital PLSS boundary.

POD change? ☒ N ☐ Y

Place of Use			NE				NW				SW				SE				Totals
Twp	Rge	Sec	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
17N	03E	25																X	

Method of Determination: Storage pond visible using aerial imagery within the digital PLSS boundary.

POU change? ☒ N ☐ YPurpose of Use: Stockwater Storage Purpose change? ☐ N ☐ Y

Method of Determination: Storage system found on property assumed to be used for purposes described by the permit.

Standard Season of Use: 1/1 - 12/31

Update required on license? ☒ N ☐ YOverlap Review POD overlap? ☒ N ☐ Y WR's:Analysis Attached ☒ Comments: 65-13560 only POD in SESE.POU overlap? ☒ N ☐ Y WR's:

Comments: 65-13560 only Stockwater/Storage use in SESE.

Diversion Rate Permitted Rate: 0.06 cfs / 9.0 AF* BU Standard Limit: 0.07 cfs / N/A*

BU Fee Limit: 0.20 cfs / 20.0 AF* Theoretical (optional): cfs

Recommended Total Div Rate: 0.06 cfs 9.0 AF Stockwater Storage Only*

Annual Volume

For Irrigation: cfs x 1.9835 x days = af
 acres x af/ac (FHR) = af
 Smaller of two volumes = af

For other uses: Use permitted for 250 head. 4.1 af recommended for 201-300 head of cattle
 Stockwater storage requires additional volume to cover consumptive losses associated with the reservoir.

IN-OFFICE BENEFICIAL USE FIELD REPORT

Recommended Amounts

Beneficial Use	Season of Use	Diversion Rate (cfs)	Annual Volume (af)
Stockwater Storage	1/1 - 12/31		9.0

	Totals	cfs	9.0 af
Amendments Required	☐ Change P.D.	☐ Add P.D	☒ None
	☐ Change P.U.	☐ Add P.U.	☐ Other:

Conditions: Condition 030 was removed based on the assumption the permit holder complied with the conditions of the permit prior to the start of construction. Condition 020 regarding protest agreements will be updated. 219 and 220 will be added to identify initial fill and maintenance of the system.

Have conditions of permit been met? ☒ Y ☐ N

Narrative: The permit is in the name of Charter Mountain Ranch Inc. Sec of State records indicate a "LLC" but not a "Inc". County taxlot data suggests a Daniel E Jones now owns the property associated with the pond. Because there is evidence that the use was developed on the property, an ownership change should be completed once the license is issued. A copy of the license approval and OC form will be sent to the Jones address found in taxlot data.

A letter was sent to both the permit owner and property owner. Dan Jones called me on January 16 2018 to confirm that the stockwater drink directly from the pond and there are no troughs or tanks set up to divert water from the pond. He also confirmed that the dam was constructed with pipes required by conditions of the permit. As a result, stockwater use is removed from the recommendation.

The permit authorizes a total of 9.0 af for stockwater storage. Surface area of the pond using ArcMap tools of a 1998 image (1997 proof) measures 3.0 acres. The app for permit identifies a 9'11" dam. If we used this as a max depth and assuming a 40% gradient, the calculation estimates a total pond capacity of 12.0 af. Evaporation losses total 3.4 af for a total system requirement of 15.4 af.

However, since we do not have any information of the actual depth, after looking at topography of the land it is reasonable to believe that the max depth could be much less than 9'11". The license should reflect losses we can measure, and authorize a capacity for the remainder of the permit. Using 3.4 af for evaporation, this leaves a capacity of 5.6 af available on the permit.

Using more recent imagery, it appears the pond may have grown in size. Any additional use needed should be applied for in a future application. The 3.0 ac evaporation loss and 5.6 af for capacity makes the average depth 1.9 ft.

A pond analysis is attached to this report. Differences to tenths of an acre-foot for volumes and what is described in this narrative are attributed to rounding differences.

Workflow

Exam Date Entered	☒
POU/POD shapes	☒
Combined Rights Entry	☐
Wild & Scenic Entry	☐
Draft License and Map	☒
FE Database (N: drive)	☒

Supporting Documents

Aerial Photograph	☒	Well Log	☐
POU/POD Map	☒	Diagrams	☐
LandSat	☐	Theoretical	☐
Photographs	☐	Other:	
Site Visit Date:			

Authentication

Field Examiner's Name: Patrick Kelly

Date: 12-1-2018

* REPORT UPDATED AFTER
CONVERSATION WITH
DAN JONES 1/16/18.

Reviewer: Angela M. Gorman

Date: 1-19-18

Seepage Loss Calculations

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

FILE NUMBER	65-13560
REVIEWER	Patrick Kelly
DATE	12/1/2017

User Input
Calculated value
Formula Explanations

INPUTS

Pond Surface Area (AC.)	3	AC.
-------------------------	---	-----

Pond Surface Area (SQ. FT.)	130680	SQ. FT.
-----------------------------	--------	---------

My Soil Classification is	On-Stream	
Suggested Seepage Rate (FT./DAY)	0.0000	FT./DAY

Formula: (Surface Area X Seepage Rate) X 7.48 = Gallons Per Day Loss

Convert to GPD	0	GPD
----------------	---	-----

Total Seepage Loss (AFA)	0.0	AFA
--------------------------	-----	-----

Though sand and gravel seepage rates may actually be higher, the maximum allowable rate is 0.2 ft/day, pursuant to Administrative Memo "Seepage Loss Standards for Ponds and Reservoirs."

Suggested Seepage Rates for Different Soil Types:
GW, GP, GM, GC, SW, SP and SM (silty sand, sand silt mixtures and gravel mixtures) = 0.2 ft per day
OL and ML (inorganic silts - very fine sands, silty, or clayey fine sands) = 0.02 ft per day
SC (clayey sands, sand clay mixtures) = 0.007 ft per day
CL (Low to medium plasticity clays) = 0.003 ft per day
MH, OH, PT and CH (high plasticity clays) = 0.0003 ft per day
LINED PONDS (liners can be chemical, fabric, or bentonite) = 0 ft per day
Ponds Intercepting Groundwater (excavated ponds filled by ground water) = 0 ft per day

PLEASE NOTE: The initial basis for the Suggested Seepage Rates in the table above is found on Page 16 of Seepage from Fish Ponds, Bulletin 599, August 1989 Alabama Agricultural experiment Station, Auburn University, Auburn University Alabama. If you don't know the soil type, please refer to the map provided at X:\Spatial\Soils\USCS\PondSoils.lyr. Use "0" if the pond fill relies on the water table.

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	65-13560
REVIEWER	Patrick Kelly
DATE	12/1/2017

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: McCall (NWS - 105708)

Month	mm/day ¹	Days per month	mm/Month
Jan	-1.98	31	0.00
Feb	-1.57	28	0.00
March	-0.90	31	0.00
April	0.39	30	11.70
May	0.88	31	27.28
June	1.82	30	54.60
July	3.44	31	106.64
August	2.88	31	89.28
September	1.49	30	44.70
October	0.20	31	6.20
November	-2.07	30	0.00
December	-2.53	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 (NW\$ -- 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 = **340.40**

$$\left(\frac{340.40}{304.8} \right) \times 3.00 = 3.4 \text{ AFA}$$

Total Storage Calculations

FILE NUMBER	65-13560
REVIEWER	Patrick Kelly
DATE	12/1/2017

This spreadsheet has been designed by Idaho Department of Water Resources to estimate the total seepage, evaporation and fill capacity required for a pond.

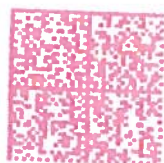
User Input
Calculated value
Formula Explanations

Surface Area (AC.)	3	"Surface Area" is automatically carried over from the "Seepage Loss" sheet.
Average Pond Depth (FT.)	1.9	"Average Pond Depth" depicts the actual depth of the pond either measured or estimated. Note: If you know the maximum depth and not the average depth, the Field Examiner's Handbook suggests multiplying the maximum depth by 0.4 to get the average depth, or you can use any method that seems reasonable to attain average depth.
Pond Capacity (AF)	5.7	Pond Capacity is calculated by multiplying the Pond Surface Area by the Average Pond Depth. If you know the capacity, divide the capacity by surface area and enter the average pond depth in the space above. <i>Note: If pond capacity is determined using a method shown on the "Pond Capacity" sheet, the user may need to modify the value of "Pond Capacity" (cell B9) manually. Note that if the value is modified manually, the formula will be altered for future use.</i>
Multiple Fill Volume Above Initial Fill to Fulfill From Storage Needs- "Multiple Fills" (AF)	0	The "Multiple Fill Volume Above Initial Fill" is the acre-feet of water required to meet a <i>from storage</i> component if the <i>from storage</i> component exceeds a one time fill. This section should not include the amount of water needed to fill the pond initially or the amount of water needed to maintain the pond level due to evaporation or seepage. For example: if a pond has a capacity of 5 acre feet and 2.5 acre feet of seepage and evaporation, but the pond is used for irrigation that requires 10 acre feet of from storage for the irrigation use, then you would insert 5 acre feet into this location (10 acre feet needed - 5 acre feet from the initial fill = 5 acre feet of additional storage needed). <i>Note: You must have a "From Storage" component exceeding the initial fill on the permit to include a volume in this space.</i>
Estimated Seepage Loss (AF)	0.0	The "Estimated Seepage Loss" is automatically carried over from the "Seepage Loss" sheet.
Estimated Evaporation Loss (AF)	3.4	The "Estimated Evaporation Loss" is automatically carried over from the "Evaporation Loss" sheet.
Total Volume Required (AF)	9.1	The "Total Volume Required" is calculated by adding the Pond Capacity, Multiple Fills, Seepage Loss, and Evaporation Loss amounts to determine the total amount of storage required.

IDAHO DEPARTMENT OF WATER RESOURCES
WESTERN REGION
2735 Airport Way
Boise, Idaho 83705-5082
RETURN SERVICE REQUESTED

CHARTER MOUNTAIN RANCH INC
JOHN MCCALLUM
PO BOX 143
GARDEN VALLEY ID 83622

PRESORTED
FIRST CLASS



U.S. POSTAGE PITNEY BOWES
ZIP 83702 \$000.373
02 1W
0001393358 JAN 09 2018

RECEIVED

JAN 16 2018 .PK

WATER RESOURCES
WESTERN REGION

1-888-888-8888

NOT DELIVERABLE AS ADDRESSED
RETURN TO SENDER
UNABLE TO FORWARD
1-888-888-8888

IDAHO DEPARTMENT OF WATER RESOURCES

WESTERN REGION

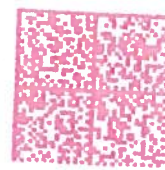
2735 Airport Way

Boise, Idaho 83705-5082

RETURN SERVICE REQUESTED

CHARTER MOUNTAIN RANCH INC
JOHN MCCALLUM
PO BOX 770
GARDEN VALLEY ID 83622

PRESORTED
FIRST CLASS



US POSTAGE & PINNEY BOWES

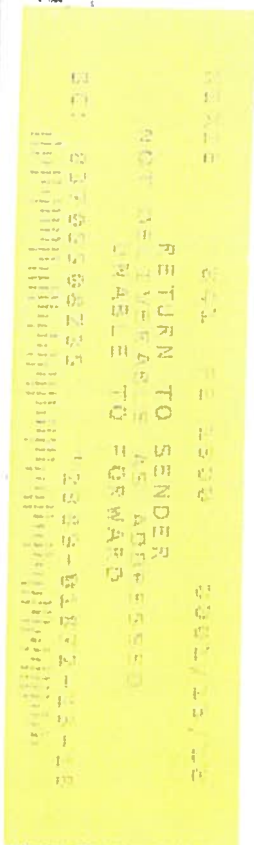
ZIP 83702 \$ 000.373
02 1W
0001393358 JAN 09 2018

RECEIVED

JAN 16 2018 .PK

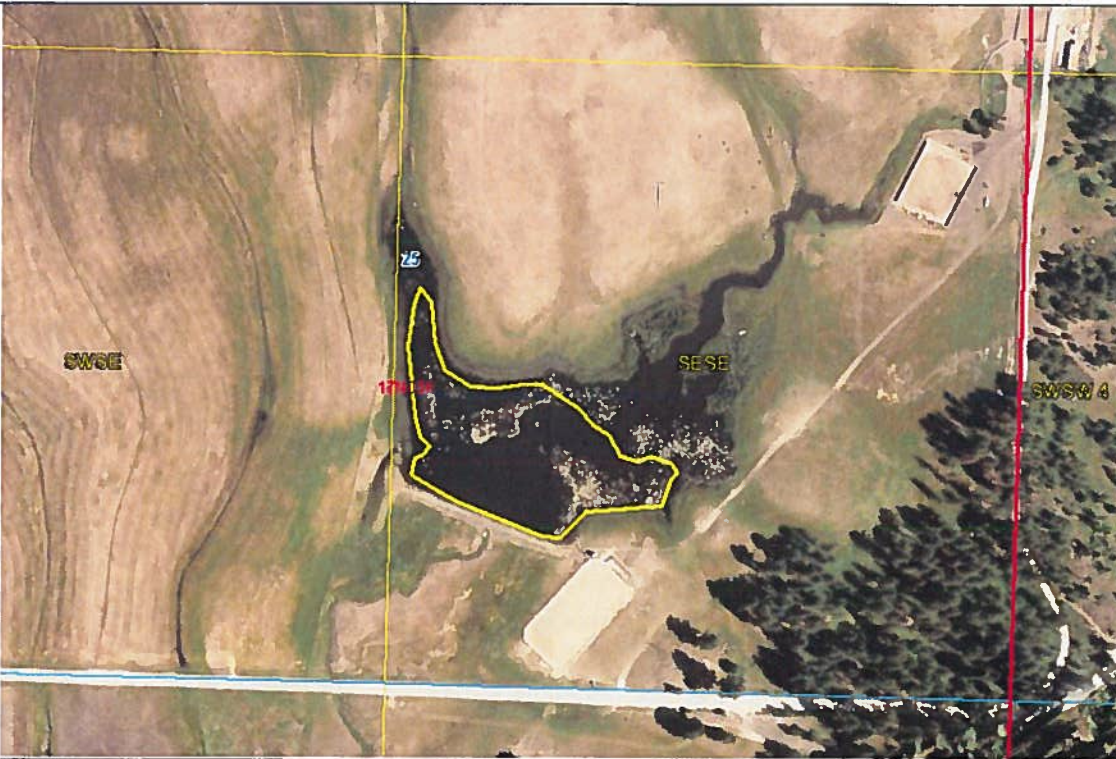
WATER RESOURCES
WESTERN REGION

LA837055082





1998 image



2013 image



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

January 8, 2018

COPY

DANIEL JONES
PO BOX 335
DONNELLY ID 83615

RE: Additional Information Request for Permit 65-13560 & 65-13557

Dear Permit Holder or Property Owner,

On September 13, 1994, an Application for Permit was filed for a stockwater and stockwater storage use in Valley County. In 1997, a proof of beneficial use was filed stating that the use had been fully developed. I am contacting you today in an effort to complete the licensing process and issue a water right license related to the use described by the permit.

Aerial photography of the property shows evidence the pond was constructed and beneficial use associated with the storage use is confirmed. The permit was issued with a Stockwater rate totaling 0.06 cfs. This suggests that water is diverted from the pond to troughs. A confirmation of the entire use that was developed under the permit is required to make a recommendation for license. This can include any evidence, statement or photos you might have of the diversions. Additionally, conditions of the permit state that the dam should be constructed with an overflow pipe at a point halfway in elevation from the toe of the dam to the high water level for purposes of watermaster regulation of flows through the dam. Evidence of such construction should be included with your statement.

Please submit the requested information to complete the licensing process. Without a timely written reply within the next thirty (30) days, a license will be issued recognizing only the storage component. Please contact me at 208-334-2190 with any questions you might have. Thank you for your attention to these matters.

Respectfully,

Patrick Kelly
Water Resource Agent, Sr.

Enclosure(s): 65-13676 Proof Report



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

January 8, 2018

COPY

CHARTER MOUNTAIN RANCH INC
JOHN MCCALLUM
PO BOX 143
GARDEN VALLEY ID 83622

RE: Additional Information Request for Permit 65-13560 & 65-13557

Dear Permit Holder or Property Owner,

On September 13, 1994, an Application for Permit was filed for a stockwater and stockwater storage use in Valley County. In 1997, a proof of beneficial use was filed stating that the use had been fully developed. I am contacting you today in an effort to complete the licensing process and issue a water right license related to the use described by the permit.

Aerial photography of the property shows evidence the pond was constructed and beneficial use associated with the storage use is confirmed. The permit was issued with a Stockwater rate totaling 0.06 cfs. This suggests that water is diverted from the pond to troughs. A confirmation of the entire use that was developed under the permit is required to make a recommendation for license. This can include any evidence, statement or photos you might have of the diversions. Additionally, conditions of the permit state that the dam should be constructed with an overflow pipe at a point halfway in elevation from the toe of the dam to the high water level for purposes of watermaster regulation of flows through the dam. Evidence of such construction should be included with your statement.

Please submit the requested information to complete the licensing process. Without a timely written reply within the next thirty (30) days, a license will be issued recognizing only the storage component. Please contact me at 208-334-2190 with any questions you might have. Thank you for your attention to these matters.

Respectfully,

Patrick Kelly
Water Resource Agent, Sr.

Enclosure(s): 65-13676 Proof Report



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

January 8, 2018

COPY

CHARTER MOUNTAIN RANCH INC
JOHN MCCALLUM
PO BOX 770
GARDEN VALLEY ID 83622

RE: Additional Information Request for Permit 65-13560 & 65-13557

Dear Permit Holder or Property Owner,

On September 13, 1994, an Application for Permit was filed for a stockwater and stockwater storage use in Valley County. In 1997, a proof of beneficial use was filed stating that the use had been fully developed. I am contacting you today in an effort to complete the licensing process and issue a water right license related to the use described by the permit.

Aerial photography of the property shows evidence the pond was constructed and beneficial use associated with the storage use is confirmed. The permit was issued with a Stockwater rate totaling 0.06 cfs. This suggests that water is diverted from the pond to troughs. A confirmation of the entire use that was developed under the permit is required to make a recommendation for license. This can include any evidence, statement or photos you might have of the diversions. Additionally, conditions of the permit state that the dam should be constructed with an overflow pipe at a point halfway in elevation from the toe of the dam to the high water level for purposes of watermaster regulation of flows through the dam. Evidence of such construction should be included with your statement.

Please submit the requested information to complete the licensing process. Without a timely written reply within the next thirty (30) days, a license will be issued recognizing only the storage component. Please contact me at 208-334-2190 with any questions you might have. Thank you for your attention to these matters.

Respectfully,

Patrick Kelly
Water Resource Agent, Sr.

Enclosure(s): 65-13676 Proof Report