

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 47-8084

Exam Date: 5/17/2013

1. Current Owner: C & C ENTERPRISES
RAYMOND & JEFFERY COATS
PO BOX 412
TWIN FALLS ID 83303

734-4009

2. SOURCE

DEADMAN GULCH CREEK

TRIBUTARY

ROCK 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:

DEADMAN GULCH CREEK

NW1/4NE1/4

Sec. 19, Twp 10S, Rge 17E, B.M.

TWIN FALLS County

Method of Determination: Waypoints were collected with a Garmin GPSmap 60CSx receiver and downloaded into an ArcMap shapefile that corresponds with 2009 and 2011 aerial photography and verified the points of diversion are located as recorded. See attached map.

2.

PLACE OF USE: FISH PROPAGATION

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			<u>NE</u>	<u>NW</u>	<u>SW</u>	<u>SE</u>	<u>NE</u>	<u>NW</u>	<u>SW</u>	<u>SE</u>	<u>NE</u>	<u>NW</u>	<u>SW</u>	<u>SE</u>	<u>NE</u>	<u>NW</u>	<u>SW</u>	<u>SE</u>	
10S	17E	19		X															

Method of Determination: Tracks were collected with a Garmin GPSmap 60CSx receiver and downloaded into an ArcMap shapefile that corresponds with 2009 and 2011 aerial photography and verified the place of use is located as recorded. See attached map.

3. ☒ Delivery System Diagram Attached (required). Indicate all major components and distances between components. Indicate weir size/pipe as applicable.
☐ Map Attached Showing Location(s) of point(s) of diversion and place(s) of use (required). Scale must be 1:24,000 or greater.
☐ Aerial Photo Attached (required for irrigation of 10+ acres).
☐ Photo of Diversion and System Attached

1.

Measurement

<u>Equipment</u>	<u>Type</u>	<u>Make</u>	<u>Model No.</u>	<u>Serial No.</u>	<u>Size</u>	<u>Calib. Date</u>
Current Meter		Swoffer	2100	4583		

2. Measurements: Flow measurements were taken in a concrete channel below the fish runways 10' above the point where the water flows into a 24" pipe that returns flow back into Deadman's Gulch. Additional measurements were taken on-stream above and below the return flows from the runways to cross check the accuracy of the flow rates measured near the outlet below the runways.

Estimated rate of flow in concrete channel: 6.89 cfs

Estimated rate of flow in Deadman's Gulch above return flows from facility: 4.66 cfs

Estimated rate of flow in Deadman's Gulch below return flows from facility: 11.79 cfs

Department of Environmental Quality's Discharge Monitoring Reports provided the following recorded flow rates from the facility collected during the beneficial use development period:

Date	MGD	cfs
7/1/1992	5.16	7.98
8/1/1992	9.02	13.95
9/1/1992	9.02	13.95
10/1/1992	9.02	13.95
11/1/1992	9.04	13.98
12/1/1992	9.04	13.98
1/1/1993	9.04	13.98
7/1/1993	5.83	9.02
8/1/1993	7.32	11.32
9/1/1993	10.38	16.05
10/1/1993	7.32	11.32
12/1/1993	7.32	11.32
1/1/1994	7.32	11.32
2/1/1994	7.32	11.32

1 mgd = 1.547 cfs

* Copies of the DEQ reports were not included as copies weren't legible

E. FLOW CALCULATIONS: N/A

F. VOLUME CALCULATIONS

1. Volume Calculations for Other Uses: Volume was calculated using flow rates provided during the beneficial use development period. Data for 4 months (March – June) was not available, therefore an assumption was made that the higher flow rates would be used in March and April and the lower flow rates would be used in May and June as the data seems to indicate lower flow rates occurred during the irrigation season and higher flow rates occurred outside of the irrigation season:

Jan – April:	13.98 cfs x 120 days x 1.9835 afd = 3327.52
May – July:	9.02 cfs x 92 days x 1.9835 afd = 1646.00
August:	13.95 cfs x 31 days x 1.9835 afd = 857.76
September:	15.00 cfs x 31 days x 1.9835 afd = 922.33
October:	13.95 cfs x 31 days x 1.9835 afd = 857.76
November – December:	13.98 cfs x 61 days x 1.9835 afd = 1691.49
	Total = 9302.86

G. NARRATIVE/REMARKS/COMMENTS

Permit was permitted for 15.00 cfs for fish propagation. Application for permit was submitted by Joe Rand on April 5, 1988, and proof of beneficial use was submitted August 19, 1994. Permit was assigned to C & C Enterprises, Raymond Coats and Jeffery Coats on March 13, 2002.

I contacted the facility owner, Raymond Coats, concerning this permit and he indicated that he was working out of state and he gave me permission to visit the property as needed to conduct a field exam. As the facility is just outside of the Twin Falls city limits, I dropped by on my way to do another field exam. What I found may best be described as a "water treatment facility" as the raceways were completely overgrown with aquatic vegetation and appeared to be diverting approximately two thirds of the flow from Deadman's Gulch. I followed up the visit with another call to Mr. Coats to explore the possibility of relinquishing the permit. He indicated that he fully intends to resume fish production upon his return to Idaho later this year.

On 5/17/2013, I returned with a Swoffer current meter and proceeded to measure flows through the facility and in the Gulch, see measurements section for results. I also obtained Discharge Monitoring Reports from the Department of Environmental Quality that reported flow rates at the facility during the development of beneficial use period. I was hoping to measure a flow rate corresponding with the rates on the reports. I measured 6.88 cfs through the facility which was approximately 1 cfs lower than the 7.98 cfs flows reported in July of 1992. While the presence of aquatic vegetation and debris at the inlet likely impacted flow through the facility, a neighbor, Kirk Tubbs, indicated that the flows in the gulch this year are at the lowest level he has seen in many years. The data provided by the DEQ indicates that 15.00 cfs was available during high flows and was put to beneficial use during the development period.

Many of the original conditions on the permit are now inactive. Condition 002, which required a measuring device, was replaced with condition 01M. The Workflow Approval Condition Search Tool suggests replacing condition 002 with R43 or R02 on licenses. Both R02 and R43 would add the requirement of a lockable device, which wasn't a required condition when the permit was issued. Additionally, both of these conditions are intended for use within water districts. While this facility is within the boundaries of Water District 470 – Rock Creek, it is on a non-regulated tributary within the water district. Condition 01M doesn't add additional requirements and is used statewide on surface water diversions greater than 0.24 cfs.

In reference to the memo evaluating the Q needed for beneficial use in fish propagation (January 4, 2011), condition 122 has been placed on the license stating "the right holder shall not divert water at a rate exceeding what is reasonably necessary for the beneficial use authorized by this right." Since no data is actually available concerning pounds, average size and type of fish that were reared at this facility, there is no way to currently address this issue. However, the limiting factor in this small facility is more likely the highly variable flow rates that will actually limit the pounds of fish that can be raised. Therefore, basing the volume on the variable flow rate is more logical in this case and addresses the intent of the memo by not issuing a license for more water than is likely needed.

It should be noted that according to the attached map, the place of use appears to be located in the SW1/4SE1/4 of Sec. 18, Twp 10S, Rge 17E, B.M. However, this is likely an error in the Department's Geographic Coordinate Database and the place of use is actually located in the NW1/4NE1/4 of Sec. 19, Twp 10S, Rge 17E, as it was originally permitted. As such, it will be forwarded for licensing as permitted.

Recommend licensing 15.00 cfs with an annual volume of 9302.9 AF for fish propagation.

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

H. RECOMMENDATIONS**1. Recommended Amounts**

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>DIVERSION RATE</u>	<u>ANNUAL VOLUME</u>
FISH PROPAGATION	01/01 to 12/31	15.000 CFS	9,302.90 AF
<u>Totals:</u>		15.000 CFS	9,302.90 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

I. AUTHENTICATION

Field Examiner's Name

Date

Reviewer

Date



Figure 1: Fish Runs



Figure 2: Point of Diversion; Check Dam on Gulch

System Diagram 47-8084



State of Idaho
Department of Water Resources
Attachment To Water Right License
47-8084

This map depicts the FISH PROPAGATION 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
-  Quarter Quarters

0 0.005 0.01 0.02 Miles

