

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 13-7924

Exam Dates: 01/07/25

Accompanied by: John Lambregts

Examiner: Christian Stewart, IWDR Water Resource Agent

1. Current Owner:

JOHANNES (JOHN) LAMBREGTS
34 COLGATE STREET
POCATELLO, ID 83201

2. **SOURCE: SPRING**

TRIBUTARY: SMITH CREEK

B. OVERLAP REVIEW

1. Place of Use: Place of use is also shared by water rights 13-7561 and 13-7578 for fish propagation.

2. Point of Diversion: Point of diversion is shared by licensed water rights 13-7561 and 13-7578 for fish propagation.

Right 13-7561 is for fish propagation for 1.80 cfs from 4/15 to 10/15. Right 13-7578 is for fish propagation for 1.80 cfs year-round.

Right 13-619, a 1.8 cfs irrigation right nominally from Bob's Creek, a drainage to the north, was listed as diverted from the same spring as right 13-7561 through an accomplished transfer. The mapped PODs for right 13-619 are located at points in the fish propagation facility where the water leaves the facility to be used for irrigation. The mapped PODs are not at the spring, where the water is actually diverted.

Beneficial use claim 13-9030 for 0.2 cfs for irrigation and stockwater is also diverted from this spring.

C. DIVERSION AND DELIVERY SYSTEM

Water originating from the warm spring is captured and piped underground. Spring water is delivered to three places. Water enters the fish raceways, water is piped into the indoor hatchery facility, and water goes into the enclosed fish tanks and the open water fish ponds.

1. POINT OF DIVERSION:

SPRING SE¼ SE¼ Sec. 8, Twp 11S, Rge 40E, B.M. CARIBOU County

Method of Determination: Field inspection, GPS

2. **PLACE OF USE:** FISH PROPAGATION

Twp	Rng	Sec	NE				NW				SW				SE				Total s
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
11S	40E	9											X						

Method of Determination: Site inspection. Aerial imagery.

3. **DELIVERY SYSTEM**

Water is piped from the spring into three separate areas of the fish propagation operation: the fish raceways, the enclosed and open fish tanks, and the indoor hatchery facility.

D. FLOW MEASUREMENTS

Measurements were performed at locations where water exits the facilities to find the combined diversion rate for the facility.

Open Water Ponds:

1.65 CFS was measured in the channel that connects the open water ponds using a Sontek Flowtracker.

Indoor Facility:

A 10' circular pipe discharges into a pond. While the amount during wintertime filled the pipe 1.5 inches deep, the high water mark for the depth from the bottom of the pipe was measured at 4 inches.

California Horizontal Pipe Flow

The California Pipe Method can be used to determine the flow rate from the open end of a partially full circular pipe freely discharging into the air.

$$Q(\text{cfs}) = 8.69 (1-a/d)^{1.88} \cdot d^{2.48}$$

a-distance from the inside top of the pipe to the water surface = 0.5 ft

d= pipe diameter = 0.833 ft

$$Q = 8.69 \cdot (1-.5/.833)^{1.88} \cdot .833^{2.48} = \mathbf{0.99 \text{ CFS}}$$

Fish Raceways:

A rectangular weir used to measure the flow out of the raceways. The depth was measured at 2.8 inches but the high water mark was at 3.0 inches.

height = 3.0 inches = 0.25 ft

width = 3.8 ft

Francis Formula for Rectangular Contracted Weir:

$$Q = 3.33 (b - 0.2h) h^{1.5}$$

Q ft³/s

h head(ft)

b width(ft)

$$Q = 3.33 (3.8 - (.2 \times .25)) \times .25^{1.5} = \mathbf{1.56 \text{ CFS}}$$

Overall flow rate for the facility during winter operations = 1.65 + 1.56 + 0.99 = **4.20 CFS**

Q limited to 3.60 cfs

F. VOLUME CALCULATIONS

$$V = [\text{Diversion Rate (cfs)}] \times () \times 1.9835 = 3.60 \times 365 \times 1.9835 = \mathbf{2606 \text{ AF.}}$$

G. NARRATIVE/REMARKS/COMMENTS

Permit holder submitted proof of beneficial use within the original timeline.

Since the spring is warmer, near 80 degrees, there are some negligible evaporation losses from the facility. The total water surface area in the facility subject to outdoor evaporation is approximately 1 acre.

The place of use and point of diversion are owned by Smith Warm Springs Ranch LLC, who lease to John Lambregts.

The controlling works could be regulated by a watermaster. The spring is tributary to Smith Creek, and there are no points of diversion on Smith Creek between the fish facility and where Smith Creek joins the Bear River. Per application processing memo 15, a measuring device is typically not required for fish propagation on "otherwise unused, unregulated sources" not regulated by the watermaster. This spring fits that definition. However, there is a weir at the fish raceways and there is a weir being installed at the outdoor ponds to help the operator measure flows.

Fish raised at the farm are exclusively warmwater species, including bass, catfish, tilapia, barramundi, and perch. IDWR does not have standard fish propagation efficiency requirements for warm-water species. Dutch Boy Farms indicates that the facility yields 200,000 pounds of fish per year.

During summertime, water leaving the facility is used to grow crops under right 13-619. John indicated to me that this enriched water produces high yield crops and helps maintain compliance with the Idaho Department of Environmental Quality and Department of Agriculture. There are fish screens at the facility to prevent loss of fish to the Bear River system.

Have conditions of permit approval been met? X Yes No

H. RECOMMENDATIONS

1. Recommended Amounts

Beneficial Use	Period of Use	Rate of Diversion	Annual Volume
FISH PROPAGATION	01/01 to 12/31	3.60CFS	2610 AF
Totals:		3.60 CFS	2610 AF

2. Recommended Amendments

 Change P.D. as reflected above Add P.D. as reflected above X None

 Change P.U. as reflected above Add P.U. as reflected above X None

I. AUTHENTICATION Christian Stewart, IDWR Water Resource Agent

Field Examiner's Signature Christian T Stewart

Date 1/13/2025



Fish Raceway



Raceway Rectangular Contracted Weir @ 2.8 inches



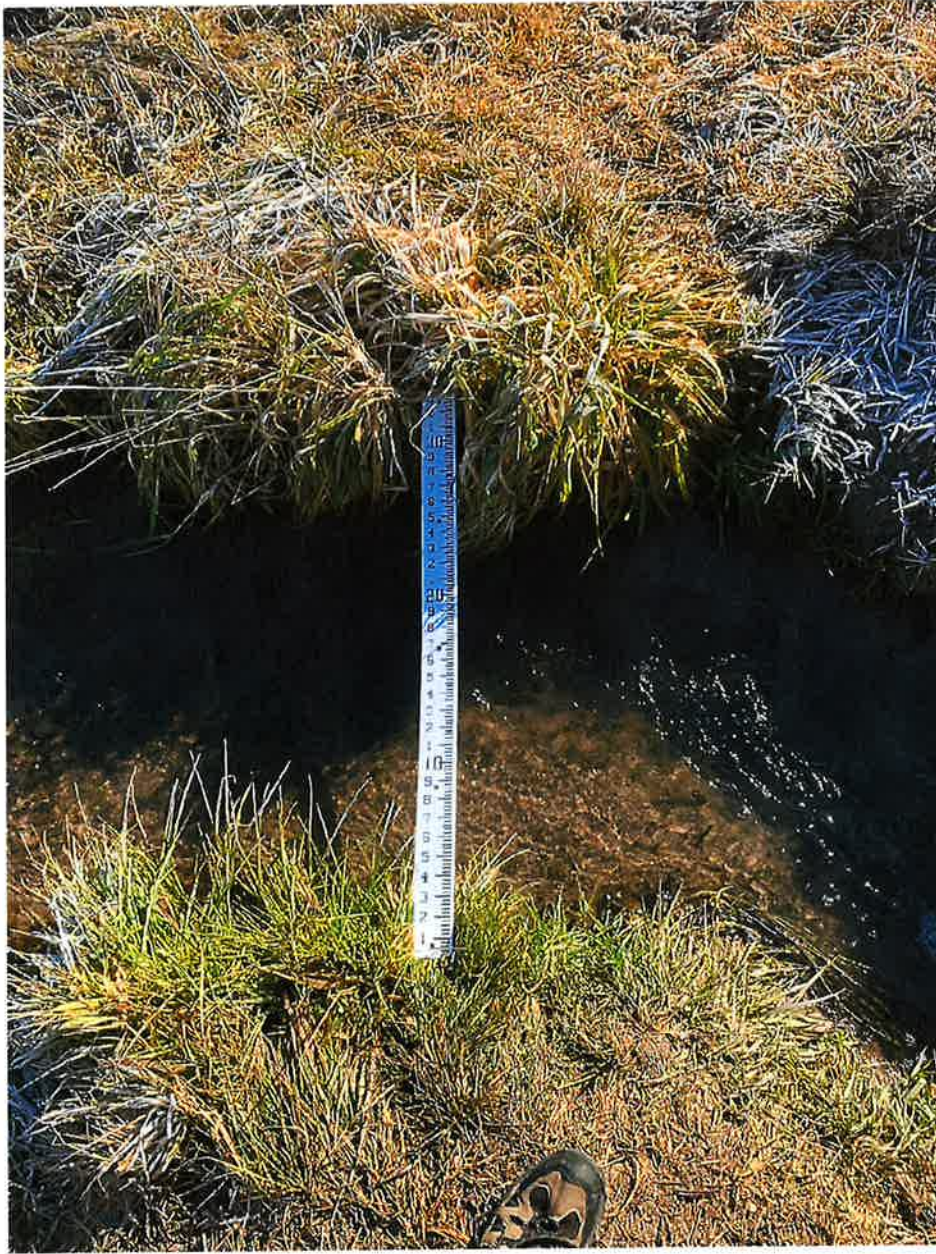
Indoor Hatchery Tanks



10" Horizontal Pipe Discharging Indoor Hatchery Water into pond @ 1.5 inches depth



Open Air Holding Ponds



Channel Used to Measure Flow into Outdoor Holding Ponds



Flow Measurement for the Holding Ponds