State of Idaho
DEPARTMENT OF WATER RESOURCES
900 N. Skyline Dr., Suite A • Idaho Falls, Idaho 83402-1718
Phone: (208) 525-7161 • Fax: (208) 525-7177 • Web Site: www.idwr.idaho.gov
EASTERN REGION

C. L. "BUTCH" OTTER
Governor
DAVID R. TUTHILL, JR.
Director

December 6, 2007

SPF ENGINEERING LLC
C/O ERIN RETELLE
600 E RIVER PARK LANE STE 105
BOISE ID 83706

RE: Application for Transfer, Mark and Jennifer Holmes

Dear Erin:

In October we returned to you an application for transfer filed on behalf the names of Mark and Jennifer Holmes. The letter accompanying the application was brief and lacked guidance. This letter is intended to provide guidance and suggestions for modifying the application and identify supplemental information needed to support the application.

In processing an application for transfer the Department of Water Resources, IDWR, must consider historic use of the water to ensure validity of the right. Because it has been almost 15 years since the partial decrees were issued, information included with the application should detail the extent of water use and when water was diverted for irrigation and fish propagation going back at least 10 years. Since the right is subject to water master control water delivery records for Water District 34 could be a good source for this type of information. Detailed written statements from the former owner, members of his immediate family or his employees having personal knowledge of the water use may also be helpful.

Your client's intention regarding future use of the water needs clarifying. IDWR designates fish propagation as a purpose of use for water rights in facilities where fish are raised and then sold or processed in a commercial enterprise. If your client simply desires a couple of ponds with fish for their own enjoyment then fish propagation should be dropped as a purpose of use. The analysis provided is based on dropping fish propagation as a purpose of use.

The sketch of the original facility illustrated on the field report for the licensing examination conducted in 1980 identifies two locations where springs where diverted

into the fish runs. The map provided with the transfer application illustrates two ponds. Leading to the question, will each pond be filled from separate springs or is there an open channel connecting to the two ponds? If points of diversion are being changed or added we ask that the application comply with present IDWR policy concerning spring sources which states when practical the legal description for the point(s) of diversion in Part 1 Item 4 needs to identify the 10 acre QQQ. Obviously using GPS to get latitude and longitude locations for the diversion(s) and also including this information on the application is helpful but not required. The location of the point(s) of diversion must also be illustrated on the map provided with the transfer application.

The description of the place of use in Part 1 Item 5 must be consistent with the map. The pond locations are correctly identified but it is not clear how recreation, aesthetics and wild life uses pertain to the N1/2NW1/4 Sec 18 T7N R24E. Also when irrigated acres are listed in this item the location of these acres must be illustrated on the map.

The remarks in Part 1 Item 6.d. provide an outline of the proposed mitigation however some of the numbers in the calculation are in error. The dimensions of the original facility identified on the licensing field report, enclosed, reveal a surface area for 0.3 acres. Using the U of I updated ET figures for open water-shallow systems at the Mackay Ranger Station; the table on Actual ET shows 774 mm/annum of evaporation. Subtracting 251 mm, being the Precipitation Deficit during the growing season for sagebrush for the same location, provides a difference of 523 mm/annum or 1.72 ft/yr/ac of evaporation. Using this factor to determine evaporation from the original system with a surface area of .3 acres and from the two proposed ponds with a surface area of .52 acres reveals a difference of .37 ft/yr of added evaporation. Though drying up a portion of an acre could mitigate the added evaporation from the larger ponds, Department policy requires drying up a minimum of one acre. This mitigation does not take into consideration evaporation and seepage from the open channels conveying the spring water to the ponds and subsequently to the river. Measurements made during the licensing exam show the original facility had seepage losses of 0.3 cfs between the inlet and outlet. This is a significant number considering the irrigation right being used for mitigation has a diversion rate of only 0.26 cfs. A statement from your client describing steps that will be taken to minimize evaporation and seepage from the point(s) of diversion to where water will be discharged into the river should accompany the application. The application if approved would require measuring devices at the point(s) of diversion and where water is discharged back the river.

Other questions may arise after the application has been resubmitted but addressing the items identified above will be an excellent step toward processing the transfer. I apologize for the delay in providing this guidance and appreciate your patience in waiting for this response.

Naturally if you have any questions feel free to call either myself or Dave Carlson at the Eastern Regional Office.

Respectfully yours,

Ernest Carlsen

Ernest Carlsen
Water Resource Program Manager

Enclosure (1)
cc: Dave Carlson

Approved By —

State of Idaho
DEPARTMENT OF WATER RESOURCES
FIELD REPORT

34-7113
Permit No.

CONTACT WITH PERMIT HOLDER

	DATE	INITIALS	REMARKS
☐ Appointment letter mailed:			
☐ Telephone call made: (List Telephone No. used)			
☐ Appointment scheduled for: (Date, time, location)			

EXAMINATION

Date 14 AUGUST 1980 Accompanied by Manager Total Q measured ~~5.507 cfs~~ (5.51) capacity

If source is surface water, estimate total flow of source

Methods of measurement Pygmy meter Meets Permit requirements? YES

Measurement calculations: See additional pages (2).

WELL/DIVERSION* NO.	HP	MOTOR MAKE	MOTOR SERIAL NO.	PUMP MAKE	PUMP SERIAL NO.	MEASURING DEVICE TYPE	CONDITION OF MEAS DEV.	REMARKS

System Description Four raceways and one pond divert water from three unnamed springs for fish propagation, and then into a ditch that flows into the Big Cost River

*Code with map on reverse side. Disregard code if only one.

RECOMMENDED AMOUNTS

Irrigation requirement = _____ AFA/Acre

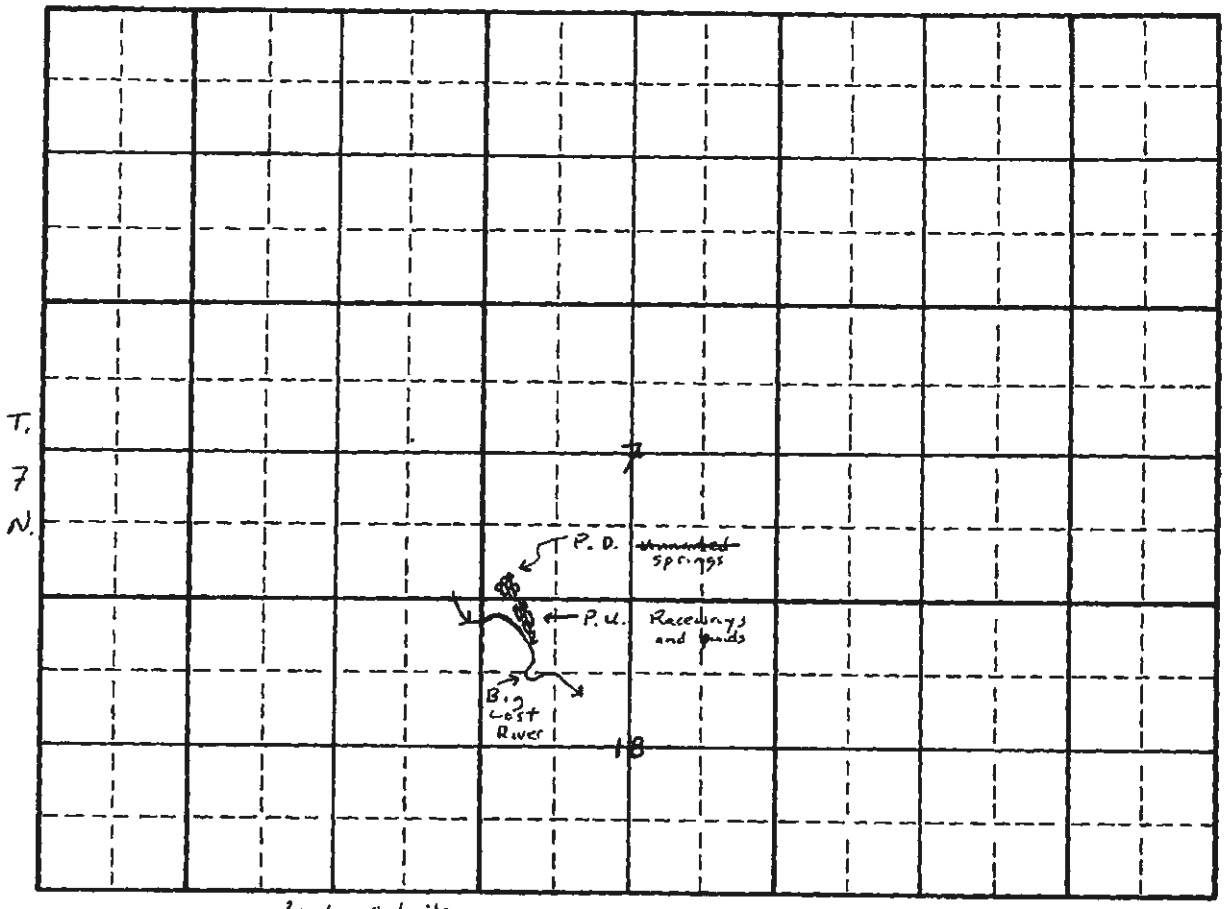
USE	Q (cfs)	V (afa)	FROM	TO
Fish Culture	~~5.507~~ (5.51)	~~3989.1~~	1 JAN.	31 DEC.
	5.51 ✓			
Total	~~5.507~~	3989.1 ✓		

Remarks Difference between inlet (5.507 cfs) and outlet (5.21 cfs) = 0.297 cfs loss to seepage, evaporation

Maximum production is 24 rainbow trout

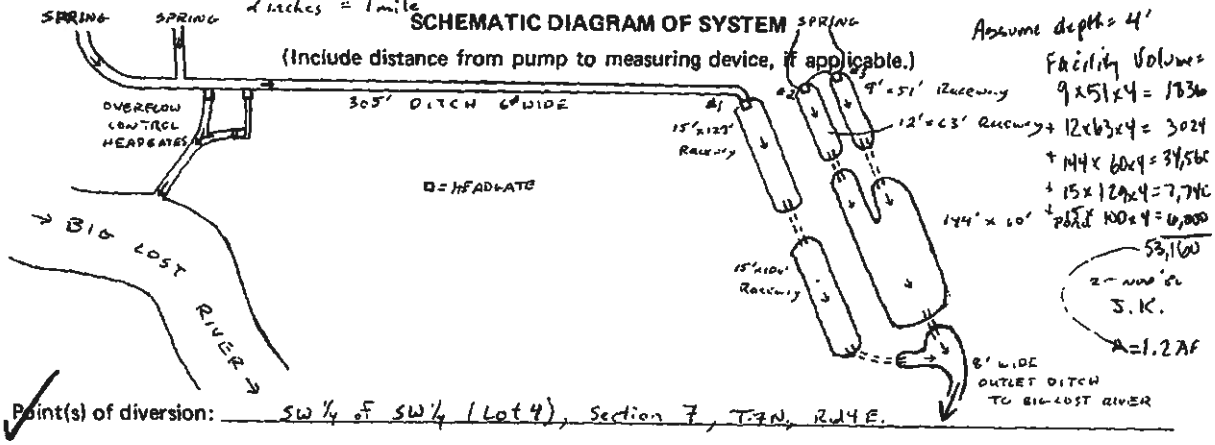
R. 24 E.

MAP (Attach Aerial Photo)



SCHEMATIC DIAGRAM OF SYSTEM

(Include distance from pump to measuring device, if applicable.)



Point(s) of diversion: SW ¼ of SW ¼ (Lot 4), Section 7, T.7N., R.24E.

Place(s) of Use

TWP	RGE.	SEC.	NE¼				NW¼				SW¼				SE¼				TOTALS
			NE¼	NW¼	SW¼	SE¼	NE¼	NW¼	SW¼	SE¼	NE¼	NW¼	SW¼	SE¼	NE¼	NW¼	SW¼	SE¼	
7N	24E	18						X Lot 1											

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

Examiner's Signature John Koppelman, Jr. Date 24 November 1980

Checked by Tom Reburn Date 15 December 1980

Date 12/30/80

MEASUREMENT

CALCULATIONS p 2

34 - 7113

29 Nov. '80 · J.K.

Headgate #1

water cross-section = 0.71' high x 3.91' wide x 1.43 ft/sec

= 3.97 cfs ✓

Headgate #2

water cross-section = 0.79' high x 1.52' wide x .714 ft/sec

= 0.857 cfs ✓

Headgate #3

water cross-section = .59' high x 1.62' wide x .714 ft/sec

= 0.68 cfs ✓

TOTAL = 5.507 cfs INLET (Rounds to 5.51 cfs) ✓

- 5.21 cfs OUTLET (page 1)

0.297 cfs loss due to seepage, evaporation

AF/Ann Calculation:

1) 5.51 cfs x 1.9835 x 365da = 3989.1 AF/Ann ✓

Amount before loss to evaporation, seepage, etc.

2) 0.297 cfs x 1.9835 x 365da = 215.02 AF/Ann

Amount lost to evaporation, seepage, etc.

3) 3989.1 - 215.02 = 3774.08 AF/Ann ✓

Difference between #1 and #2.