

MEMORANDUM FOR THE RECORD

TITLE – 16FOS04 Foster Fish Facility Evaluation Operations

DATE – 19 October 2016

PROJECT – Foster Dam, Foster Fish Facility

RESPONSE DATE – 02 November 2016

Description

An evaluation of the performance of Foster Fish Facility was conducted for a second year in 2016 by the University of Idaho. In addition to this effort, additional operations were conducted after study treatments ceased to try and attract fish holding in the Foster Dam tailrace into the ladder. The purpose of this MFR is to document study operations and those conducted after the randomized block study design had concluded.

Type of change/outage required

A randomized block study design was implemented (schedule below).

Open Treatment: weir gate completely lowered

Auto Treatment: weir gate automatically controlled (partially raised to increase hydraulic head)

Other operations were implemented after the study concluded in an attempt to attract fish into the ladder.

Additional details can be found in the attached study proposal.

Dates of operations/impacts/repairs

Operations during study: July 14-23

Operations after study: August 3-19

Randomized Block Design Schedule (during study)

Start Date	Day	Block	Treatment	Treatment
14-Jul	1	1	High	Open
15-Jul	2	1	Low	Auto
16-Jul	3	2	High	Open
17-Jul	4	2	Low	Auto
18-Jul	5	3	High	Open
19-Jul	6	3	Low	Auto
20-Jul	7	4	Low	Open
21-Jul	8	4	High	Auto
22-Jul	9	5	Low	Open
23-Jul	10	5	High	Auto

Other Operations (after study concluded)

DATE	TIME	ENT. STATUS	PUMP CONFIGURATION	REMARKS
3-Aug	9:45 AM	MANUAL OPEN	PUMPS OFF	Operator will turn pumps on/off
4-Aug	21:00	MANUAL OPEN	Pumps 1 & 2 On	No fish movement
6-Aug	10:00 AM	MANUAL OPEN	Pumps off	No fish movement
7-Aug	9:00 PM	MANUAL OPEN	Pumps 1 & 2 On	No fish movement
9-Aug	2:00 PM	Auto Closed	Pumps 1 & 2 On	No fish movement
15-Aug	1:30 PM	MANUAL OPEN	One pump on	No fish movement
19-Aug	1:00 PM	Auto Closed	Pumps 1 & 2 on	No fish movement

Length of time for operations/repairs

About 17 days.

Expected impacts on fish

Study results are not complete. It appeared operations after the study did not increase the number of fish entering the ladder.

Comments from agencies

Final results

Study results are not complete. It appeared operations after the study did not increase the number of fish entering the ladder.

Please email or call with questions or concerns.

Thank you,

Chris Walker
NWP Operations Division Fish Section
503.808.4316
Christopher.E.Walker@usace.army.mil

Fenton Khan
Environmental Resource Branch
US Army Corps of Engineers, Portland District
(503) 808-4777
Fenton.O.Khan@usace.army.mil

Brett Boyd
Manager: South Santiam Hatchery, Foster Fish Facility
Oregon Department of Fish and Wildlife
(541) 367-3437
brett.h.boyd@state.or.us