

Fish Passage Plan (FPP) Change Form

Change Form # & Title: 25AppJ002 – JDA Sample Rates
Date Submitted: December 10, 2024
Project: John Day Lock and Dam
Requester Name, Agency: David Miller, USACE-Portland
Final Action:

FPP SECTION: Appendix J “Smolt Facility Operating Protocols”, section 2.1 JDA

JUSTIFICATION FOR CHANGE: Juvenile American shad fry can become so abundant they overwhelm the capacity of the John Day (JDA) Smolt Monitoring Facility (SMF) laboratory sample holding tank. Fall Chinook smolt are the predominant salmonid out-migrants during juvenile shad passage, and their passage numbers decline at about the same time juvenile shad passage increases. At the same time, river water temperatures are typically at their season peaks, stressing collected salmonid smolts. Delayed handling and sorting from increased juvenile shad causes additional stress. Reduced sample rates can be used as a tool to sample fewer juvenile shad, reducing stress on salmonids.

Currently, the FPP has antiquated guidance for not exceeding a 25% sample rate when temperatures are $\geq 70^{\circ}\text{F}$. This was a tool to prevent stressing fish when JDA was sampling 24-hours/day. JDA has since reduced sampling to greatly reduce stress on juvenile salmonids. The current daily sample window is 6-hours/day, and staff are present and continually working fish during this time, greatly reducing potential risks and stress to salmonids.

The sampling goal is to collect 100 of the predominant fish species. This occasionally requires sampling at 100% in order to reach the goal. During the shad influx (and reduction in salmonids), sampling at 100% collects excessive juvenile shad in order to collect very few salmonids (and getting nowhere near the collection goal). Personnel must continually work, collect, weigh, and record shad to keep the holding tank from exceeding its carrying capacity. The few salmonids in the tank are hard to sample with so many shad, and ultimately suffer unnecessary stress during already high water temperatures.

Note: Juvenile shad numbers can reach 10’s of thousands, while juvenile salmonids may be <5 during this window, and these conditions typically only occur during the final few weeks of the sample season.

JDA Fisheries would like to remove the original “a)” bullet because the sentence was originally meant to help reduce risk when sampling 24 hours (overnight without sample rate changes), which is no longer the planned sampling schedule. Adding the new verbiage will allow JDA to reduce sample rates when juvenile American shad numbers are excessive, ultimately reducing stress on any collected salmonid smolts sampled at the same time.

PROPOSED CHANGE: *Edits to existing FPP text in “track changes”.*

2.1. General Facility Protocols.

- ~~a) Sample rates should not exceed 25% unless collecting research fish at water temperatures below 70°F.~~
- ~~b)a) When 10 or fewer smolt are sampled at 100% sample rate, and in a 6-hour period (0700 to 1300 hours), sample rates may be reduced to keep juvenile shad numbers manageable and reduce stress on juvenile salmonids.~~
- ~~e)b) The Corps reserves the right to terminate trapping operations at any time.~~

COMMENTS:

RECORD OF FINAL ACTION: