# Fish Passage Plan (FPP) Change Form

**Change Form # & Title**: 21AppJ001 – High Temperature Sampling Protocols LSR Projects

**Date Submitted**: 6 July 2021

**Project**: IHR, LMN, LGS, LWG (Appendix J)

**Requester Name, Agency**: Charles Morrill, WDFW

**Final Action:**

**FPP Section**: Appendix J – Smolt Monitoring Facility Protocols at BON, JDA, and MCN.

**Justification for Change**: In its current form, Appendix J provides high temperature sampling protocols for the smolt monitoring facilities at Bonneville, John Day, and McNary dams but does not provide any equivalent protocol for smolt monitoring and condition monitoring facilities on the Snake River (Lower Granite, Little Goose, Lower Monumental, and Ice Harbor). This change form introduces high temperature sampling protocols for these Snake River smolt monitoring and condition monitoring facilities. The goal of these high temperature sampling protocols is to reduce handling for the smolt monitoring and condition monitoring program during periods of high temperatures to reduce impacts on juvenile salmonids.

Ice Harbor is not a Smolt Monitoring Program (SMP) site and, therefore, conducts samples for condition monitoring purpose twice per week. Currently, Lower Granite, Little Goose, and Lower Monumental are all SMP sites that conduct SMP index sampling (i.e., 24-hour samples) every day.

**Proposed Change**: *See following pages. The proposed changes would be additions to the existing Appendix J (adding new Sections 4 and 5). Section 4 would cover the high temperature protocol at Ice Harbor while Section 5 would cover the high temperature protocols at Lower Granite, Little Goose, and Lower Monumental. As written, these actions cover sampling in 2021 and may need revision for future years.*

**Comments**:

July 8, 2021 FPOM: FPOM will convene a special meeting ASAP to discuss further. The group supported transitioning Lower Monumental to every other day sampling effective immediately. PENDING

July 16, 2021 email from Scott St. John, Corps NWW: Attached is the updated change form.  This was vetted by the group that attended the special meeting on 12 July and also vetted by Project Biologists.

**Record of Final Action**:

**Appendix J**

**Smolt Monitoring Facility Operating Protocols at**

**Bonneville, John Day, McNary, Ice Harbor, Lower Monumental, Little Goose, and Lower Granite Dams**

1. Ice Harbor DaM JUVENILE FISH FACILITY (JFF) [NEW SECTION]

Agencies conducting research in the Ice Harbor (IHR) Juvenile Fish Facility (JFF) will implement the following protocols as precautionary measures to avoid or minimize delayed fish mortality resulting from stress during handling. The Fish Passage Operations & Maintenance (FPOM) workgroup coordinated these protocols with fish agencies and tribes.

* 1. IHR JFF Sampling at Water Temperatures > 70.0°F.
     1. An instantaneous sample/holding temperature of 70.0°F or greater taken within the juvenile fish facility between 0630 and 0700 hours will trigger the suspension of condition sampling at IHR. Project biologist will notify condition monitoring personnel when this has occurred.
     2. Condition sampling at IHR may resume if/when the instantaneous sample/holding temperature taken within the juvenile fish facility between 0630 and 0700is ≤ 70.0°F.
     3. If there is a research need to sample at temperatures >70.0°F, the Corps District POC will initiate coordination with FPOM.
     4. If the condition monitoring or project fisheries biologists suspect a bypass system problem during a high temperature sampling period, additional sample collection may occur. Project or District biologists will notify FPOM as soon as possible and provide updates as they attempt to resolve the problem.

1. Lower GRANITE, LITTLE GOOSE, and LOWER MONUMENTAL DaM JUVENILE FISH FACILITIES (JFF) [NEW SECTION]

Agencies conducting research in the Lower Granite (LWG), Little Goose (LGS), and Lower Monumental (LMN) Juvenile Fish Facilities (JFF) will implement the following protocols as precautionary measures to avoid or minimize delayed fish mortality resulting from stress during handling. The Fish Passage Operations & Maintenance (FPOM) workgroup coordinated these protocols with fish agencies and tribes.

* 1. LWG, LGS, and LMN JFF Sampling at Water Temperatures > 68.0°F.
     1. An instantaneous sample/holding temperature of 68.0°F or greater taken within the juvenile fish facility between 0630 and 0700 hours will trigger the following changes in sampling after a project biologist notifies SMP biologists.
        1. If transportation is not occurring, daily index sampling will be reduced to every-other-day index/condition monitoring. Daily sampling may resume up to 3 days prior to beginning juvenile fish transport to estimate loading densities.

If transportation is occurring, daily index sampling will continue but sample rates will be reduced to target approximately 100 fish per day.

* + - 1. Monitoring for gas bubble trauma (GBT) will continue (where/when applicable).
    1. Normal index sampling may resume when the instantaneous sample/holding temperature taken within the juvenile fish facility between 0630 and 0700 is ≤ 67.5°F.
    2. If there is a research need to sample at temperatures >68.0°F, the Corps District POC will initiate coordination with FPOM.
    3. If the SMP or project fisheries biologists suspect a bypass system problem during a high temperature sampling period, additional sample collection may occur. Project or District biologists will notify FPOM as soon as possible and provide updates as they attempt to resolve the problem.