

**Fish Passage Plan (FPP) Change Request Form**

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**Change Form # & Title:** 16AppJ001 – MCN Consistency with Temperatures of 70°F  
**Date Submitted:** December 17, 2015  
**Project:** MCN  
**Requester Name, Agency:** Greg Moody, COE NWW  
**Final Action:** **APPROVED – January 28, 2016**

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**FPP Section:** Appendix J – Smolt Facility Protocols – MCN sections **3.1.1, 3.4, 3.4.6, and 3.4.7.**

**Justification for Change:** Consistency in project operation at this temperature.

**Proposed Change:** See edits in track changes on following pages.

**Comments:**

1/28/2016 FPP Meeting: revised to add decimal place to temperature for consistency (68.0).

**Record of Final Action:** APPROVED as revised at FPP meeting 1/28/2016.

### 3. McNARY DAM JUVENILE FISH FACILITY (JFF)

Agencies conducting research in the McNary Dam (MCN) 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.

#### 3.1. General Facility Protocols.

3.1.1. Sample rates should not exceed 25% unless collecting research fish at water temperatures < ~~70~~68.0°F.

3.1.2. The Corps reserves the right to terminate trapping operations at any time.

#### 3.2. MCN JFF Requirements for Users.

All personnel conducting research or monitoring in the MCN JFF shall:

3.2.1. Have appropriate documentation for conducting research at the dam;

3.2.2. Have valid State and Federal permits that cover all ESA-listed species that may occur at the project during the collection period;

3.2.3. Comply with all permit conditions, even if more restrictive than protocols herein;

3.2.4. Wear hard hats at all times when outside, in, under or around the JFF or the dam;

3.2.5. Wear long pants or raingear at all times. No shorts or sweats permitted; and

3.2.6. Wear steel-toed shoes (or rubber boots when likely to enter water) at all times. No tennis shoes or sandals permitted.

3.2.7. If users provide the project biologists with a schedule, it will not be necessary to notify them upon arrival and departure.

3.2.8. Users shall coordinate sample rates with Smolt Monitoring Program (SMP) or MCN project biologists.

3.2.9. Users are not permitted to routinely operate JFF flushing valves and release pipes/valves without the permission of project biologists.

3.2.10. The Project Biologist must approve any proposed modifications to the building or equipment.

#### 3.3. MCN JFF Sample Mode Operations (typically April 6 – September 30).

##### 3.3.1. Sampling Procedures:

3.3.1.a. Personnel will normally conduct sampling in accordance with smolt

monitoring program guidelines recommended by the PSMFC. Project and SMP personnel may occasionally alter sampling guidelines if fish research activities require it. Normal alterations of sampling guidelines are to adjust the number of fish sampled to meet approved research needs or to minimize the handling of fish during warm water temperature periods.

**3.3.1.b.** Electronic counting tunnels count sampled fish and staff verify and adjust the counts by hand counts. Staff will base all fish number estimates and rates on the size of the sample of fish collected. Staff will take samples hourly for 24-hours every-other-day. Project biologists will coordinate with SMP personnel to set sample rates.

**3.3.1.c.** SMP and project personnel will take and use species composition and weight samples to determine loading densities for raceways (if fish are being collected for research needs). Project personnel will keep a running total of hourly estimates of fish numbers and raceway totals. Daily samples for monitoring descaling will include a minimum of 100 fish of the dominant group(s) for which descaling information is recorded. SMP and project personnel will monitor descaling every-other-day for facility operations. SMP and project personnel may conduct full sample descaling instead of 100 fish subsamples as long as it does not adversely affect other facility operations.

**3.3.1.d.** Where SMP activities are conducted at collector dams, project biologists may utilize daily total information gathered by those personnel.

**3.3.1.e.** Research updates and trouble reports will go through project biologists to FPOM.

#### **3.4. MCN JFF Sampling at Water Temperatures >7068.0°F.**

**3.4.1.** Personnel will obtain daily average river temperatures from the Corps website at: [www.nwd-wc.usace.army.mil/tmt/documents/ops/temp/string\\_by\\_project.html](http://www.nwd-wc.usace.army.mil/tmt/documents/ops/temp/string_by_project.html).

**3.4.2.** Staff will conduct daily 24-hour index sampling every-other-day, 0700–0700 hours. If juvenile salmonid populations experience high mortality after personnel implement the above procedures, the project will cease fish collection for regular sampling, but SMP and project staff shall continue to collect for fish condition sampling for up to 8 hours per day.

**3.4.3.** The switchgate selects between sample and bypass mode.

**3.4.4.** If populations experience high mortality, staff will reduce sample sizes to approximately 100 fish per day, within sampling limitations.

**3.4.5.** Project or SMP personnel will use a thermometer in the sample holding tank for official reporting requirements, instantaneous temperatures or when online data are unavailable.

**3.4.6.** An instantaneous temperature of 7068.0°F or greater taken between 0630 and

0700 hours will trigger a change in sampling mode after a project biologist notifies SMP biologists.

**3.4.7.** Normal index sampling may resume when daily average temperatures are  $\leq$  ~~69.5~~68.0°F

[www.nwd-wc.usace.army.mil/tmt/documents/ops/temp/](http://www.nwd-wc.usace.army.mil/tmt/documents/ops/temp/)

**3.4.8.** If there is a research need to sample at temperatures  $>$ ~~68.070~~68.0°F, the Corps District POC will initiate coordination with FPOM.

**3.4.9.** If the SMP and 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.

**3.4.10.** For additional measures to take when sampling at water temperatures  $>$  68.0°F, see **FPP Chapter 5 - McNary Dam**, section ~~4.1.2~~.

### **3.5. MCN JFF Bypass Mode Operation.**

**3.5.1.** Project personnel will set the switchgate to the appropriate bypass mode.

**3.5.2.** Project personnel will inspect the facility as necessary.

### **3.6. MCN JFF System Failure Protocols.**

**3.6.1.** Personnel shall immediately report any system failure or abnormality to a project biologist, or if unavailable, the control room at ext. 231.