2022 Fish Passage Plan

Appendix B

Corps of Engineers Juvenile Fish Transportation Plan [1]

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[1] If any provisions herein conflict with the current *Fish Operations Plan* (FOP), included in the Fish Passage Plan as **Appendix E**, the current FOP shall prevail.

1. INTRODUCTION

This *Juvenile Fish Transportation Plan* (JFTP) describes operations and establishes criteria for the collection and transportation of juvenile salmon and steelhead from Lower Granite, Little Goose, and Lower Monumental dams (collector dams) to release below Bonneville Dam. The JFTP supplements operating criteria presented in the project-specific chapters of the current *Fish Passage Plan* (FPP).[2]

The JFTP is conducted by the Corps of Engineers' Walla Walla District (CENWW) under current Endangered Species Act (ESA) Section 7 (a)(2) consultations as an integral component of Columbia River System (CRS) operations. From 1992 to 2013, this activity was implemented under ESA Section 10 (a)(1)(A) incidental take permit issued by the National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NOAA Fisheries, also referred to as NMFS).

On-site biological assistance is provided through contracts procured through BPA and the Corps. BPA arranges biological assistance provided by fishery agencies through a contract with the Pacific States Marine Fisheries Commission (PSMFSC), who sub-contracts with Washington Department of Fish & Wildlife (WDFW) and Oregon Department of Fish & Wildlife (ODFW). On-site biological assistance is provided by WDFW at Lower Granite and Lower Monumental, while ODFW provides biological assistance at Little Goose. The Corps contract provides additional services at the collector projects in direct support of the juvenile fish transportation program.

The transport program will be coordinated with other fishery monitoring, research, and management activities by CENWW. Coordination will be achieved with the fishery agencies and tribes through the appropriate regional forums, such as the Fish Passage Operations and Maintenance (FPOM) Coordination Team and the Technical Management Team (TMT), and with other agencies as required.

2. OBJECTIVE

The objective of CENWW and the transportation program is to transport juvenile fish when the best scientific information indicates doing so will increase adult return rates. This can be achieved by:

- **a.** Providing safe and efficient collection and barge or truck transport of juvenile salmon and steelhead from collector dams to release areas below Bonneville Dam.
- **b.** Identifying and recommending programs or facility changes that would benefit fish collection and transportation or bypass operations.
- **c.** Assuring that collection, transport, and release site facilities are ready for operation prior to the beginning of transport operations.

[2] The annual Fish Passage Plan (FPP) is available online at: pweb.crohms.org/tmt/documents/fpp/

d. Assuring that collection, transport, and release site facilities are properly maintained throughout the transport season.

e. Establishing operating criteria for facilities, barges, and trucks including fish holding and transport densities, sampling rates, and facility operations and maintenance.

f. Coordinating changes needed to accommodate fluctuations in the outmigration with projects, NOAA Fisheries, PSMFC, FPOM, and TMT personnel.

g. Coordinating transport evaluation and other research with the transportation program.

h. Providing the training of new personnel associated with collection and transport facilities and equipment.

i. Providing all parties involved a list of emergency points of contact and appropriate telephone numbers so that any emergency can be coordinated and corrected efficiently.

j. Preparing annual reports detailing transportation activities and results for the previous year, and identifying maintenance, replacement, or modifications needed for the next transport season.

3. TRANSPORT PROGRAM DURATION

3.1. Starting Operations

3.1.1. Consistent with the Fish Operations Plan (FOP; included in FPP as **Appendix E**) and guidance provided by the Regional Implementation Oversight Group (RIOG), the best transport operation for fish will be determined upon review of data on fish survival, adult returns, current in-river conditions, and water supply forecasts. TMT will review transport studies and provide a recommendation each year to CENWW on how to operate the juvenile transport program.

3.1.2. Planning dates to initiate juvenile transport at Lower Granite Dam will be April 21–25 unless the Corps adopts a recommendation by TMT for a later start date (no later than May 1) and accompanying alternative operation. Transport at Little Goose and Lower Monumental may begin simultaneously with the start of transport at Lower Granite, or may begin up to 4 days and up to 7 days later, respectively.

3.2. Summer Transport Operations

3.2.1. At Lower Granite, Little Goose, and Lower Monumental, summer operations will begin in coordination and discussions with TMT.

3.2.2. Fish collected during summer operations will be held in shaded raceways or holding tanks. Sampling may convert to 100% when fish numbers are below 500 fish per day (per PSMFC sampling guidelines) and smaller pick-up mounted transport tanks may be used. Steelhead that are determined by SMP biologists to be in poor condition or reverting to the parr stage may be bypassed to the river.

3.3. Ending Operations

3.3.1. Transport operations are anticipated to continue through approximately September 30 at Lower Monumental and through October 31 at Lower Granite and Little Goose.

3.3.2. Transport may be stopped earlier at any of the projects due to *columnaris* disease (see **section 4.6.5**) or at Lower Monumental due to low fish abundance (see **section 4.6.6**).

3.4. Emergency Notification

3.4.1. If icing conditions threaten facility integrity or present unsafe conditions on the transport route, transport operations may be terminated early by the Project's Operations Manager. The CENWW Transportation Coordinator will coordinate any emergency termination or modification of the transportation program with NOAA Fisheries and TMT, except as described below in **section 4.6.5** regarding ending collection for transport due to *columnaris* disease or at Lower Monumental due to low fish abundance (see **section 4.6.6**).

3.4.2. If high water temperatures or other factors increase collection mortality to 6% of daily collection (when sample sizes are ≥ 20 fish) for 3 consecutive days, or if mortality rates are increasing at such a rate that these criteria are likely to be met, Project Biologists will report to the CENWW Transportation Coordinator. The Transportation Coordinator will evaluate the situation and notify NOAA Fisheries and may arrange a conference call, if needed, with TMT to discuss options to provide adequate fish protection measures.

3.4.3. In the event of a fish loss exceeding conditions considered in the incidental take statement of the current CRS BiOp, which includes the transportation program, the Corps shall notify NOAA Fisheries and reopen consultation as needed.

4. OPERATING CRITERIA

4.1. Early Season Pre-Transport Operations

Prior to initiation of transport, or when fish are not being transported from the Snake River projects, fish collection facilities will be operated as described in the Smolt Facility Protocols in **Appendix J.**

4.2. Collection & Transportation Operations

4.2.1. Collection of fish for transport will commence on the agreed-to start dates at Lower Granite, Little Goose, and Lower Monumental and barging will begin the following day. Collected juvenile fish will be transported from each facility by barge daily or every other day (depending on the number of fish) throughout the migration season.

4.2.2. Once transport operations begin, all juvenile fish collected shall be transported except for those marked for in-river studies. Marked or PIT-tagged fish will be released to the river if they are part of an approved research study or Smolt Monitoring Program (SMP) travel time evaluation.

4.2.3. Juvenile fish collected for transport will be bypassed back to the river if the number of collected fish exceeds or is expected to exceed facility or barge holding capacities. Holding for transport will resume when capacities are adequate to hold and transport fish according to criteria. Maximum holding time and loading criteria will not be exceeded without CENWW review and approval.

4.2.4. Transport operations will be carried out at each project in accordance with all relevant FPP operating criteria.

4.2.5. Specifics of the transportation program may be altered during the transportation season based on recommendations from the TMT.

4.3. Collection Facility Operations

4.3.1. Once transport operations begin, collection facilities will be staffed 24 hours per day until transport operations cease.

4.3.2. Flow and fish passage at juvenile fish separators will be monitored at least every 15 minutes during separator operations. Fish that are too large to pass through the separator bars will be bypassed to the river.

4.3.3. When collection systems are not providing safe fish passage or meeting operating criteria, Project Operations Managers and Biologists will make operational changes in the best interests of fish, and then notify CENWW as soon as possible. The CENWW Transportation Coordinator will coordinate changes with NOAA Fisheries and TMT.

4.3.4. If it appears that facility or barge holding capacity may be exceeded on a given day, the Project Biologist shall immediately inform CENWW with a report of the hourly fish collection numbers, barge arrival time or holding capabilities, along with facility descaling and mortality information. The CENWW Transportation Coordinator shall promptly coordinate this information with RCC and NOAA Fisheries. Additional spill at the affected project may be requested if it appears that holding capacity will be exceeded or fish condition information indicates that spill is a better passage route than the bypass system. If it is determined that the best course of action is to increase spill, spill operations shall begin prior to the facility reaching its holding capacity (around when the 8th of 10 raceways is filled). This level of spill may continue until holding capacity is adequate or fish condition improves.

4.3.5. To avoid attracting predatory birds, mortalities should be returned to the river at night if deemed necessary by the Project Biologist.

4.3.6. At Little Goose and Lower Monumental, lamprey-friendly tailscreens will be installed for the entire fish collection season. Fishery staff at these projects have never observed salmon fry being impinged on these screens.

4.3.7. At Lower Granite, lamprey-friendly tailscreens will be installed as needed at the discretion of Project Biologists based on the presence of lamprey in the raceways, while considering the risk of impingement of salmon fry on the lamprey-friendly tailscreens. Project Biologists will switch back to salmon-criteria screens at the first sign of impingement of salmon fry on the

lamprey-friendly tailscreens, or when fry are observed in the sample. The salmon-criteria screens will be left in place until salmon fry are no longer present in the sample.

4.3.8. Juvenile lamprey are sometimes found in dewatered raceways after truck/barge loading operations. If debris is not a problem, lamprey should be promptly and safely flushed or otherwise returned to the river. If debris is a problem, and when practicable, lamprey should be removed by hand and put in a container with water and later returned to the river.

4.4. Sampling Procedures

4.4.1. Sampling will normally be accomplished in accordance with SMP sampling guidelines recommended by the PSMFC. Sampling guidelines may occasionally be altered if required by the transportation program or fish research activities. Typical alterations of sampling guidelines are to adjust the number of fish sampled to meet approved research needs, to minimize fish handling during warm water periods, or to meet deadlines for loading fish transport vehicles.

4.4.2. Sampled fish will be counted by electronic counting tunnels, then verified and adjusted by manual counts. All estimates of fish numbers, rates, and loading densities in raceways, trucks, and barges will be based on a sample of collected fish. Samples will be taken hourly 24 hours per day at sample rates set by Project Biologists as coordinated with SMP personnel.

4.4.3. Species composition and weight samples will be taken to determine loading densities for raceways, barges, and trucks. Project personnel will keep a running total of hourly estimates of fish numbers, raceway totals, and direct loading totals for barges based on these estimates. Daily samples for monitoring descaling will include a minimum of 100 fish of the predominant group(s) for which descaling information is recorded. During periods of low fish passage, descaling will be monitored for facility operations. Full sample descaling may be conducted instead of 100 fish subsamples if it does not impact other facility operations. During extended transport operations (after August 15 at Snake River projects), samples may be evaluated every other day to minimize handling stress and to allow all collected fish to be held in the sample holding tanks.

4.4.4. Where SMP activities are conducted at collector dams, Project Biologists may utilize daily total information gathered by those personnel.

4.5. Loading Criteria

4.5.1. Raceway Capacity:

4.5.1.1. Inflow to raceways is approximately 1,200 gallons per minute (gpm) at Lower Granite and Little Goose, and 2,400 gpm at Lower Monumental.

4.5.1.2. Individual raceway volume is approximately 12,000 gallons at Lower Granite and Little Goose, and 24,000 gallons at Lower Monumental.

4.5.1.3. Maximum raceway capacity is 0.5 pounds (lbs) of fish per gallon of water. This capacity limit shall not be exceeded without CENWW review and approval through coordination with NOAA Fisheries and TMT. Project Biologists will provide the following

information to the CENWW Transportation Coordinator to inform the joint decision whether to exceed capacity criteria or to bypass fish to the river:

a. Species composition.

b. Total anticipated collection during the critical holding period.

c. In-river fish passage conditions.

d. Fish condition.

4.5.2. Raceway Distribution: Collected fish will be distributed among available raceways in a manner that minimizes crowding, stress, and risk of disease transmission. Additional fish will be added to each raceway at the discretion of the Project Biologist until holding capacity is reached. Whenever possible, small fish will be held in separate raceways from large fish.

4.5.3. Raceway Holding Time: Maximum raceway holding time is 2 days, except in instances when additional holding time is needed to collect sufficient fish for tagging for research studies.

4.5.4. Truck & Barge Capacity: Maximum loading capacity is 5 lbs of fish per 1 gpm inflow for barges, and 0.5 lbs per 1 gallon of water for trucks (**Table B-1**).

Table B-1. Juvenile Fish Transportation Program Transport Vehicle Capacity.

Transport Vehicle	Capacity (gal)	Inflow (gpm)	Fish Capacity (lbs)
Barge 2127 - "*SOCKEYE*"	85,000	4,600	23,000
Barge 2817 - "*BLUEBACK*"	85,000	4,600	23,000
Barge 4382 - "*STEELHEAD*"	100,000	10,000	50,000
Barge 4394 - "*COHO*"	100,000	10,000	50,000
Barge 8105 - "*CHINOOK*"	150,000	15,000	75,000
Barge 8106 - "*KING SALMON*"	150,000	15,000	75,000
Barge 8107	150,000	15,000	75,000
Barge 8108	150,000	15,000	75,000
Truck	3,500	n/a	1,750
Truck-Slide on tank	1,000	N/a	500
Truck - Midi-tank	300	N/a	150
Truck - Mini-tank	150	N/a	75

4.6. <u>Summer Transport Operations</u>

4.6.1. During the summer, all fish collected will be routed to raceways with the most effective shading for holding. Sampling efforts should be minimized, if possible, to limit handling stress on fish. Facility samples may be processed every other day if necessary.

4.6.2. All collected fish may be routed to sample tanks when fish numbers drop to an acceptable handling level. At that time, all collected fish will be handled as part of the daily sample per SMP guidelines (see **Appendix J**). To minimize handling stress, facility samples may be processed every other day. When large trucks are used, fish may be loaded from either raceways

or labs. When mini or midi-tankers are used, Corps and agency Project Biologists will select the best method of transferring fish from the lab to the tankers.

4.6.3. During summer trucking, if fish collection numbers begin increasing to where it appears the project will have difficulty transporting the fish with available equipment, the project shall notify the CENWW Transportation Coordinator immediately. The Transportation Coordinator will arrange for an additional transport vehicle if possible, joint fish transportation between two or more operating projects, or prioritize transport/bypass operations between the projects.

4.6.4. When water temperatures are above 68°F, all personnel handling fish shall take extra care to minimize stress and other impacts on fish.

4.6.5. If mortality from *columnaris* disease (*Flavobacterium columnare*) in the condition sample exceeds 10% for three consecutive days after August 17, collection for transport will end and the system will be placed in primary bypass with a condition sample taken every third day. The collection of fish for condition sampling will end after one 24-hour sample period, or when 100 juvenile salmonids are collected for examination. The FPC will be notified and FPAC will review available data for future recommendations. Transport will be reinitiated when all following criteria are met:

- **a.** Collection mortality is less than 5% for two consecutive sampling periods.
- **b.** Water temperature in the tailrace is below 65°F.
- **c.** More than 50 fish are collected during the two consecutive daily periods.

4.6.6. At Lower Monumental Dam, collection of fish for truck transport will stop when daily collection is less than 50 fish per day for 3 consecutive days. The facility will continue to collect fish for condition sampling through September 30. If collection numbers increase substantially, TMT will be notified and will determine whether to recommend resuming transport.

4.7. Facility and Equipment Logbooks, Records, and Reports

4.7.1. To document transportation activities at Snake River collector dams, the following items will be logged at each dam by either project personnel or state biologists:

- **a. Juvenile Fish Facilities**: Records will be maintained recording fish counts by hour, by day, and by species, numbers and species of fish trucked or barged, number and species of fish sampled, descaling rates, and mortality rates. Records will be transmitted daily to CENWW for consolidation and transmittal to CENWD. Facility personnel will follow standard operating procedures (SOP) and will note in facility logbooks accomplishment of SOPs at various stations at the collection facilities. General observations of fish condition and juvenile fish passage will be documented in facility logbooks by state biologists.
- **b. Truck & Barge Logbooks**: Each truck and barge shall have a logbook to record fish loading rates, fish condition, estimated mortality, release site, equipment malfunctions, and accomplishment of scheduled work under the SOPs. When consecutive loading of trucks or barges occurs at downstream projects, truck drivers or barge riders will record numbers and condition of fish loaded. Towboat captains will keep logbooks on

towboat activities. Barge riders will be authorized as inspectors by the Contracting Officer's Representative to initial entries noting towboat passage, loading, or fish release activities, and comments on barging operations. State biologists will report truck and barge mortality information in their weekly reports.

c. **Weekly Reports:** Contracted biologists shall prepare weekly reports documenting daily and weekly collection and transportation numbers, sampling information, facility and sampling mortality, descaling rates, and adult fallbacks. The weekly reports will be used by CENWW for any weekly reports to inform consultations with NOAA Fisheries on the status of project operations. Contract biologists shall distribute the weekly reports to other regionally interested parties as directed by the CENWW Transportation Coordinator.

5. TRUCK & BARGE OPERATIONS

5.1. Truck Operations

5.1.1. Trucks. Two 3,500-gallon fish transport trailers and one tractor, one 1,000-gallon tank, three 300-gallon midi-tanks, and three 150-gallon mini-tanks are available for hauling fish. Mini- and midi-tanks are small units that can be mounted onto pickup trucks, and one of each will be provided at each collector project. During trucking operations, a transport truck/trailer is based at Lower Granite Dam, with the second transport trailer held in reserve. In addition, a 1,000-gallon tank/truck is also based at Lower Granite Dam. The truck/trailer combination may be relocated to meet transport demands and when smaller transport vehicles begin operating in late summer.

5.1.2. Truck Release Sites: The normal early spring release site for trucked fish will be a truck pad behind the Bonneville Dam Smolt Monitoring Facility (SMF). Fish released from the truck pad pass through the SMF outfall into the Columbia River. When collection numbers are low during truck transportation, midi-tanks and mini-tanks may also release fish into the Bonneville SMF outfall flume. Dalton Point will be utilized as an alternate release site in the case of an emergency or if unsafe conditions exist at the Bonneville facility.

5.1.3. Operation of Truck Life Support Systems: Truck drivers will be trained by Project Biologists and maintenance personnel on the operation of truck life support systems, the requirements of fish to be met, and signs of stress for which to watch. Routine checks will be made on support systems and fish condition at check points identified by Project Biologists. Life support system data and information on fish condition will be entered into the truck driver's logbook at each check point and at the release point. The truck driver's logbook will be reviewed by the Project Biologist upon the truck driver's return after each trip.

5.1.4. Truck Loading Schedules: If required to maintain transport schedules at the Snake River projects, transport trucks, midi-tanks, and mini-tanks leaving Lower Granite may take on additional fish at Little Goose Dam, or trucks leaving Little Goose may take on additional fish at Lower Monumental Dam. Loading schedules will be coordinated so that fish will be kept separated by size as much as possible.

5.2. Barge Operations

5.2.1. Barges: Eight fish barges and four towboats will be available for use. Barges with 75,000-lb capacity will operate from Lower Granite.

5.2.2. Barge Scheduling:

- **a.** It takes approximately 79 hours to travel from Lower Granite to the release area near the Skamania light buoy below Bonneville Dam and return.
- **b.** The FOP (**Appendix E**) defines the start date of collection for transport in coordination and discussion with RIOG.
- **c.** One barge will leave Lower Granite every other day or daily, beginning on or about the second day after initiation of collection.
- **d.** When fish numbers increase during every other day barging, the transport program will switch to one barge leaving Lower Granite daily. When fish numbers decline in late spring, barging will change to or return to every other day from Lower Granite through June 20.
- **e.** During spring operations, barges will take on additional fish at Little Goose and Lower Monumental as barge capacity allows. The two medium and two small barges may also be used from Lower Granite for additional barging capacity, or they will be used for direct loading of fish at Little Goose.
- **f.** During spring spill at Little Goose, direct loading rather than loading into the raceways will be preferred to reduce exposure duration to high Total Dissolved Gas (TDG) in the raceways that can occur during high spill periods.
- **g.** When daily collection exceeds barge capacity, juvenile fish may be spilled per **section 4** above or bypassed to the river until collection numbers drop to where juvenile fish can be barged within barge capacity criteria.

5.2.3. Barge Loading: Whenever possible, small and large fish will be loaded in separate compartments in barges or until steelhead collection drops below 100 fish collected over a 2-day period. At that time, all fish may be transported in the same compartment.

5.2.4. Barge Riders: Project barge riders will accompany each barge trip, supervising all loading and release operations, and barge operations in progress. Barge riders will be trained on barge operation, maintenance, and emergency procedures by Project Biologists and maintenance personnel. Barge riders will also be cross trained in facility operations and may rotate with facility operators as decided by project management. Barge riders shall be responsible for monitoring fish condition, barge equipment operations, and water quality data (currently temperature and dissolved oxygen levels) at regular intervals during downriver trips. Barge riders shall maintain logbooks and forms recording loading activities and times, loading densities by barge compartment, information on equipment operations, and release locations. Standard operational procedure forms shall be filled out during routine monitoring of equipment operation and shall include fish mortality and water quality data. At each subsequent dam where fish are loaded onto the barge, the barge rider shall make appropriate notations in the logbook and/or appropriate form. The barge rider shall also serve as an inspector for the towboat contract, and

record information required by the Contracting Officer's Representative, and shall initial the towboat captain's logbook confirming operational information and lockage times. Any unresolved differences between barge riders and towboat crews shall be reported immediately to the Contracting Officer's Representative.

5.2.5. Barge Release Area: The barge schedule is based on releasing fish between river miles 138 and 141 with arrival at that point pre-determined to occur during nighttime hours to minimize predation impacts. As a reference point, Bonneville Dam is at RM 146. Barge travel time is affected by weather and river flows. Each towboat will be assigned a designated river mile for fish releases to ensure fish are not released in the same area on consecutive trips. Lower Granite Project Biologists will furnish maps of the release site and clearly designate the assigned river mile for fish release on each trip. As warranted, barge riders may randomly select a barge release site between river miles 138 and 141 to further decrease the ability of predators to prey on fish released from the barge. The alternate release site should be coordinated with the Lower Granite Project Biologist, if possible.

5.2.6. Barge Lockage Priority: During the fish barging season, fish barges as Government vessels should be provided priority lockage over commercial and recreational traffic when locking through navigation locks, per *33 CFR 207.718(f)*. However, safety will not be compromised during lockages.

6. EMERGENCY PROCEDURES

Emergency procedures will be followed any time an emergency occurs, 24 hours per day, 7 days a week, during the transport season. Emergencies will be reported to the CENWW Transportation Coordinator as soon as possible. In the event of an emergency (e.g., equipment failure at a facility, truck, or barge; emergency lock outage; chemical spill in the river, etc.), facility workers, truck drivers, and barge riders will be expected to take immediate appropriate actions to protect fish. If time allows, the worker, driver, or rider should consult with their supervisor by phone or radio to jointly make emergency decisions. If time does not allow consultation, the worker, driver, or rider must take appropriate action on their own initiative, then report to their supervisor as soon as possible after the action has been completed. A complete list of persons to be notified in case of emergencies, with work and home phone numbers, will be provided to each person involved in the transport program. Facility operators, truck drivers and barge riders will be trained on emergency notification procedures by Project Biologists and CENWW. To report an emergency, the person involved will immediately notify their supervisor or the next person up the line until the emergency has been properly reported and corrective action has been initiated. In addition to phone reporting, barge riders will report emergencies by the towboat radio to the nearest Corps dam. The operator on duty will relay the message to the person or persons identified by the barge rider.

7. FISHERY AGENCY ROLES & RESPONSIBILITIES

The fishery agencies provide biological assistance at collector dams for transportation. CENWW contracts for fish biologists to work at each collector facility. Contracts specify that state agency personnel at collector dams accomplish specific tasks for the Corps, including:

- **a.** Reviewing or conducting handling, inspection, and recording of data from fish sampled at the collection facility.
- **b.** Evaluating and recording fish condition and recommending operational changes or inspection of facilities if fish condition indicates a problem.
- **c.** Providing hand counts of sampled fish, assisting the Project Biologist in adjusting electronic fish counts, checking hourly and daily fish counts for accuracy, and coordinating facility counts with PSMFC SMP counts where appropriate.
- **d.** Conducting quality control inspections of collection facilities and transport equipment including visits to other collection facilities when work schedules allow.
- **e.** Monitoring the effects of smolt monitoring and research projects on fish condition and transportation activities and reporting impacts, including numbers of fish handled for research purposes and the disposition of those fish, to the Project Biologist.
- **f.** Participating in gatewell dipping as required to monitor fish condition.
- **g.** Preparing weekly reports summarizing fish numbers and transport activities.
- **h.** Preparing accurate text and tabular data in correct format for project annual reports.

8. REPORTING

8.1. Daily Reports

Project Biologists or contract biologists at each collector dam will be responsible for entering all pertinent information into the computer database and for transmitting daily reports to CENWW. On weekdays, information will be transmitted by 1500 hours on the day collected. Weekend information will be transmitted to CENWW by 1200 hours on the following Monday.

8.2. Weekly Reports

Contract biologists will provide weekly reports detailing fish collection and transportation numbers, descaling estimates, and facility and transportation mortality estimates. The reports will also contain a narrative on project activities and compliance with operating criteria. If research or smolt monitoring activities are occurring at the project, the weekly reports will include information on the number of fish sampled and sacrificed also. Corps biologists shall provide the reports to interested parties within the region.

9. REQUIREMENTS FOR FISHERY AGENCY ACTIVITIES AND RESEARCH

9.1. Coordination and Protocols

9.1.1. Agencies and tribes requesting to work at Corps dams will provide early coordination, including work proposals, CBFWA approval, ESA permits, and project needs and requirements through written correspondence to CENWW, Operations Division Chief. Work shall not start until written approval is received. The *NWW Guide for Project Access* for researchers is available on the FPOM website.[3]

9.1.2. The Corps expects PSMFC to annually coordinate SMP sampling guidelines with the Corps.

9.1.3. To maintain good working relationships and safe conditions, fishery agencies, tribes, and researchers will be required to adhere to the following courtesy, security, and safety protocols:

- **a.** Have agency picture identification and present it to project security on arrival.
- **b.** Check in with the Operations Manager upon first arrival at the project to receive information on who will be the project point of contact, and what courtesy and safety requirements must be followed.
- **c.** Notify the point of contact whenever arriving or departing from the project so they will know where personnel will be working and when they will be on the project.
- **d.** Adhere to project clearance, safety, security, and work procedures, including preparing an *Activity Hazard Analysis* per the Corps Safety Manual, 385-1-1.
- **e.** Notify the Operations Manager or his/her representative of unscheduled or non-routine work and activities.
- **f.** Notify the point of contact of expected guests or changes in personnel and assure that these individuals are aware of safety and work procedures.

[3] NWW Guide to Researchers for Project Access: pweb.crohms.org/tmt/documents/FPOM/2010/NWW%20Research/Research.html