

**OFFICIAL COORDINATION REQUEST FOR
NON-ROUTINE OPERATIONS AND MAINTENANCE**

COORDINATION TITLE – 22DEX02 Dexter Fish Facility Upgrades In-Water

Work Periods

COORDINATION DATE – May 3, 2022

PROJECT – Dexter Fish Facility

RESPONSE DATE – May 13, 2022

Description of the problem –

On 1 September 2021, the U.S. District Court for the District of Oregon issued an Interim Injunction order, mandating that USACE undertake specified actions intended to improve conditions at several of USACE's Willamette Valley projects for Endangered Species Act (ESA)-listed Upper Willamette River spring Chinook salmon and winter steelhead until USACE and NMFS complete the reinitiated ESA consultation on the continued operation and maintenance of the Willamette Valley System and NMFS issues a new Biological Opinion (BiOp). Among other measures, the Interim Injunction provides, “As required by RPA 4.6 [set forth in the 2008 NMFS Willamette Project BiOp], the Corps SHALL make improvements to and begin operating the Dexter adult fish facility within two years of this Interim Injunction.”

USACE previously began to design upgrades to the Dexter Adult Fish Facility (AFF) as required by RPA 4.6 but put them on hold in 2014 at the 90% Design Documentation Report (DDR) and Plans and Specifications (P&S) phase. Following the issuance of the Interim Injunction, USACE restarted work to complete the 90% DDR and P&S for the upgrades and begin construction as soon as reasonably possible. USACE has been coordinating with NMFS to ensure that the design meets NMFS criteria and the requirements of RPA 4.6 and incorporates lessons learned, where appropriate, from other AFFs that USACE reconstructed since 2014. This is a complex project with many construction activities to sequence, including the In-Water Work (IWW) periods, on an accelerated timeline compared to past AFF upgrades. Recently, USACE identified an aggressive schedule for completion of the upgrades by May 2026 that permits the facility to remain operational during construction. That schedule assumes the availability of the IWW periods identified below.

This MOC is intended to coordinate the IWW periods available for construction of the upgrades, which USACE will subsequently include in the contract P&S included in the solicitation package. USACE needs the IWW periods identified now so that the construction contract can be advertised by the end of this year. The IWW periods identified in the P&S are expected to be firm but may later be refined during the contracting process.

Project updates at WFPOM will be provided for awareness and additional coordination as necessary.

Type of outage/change required

The IWW period in the Middle Fork Willamette River at the base of Dexter Dam, where the work will occur, is listed as “by specific arrangement” in the Oregon Guidelines for Timing of In-Water Work to Protect Fish and Wildlife Resources, June, 2008. This coordination request seeks to arrange specific IWW periods for the construction of the Dexter AFF upgrades, as identified below.

Impact on facility operation

We intend to provide the contractor the maximum opportunity to do the work, so the upgraded facility is fully operational as soon as possible. The P&S will require that all work within, adjacent to, or over the river be performed during the IWW periods identified below. However, one or more of these IWW periods may later be reduced or eliminated after contract award depending on the contractor’s proposed construction work plan. The scope of work to be completed during the IWW periods will include construction of upgrades to the fish ladder entrance, return to river pipe, and facility drain outlets. Cofferdams will be required for work that will occur below tailwater elevation; deployment and removal of the cofferdams and all work within the area dewatered behind the cofferdams will be conducted during the IWW periods. Complete removal of all cofferdam materials will be accomplished prior to the end of the final IWW period. The fish ladder entrance cofferdam will be installed during IWW period 2025 and removed by the end of IWW period 2026.

Turbine and spill pattern operation changes may be necessary as a safety requirement to protect the work site during installation and removal of the cofferdams. These changes will be coordinated, as necessary, at a later date and are not expected to impact flow or ramp rate requirements for Dexter Dam.

Any changes to fish facility operations will be coordinated by Operations Division Technical Branch Fish Section (ODT-F). Changes that affect the hatchery production contract will be coordinated through the contracting process and WFPOM will be notified.

Dates of impacts/repairs

IWW periods during construction -

2023 – mid-Feb to mid-May and mid-July to mid-Sept
2024 – mid-Feb to mid-May and mid-July to mid-Sept
2025 – mid-Feb to mid-May and mid-July to mid-Sept
2026 – mid-Feb to mid-May

Length of time for Dexter Fish Facility Construction

Minimum four years.

Expected impacts on fish

Any adult and juvenile salmonids in the river will be exposed to construction activities during cofferdam placement and removal as well as work that is occurring within the footprint of the cofferdams.

Table 1 is the periodicity table for Spring Chinook in the Middle Fork Willamette R. below Dexter Dam indicating critical life stage activities for salmonids (reproduced from the 2022 Willamette Fish Operations Plan, Chapter 5 – Middle Fork Willamette Subbasin).

Table 1. Periodicity Table for Spring Chinook in the Middle Fork Willamette below Dexter Dam

Life Stage/Activity/Species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Comments
Upstream Adult Migration													based on Dexter captures
Adult Spawning													
Adult Holding													based on Dexter captures
Egg Incubation through Fry Emergence													incubation & emergence accelerated 2-3 mo. because of warm water dam releases Emergence based on field observations and TU calculations; often high egg mortality below Dexter
Juvenile Rearing													
All life stages													
Fry													peak period of rearing of fry based on trapping field data (2011-2013)
Subyearling													subyearling primary rearing period (May-Aug) based on seining data; however catch rates are low
Fall migrant													subyearlings that do not migrate in first summer; not documented
Yearling													fish that remain through first summer & winter; not documented
Downstream Juvenile Migration													
Dec-Mar = fry													Fry movement based on field data (2011-2013)
April-mid July = subyearling													juvenile migration data based on PIT tag data, limited for MF Willamette
mid-Oct-mid Dec = fall migrants													
Mar-May = yearling smolts;													

Based on professional opinion & field studies, 90% of the life-stage activity occurs during the time frame shown as the peak use period.
Based on professional opinion & field studies, 10% of the life-stage activity occurs during the time frame shown as the lesser use period.

Legend:

- Grey shaded cells: Represents periods of peak use based on professional opinion.
- Yellow shaded cells: Represents lesser level of use based on professional opinion.
- Red shaded cells: Represent information based on field data & direct knowledge.
- Red cells: Represent critical periods when flow fluctuations should be avoided to prevent disruption of spawning, to minimize disturbance of eggs during early incubation, and to minimize stranding or displacing newly emerged fry.

Comments from agencies

ODFW Comments

Thank-you for the opportunity to comment.

ODFW would like to have the opportunity to review and provide input into designs for the court-ordered Dexter adult fish facility. Despite extensive local facility knowledge and operational familiarity with other Corps-funded Willamette basin fish facilities (Foster and Minto adult fish facilities) that could improve the final designs and outcome, the current designs, including proposed modifications to the 2014 Dexter adult fish facility designs, have not been shared with ODFW for input or review.

ODFW requests the opportunity to review and provide meaningful input to the Dexter adult fish facility designs before it is too late to do so.

Based on the information shared in this MOC, ODFW has two suggestions regarding the timing of proposed work:

1. Delay the start of the in-water construction window until March 1. This assumes that by doing, ODFW will be able to rear and release an additional release group from Dexter Ponds. If the Corps chooses to continue with the earlier mid-February start to the IWWW, both the March and April release groups of spring Chinook smolts will be direct released to the river without acclimation at Dexter Ponds for three or more years, possibly resulting in stray rates as adults.
2. Provide an additional opportunity for adult trapping at the Dexter adult fish facility in August. This could be as brief as two weeks and would allow ODFW to additional remove hatchery fish from the river and increase numbers of collected fish for both broodstock and outplanting purposes.

ODFW may be able to provide additional flexibility to the IWWW, pending an understanding of the proposed actions and potential impacts. We encourage additional conversations as information becomes available.

Thank-you for your consideration.

Final results

The Corps appreciates ODFW's suggestions regarding the timing of the proposed work and would like to accommodate the requests to the extent possible, as described below. However, there are periods during which it is not feasible to accommodate the requests without negatively impacting the construction schedule. Subject to the contractor's proposed construction work plan, the Corps proposes to proceed as follows:

- 2023 – mid-February to mid-May: The start of this IWW period can likely be delayed until March 1, 2023.
- 2023 – mid-July to mid-September: The contractor will need to see the fish ladder in a dewatered state during this IWW period. However, after contract award, the Corps will work with the contractor to determine whether the contractor's proposed construction work plan can provide an opportunity for collection of adults for a period in August 2023.
- 2024 – mid-February to mid-May: The Corps anticipates that the contractor will switch to the interim facility water supply during this IWW period, so it must be maintained as is.

- 2024 – mid-July to mid-September: The Corps anticipates that the contractor will install the outfall and return-to-river structures during this IWW period, so it must be maintained as is. However, after contract award, the Corps will work with the contractor to determine whether the contractor’s proposed construction work plan can provide an opportunity for collection of adults for a period in August 2024 while this work is ongoing.
- 2025 – mid-February to mid-May: The Corps anticipates that the contractor will require this entire IWW period. However, after contract award, the Corps will work with the contractor to determine whether the contractor’s proposed construction work plan can delay the start of this IWW period until March 1, 2025.
- 2025 – mid-July to mid-September: The Corps anticipates that the contractor will install the entrance cofferdam during this IWW period, so it must be maintained as is to ensure that the final phase of construction can begin on time and the new facility is operational in time to collect adults in June 2026.
- 2026 – mid-February to mid-May: The Corps anticipates that the contractor will dismantle the interim facility water supply, remove the entrance cofferdam, and commission the new facility during this IWW period, so it must be maintained as is to ensure that the new facility is operational in time to collect adults in June 2026.
- Additionally, the Corps intends to install screens on the facility water intake within the forebay of Dexter Reservoir. The design of this feature is on a separate planning schedule and will be constructed under a separate contract with the intent to construct in 2026. As design and installation timing is finalized, the Corps will supplement this MOC with additional information.

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