Project Name	Article 6 – FHMP Transition Plans
Date Proposal Submitted	February 1, 2022
Date of Requested Decision	April 5, 2022
Date of Decision <sup>1</sup>	April 12, 2022
Requested By	Matt Bleich

<sup>1</sup> Decision will become final if committee members who were not present at this meeting do not oppose this proposed decision within 7 days

#### FHC Decision and Justification

FTC approves the Fisheries and Hatchery Management Plan (FHMP) Transition Plans associated with License Article 6 described within this Decision Document.

FTC representatives present – WA Fish and Wildlife, WA Ecology, Yakama Nation, NOAA, and Tacoma Power

Justification: This decision will allow for the implementation of the transition plans identified in the FERC license required FHMP for the Cowlitz Project. In addition, the transition plans will promote Cowlitz Basin recovery and harvest opportunity strategies.

## **Proposed Decision or Consideration**

Tacoma is seeking approval and implementation of the Transition Plans as characterized in the FHMP and submitted to FERC in October 2020 and described in the Background section below. This includes Transition Plans for Spring Chinook, Fall Chinook, Winter Steelhead and Coho which have been developed with the intent to advance recovery efforts and provide recreational opportunity during this FHMP period.

### Background

The Cowlitz FTC met approximately once per month over the course of 15 months to develop Transition Plans for Winter Steelhead, Spring Chinook, Fall Chinook and Coho. Additionally, progress and public comment was received throughout this period via two public meetings and one public comment period. The resulting attached Transition Plans include:

### Spring Chinook:

Spring Chinook recovery during this FHMP period will continue to focus on the Upper Cowitz/Cispus populations. Segregated hatchery production will be maintained with an annual juvenile release goal of ~1.8 million, based on bioprogramming. The program will be a combination of yearling and sub-yearling releases. The yearling program will be maximized based on facility space and water availability and sub-yearlings will be used to make up the difference to achieve the program goal. Assessment of SAR by release size will continue to be evaluated. The Bioprograming Plan will assess if additional yearling rearing capacity can be realized. Program improvement will increase availability of adults to recolonize the upper Cowitz/Cispus watersheds and build abundance, while maintaining harvest opportunity.

The current segregated hatchery program will continue while conducting a life cycle modeling/ population viability analysis to establish key biological reference points for the Upper Cowlitz/Cispus spring Chinook population (i.e., minimum seeding targets). Once this information is available (expected in 2022), it will be used in conjunction with estimates of collection efficiency at CFFF to determine if it is appropriate to begin implementation of an integrated program using one of the following options: 1) a single integrated program for the entire production, or 2) a "stepping stone" approach utilizing a smaller highly integrated program alongside a segregated program to meet production goals.

# Fall Chinook:

The overall hatchery program size will remain the same (contingent on bioprogramming). Transition from the current lower Cowlitz segregated and integrated programs to a single Upper Cowlitz integrated hatchery program (utilizing only the Tilton River population segment) for all or the vast majority of the 3.5 million smolts. Begin CWT marking of Chinook smolts handled at the Mayfield Dam Juvenile facility in 2022. Continue improvements to lower Cowlitz spawner abundance monitoring. This will promote continued abundance building of Upper Cowlitz Fall Chinook while improving understanding of the population and origin of returning natural-origin fall Chinook in the Lower Cowlitz and Tilton rivers to advance recovery, including progression through additional recovery phases.

## Winter Steelhead:

Transition from the current larger lower Cowlitz integrated program (478,000) and two smaller upper basin programs, the Tilton River (48,500) and the Upper Cowlitz Basin (118,000), to one segregated program and two integrated programs yielding the same total hatchery production size.

New program production goals:

Lower Cowlitz segregated: at least 308,500 (reduction from 478,000) Tilton River integrated: up to 100,000 (increase from 48,500) Upper Cowlitz integrated: up to 236,000 (increase from 118,000)

The purpose of changes to the Cowlitz steelhead hatchery programs is to increase naturalorigin abundance in the upper Cowlitz and Tilton basins to advance recovery objectives. Converting the lower Cowlitz River hatchery program from integrated to segregated has the recovery objective of increasing abundance in tributaries by discontinuing the collection of broodstock from the natural population. This change also allows the run timing of the lower river hatchery program to be aggressively advanced and, when combined with upper basin program returns, to promote earlier and protracted steelhead angling opportunity in the lower Cowlitz River with meaningful opportunity each month from December to May.

Within a specific year, if there are shortfalls for any program, attempts to shift production to another program will be made. The most likely shift in annual production anticipated will be from the integrated programs to the lower segregated program due to shortfalls in broodstock collection for the integrated programs. In this case, the lower Cowlitz segregated program will scale up to compensate for integrated program shortfall(s). This strategy promotes continued abundance building of Tilton River and upper Cowlitz populations while maintaining flexibility in the lower Cowlitz River program to maintain overall production levels. This strategy will help Upper Cowlitz/Cispus and Tilton populations progress towards local adaptation while expanding overall hatchery steelhead return timing for fishery augmentation.

### Coho:

In the short term, the overall hatchery program size will remain the same (contingent on bioprogramming), but will transition from the current segregated (1.2 million smolts) and integrated (978,000 smolts) programs to a single Upper Cowlitz Subbasin Integrated Hatchery Program of ~2.2 million smolts that will supplement both the Tilton and Upper Cowlitz/Cispus

subbasins. This change is designed to increase adult abundance of hatchery fish available for reintroduction, and improve integration to better represent natural-origin populations for the Upper Cowlitz/Cispus and Tilton and will include transport of up to 12,000 integrated hatchery-origin fish to the Tilton and up to 40,000 integrated hatchery-origin fish to the upper Cowlitz/Cispus subbasin. Additionally, marking programs will be altered to move CWT marking of Coho smolts from Cowlitz Falls to Mayfield in 2022. These actions will promote recovery by reducing handling/tagging of natural-origin smolts and also provide integrated adults for supplementation to the Tilton River, while providing an overall increase in adult abundance upstream of Mayfield Dam. In the long term, two separate integrated hatchery programs may be developed (~2.2 million smolts total) to supplement each of the Tilton and Upper Cowlitz subbasins, if determined to be beneficial through an adaptive management process.

# **Coordination Need**

Tacoma Power will work through the FTC to coordinate and collaborate on making the necessary decisions to successfully implement the Transition Plans.

### Summary of Potential Impacts

Implementation of the FHMP Transition Plans in this manner will provide the best opportunity to restore a self-sustaining populations and provide angler opportunity in the Cowlitz Basin.