

## Forks Creek Hatchery Phasing of Recent Hatchery Improvements

Background: The Forks Creek Hatchery is the fourth oldest state hatchery, dating back to 1899. Fish raised at the hatchery include Chinook (*Oncorhynchus tshawytscha*), chum (*Oncorhynchus keta*) and coho (*Oncorhynchus kisutch*). The hatchery is located inside the bend of Forks Creek between area 1 and 2. Phases 1-3 were done under the Fish Habitat Enhancement Process (FHEP, RCW 77.55.181), and therefore did not have State Environmental Protection Act (SEPA) done. Phase 4 does not qualify for FHEP. To avoid confusion and for transparency, WDFW will describe past, present and future phases for this location.

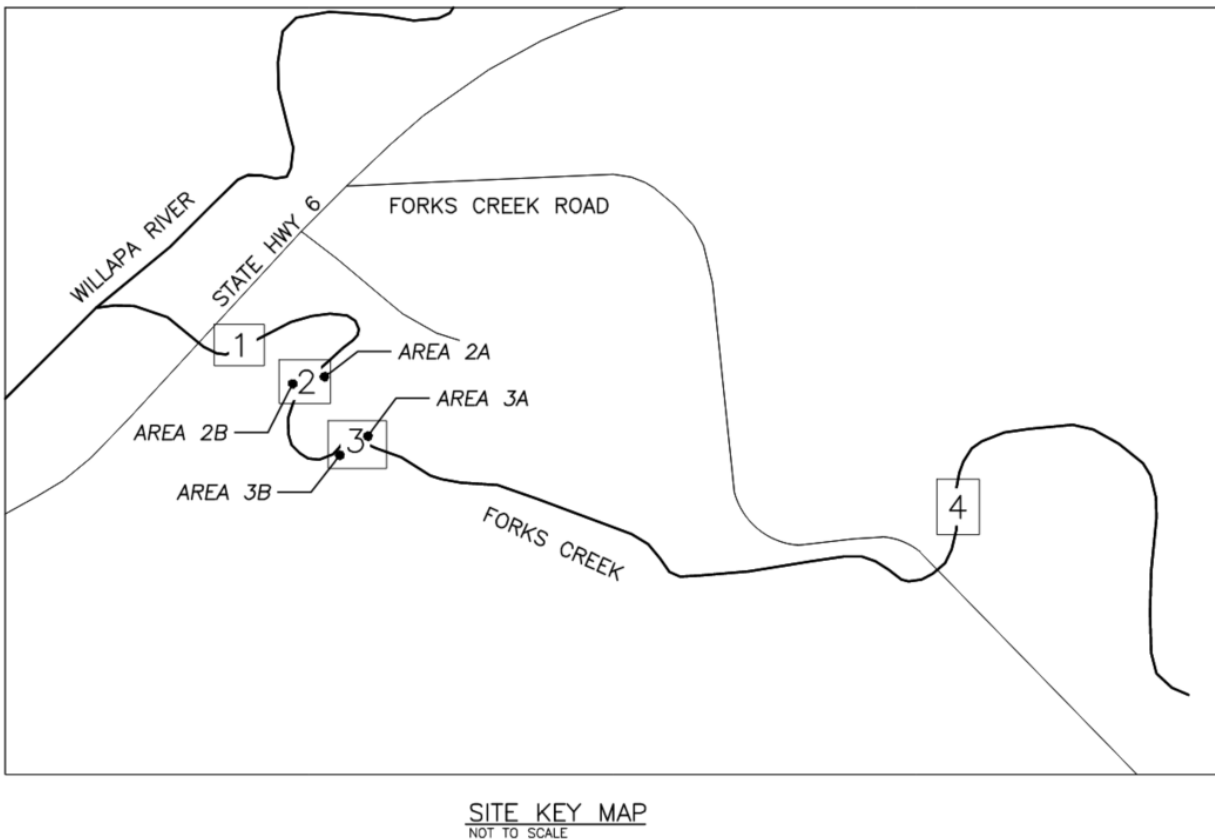


Figure 1, Site Key Map: this map shows locations related to different phases of work. Please ignore the subdivisions of Area 2 and 3 into 2A, 2B, 3A, and 3B. The document will refer to phases and areas. This figure only shows the areas in relation to each other.

Phase 1 was constructed in 2017 at areas 2 and 3. It included large wood placement at area 3 to prevent erosion of the neighboring dairy farm field, channel modification at area 3, and removal of unneeded hatchery infrastructure located in Forks Creek at area 2.



Figure 1: bank protection installed at area 3 as part of phase 1, looking upstream.

Phase 2 was constructed in 2019 at area 1. Work included replacement of the channel spanning weir, replacement of the surface water intake, a new Obermeyer gate, and a resident fish ladder. This brought screens and the resident fish ladder at this location up to state and federal standards.



Figure 2: New channel spanning weir at area 1 (person walking across top). New Obermeyer is in slot where pipe is shown in picture.

Phase 3 was constructed in 2022 and 2023 at area 1. Work included new piping and replacing asphalt.



Figure 3: compacting earth around new pipes at hatchery during phase 3 between areas 1 and 2.



Figure 4: Phase 3 work between areas 1 and 2. Placement of new HDPE line. Earthen pond is behind suspended pipe, in front of vegetation and under dirt at this time.

Phase 4 is scheduled for 2024 in the same area shown in Figure 4 (between area 1 and 2). Work will include replacing the current earthen bottom settling pond with a concrete settling pond and a new Distribution box. A better settling pond will allow for more sediment to settle out of water before use, making collection easier and reducing wear on pumps and pipes. This sediment can then be removed mechanically after the water is slowly removed. The new settling pond will connect to the existing drain of the existing sediment pond. The ecology block wall at the base of the taller vegetation will remain, as will the vegetation.

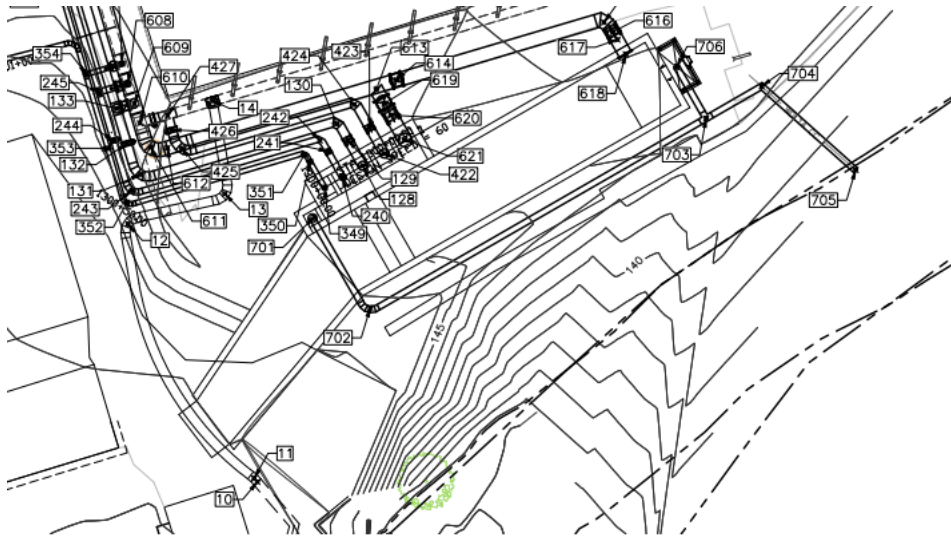


Figure 5: Proposed new sediment pond schematic, Phase 4 between areas 1 and 2.



Figure 6: Location of new sediment pond (Phase 4 between areas 1 and 2), currently an earthen pond (the depression). Phase 4, between area 1 and 2. Construction may include some trimming of branches, but no cutting of tree trunks.

A future Phase 5 (at area 4) will likely address the upper intake and fish passage. Funding for this work in the Capital Budget has not been granted, and therefore project date is unknown. Presumed work may include modifying or replacing the intake and adding state and federal compliant screening. The current fish ladder also does not meet current state or federal standards (particularly at lower flows) and should be addressed. At one point, WDFW thought the upper intake and weir could be removed and the area restored. However, WDFW now believes the upper intake is needed to continue raising fish at current production levels. A Pacific County Conservation District (PCCD) wood placement project is waiting for WDFW work here to ensure any mobilized bedload is captured before it gets down to the hatchery. Coordination between WDFW and PCCD is ongoing.



Figure 7: Existing upper intake (area 4, phase 5), showing fish ladder (near) and non-passable weir (far) at moderate flows.