

May 1, 2020

Memorandum -- delivered via email

To: Chris Walker, NWP Operations Division Fishery Section
US Army Corps of Engineers (Corps)

From: Anne Mullan, ~~AM~~ Endangered Species Biologist, Willamette Branch
West Coast Region, National Marine Fisheries Service (NMFS)

Subject: NMFS' comments on 20BCL02, 20FOS02, and 20WVP05 Memos of Coordination

Thank you for this opportunity to review the set of operations and discussions during March and April. This memo summarizes comments prepared by NMFS' West Coast Region technical staff. The above memos of coordination from the Corps were sent during March and April to memorialize discussions based on outlooks early in the Willamette Valley Project conservation storage season.

During April two aspects of flows were at odds: while there were good snowpack and snow water equivalent measures (at or above average in most sites, per NRCS April report), precipitation levels were well below average for the water year and projected to stay that way during the rest of the spring. When requested by the Corps to not attempt meeting targets, even deficit levels, in the mainstem, NMFS agreed, with opportunities for flow from natural events possibly keeping the average above deficit minimum during some weeks. In addition, with higher flows below the dams, missing flow targets in the Santiams would be less harmful. By not attempting to meet targets in the mainstem, with no releases below dams above minimums, and with lower releases in basins where filling was uncertain, the potential result would avoid worst case drought scenarios. By filling to the key elevations at Cougar for temperature control tower operations and at Detroit to allow later spill that reduces warm water build up, mainstem deficit targets, and tributary minimum flow targets could be reconsidered for May. This will help as the spring Chinook run benefit if water temperature rises while they are in the mainstem. This run appears to be passing Willamette Falls early this year.

With lower releases throughout April in South Santiam, and snowmelt boosting inflow, Green Peter is filling to top of rule curve, and with incoming rainfall, releases from Foster will be sharply increased. This may have been less harmful South Santiam higher flows were weighed against filling. With ODFW visual checks, the minimum was set to keep Wiley Creek mouth watered up to avoid any barrier to access. The benefits for habitat or for outmigrating steelhead in the tributary and the mainstem, were reduced. During May, using more of the flow to benefit juveniles with increases in habitat, and for adult Chinook that appear to be migrating upriver earlier, will be helpful. In Detroit, lower minimum flows during April can ideally provide several weeks of temperature operations in the warm weather period. We look to the next month to continue to attempt balancing between filling and releasing for benefits downstream, during migration and with spawning later. The snowpack has been reduced

during April, although in contrast to earlier drought years (2001, 2015) remains higher as it started out near or above median, and air temperatures were not as high.

We appreciate the projections of outflow and reservoir elevations provided for the modified operations and the informative meetings to consider options. As the Corps has noted, this year will require closer coordination to maximize the benefits of the limited refill in some basins, and to manage the higher elevations in others. Please direct questions or concerns about these comments to Anne Mullan at anne.mullan@noaa.gov or 503-231-2367.

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