Memorandum -- delivered via email

To: Chris Walker, NWP Operations Division Fishery Section

US Army Corps of Engineers (Corps)

From: Anne Mullan Anne Mullan Anne Species Biologist, Willamette Branch

West Coast Region, National Marine Fisheries Service (NMFS)

Subject: NMFS' comments on 18DET01 MFR "Temperature Operations Delay Due to Algal Bloom"

Thank you for this opportunity to review this Memorandum for the Record (MFR). This memo summarizes comments prepared by NMFS' West Coast Region technical staff.

In response to the City of Salem request, endorsed by the Oregon Health Authority, we agree with the Corps proposal to delay releasing water through the spillway at Detroit Dam in hopes of reducing impacts of algal blooms in the Detroit Reservoir. We expect that temperature operations from spill will be delayed from the start of the normal operations on June 1st, to as late or possibly later than June 7th, and we hope that the remaining storage from a currently nearly full Detroit reservoir will allow several weeks of temperature operations in the remaining warm weather period.

Among the noted possible impacts to fish, delays in upstream migration of spring Chinook salmon to spawn, collection of spawners at the Minto Fish Facility, cooler temperatures for incubating winter steelhead redds, followed by warmer temperatures to incubating Chinook salmon redds in the fall and winter are possible to minimize when the algal blooms link to the cyanobacteria found in Salem's drinking water supply are resolved. In particular, the Chinook redds will likely benefit the most from the improved temperature regime with spilling warm water during the reservoir stratification months. The delays in spring Chinook over the Willamette Falls could allow for benefits of the spill when it begins as well, and may reduce the impacts on Minto Fish Facility.

We would appreciate if you could provide the diagram of Detroit dam outflow temperature predictions under the modified operations, once the spill for temperature operations begins. We request that the Corps use the ROs, when possible, to increase the probability of achieving temperature targets, and we realize this is possible only when the elevation has dropped to allow safe use.

Please direct questions or concerns about these comments to Anne Mullan at anne.mullan@noaa.gov or 503-231-2367 or Diana Dishman at diana.dishman@noaa.gov or 503-736-4466.

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