**OFFICIAL COORDINATION REQUEST FOR**

**NON-ROUTINE OPERATIONS AND MAINTENANCE**

**COORDINATION TITLE -** 20GPR01 Spill Test for Foster Fish Facility Ladder Temperatures

**COORDINATION DATE –** 26 May 2020

**PROJECT –** Green Peter Dam

**RESPONSE DATE –** 09 June 2020

**Description of the problem –** The goal of this operation is to warm Foster Lake and the Foster fish ladder using spilled surface water from Green Peter Lake and observe whether there are associated improvements in the collection of upstream migrating adult salmon and steelhead, specifically spring Chinook Salmon, returning to the Foster Adult Fish Facility (AFF). Additionally, this operation is to field test and validate water temperature modeling results by the USGS of the Foster Reservoir. The operation will occur in late May/early June. By releasing (spilling) warm surface water from Green Peter Dam rather than water sourced from the deeper, cooler turbine intakes, a more natural seasonal water temperature could be achieved and potentially improve adult fish attraction and collection at the Foster AFF. Spring Chinook salmon are listed under the Endangered Species Act and the Biological Opinion (BiOp) from the National Marine Fisheries Service (NMFS) requires improvements to upstream passage at Foster Dam for these listed fish (NMFS 2008).

This operation is a short duration test that will:

1) Validate the key assumption for developing a permanent structural solution by the Foster Fish Ladder Improvements Project Development Team (FFLIP PDT): Warmer water temperatures in the ladder will improve fish attraction into the ladder and collection at the facility.

2) Validate the Green Peter- Foster water temperature model hydrodynamics completed by the USGS.

3) An additional value of this operation is to act as a live operational test of Green Peter spillway gates, which have not been video documented operating under hydraulic load since 1990.

**Type of operation required –** Water will be routed through the spillway at Green Peter Dam.

**Impact on facility operation –** No impacts are anticipated.

**Dates of operation –** 26 May 2020 to 16 June 2020

**Length of operations –** 3 weeks

**Expected impacts on fish –** More timely attraction to Foster Dam and increased observed collection rates in Foster Fish facility.

**Comments from agencies -**

**Final results -**

Please email or call with questions or concerns.

Thank you,

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