

OFFICIAL COORDINATION REQUEST FOR NON-ROUTINE OPERATIONS AND MAINTENANCE

COORDINATION TITLE - 16 IHR 003 – Unit 2 testing without STSs – [Update 08 Apr 2016](#)

COORDINATION DATE - ~~April 4, 2016~~ [April 8, 2016](#)

PROJECT- Ice Harbor Dam

RESPONSE DATE – April 14 (April FPOM Meeting)

Description of the problem - The turbine runners on Units 2, 3, and then 1 will be replaced one at a time, taking approximately 13 months per unit. The runner replacement work on unit 2 is scheduled to begin in May of 2016. Unit 2 is tentatively scheduled to be removed from service beginning on April 18 to prep the unit. Under the contract, turbine performance testing will be required now with the existing runner (pre-test), and then later on with the new runner installed (post-test), to capture performance data, including vibration and noise measurements. Both tests will require the unit to be run without STS screens installed, as that is the condition for which the replacement runner power output guarantee was provided.

UPDATE: The pre-testing is now scheduled to occur during the April 27-29 period (instead of the week of April 18). It will take one or two days to do the testing (instead of one day). The unit will not be running continuously for the testing, but will run as long as needed to take certain measurements, then shut off, then run again to take more measurements, shut off, etc. The runner replacement is scheduled to be completed in late July, so the post-testing would occur in late July or August (instead of June).

Type of outage required – Run unit 2 without STSs installed.

Impact on facility operation – No expected impacts to facility operations by running unit 2 without STSs installed.

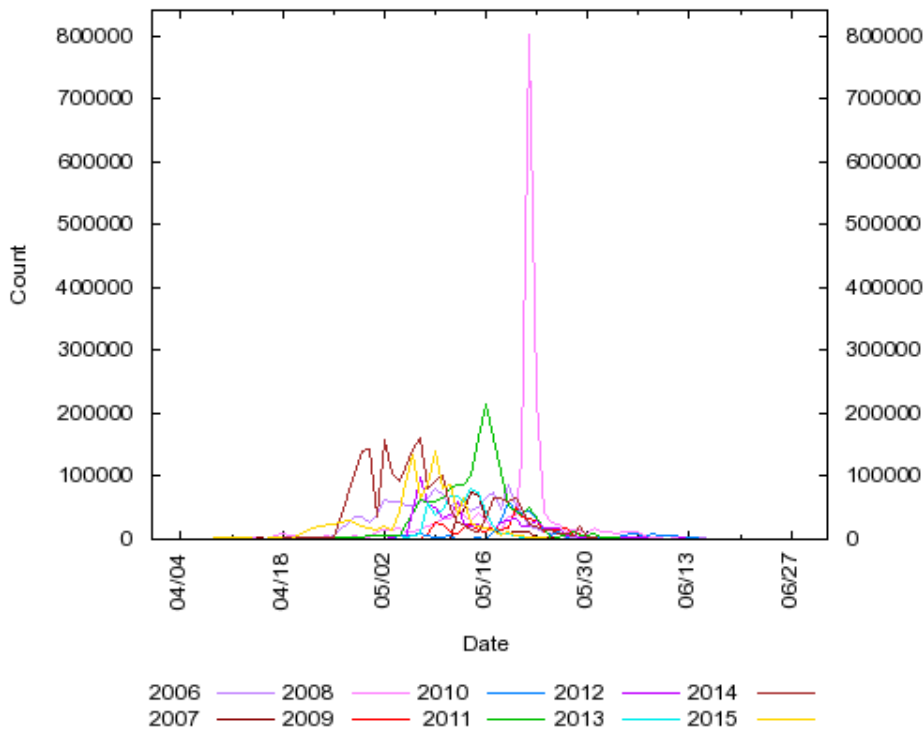
Dates of impacts/repairs – The pre-test is tentatively scheduled to occur on one day during the week of April 18. The post-test will occur on one day, probably in June of 2017, depending on when the runner replacement is completed.

Length of time for repairs – One day per test, 0630 hours to 1700 hours.

Expected impacts on fish passage – Under the Fish Passage Plan, STSs are to be installed and operational from April 1 to December 15 for turbine units that are available for service. Downstream fish passage at the dam during the fish passage season is normally over the spillway or through the juvenile fish bypass system after fish are diverted away from the turbines by the STSs. Direct survival of juvenile fish through the existing turbines is generally lower than survival through the juvenile fish bypass system.

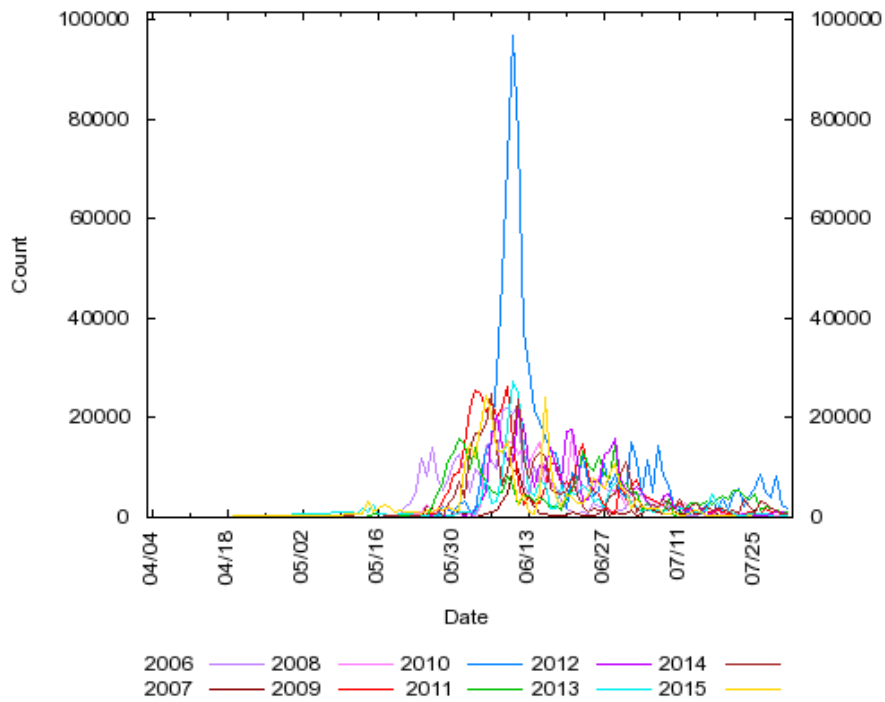
Based on the latest STP (Single Trace Process) forecast, predicted river flow during the week of April 18 is about 75 kcfs. During that period, 45 kcfs spill during the day will be occurring. This equates to probably 2 or 3 units running during the day. So the majority of flow will be going over the spillway when the test is occurring. A small proportion of the flow, and presumably a small proportion of the fish, will go through unit 2 turbine during the test. As shown in the following graphs, juvenile Chinook and steelhead numbers are typically relatively low at Lower Monumental Dam during the April 18-22 period and in June. Subyearling Chinook numbers are typically relatively high in June. Relatively low numbers of adult Chinook fallbacks will be present at Ice Harbor during both periods. Steelhead kelts will also be present, more so in June than April.

Yearling Chinook Smolt Passage Index
 Lower Monumental Dam Passage
 Years 2006 - 2015



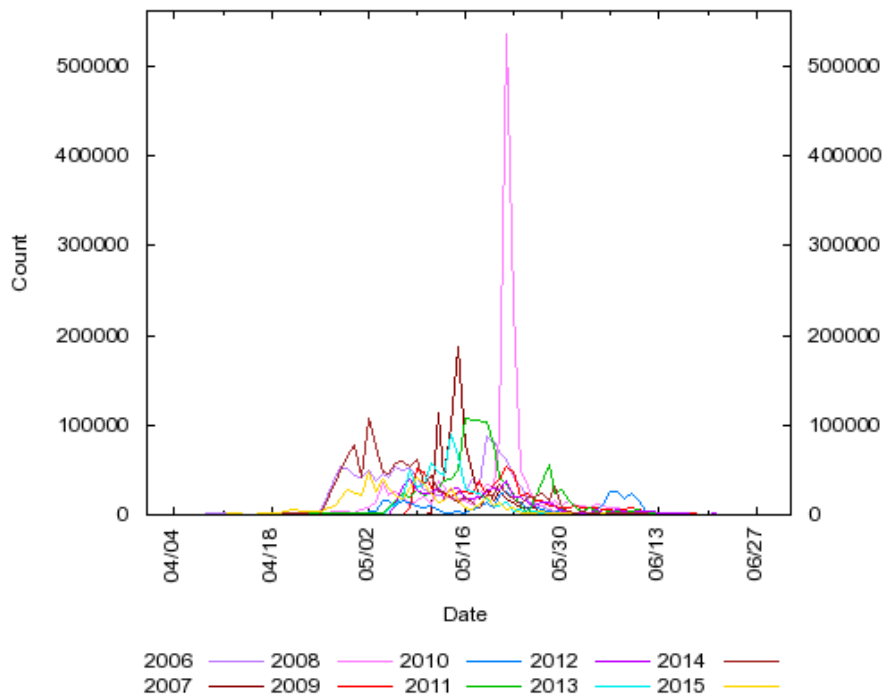
Subyearling Chinook Smolt Passage Index

Lower Monumental Dam Passage
Years 2006 - 2015



Steelhead Smolt Passage Index

Lower Monumental Dam Passage
Years 2006 - 2015

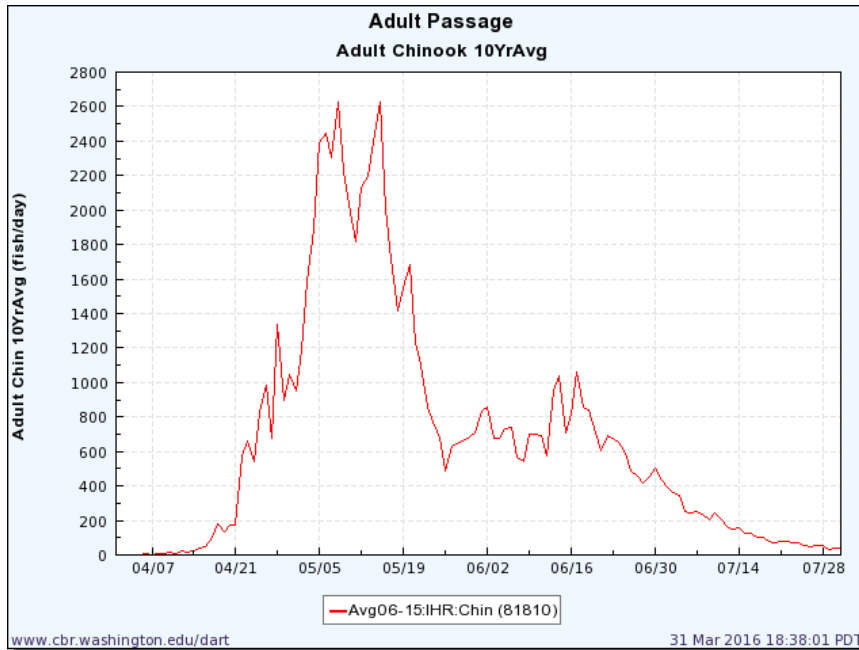


DART Data Citation

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Comments from agencies

Final results

Please email or call with questions or concerns.

Thank you,

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