Northwest **Power** and **Conservation** Council

July 6, 2022

MEMORANDUM

TO: **Council Members**

FROM: **Stacy Horton, Washington Policy Analyst/Biologist**

SUBJECT: **Tucannon River Spring Chinook Status Update and Next Steps to Recovery**

BACKGROUND:

Presenter: Joe Bumgarner, Washington Department of Fish and Wildlife (WDFW) Research Scientist Snake River Lab (Dayton) and Chris Donley, Washington Department of Fish and Wildlife Regional Fish Program Manager for Region 1 Spokane.

Summary: Chris Donley has been employed with the Washington Department of Fish and Wildlife for 27 years. During his tenure he has worked in both fisheries research and management working with a diverse array of native and non-native fish species.

Joe Bumgarner has been employed with the Washington Department of Fish and Wildlife for 29 years. He has spent his entire career at the Snake River Lab doing fisheries research and hatchery evaluations for spring and fall Chinook salmon, and summer steelhead in SE Washington under the Lower Snake River Compensation Plan program for Washington.

Joe and Chris will provide the Council with a status update and discuss recovery efforts for the Tucannon River Spring Chinook population.

Background: The Tucannon River Spring Chinook population has been listed as "threatened" under the endangered species act since 1992. Recovery

efforts implemented in the Tucannon basin after listing included hatchery reform/production changes, improved smolt release strategies, a short term captive broodstock program, habitat restoration and protective fishery closures. By the early 2000's the abundance trend for Tucannon spring Chinook was on an upward trajectory, and it appeared that recovery efforts were working, and that far greater numbers of adult fish were present in the basin. Unfortunately, as adult abundance increased other challenges arrived including floods, fires, high pre-spawn adult mortality, seemingly higher than normal juvenile outmigration mortality, rapidly increasing piscine and avian predation in the mainstem Snake and Columbia rivers on outmigrants, and most recently changes in marine survival as a result of reduced ocean productivity. These increasing stressors, in combination with pre-existing issues, have combined to create a rapid downturn in the population beginning around 2016 and continuing until today. Currently, an average of less than 200 adult fish of both hatchery and wild combined have returned to the basin annually since 2019, with an average redd count of 20 over the last three years. Despite the best efforts of WDFW, Comanagers, Recovery Boards and concerned public, the current recovery efforts are not working. Today's presentation will detail the history and current status of spring Chinook in the Tucannon basin and how the program will evolve moving forward to find recovery success.