Priest Rapids Hatchery Subcommittee Statement of Agreement #2022-01 Approved by PRCC HSC 2/16/2022 Regarding the 2023 NNI Hatchery Recalculation Dataset February 16, 2022

Statement

The Priest Rapids Coordinating Committee's Hatchery Subcommittee agree to the 2023 NNI Hatchery Recalculation data set (Attachment A). The data set includes the release to adult survival rate (SAR) data sources from the identified hatchery programs described in Table 1. These data will be used to recalculate hatchery mitigation values to achieve NNI for the next 10 years (2023 to 2033).

Hatchery Program	Brood Years Included	Brood Years (n)	PIT ¹ + CWT Harvest SAR Brood Years	CWT ² SAR Brood Years	Average of CWT and PIT + CWT Harvest SAR Brood Years
Spring Chinook Salmon					
Chiwawa	2007-2014	8	2007, 2009, 2011, 2013	2008, 2010, 2012, 2014	NA
Nason ³	2007-2014	8	2007, 2009, 2011, 2013	2008, 2010, 2012, 2014	NA
Methow ⁴	2007-2014	8	2008, 2010, 2012, 2014	2007, 2009, 2011, 2013	NA
Summer Chinook Salmon					
Carlton ^{4,5}	2006-2014	9	2008, 2009, 2012, 2014	2006, 2007, 2010, 2011	2013
Chelan Falls ⁴	2006-2014	9	2007, 2010, 2012, 2014	2006, 2008, 2009, 2011	2013
Dryden⁴	2006-2014	9	2008, 2011, 2012, 2014	2006, 2007, 2009, 2010	2013
Similkameen ^{4,6}	2006-2014	9	2008, 2009, 2011	2006, 2007, 2010, 2012, 2013, 2014	NA
			Fall Chinook Salmon		
Priest Rapids Hatchery ⁷	2006-2013	8	2007, 2009, 2011, 2013	2006, 2008, 2010, 2012	NA
			Steelhead ⁸		
Chiwawa/Wenatchee	2008-2015	8	NA	NA	NA
Okanogan	2008-2015	8	NA	NA	NA
Wells Methow R. programs	2008-2015	8	NA	NA	NA
Sockeye Salmon ⁹					
Wenatchee	2007-2015	9	NA	NA	NA

Table 1. SAR data sources used for 2023 Hatchery Recalculation.

Notes:

- 1. PIT + CWT Harvest = SARs to relevant PUD projects, plus CWT based harvest data.
- 2. CWT = SAR values from PUD Annual Hatchery Monitoring and Evaluation Reports.
- 3. Nason data were available for 2 brood years: 2013 (PIT+ Downstream CWT harvest) and 2014 (M&E CWT only). Chiwawa data were used for brood years 2007-2012 (see row above).
- 4. In instances where an initial relevant brood year lacked PIT data, the inclusion of PIT + CWT harvest values began at the first brood year where PIT data became available and alternated thereafter with CWT values.
- 5. PIT + CWT harvest data were available for only 5 of 9 relevant brood years, therefore PIT + CWT harvest data were used for the available years regardless of sequence.
- 6. PIT + CWT harvest data were available for only 3 of 9 relevant brood years, therefore PIT + CWT harvest data were used for the available years regardless of sequence.
- 7. The PIT SAR estimate for Priest Rapids Hatchery BY2006 was unreliable.
- 8. There is limited CWT data available for steelhead; therefore, PIT-based SARs adjusted for harvest were used. Harvest estimates were calculated by estimating the proportion of upper Columbia hatchery steelhead above McNary Dam and applying that value to the harvest of A-index hatchery (clipped and unclipped) steelhead in treaty and non-treaty, Columbia River fisheries, occurring from the mouth of the Columbia River to Priest Rapids Dam and select dip-in area fisheries between Bonneville and McNary dams. Harvest estimates of hatchery steelhead during conservation fisheries occurring above Priest Rapids Dam within project reservoirs were derived from creel surveys.
- 9. There is no hatchery program for Wenatchee Sockeye Salmon.

Background

The Priest Rapids Coordinating Committee's Hatchery Subcommittee agreed to use the equation described in the Biological Assessment and Management Plan (BAMP) to calculate hatchery compensation for the natural-origin population in the June 16, 2021, SOA "Regarding Methods for 2023 NNI Hatchery Recalculation". The BAMP equation includes counts of natural-origin adult returns and SARs from the hatchery being used for the mitigation. However, the HCP Hatchery Committees were unable to come to a consensus on which data would be used in this equation. The position of the PUDs was that the adult counts and SARs should be derived at the same location, and the dams provided the best location for measuring both. Other committees' members' positions were that adults should be counted at the dams and CWT recoveries should be used for the SAR component of the equation. Ultimately, the Priest Rapids Coordinating Committee's Hatchery Subcommittee compromised and agreed to use adult counts at the dams and a combination of CWT recoveries and PIT-tag based SARS. The SARS will alternate between PIT based and CWT based where possible; for summer Chinook with nine relevant brood years, brood year 2013 will be an average of CWT and PIT SARS. This negotiated agreement is not the default for future recalculations.

The Priest Rapids Coordinating Committee's Hatchery Subcommittee will endeavor to come to an agreement by December 2022 on a method and data sources for the 2033 recalculation of hatchery compensation for the naturalorigin populations, following approval of the 2023 NNI Recalculation Implementation Plan. Additionally, the Priest Rapids Coordinating Committee's Hatchery Subcommittee will include the core data needed for the agreed upon future recalculation method in annual reports to ensure these data are available and approved prior to recalculation.