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NORTHWEST INDIAN FISHERIES COMMISSION

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February 11, 2015

Dr. D. O. McIsaac
Pacific Fishery Management Council
7700 NE Ambassador Place, Suite 101
Portland, OR 97220-1384

Re: Pacific Fishery Management Council (Council) Request on the Use of a Standardized Method to Calculate Chinook Age-2 Fishery Regulation Assessment Model (FRAM) Stock Recruit Scalars

Dear Dr. McIsaac:

The Puget Sound co-managers (WDFW and the Puget Sound Treaty Tribes) have completed their annual process for forecasting abundances of salmon in Puget Sound. Forecasts for recruit scalars for age-2 Chinook salmon were completed as part of that process. Your letter dated December 23, 2014 requested written notification to the Council of the methods used to forecast age-2 Chinook scalars in 2015. In response, the attached table lists forecast methods agreed to by the co-managers for calculating age-2 Chinook recruit scalars for the 2015 management year.

The standardized method for calculating age-2 Chinook scalars reviewed by the Council in November was applied in several watersheds. Other stocks used watershed-specific approaches developed by local staff. The corresponding numeric forecast values are in the hands of appropriate staff to begin the preseason planning process.

Sincerely,

Mike Grayum
Executive Director
Northwest Indian Fisheries Commission

James Unsworth, Ph.D.
Director
Washington Department of Fish and Wildlife

Puget Sound Chinook Age 2 Forecast Summary

Stock	2014 Type of Forecast	2014 Method to obtain age-2 ocean recruit scalar	2015 Method
Nooksack/Samish SF	no forecast provided	average age comp applied to adult forecast	Age 2s from 3s
Nooksack Springs	no forecast provided	average age comp applied to adult forecast	Age 2s from 3s
Skagit Fall Fing	ocean abundance	environmental variables and Validation age2 recruit scalars	Age 2s from 3s
Skagit Fall Yrl	ocean abundance	environmental variables and Validation age2 recruit scalars	Age 2s from 3s
Skagit Springs	ocean abundance	environmental variables and Validation age2 recruit scalars	Age 2s from 3s
Shohomish Fing	terminal runsize	expanded to ocean abundance; see footnote a)	As described in forecast documents
Snohomish Yrl	terminal runsize	expanded to ocean abundance; see footnote a)	As described in forecast documents
Stillaguamish	terminal runsize	expanded to ocean abundance; see footnote a)	As described in forecast documents
Tulalip	terminal runsize	expanded to ocean abundance; see footnote a)	As described in forecast documents
Mid PS FF	ocean abundance	Age 2s from 3s	Age 2s from 3s
SPS FF	ocean abundance	Age 2s from 3s	Age 2s from 3s
SPS Yrl	no forecast	static scalar	Age 2s from 3s
White Springs	no forecast	static scalar	Age 2s from 3s
Hood Canal FF	terminal runsize	iterative FRAM runs to find age-2 recruit scalar; average jack ratio applied to adult forecast	As described in forecast documents
Hood Canal Yrl	terminal runsize	iterative FRAM runs to find age-2 recruit scalar; average jack ratio applied to adult forecast	As described in forecast documents
Elwha/Dung	no forecast	static scalar	Age 2s from 3s
Hoko	ocean abundance	Age 2s from 3s	Age 2s from 3s

a) To estimate age-2 recruit scalars (ocean abundance), FRAM's natural mortality and maturation rates were applied to terminal run size forecasts.