

SACRAMENTO RIVER WINTER CHINOOK (SRWC) UPDATE

Sacramento River winter Chinook (SRWC) are listed as endangered under the Endangered Species Act (ESA). During the 2015 salmon preseason process and the March and April Council meetings, the Council was briefed on poor survival concerns for the 2014 brood of SRWC. The ongoing drought conditions in California are likely contributing to decreased spawning success and increased juvenile mortality that could result in low adult recruitment for this brood depending on ocean rearing conditions. The onset of El Niño conditions in the Pacific Ocean in the spring of 2015 during the outmigration of the 2014 brood has raised concerns about ocean rearing conditions. Although the 2014 brood will predominately be vulnerable to the 2016 ocean salmon fisheries, the Council, the California Department of Fish and Wildlife (CDFW), and the California fishing industry enacted additional precautionary fishery restrictions south of Point Arena, California in 2015. Additionally, the Council provided recommendations to water managers on improved in-river habitat management practices affecting the 2015 spawners and their progeny.

The purpose of this agenda item is to receive an update on the 2015 return, current and projected freshwater habitat conditions, and more information from the National Marine Fisheries Service (NMFS) regarding the Council recommendation for a change in the harvest control rule to allow for a *de minimis* incidental take in years of low abundance.

On May 29, 2015 the Council submitted a letter to State Water Resources Control Board and the Bureau of Reclamation regarding Sacramento River flows, temperature management, and SRWC survival (Agenda Item E.2, Attachment 1). On July 7, 2015, the State Water Resources Control Board sent a letter to the Bureau of Reclamation regarding a revised Sacramento River temperature management plan which references the elevated egg, fry, and juvenile mortality that occurred to the 2014 SRWC brood due primarily to low flows and high temperatures, and addresses ways to avoid similar conditions in 2015 (Agenda Item E.2, Attachment 2). The Council is scheduled to hear reports from CDFW and NMFS on the 2015 SRWC run size and current and projected Sacramento River water conditions as they relate to the SRWC spawning and juvenile habitat conditions.

In 2013, the Council requested that NMFS revisit SRWC harvest policy under the ESA to allow for *de minimis* harvest levels during periods of low escapements, noting that the current ESA implementation calls for zero fishery impacts when the geometric three-year average return has been under 500 spawners. NMFS has not reinitiated a consultation under the ESA, due, in part, to the ongoing California drought and the fact that recent geometric mean levels of spawners have been significantly higher than 500. NMFS will report on recent thinking about developing new harvest policy alternatives, including a consideration of integrating some index of SRWC juvenile survival for possible use at some point in 2017 or thereafter, and the Council role in development and evaluation of alternatives (Agenda Item E.2.a, NMFS West Coast Region Report).

The Council may wish to initiate discussions on 2016 fishery planning and the process of developing fishery management objectives, based on the 2015 fishery management experience

and updates presented and discussed under this agenda item. During the 2015 salmon season development process, concerns were expressed that the harvest control rule and its reliance on a three-year average might not be responsive enough to the extreme spawning and rearing freshwater habitat conditions observed in recent years. The Council could explore potential scenarios for 2016 fisheries under the existing control rule and, in keeping with the precaution exercised in 2015 fisheries, may discuss how alternative harvest policies that more directly reflect the apparent early life survival of the 2014 brood would be brought forward in the Council's salmon management process.

Council Action:

1. **Consider Sacramento River and ocean conditions relative to SRWC spawning and survival.**
2. **Consider NMFS planning efforts to develop new alternatives for the SRWC harvest control rule.**
3. **Discuss plans for 2016 fishery management objectives.**

Reference Materials:

1. Agenda Item E.2, Attachment 1, May 29, 2015 from Dr. Donald McIsaac to Mr. Howard of the State Water Resources Control Board and Mr. Milligan of the Bureau of Reclamation.
2. Agenda Item E.2, Attachment 2, July 7, 2015 letter from Mr. Howard of the State Water Resources Control Board to Mr. Milligan of the Bureau of Reclamation regarding Sacramento River temperature management planning.
3. Agenda Item E.2.a, NMFS West Coast Region Report, Reconsideration of the Sacramento River winter Chinook Harvest Control Rule.

Agenda Order:

- E.2 Sacramento River Winter Chinook (SRWC) Update Mike Burner
- a. Reports and Comments of Advisory Bodies and Management Entities
 - b. Public Comment
 - c. **Council Action:** Consider Sacramento River and Ocean Conditions Relative to SRWC Spawning and Survival, Revisions to the Harvest Control Rule, and Plans for 2016 Fishery Management Objectives

PFMC
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