

SALMON ADVISORY SUBPANEL REPORT ON  
DRAFT PACIFIC FISHERY MANAGEMENT COUNCIL LETTER ON  
SACRAMENTO RIVER TEMPERATURE STANDARDS

The Salmon Advisory Subpanel (SAS) reviewed the DRAFT Pacific Fishery Management Council (Council) letter on Sacramento River temperature under Agenda Item F.1 at our August 31 meeting and would like to thank the Habitat Committee and Council for its detailed and thorough recommendations to the regulatory agencies. We would also like to suggest the following additions which we believe would improve the Sacramento River regulatory regime for the spring- and fall-run Chinook, in addition to the suggestions focused on winter Chinook.

To further strengthen the recommendations, we provide the following suggestions:

National Marine Fisheries Service (NFMS):

- In the third bullet that starts “*Make the CVP’s’ compliance with end-of-September, carry-over Shasta Reservoir water storage needs...*”, add the following language:  
“These needs should take into account any additional storage capacity needed for additional water releases that support spring- and fall-run Chinook salmon”.
  - The SAS feels this additional language would help reiterate that in addition to planning for the protection of listed winter Chinook, the planning for water storage should also consider spring- and fall-run Chinook and include requirements for water release with proper flow reduction management (stepped-releases) to support natural spawning spring- and fall-run Chinook salmon by preventing redd de-watering.

California State Water Resource Control Board (SWRCB):

- In the last bullet that starts “*In revising Order 90-5, ensure that the revised order requires protection of spring- and fall-run Chinook salmon...*”, add the following language :  
“In addition to the inadequate temperature control standards for spring- and fall-run Chinook, minimum flows must be taken into account which more greatly coincide with the amount of habitat available according to the river’s elevation at particular flows.”
  - The SAS supports the improvement of temperature-dependent mortality (TDM) standards for spring- and fall-run Chinook but would like to emphasize that adequate in-stream flows and access to habitat are also crucial to the reproductive success of these stocks.

Reclamation:

- In the first bullet that starts “*Establish and proactively maintain...*” add the following language at the end of the first sentence before “*in each following water year*”:

“as well as minimum flows necessary for spring- and fall-run Chinook in each following water year and maintain necessary proper flow reduction management to prevent redd de-watering. ”

The final sentence would read: “Establish and proactively maintain a precautionary buffer in CVP water operations to ensure there is enough carry-over storage of cold water available at the end of each water year in Shasta Reservoir to meet winter-run Chinook salmon temperature management TDM control needs *as well as minimum flows necessary for spring- and fall-run Chinook in each following water year and maintain necessary proper flow reduction management to prevent redd de-watering* in each following water year.

- This language would again reiterate that in addition to planning for the protection of listed winter chinook, the planning for water storage should take into account the needs for water releases to maintain minimum flows necessary to support spring- and fall-run Chinook for spawning and rearing needs.

The SAS also supports the ongoing work of the Southwest Fisheries Science Center and Dr. Steve Lindley on habitat modeling in the Sacramento River. The SAS agrees further exploring the limitations of habitat productivity is a crucial area for refinement/expansion in the future and could greatly assist in the considerations of whether water releases should be targeted for minimum flows, maximum temperature, or some combination thereof to maximize salmon productivity. The SAS was not able to join Dr. Lindley’s presentation in advance of this report due to the timing of our meeting but looks forward to participating.

PFMC  
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