

## HABITAT COMMITTEE REPORT ON PROGRESS REPORT ON CAUSES OF THE 2008 SALMON FAILURE

The Habitat Committee (HC) reviewed both the workgroup report on Sacramento fall Chinook and the recovery plan for Central Valley winter and spring Chinook and steelhead. The HC noted several topics common to both reports. Since both processes are occurring in the same system, there is an opportunity for integration and cooperation of the two processes. The HC recommends this Sacramento fall Chinook progress report in particular needs to focus on actions that the Council can take to address the decline in stocks, rather than only enumerating potential causes of stock decline.

While the HC supports eliminating topics from the “laundry list” of potential causative factors, it is difficult to support deletions from the list without knowing the reasoning behind the deletion. The HC also advises the authors to ensure that seemingly minimal factors are not eliminated from an analysis of cumulative impacts.

The HC has the following comments:

- We would like to see more inquiry into hatchery/wild interactions. For example, it is critical to differentiate between hatchery and wild fish on the spawning grounds, and to understand variations in survival between the two groups that could be important for forecasting.
- There appears to be a large gap in information on survival and passage below the Delta and into San Francisco Bay. Estuary survival can be an extremely important component of stock performance.
- It is not clear whether observer data from non-salmon fisheries (for example, whiting) were examined in order to rule out this potential source of Sacramento fall Chinook mortality.
- When considering unusual population dynamics of prey species in the ocean, the authors should also consider harvest impacts to prey species. The Council controls harvest on many salmon prey species and this seems to be a “low-hanging fruit” item in terms of short-term Council actions.
- The HC notes that pollution events have been deleted from the list of potential causal factors. Pesticides and herbicides pose as much or more of a threat at the “background” levels seen in salmon streams. The Environmental Protection Agency (EPA) and National Marine Fisheries Service are obligated as a result of litigation to examine the effects of over 30 pesticides and herbicides found in salmon streams for their effects on these fish. The results of this evaluation might be of importance to the workgroup.
- The HC is encouraged to see that revisions to forecasting and harvest impacts modeling for Sacramento fall Chinook are already underway, and that existing assumptions about fish/habitat interactions will be challenged in those models.

Each of the above comments reinforces the ecosystem-based approach to improving fish management.