SCIENTIFIC AND STATISTICAL COMMITTEE REPORT ON THE CALIFORNIA CURRENT ECOSYSTEM REPORT INCLUDING INTEGRATED ECOSYSTEM ASSESSMENT

The Scientific and Statistical Committee (SSC) received a presentation by Drs. Chris Harvey (NWFSC) and Toby Garfield (SWFSC) on the annual ecosystem report to the Council. The annual ecosystem report is a concise source of information on patterns of climate forcing on the California Current ecosystem, and the biological response of ecosystem components, including fish stocks and fisheries. The report is an important step towards providing the Council family with an ecosystem perspective on West Coast fish stocks, fisheries, and coastal communities. The SSC appreciates the authors' responsiveness to suggestions offered by the Council and SSC on the previous year's report.

The annual ecosystem report makes a strong case that the extreme environmental conditions over the past few years are likely to have near-term adverse effects on salmon runs, but the report did not quantify the magnitude of these effects. The impacts of recent environmental conditions on groundfish stocks are less clear and may be mixed, but the most likely impact is lower recruitment during the event. Lower recruitment will only impact the fishery when the impacted year classes begin recruiting to the fishery in 3-5 years. In addition, groundfish populations typically include many year classes, so a few years of lower recruitment should have a relatively small effect on overall biomass trends.

Last year, the SSC Ecosystem Subcommittee (SSCES) met with the California Current Integrated Ecosystem Assessment (CCIEA) team during the September Council meeting to conduct a technical review of the human dimension indicators in the Integrated Ecosystem Assessment (IEA). The SSC agreed with the CCIEA team that a technical review of aspects of the IEA was helpful, and recommends that a similar review meeting be scheduled this year, ideally in September 2016. Based on discussions with the IEA team, the potential topics for technical review from the annual ecosystem report include:

- the proposed indicators to evaluate trends in freshwater, estuarine, and marine habitat;
- the "stop light" method for characterizing environmental conditions for salmon; and
- further review of coastal community vulnerability indicators.

Additional topics that are not presently included in the annual ecosystem report, but may benefit from SSCES review include:

- review of the analysis of environmental forcing on sablefish requested by the Council; and
- risk assessments being developed by the CCIEA team as discussed during the webinar series on ecosystem indicators held earlier this year.

This meeting will be most useful if the primary analysts conducting the work being reviewed attend the meeting. Given the number of potential review topics, a two-day meeting of SSCES will likely be needed to conduct the review.