GROUNDFISH ADVISORY SUBPANEL REPORT ON THE ANNUAL STATE OF THE CALIFORNIA CURRENT ECOSYSTEM REPORT

The Groundfish Advisory Subpanel (GAP) received a report from Drs. Chris Harvey and Toby Garfield of the Integrated Ecosystem Assessment (IEA) Team on the Annual State of the California Current Ecosystem Report. We also reviewed the reports of the Ecosystem Advisory Subpanel (EAS), <u>Agenda Item F.1.b</u>, <u>Supplemental EAS Report</u>, and the Habitat Committee (HC) <u>Agenda Item F.1.b</u>, <u>Supplemental HC Report</u> and offer the following comments.

In general, we agree with the EAS and HC comments in terms of the IEA team trying to grasp the complex changes involved in the California Current Ecosystem. Furthermore, the GAP finds this information is comprehensive and useful.

In 2014, the <u>GAP supported the inclusion</u> of human dimensions in the ecosystem report and also cautions that an analysis of the true drivers of some changes, such as a decline in groundfish landings, may require further examination. The human dimension is likely only one part of the issue.

The GAP and Salmon Advisory Subpanel (SAS) also <u>suggested in September 2016</u> that the IEA include vertical temperature profiles, oxygen minimums and upwelling data, as these could apply both to salmon and groundfish species. We still support the inclusion of this kind of data, as it could be informative to the ecosystem work and potentially provide a useful forecasting tool.

Regarding the usefulness of the report as a forecasting device: The GAP realizes this report is not useful – yet – for forecasting. What these indicators mean for management isn't entirely clear. Fisheries that are on shorter cycles, such as anchovies and sardines, could utilize some of this information in making long-term fishing plans but cautions on relying on this for fishery management plan development. This likely won't inform longer-lived species such as groundfish until the IEA team has a much longer time series from which to draw. This report will be valuable into the future as refinement of ecosystem-based management develops.

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