SCIENTIFIC AND STATISTICAL COMMITTEE REPORT ON GROUNDFISH ESSENTIAL
FISH HABITAT ENVIRONMENTAL IMPACT
STATEMENT – FINAL PREFERRED ALTERNATIVE

At the March 2005 meeting, the SSC heard an update from Mr. Steve Copps (NMFS) on recent progress in preparing the groundfish EIS for EFH. The updated draft EIS document was distributed in March for further consideration at the April Council meeting. He noted that the present draft of the EIS is substantially changed and addresses many of the concerns expressed previously by the SSC.

Also at the March 2005 meeting, the SSC reviewed the Oceana Methodology for identifying areas of EFH that would be closed to bottom trawling and listened to presentations by Jim Ayers and Jon Warrenchuck (Oceana), and Geoff Shester (Stanford). Oceana's stated objective for EFH is to protect habitat while maintaining vibrant fisheries. The Oceana alternative is included as one of the alternatives in the draft EIS. The Council included the Oceana alternative as preliminary preferred Alternative number 12.

The Oceana approach considers coral and sponge habitats to be of particular importance to groundfish and referred to the EFH final rule, which states that it is not appropriate to require definitive proof of a link between fishing impacts to EFH and reduced stock productivity before Councils can take action to minimize adverse fishing impacts to EFH to the extent practicable.

The Oceana alternative seeks to establish an open trawling area by subtracting the area to be protected from the total fishing area, effectively freezing the bottom trawl footprint. Trawl logbook data from 2000-2003 were used to establish the proposed bottom trawl footprint. Areas within the proposed bottom trawl footprint were identified as areas of EFH that would be closed to bottom trawling based on 5 criteria. Observer data were not explicitly used to identify biogenic habitat, rather they were used to corroborate determinations from other sources. Approximately 14,000 km^2 of 90,000 km^2 within the bottom trawl footprint were identified as areas of EFH that would be closed to bottom trawling.

Oceana used multiple criteria to evaluate areas for closure, not just records of structure-forming invertebrates from trawl and submersible surveys. These additional criteria included; 1) a database of areas considered untrawlable during the shelf survey, 2) substrate characteristics (hard bottom habitat, including rocky ridges and rocky slopes), 3) bathymetric features (canyons, gullies and seamounts), and 4) areas with high habitat suitability from the EFH analysis. Areas labeled biogenic in the Ocean alternative were identified primarily from records of structure-forming invertebrates.

At the March meeting a considerable amount of SSC discussion focused on what criteria were used to define areas to be closed to fishing. The SSC noted that trawl survey data are not adequate to formulate a comprehensive model of coral and sponge distribution. An analysis of the density of positive trawl samples (for invertebrates) was used as a basis for drawing polygons enclosing discrete areas. The SSC noted that the analysis, because it is an analysis of positive tows only, is probably not the best metric of habitat forming invertebrate distribution; a presence/absence analysis may be more robust. It is clear that groundfish trawl surveys are not the ideal tool for sampling invertebrate distribution and abundance.

Observer data from bottom trawl fishing vessels, aggregated in blocks, were also analyzed as a secondary data source. Oceana reported that these data corroborated the trawl survey analysis and recommended increased observer coverage to document invertebrate distribution. The SSC noted that increased observer coverage may not be the solution. Special studies are essential to further understand the biogenic structure and its linkage to groundfish production.

Oceana indicated to the SSC its expectation that the Council would provide an analysis of long-term economic benefits of their alternative in the Draft EFH EIS. The SSC notes that such analysis is not feasible without more definitive information on long-term effects of habitat protection on fishery yield.

At the April meeting of the SSC, discussion on EFH again focused on the Oceana methodology. The SSC noted that, while Oceana's work is a good start in beginning the process to identify locations where biogenic habitats may exist, much work is needed to produce reliable and detailed maps showing the spatial distribution of biogenic habitats.

The SSC recommends new, scientifically designed surveys be developed to explicitly assess EFH. Such surveys could employ new technologies utilizing undersea quantitative video deployed on Autonomous Underwater Vehicles (AUV's), Remote Operated Vehicles (ROV's), and manned submersibles.

The SSC recommends that the Council explore an adaptive approach as it enters into the realm of spatial fisheries management. If planned carefully, incremental gains in knowledge could follow from studies designed to evaluate the effects of fishing (and not fishing) on a habitat-specific basis.

In conclusion:

1. There remains scientific uncertainty as to whether or not sponge and corals are essential fish habitat for the species in the groundfish FMP, but they are longlived and undoubtedly easily damaged by bottom trawling.

2. Trawls were not designed to sample sponge and coral organisms.

3. The NMFS groundfish trawl survey was not designed to identify or sample sponge and coral habitat.

4. Trawl fishery data may not adequately identify biogenic habitat.

5. Given these caveats and data limitations, the SSC considers the Oceana methodology to be a reasonable first attempt at identifying invertebrate distributions. However, the SSC cautions that if this approach is used to designate EFH these designations should be reviewed and modified, if necessary, as data from more appropriate surveys become available.

6. The SSC will incorporate research and data needs with regard to groundfish EFH into the next update of the Council's Research and Data Needs document.