

HABITAT AREAS OF PARTICULAR CONCERN (HAPC) PROPOSAL

Date: January 9, 2004

Name of Proposer: Marine Conservation Alliance

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Please check applicable box (es):

- GOA Groundfish FMP
- BSAI Groundfish FMP
- Scallop FMP
- BSAI Crab FMP

Title of Proposal. Adak and Kanaga area coral/rockfish HAPCs

HAPC Site Location. NOAA charts 16460 and 16471. HAPC sites are delineated in Figure P2-1 at Cape Moffett, Great Sitkin, Adak South, Kanaga Volcano, and Kanaga

Habitat Type and Species Information. Some of the sites in this proposed HAPC are simply boxes and lines drawn around the National Marine Fisheries Service's (NMFS) submersible dive track lines for dives where "coral gardens" or high-relief hard coral stands were identified. These data came from NMFS' Auke Bay Laboratory (Bob Stone) and the Alaska Fisheries Science Center (AFSC) (Rebecca Reuter and Paul Spencer) based on submersible dives in the central Aleutian Islands. Where submersible dive information was available, knowledgeable captains used their experience to delineate the likely geographical extent of the coral gardens and high-relief hard coral stands, based on continuations and extensions in bathymetric features and transitions from very rocky, high current areas to adjacent areas where these conditions do not exist. To the best of our knowledge, other sites in this proposal have not been mapped. These unmapped sites were selected by trawl skippers who have a wealth of experience and knowledge of the Aleutian Islands based on the criteria in North Pacific Fishery Management Council's (NPFMC) HAPC priority for high-relief hard coral stands that are good rockfish habitat. Trawling has occurred around the margins of some of these areas, but the grounds within the actual sites are mostly considered untrawlable, due to the high-relief bathymetric and rock pile features. Figure P2-2 is taken from the Essential Fish Habitat (EFH) Environmental Impact Statement (EIS) Alternative 5b analysis to evaluate the degree to which trawling has occurred in the proposed sites. The blue highlighting in Figure P2-2 depicts areas that would have been "open" under 5b because significant catches had historically been taken there. Although the 5b analysis is limited by the spatial scale of the 5x5 blocks used for the analysis, it appears from the figure that much of the proposed area is lightly or not fished. Based on the highest 25th percentile of rockfish Catch Per Unit Effort (CPUE) from Fritz, *et al.*'s CPUE study (Figure P2-3) it appears that portions of these sites have had some high rockfish catch rates in the past to the degree that they have been fished by trawls and longlines. Rockfish catch data prepared by NMFS for Oceana's Freedom of Information Act (FOIA) request also suggest the proposed HAPC sites contain rockfish to the extent that peripheral areas have been fished in the 1990-2002 period (Figure P2-4).

In the case of the Cape Moffett site, there are important trawl grounds adjacent to the proposed HAPC site. Figure P2-2 overlays the Oceana 5b proposal and shows this area was left open as an actively trawled area (blue shading), because that proposal did not have a fine enough scale to separate out trawled and untrawled sites within the area. Data suggest that all of these sites have high abundance of rockfish, according to the Fritz, *et al.* historical Catch Per Unit Effort (CPUE) study (Figure P2-3) where the highest 25% of rockfish CPUEs are plotted for trawl and longline rockfish hauls.

Summary Statement of the Proposal. A set of HAPC sites is proposed around Adak and Kanaga islands based on extensions around NMFS' submersible dive locations in the areas where coral gardens

were found. Other sites within this proposal are based on information from trawl skippers that the area contains high-relief hard coral stands and rockfish habitat. A set of steps is proposed to map the area and develop any appropriate restrictions on bottom trawling while incorporating an experimental design to increase understanding of how rockfish use habitat.

Statement of Purpose and Need. The purpose of this proposal is to address the NPFMC's HAPC priority of identifying high-relief hard coral stands that are habitat for rockfish. Research dives indicate some areas have high concentrations of high-relief hard corals, and for other areas, trawlers with extensive experience in the Aleutian Islands believe certain unique areas meet the NPFMC's HAPC priority. The purpose of the proposal is to 1) designate the area as HAPC in accordance with the Council's priorities; 2) prioritize mapping via submersible exploration and rockfish abundance evaluations to identify the exact locations of high-relief hard coral stands within the HAPC site; and 3) develop appropriate restrictions on bottom trawling to protect high-relief hard coral rockfish areas within the AI HAPC sites while preserving fishing opportunities to the extent practicable, while at the same time designing and conducting applied research to increase understanding of how rockfish use habitat and how fishing affects the productivity of that habitat.

Objectives of the Proposal. The objective of this proposal is to meet the NPFMC's HAPC priority as per the 2003 Request For Proposals (RFP). The unmapped portions of these sites should receive a high priority for submersible mapping so any appropriate restrictions on bottom trawling can be developed to protect the high-relief coral habitat within the designated HAPC while allowing fishing opportunities in areas that are not high-relief hard coral stands that are habitat for rockfish. We feel these sites are ideal for controlled studies of how fish use habitat and how fishing affects that use. Once the sites are mapped to establish where concentrations of hard corals and rockfish occur and determine the level of existing fishing and non-fishing effects, these sites lend themselves well to zoning for fishing and control areas to evaluate the effects of fishing gears as well as habitat associations of rockfish with fished and un-fished habitat.

Describe How the Proposal Addresses the each of the 4 HAPC Considerations (50CFR 600.815):

The **IMPORTANCE** of the ecological function provided by the habitat.

The extent to which the habitat is **SENSITIVE** to human-induced degradation. Research has shown fishing can modify high-relief coral habitat but the implications of such modifications as they occur from the fishing gears used in Alaska and the low intensity of fishing effort as it occurs off Alaska are not known.

Whether, and to what extent, the activity **STRESSES** the habitat type. The sites in this proposal meet the 2003 HAPC priority because trawling occurs around the periphery but the core area is very rough bottom and is generally not trawled. Some groundfish longline and pot fishing probably occurs within these sites but the extent of this is not known at this time.

The **RARITY** of the habitat type. Submersible dives have shown that some of the sites in this HAPC proposal are unique because they are dense coral gardens. In other cases, fishermen believe that the as yet unmapped sites in this proposal are some of the most concentrated reefs with hard corals in the vicinity of Adak and Kanaga, and are thus unique and potentially important.

Describe any Proposed Solutions to Achieve These Objectives. The proposed sites fit the NPFMC 2003-04 HAPC priority based on available data because they are relatively unfished and, based on rockfish CPUEs at the periphery areas, likely to contain habitat for rockfish and other demersal fishes (see Figures P2-3 & P2-4). The area within this HAPC proposal should be high priority for submersible mapping so high-relief coral stands thought to be rockfish habitat can be delineated and appropriate bottom trawling restrictions can be developed to protect the high-relief coral habitat within these HAPC sites. These sites are numerous and extensive and thus ideal for controlled studies of how fish use habitat and how fishing affects that use. Once these sites are completely mapped to establish that they do, in fact, contain high-relief hard coral areas used by rockfish, and once the level of existing fishing and non-fishing effects on the area are observed and categorized, these areas should be zoned for fishing and control areas to evaluate the effects of fishing gears as well as habitat associations of rockfish with fished and un-fished habitat.

Describe any Proposed Management Measures for the HAPC. 1. Designation of HAPC, meeting NPFMC's 2003 priority. 2. Prioritization for submersible mapping and rockfish abundance evaluation. 3. Eventual development of appropriate protections for high-relief hard coral/ rockfish sub-areas within these proposed sites. 4. Development of controlled research to learn more about how rockfish associate with and use habitat, how fishing affects that use and productivity, how different levels of fishing intensity and gear effects influence productivity of high-relief hard coral habitats.

Identify any Expected Benefits to Habitat or FMP species. Sites within this proposal may contain important areas of high-relief hard coral abundance with excellent rockfish habitat that have not been trawled extensively. If the steps outlined in this proposal are implemented, rockfish and other Fishery Management Plan (FMP) species could benefit with only minimal impacts on trawl fisheries and communities that depend on trawling.

Identify Fishery, Stakeholders, and/or Communities, which may Benefit from the Proposed HAPC. Proposed sites may be important hard coral abundance areas with excellent rockfish habitat that has not been trawled extensively. If the steps outlined in this proposal (mapping, zoning of appropriate fishing activities within HAPC, research on habitat use and how fishing affects productivity) are implemented, rockfish and other FMP species could benefit with only small direct impacts on trawl fisheries and communities that depend on trawling. Of specific concern here is the careful delineation of the borders of the HAPC site around Cape Moffett so as to adequately cover the coral garden area while not affecting the adjacent fishing areas to the south and west. These established cod trawling areas are important to the Aleutian Islands cod fishery, particularly to small vessels that deliver cod to Adak. Some of the sites within this proposal fall within sea lion rookery and haulout areas and are thus closed to trawling and to some fixed gear fishing for cod, pollock, and Atka mackerel. In these areas, the only trawl fishery potentially affected is for Pacific Ocean Perch. Impacts on fixed gear fisheries in these areas are not known because data (such as EFH EIS 5b analysis) are not available to evaluate effects, but impacts can be expected to be larger than for trawlers.

Support Data or Information Sources. NOAA charts 16460 and 16470; NMFS' Auke Bay (Bob Stone) and AFSC (Rebecca Reuter) data on submersible dive sites where "coral gardens" or "high-relief hard coral stands" were identified. Additionally, this proposal is based upon knowledge and information volunteered by trawl captains who target cod, Atka mackerel, and rockfish in the Aleutian Islands, portions of NMFS' analysis of AI proposal 5b in 2003 EFH EIS; Fritz, *et al.* CPUE study, 1998 (NOAA Technical Memorandum NMFS-AFSC-88); rockfish catch data prepared by NMFS for Oceana (2003 FOIA).

Figures P2-1 through P2-4 for
Adak and Kanaga proposed
HAPC sites

Figure P2-1 Adak Kanaga HAPC Sites

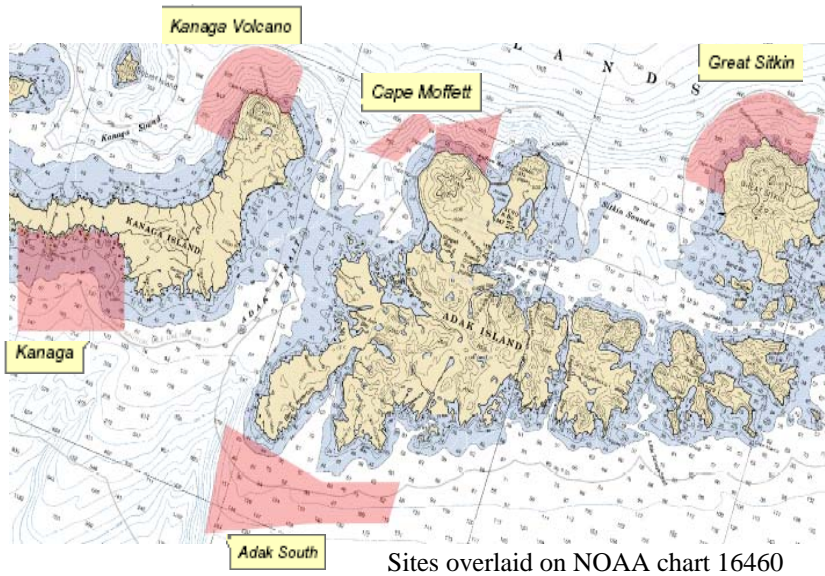
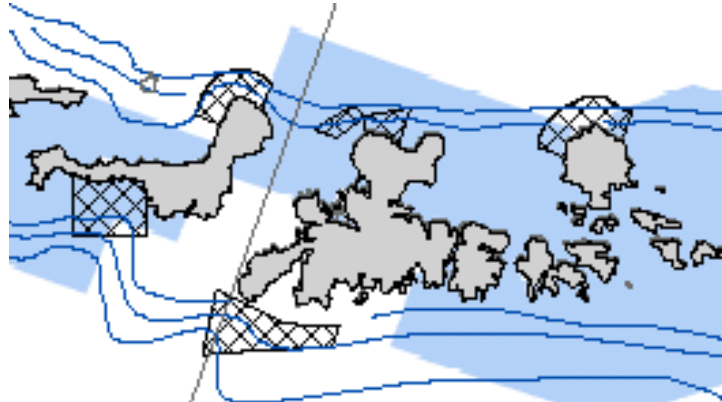


Figure P2-2: EFH Alternative 5b Open areas analysis applied to Adak-Kanaga proposed HAPC Sites



Areas in blue were “open areas” under alt. 5b. Note that some of the proposed sites fall within the area that would have been closed (relatively untrawled 1990-2001) while others would have been open under 5b (Cape Moffett and Kanaga) due mainly, we think to lack of geographic resolution in 5b 5x5 kilometer blocks used for the data analysis)

Highest quartile rockfish CPUE data from Fritz et al. CPUE study

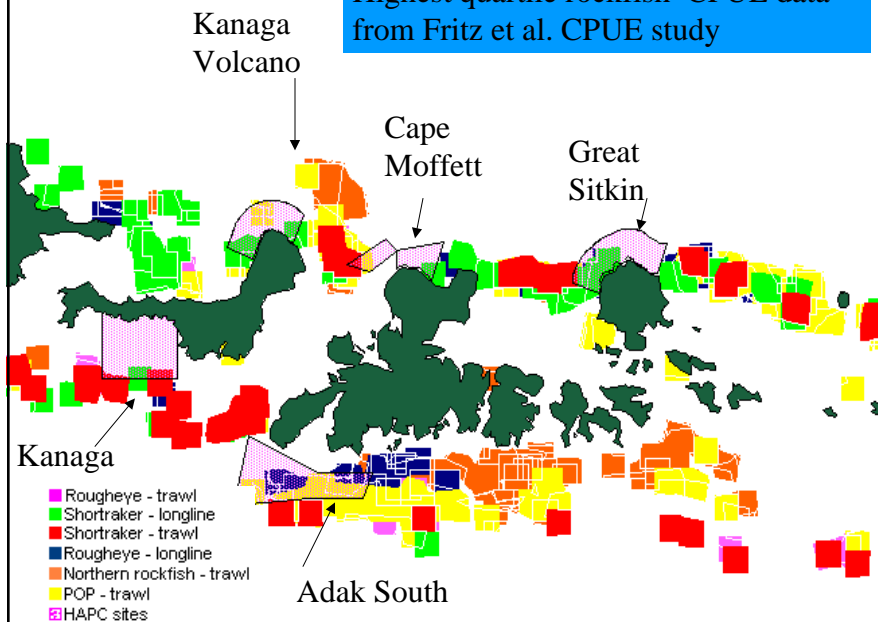


Figure P2-4: Rockfish catch rates for Adak-Kanaga sites (average mt rockfish catch per year per 10 x 10 km blocks) from Oceana FOIA data set

