

April 15, 2004

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Ms. Stephanie Madsen, Chair  
North Pacific Fishery Management Council  
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Dear Dr. Balsiger and Ms. Madsen:

Corals, sponges, and other living seafloor communities are important to the health of our oceans. The current Essential Fish Habitat Environmental Impact Statement process for the North Pacific provides the opportunity for the National Marine Fisheries Service (NMFS) and the North Pacific Fishery Management Council (NPFMC) to conserve corals, sponges, and other living seafloor communities that provide habitat for fishes from destructive fishing practices. We, the undersigned marine scientists and marine conservation biologists are concerned by the actions and rationale of the NMFS and NPFMC that fail to protect deep sea corals and sponges in North Pacific waters.

Presence of living benthic structure increases habitat complexity and sustains patterns of biodiversity in our ocean ecosystems. Cold water corals are among the most vulnerable and oldest seafloor habitats in Alaska. Many marine species, including commercially important species, utilize the vertical and three-dimensional structure provided by corals and sponges. Widely distributed in the Aleutians, Bering Sea, and Gulf of Alaska, these long-lived animals can protect fishes from strong currents and predators, as well as serve as nurseries for juveniles, and focal sites for feeding and reproduction.

Gorgonian corals, such as the red tree coral *Primnoa* spp. and the bubblegum coral *Paragorgia arborea*, are one of the most prominent groups of corals in Alaska. Both grow slowly, but can reach large sizes (3 m tall) and great ages (200+ years) if left undisturbed. Rockfish, Atka mackerel, walleye pollock, Pacific cod, sablefish, flatfish, crabs, and other economically important species in the North Pacific are found around red tree coral in the Gulf of Alaska (Krieger and Wing 2002). Among fish caught around corals during trawl surveys from 1975-1998, rockfish and Atka mackerel were most commonly caught around gorgonian, cup, and hydro- corals (Heifetz 2000). Eighty three percent of the rockfish observed during one study were associated with red tree coral (Krieger and Wing 2002). The removal or damage of red tree corals in Alaskan waters could have long term effects on associated faunal communities (Krieger and Wing 2002).

Video observation indicates that some managed fish species in the Aleutian Islands are highly associated with corals, sponges and other structure-forming invertebrates. One hundred percent of juvenile rockfish and eighty seven percent of all managed species counted in video from dives around the Aleutian Islands in 2002 were found within or very near these organisms (Stone, unpublished data). In recognition of their ecological importance and vulnerability to the adverse effects of fishing, coral, sponges, and other structure-forming seafloor communities have been identified as habitat areas of particular concern in Alaskan waters (Amendment 55/55/8/5/5 to the Fishery Management Plans for

BSAI Groundfish, GOA Groundfish, BSAI Crab, Alaska Scallop, and Salmon in the EEZ, pg 362-364, Jan.1999).

Bottom trawling destroys far more ocean habitat than any other fishing practice on the West Coast. The NMFS estimates about one million pounds of corals and sponges were removed from the seafloor of the Aleutian Islands and the Bering Sea annually between 1997 and 1999 by commercial fishing – over 90% by bottom trawlers (NMFS 2003). The impacts of this kind of destruction are neither minimal nor temporary. Both hard corals and soft corals can be extremely slow growing and sensitive to disturbance (eg Krieger 2001, Witherell and Coon 2000). For some species, it could take hundreds of years, if ever, for these animals to recover from the destruction of bottom trawling (eg Witherell and Coon 2000, Risk *et al.* 1998, Andrews *et al.* 2002). Vase sponges, morel sponges, and seawhips in deep, cold water habitats such as those in the Gulf of Alaska are also very vulnerable and slow to recover from bottom trawling (Freese *et al.* 1999, Freese 2001).

As documented in the National Academy of Sciences, National Research Council report of 2002, “Effects of Trawling & Dredging on Seafloor Habitat,” bottom trawling reduces the complexity and biological diversity of seafloor habitats. The Academy recommends closures, gear modifications, and fishing effort reductions to mitigate the detrimental impacts of bottom trawling. Further, in February 2004, more than 1,100 of the world’s foremost biologists signed a consensus statement calling for governments and the United Nations to protect imperiled deep sea coral and sponge ecosystems.

Currently in the North Pacific, NMFS is using the argument that bottom trawling in Alaska has no more than a “minimal” impact on habitat. The agency is using the rationale that in order to be more than minimal, habitat degradation must be so severe as to cause commercial fish stocks to collapse below sustainable levels. NMFS is measuring habitat effects by gauging the stock status of commercial fish, an inappropriate proxy as fisheries scientists cannot separate the effects of overfishing from those of habitat destruction on the status of fish populations. Rather, the effects on habitat should be directly measured, using observation and experiment.

NOAA scientists have said that the deep-sea corals in the Aleutians in particular are likely unparalleled in the world and that they have observed areas of damaged corals and associated organisms. Further, NMFS’ own analysis shows that habitat-structuring organisms like corals, sponges, bryozoans, tunicates, crinoids, and anemones will be reduced 70-90% in thousands of square kilometers of habitat if current fishing practices continue. These losses are not inconsequential. Ecosystems are naturally resilient, but only to a point. Waiting to cross that threshold is dangerous. If the resiliency of a system is exceeded, the change can be irrevocable.

The time is now to protect Alaska’s corals. We strongly urge the Council and NMFS to protect sensitive benthic habitat from destructive fishing practices.

Sincerely,

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