Committee on Resources

Subcommittee on Fisheries Conservation, Wildlife and Oceans

Statement

Testimony of Clarence Pautzke, Executive Director
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to the
Subcommittee on Fisheries Conservation,
Wildlife and Oceans
House Committee on Resources

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Good morning, Mr. Chairman, and members of the Subcommittee. I have been asked to comment on Council progress in implementing the essential fish habitat (EFH) provisions of the Sustainable Fisheries Act, and on the adequacy of information to identify EFH and to assess the effects of fishing gear on essential fish habitat.

Council Implementation of EFH Amendments

Much of our work on identifying EFH in North Pacific waters occurred in 1997. NMFS developed initial guidance by January 2, a proposed rule by April 23, and an interim final rule by December 19, 1997. The NMFS Alaska Region established a core team by April 1997, and multi-agency technical teams for groundfish, salmon, crab and scallops worked the rest of the year to produce a draft amendment package. The teams had biologists from the North Pacific Council, NMFS (Region and Center), Alaska Department of Fish and Game, and the U.S. Forest Service. Without their help, we would not have met the 24-month legislated deadline for developing our plan amendments.

Many meetings and public hearings were held in 1997 and early 1998, and by April 1998, the Council was able to send draft amendments out for public review. Final decisions were made in June 1998. The EFH amendments were submitted to the Secretary in October 1998 and approved in January 1999. Other regional councils made similar efforts. At their July 1998 meeting, the Council chairmen indicated that all councils anticipated having their amendment packages submitted by the October 1998 deadline or shortly thereafter. A synopsis of progress through September 1999 by the councils has been provided to your staff.

Adequacy of Information for Identifying and Describing EFH

NMFS guidelines prescribed four information levels for identifying EFH, and our scientists added a fifth, level 0, indicating no systematic sampling. The technical teams determined that only level 0 and 1 (presence/absence) information was available for most life stages. Level 2 (habitat-related densities) information was generally available for adult life stages. Typical information levels for groundfish and crab are shown in underline attachment 1. Only salmon had higher 3 and 4 information levels. Though skimpy, this information enabled the teams to describe general distributions and known concentrations for each species.

General distribution is the area containing about 95% of the individuals across all seasons, but not a species' entire current and historic range. Known concentrations are subsets of the general distribution and were identified only for life stages that had at least level 2 data. The biologists then examined survey and fishery hauls, and based on a catch per unit effort measure of density, drew lines around areas with an upper third of the densities for a species life stage. The accompanying chart shows the difference between general and known distributions for adult pollock in the Bering Sea and Aleutians.

Based on NMFS recommendations, the Council used the relatively larger general distributions to identify EFH, believing they would more adequately address unpredictable annual differences in spatial distributions of a life stage and changes due to long-term shifts in oceanographic regimes. The Council also believed that all habitats occupied by a species contribute to production at some level and that long-term productivity is based on both high and low levels of abundance. A species' entire general distribution my be required during times of high abundance.

We recognize that the information is incomplete, despite having large commercial fisheries, rigorous reporting requirements, comprehensive observer coverage, and extensive research surveys. The technical teams identified many research needs to (1) describe complete life history distributions and abundances of managed species; (2) identify and map continental shelf and slope benthic habitats; (3) determine the most productive habitats for managed species' survival, growth, and productivity; and (4) assess the importance of habitat properties in recruitment processes of managed species. This research will require significant funding.

Adequacy of Information for Assessing Fishing Impacts on EFH

The SFA required us to add provisions to our plans to minimize, to the extent practicable, the effects of fishing on EFH. The councils argued that they could not respond to that requirement until after EFH had been identified. But in our amendments, in the short time we had, we did describe actions we already had taken to protect EFH in the Alaska EEZ. These measures included a ban on directed fishing for forage fish to protect the prey field for managed stocks; year-round area closures to groundfish trawling and scallop dredging to protect crab habitat; gear restrictions on scallop dredge size and design of crab pots; and various closures to reduce interactions with marine mammals, particularly Steller sea lions. We also closed a unique pinnacle area off Southeast Alaska to fishing to protect valuable habitat for ling cod and rockfish species. All-in-all, we have about 30,000 square nautical miles in the Bering Sea closed to bottom trawling to protect habitat, an area larger than Maine and more than twice the size of Georges Bank. There are even larger trawl closure areas (54,000 square nautical miles) in the Gulf of Alaska to protect habitat.

In our EFH amendments, we described fishing impacts by trawls, dredges, longline gear, crab and groundfish pots, and salmon fishing gear on habitat, distilled from almost ninety literature citations, however, relatively few were from Alaska. Fortunately, the NMFS Alaska Fisheries Science Center has initiated several studies in the Bering Sea, Aleutians, and Gulf of Alaska, designed specifically to address potential effects of fishing, particlularly trawling, on the sea floor, benthic organisms and their habitat. Some have involved manned submersibles and laser line technologies. The Center is also funding a retrospective study on commercial trawl data and benthic community structure to describe the geographic and temporal patterns of trawl fishery effort in the Aleutians and Gulf of Alaska, the community structure on the bottom, and resulting differences between heavily and lightly trawled areas.

All these studies will help us assess the impacts of the major gears on various types of bottom habitat. Minimizing their impacts to the extent practicable may require measures that could close areas to certain

gear types. In considering such closures, we will need to consider fully the impacts of moving gears out of one area into another. Indeed, with the extensive closures that now exist, further closures could have high marginal costs and may disrupt our already very complex management system.

Next Steps

Our next round of plan amendments will emphasize Habitat Areas of Particular Concern (HAPCs). Our original EFH amendments identified living substrates (e.g., eelgrass, kelp, sponges, and coral) and freshwater areas used by anadromous fish as HAPCs. Now we are considering such habitat types as seamounts and pinnacles, the ice edge, the shelf break, and biologically-consolidated fine-grained sediments for HAPC status. We also are examining three specific HAPC areas including a deep basin in Prince William Sound, the Chirikov Basin north of St. Lawrence Island, and red king crab bycatch areas around Kodiak Island. We may take final action next month to prohibit retention of invertebrates such as corals, sponges, and mussels, as well as kelp and rockweed, which are major biota in the living substrates identified as HAPC.

Ultimately we need to identify ecologically important, sensitive, exposed, and/or rare areas that are vulnerable to fishing and non-fishing activities. We must be as specific as possible so that the protection of habitat can be balanced with the needs of fishing and non-fishing stakeholders. These stakeholders need to be involved in locating valuable, vulnerable habitat areas. Significant funding will be needed, as well as patience, as we try to tease out the relationships of fish species to their habitat. Coral protection likely will be one of the first issues addressed through this stakeholder process. Coral concentrations have been mapped and now we need to define suitable areas for protection based on meaningful stakeholder advice.

Legislative Changes

Some folks now are questioning whether EFH requirements are too broad and need focus. The Council chairmen echoed this general perception at their June 1999 meeting, noting that the definition of EFH tends to lead to a situation where: "If everything is designated as essential then nothing is essential." They recommended either modifying the definition of EFH or requiring NMFS to be more specific in its guidance on using different types of data to describe it. They also urged NMFS to increase its budget requests to address EFH concerns.

Indeed, the definitions in both the Magnuson-Stevens Act and guidelines have contributed to very expansive treatments of EFH. Most legislators likely were visualizing a much more focused EFH when the SFA was being drafted. For example, in an April 25, 1994 memorandum to the Council chairmen, the staff of the then Committee on Merchant Marine and Fisheries, suggested that the definition of essential habitat should include spawning and nursery areas, and areas of special ecological significance to the fisheries. They cautioned that the definition should not include the entire geographical area occupied by the fish stocks. Other definitions were offered as well, some more expansive than others. In the Congressional Record of October 18, 1995, when final amendments to HR 39 were being debated on the House floor, essential habitat was characterized as breeding and nursery areas. However, in the end, the following more expansive definition was placed in the Act:

"*Essential fish habitat includes the waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity.*"

In their guidelines, NMFS then proceeded to define and expand on almost every word in the definition:

Waters: aquatic areas and associated physical, chemical, and biological properties, used currently or historically.

Substrate: sediments, geological features underlying the waters, and associated biological communities such as coral reefs or submerged aquatic vegetation.

Necessary: habitat required to support a managed species or assemblage at a target production level reflecting conscientious stewardship.

Spawning, breeding, feeding, or growth to maturity: covers a species' full life cycle.

Feeding and growth to maturity: includes EFH for prey species if the managed species depends on the existence of a specific prey species.

This is not, of course, the first time this has ever happened. Almost any piece of legislation, regardless of how simple and straight forward it may appear at first blush, undergoes a very expansive transformation when it is reshaped into guidelines or federal rules by the Agency or the councils. I have found that the old axiom really is true: "the devil is in the details."

Nonetheless, the combined effect of the legislated definition and the interpretive guidelines is to commit the Secretary and councils to a very broad ecosystem approach to fish habitat conservation and enhancement. And in many respects, this approach goes far beyond our technical abilities and knowledge base. As much as we would like to understand the habitat needs for each species, the reality is that our current information is very limited, even off Alaska where we have had large commercial fisheries, with rigorous reporting requirements and observers, for many years.

The bar has been set very high. But instead of attempting to tinker with the definition of EFH or the guidelines, it may be more constructive to set our sights on gathering the types of detailed information that will be required to delineate those very specific ecologically significant, spawning and nursery areas that more likely were contemplated in the initial crafting of the SFA. We need to build on our current basic, broad brush, level 0-2 EFH descriptions, to define level 3-4 focused areas. Then we could be more confident in drawing conclusions about the impacts of fishing and non-fishing activities in those areas on the sustainability of the associated resources.

The guidelines now provide a pathway to more focused areas: identification of Habitat Areas of Particular Concern. The councils individually could go even a step further by identifying special zones within a HAPC. These would provide the basis for defining habitat that is truly essential. As I noted above, the North Pacific Council has already started that process. And as more research is conducted over the next ten years, we will be able to sharply focus on those hotspots that need to be protected and given special consideration. This will take significant funding for research by NMFS and its science centers if we truly want to identify and ultimately protect essential habitat. As more information is gathered to identify special areas needing protection, we will be able to apply more of a rifle, rather than shotgun, approach to addressing protection of EFH. This will benefit both non-fishing and fishing stakeholders.

Thank you for this opportunity to comment on this important issue.

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