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**Testimony to Congressional Oceans Commission, Anchorage
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Good morning. My name is Jim Ayers, Director of Oceana's North Pacific Regional Office. Oceana is a recently formed non-profit dedicated to helping restore and protect the world's oceans. You recently heard testimony from Ted Danson, a member of Oceana's Board of Directors, who spoke on behalf of Oceana and American Oceans Campaign. I would like to thank you for giving me the opportunity to expand on that testimony and address issues of particular concern in the North Pacific Ocean with particular regard to habitat.

The oceans are this planet's life support system. Most of the Earth's biosphere is located in the oceans. The ocean is the biological pump that cleans the air we breathe, produces the water we drink and provides the seafood we consume. The ocean is home to seabirds, marine mammals, fish and other aquatic life. All of Earth's creatures depend upon the ocean for survival. How we of this generation manage the oceans will affect our children and our grandchildren far more than our space program or economy.

The two major Human threats to Alaska oceans are pollution and destructive fishing practices. We will not totally solve these problems; our responsibility is to stop the preventable and develop the tools for the next generation to overcome future challenges.

The citizenry of our government have lost confidence in the current management of our oceans. The issue at hand is that the system is broken, our oceans are in trouble and we must change the paradigm of ocean management in our country. You have a tremendous challenge and responsibility. It is in the order of magnitude of walking on the Moon or exploring Mars, but far more important. You must be bold leaders; you have been selected to speak for all of us about our oceans.

I will speak briefly on Pollution and Bycatch, but will focus my time on destruction of Alaska Ocean Habitat using the Aleutian Archipelago as a prime example. We will propose recommendations of how to meet these challenges.

I. Pollution:

1. Persistent Organic Pollutants (POPs)

POPs are of particular concern in Northern latitudes where internationally transported chemicals settle out in cold climates and remain in the food chain. The traditional Alaska Native way of life is based on hunting, fishing and close relationships with the land and water. Subsistence users rely on many animals for food including seals, whales, fish, birds and bird eggs. The people in the North eat food higher on the food chain in animals where these contaminants bioaccumulate. It is also important to note that the people in the north tend to eat more organ meats and fats where these chemicals accumulate. Contaminant risks associated with consumption patterns of traditional foods are unknown. Further studies are necessary to determine contaminant concentrations in subsistence foods and evaluate the potential health effects for subsistence users. I have previously submitted copies of "Contaminants in Alaska, Is America's Arctic at Risk," for your review during your meeting in Seattle.

We recommend the following policies:

- **The U.S. Senate should immediately ratify the POPs treaty (Jefford's Bill) for the 12 listed POPs and ensure an efficient, effective process for adding new chemicals to the treaty;**
- **Clean Water Act should be amended to prohibit POPs and persistent bioaccumulative toxins in mixing zones; and**
- **Funding should be provided for research on the impacts of POPs in the subsistence diets of Indigenous people here in the U.S. (and the source and research regarding the source where feasible).**

- 2. Cruise Ships will be discussed by The Ocean Conservancy later. Suffice it to say we must stop the dumping of waste by cruise ships. It is 100% preventable.**

II. Destructive Fishing Practices:

1. Bycatch

Bycatch is the name given to fish and other marine animals caught by fishermen but thrown back, usually injured or dead. Current Bycatch includes fish, sea turtles, sea birds, marine mammals, coral, sponge and other living creatures that can be scraped off the bottom or caught by a net or hook. According to a United Nations report, one quarter of the global catch in 1994, more than 27 million metric tons of fish, is thrown overboard each year dead or dying as unwanted Bycatch. In 1994 the Alaska fishing fleet threw out a staggering 750 million pounds of dead ocean wildlife, more than was kept by the entire New England fishing fleet that year.

Of particular concern are the world's many endangered animals that are caught as Bycatch. For example, the International Whaling Commission estimates that between 65,000 and 80,000 whales, dolphins, seals and other marine mammals perish as Bycatch each year. These are important issues to Alaskans.

While virtually all fishing gear causes Bycatch, the gear types with the greatest impacts on endangered wildlife include shrimp trawl, pelagic longline, and gillnet fisheries in the U.S. and around the world.

The amount of fish thrown out in the North Pacific routinely exceeds the amount of groundfish kept in New England. **Trawling** is the most wasteful method of fishing, accounting for **91% of discards**. In 1999 the North Pacific groundfish fishery threw out **over 300 million pounds of fish annually**. Though the overall groundfish catch was down, the percentage of groundfish discarded rose by 1.5%. Halibut mortality and Herring mortality also increased, as did Bycatch of Red and other King Crabs. (Based on NMFS data) There are over 40 reports of more than a ton of coral being drug in by single trawl.

We recommend the following:

- **Establish a national policy that requires a government-approved Bycatch monitoring and minimization plan as a prerequisite to fishing.**
- **Establish a national goal for these plans to reduce Bycatch to levels approaching zero.**
- **Annual reports regarding the reduction of Bycatch or the success of the reduction.**
- **Require action be taken to curtail fishing when Bycatch caps are violated.**

2. Bottom Trawling habitat destruction (Coral and Sponge in the Aleutians)

This destruction of species habitat is indicative of our failure to manage our Alaska Oceans prudently. Sea floor habitat in Alaska is different than in other places in the world. There are long-lived, slow-to-recover habitat species. We have incredible incomparable areas of fish, marine mammals, sea birds, as well as other rare species being discovered and yet the state and federal government continue to permit major seafloor destructive actions.

Beyond their importance to commercial fisheries, coral and sponge provide medicine to treat human diseases (such as cancer and asthma). They contain long-term records of climate change and important genetic information about our evolutionary history. They are areas of incredible biodiversity. Management of our fisheries and oceans must include these values in analyzing the costs and benefits of management decisions.

This summer National Marine Fisheries Service scientists Dr. J. Heifetz and Mr. B. Stone made an extraordinary discovery of coral reef in the Aleutian Islands.

It is a little known fact that brilliantly colorful deep sea corals and sponges exist in the North Pacific, particularly in Alaska. Deep sea corals and sponges are living animals that provide habitat for large aggregations of fish on the seafloor. Commercial and non-commercial fish and invertebrate species use these colorful, habitat-forming species for protection, breeding areas, feeding grounds, and nurseries. Some of these tree-like animals grow to be over 10 feet tall and over 500 years old. It is no coincidence that these habitats support some of the most productive and biodiverse marine ecosystems in the North Pacific.

The Aleutian Archipelago

- Longest Archipelago in the world, over 1,000 miles long
- Most of its islands located within the Alaska Maritime National Wildlife Refuge
- Volcanic islands, islets, spires, rocks and headlands
- Steep shelf break immediately offshore creates unique seafloor habitat and strong currents
- Mixing zone between upwelling from the Aleutian Trench and productivity from the Bering Sea
- In Aleutian ecoregion, there are over 450 species of fish and shellfish, 260 species of seabirds and migratory birds, and 26 species of marine mammals
- Migratory birds from all seven continents
- This cradle of productivity in combination with unique ocean habitat creates a home for the last great concentrations of seabirds and marine mammals in North

America, and contributes to the most productive fishery in the U.S., providing over 50% of all U.S. caught seafood.

Both commercially and non-commercially harvested species are associated with and/or dependent on corals and sponges. Adult and sub-adult rockfish (*Sebastes spp.* and *Sebastolobus alascanus*), Atka mackerel (*Pleurogrammus monopterygius*), shrimp, and king crab are known to associate heavily with coral, using coral as habitat, shelter, and protection from predation (Witherell and Coon 2000; Freese 2000; Krieger 1999; Heifetz 2000). Soft corals in the Bering Sea were found to be in close association with gadids (e.g. Pacific Cod and Walleye Pollock), Greenland turbot, greenling, and other flatfish (Heifetz 1999). Non-commercially harvested species also depend on coral. Sea stars, nudibranchs, and snails consume deep sea coral polyps as a food source while suspension feeders such as crinoids, basket stars, sponges, and anemones attach themselves to coral (Krieger 1999).

The recovery of these habitats takes centuries, and one pass of a trawl net can remove over one ton of these species as noted earlier. However, there is no comprehensive research and mapping of the seafloor to identify where these and other species occur. Yet, we continue to permit bottom trawling to continue to destroy coral and sponge even where regulators know these habitats exist. This undoubtedly has impacts that will be felt for generations to come. In Norway, for example, fishers themselves complain that heavily fished coral areas produce less than half the fish they used to. What may seem like a healthy and abundant fishery may not be so productive in the foreseeable future if the very habitat that supports it is irreversibly destroyed.

Most importantly, the destruction of North Pacific coral and sponge and the degradation of the Aleutians is an indicator of the failure of the current paradigm and underscores the need to move to a science ecosystem-based management approach to our fisheries.

III. Closing

Recommendation of a Model approach:

- General assessment of the biodiversity and health of special marine area (like the Aleutians) with particular attention to species showing decline or sensitive habitats being destroyed reflecting ecosystem stress (Aleutian Stellers and coral);
 - Identify activities that most immediately threaten the resource (bottom trawling);
- Conservation Closures to protect species and habitat that may be threatened by current or proposed activities (until adequate research completed);
- Designation and Definition of Special Management Area;
- Comprehensive Research and Mapping Plan
 - Develop an underwater research and monitoring program to assess the health of the habitat and map seafloor geology and biodiversity;
 - Collaborative state, federal and tribal program to assess the health of subsistence wild foods;
 - Assess the impacts of fishing or other activity on ecological functions.
- Fisheries Ecosystem Plans
 - Scientific assessment of the biodiversity and biomass, health and population of various species including non-targeted species;
 - Consideration of area specific fishing rates (e.g. F75%);
 - All fishing vessels required to have onboard observers and vessel monitoring systems (VMS);
 - Onboard observers to be federal compensated and protected employees; and
 - Scientific design to evaluate different ecosystem management strategies.
- Funding:
 1. Research, mapping and management of special areas, and
 2. Fishing technical innovations and incentives

In summary, we recommend three specific actions and develop three tools to change the paradigm in of ocean management in America.

Three specific immediate actions:

1. Support ratification of POPs treaty (Jefford's Bill) for the 12 listed POPs and ensure an efficient, effective process for adding new chemicals to the treaty; and
2. Set specific target levels and specific dates to reduce Bycatch (goal of zero),
3. Immediately identify special management areas and take action to protect them until research can be completed.

Three tools to change the paradigm of ocean management:

1. Establish an agency to manage for the health of our ocean and ocean resources;
2. Develop and fully fund a cooperative coordinated science research programs for respective areas of oceans to better understand and manage our ocean habitat and ocean resources. (Aleutian Model)
3. Management regime that is based on sound science, strong management and public participation (eco-region councils, scientists, and broad public involvement).

The health of our oceans is threatened by pollution and destructive practices. The current government structure for protecting our ocean resources has failed and requires dramatic change and investment. Oceana is prepared to join you in this plea for reform.

Thank you.

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