

## Speech for the U.S. Commission on Ocean Policy

Aloha. On behalf of Governor Cayetano, it is my privilege to welcome you all to Hawaii.

The work of the U.S. Commission on Ocean Policy is of vital importance to our islands. Your recommendations to the United States Congress on needed policy changes can improve our Nation's ability to better manage our ocean resources throughout the new century.

With all due respect to some of our sister coastal states, Hawaii is the Ocean State. With our islands neighbors to the west, we are the nation's ocean region.

Our Pacific Ocean region covers 1.5 million square nautical miles. This equals one half of the entire Exclusive Economic Zone of the United States. The Continental US, Alaska, and the Caribbean region make up the other half of the nation's EEZ.

We are ocean rich and land poor in these islands. From our highest mountains (at nearly 14,000 feet) to our coastlines, there is no point of land that is more than 28.5 miles from the coast. Everything we do on land affects our ocean resources.

While we are the 47<sup>th</sup> smallest state in land area, our 6,425 square miles of land consists of 8 larger main islands and 124 smaller offshore islands, atolls, and shoals. Our State stretches for over 1,500 miles from the Big Island of Hawaii to Kure Atoll. To put this in perspective, it took you about 5 hours to fly to Hawaii from the West Coast and it would take you another 3 hours to fly from Honolulu to Kure Atoll. Our neighbors in the Pacific in Guam and CNMI must travel 8 hours across the ocean just to get to Hawaii.

Our ocean resources are vital to our way of life and have been for centuries. The Pacific Island cultures traveled great distances in small canoes, guided by the wave patterns and the stars, between our islands, well before the discovery of the New World.

Today, our ocean is still a vital link, as about 98% of our goods are shipped to the islands. The ocean is part of our cultural heritage. It moderates our weather, shapes our islands, provides seafood for our sustenance, captures the hearts of our visitors, is a main source of enjoyment during our leisure, and plays a significant part in our economy.

We look forward to spending the next two days sharing our knowledge of our oceans and offering some policy options for your consideration.

Focusing now on Hawaii, let me further expand on the importance of our oceans:

Ocean industries in Hawaii -- shipping, fishing, recreation and marine tourism, research and development, seafood marketing, and aquaculture -- are valued at over \$3 billion annually in gross revenues.

We are one of the most isolated island chains in the world with over 25% of our reef animals found no where else in the world. We have more plants and animals unique to our islands than any part of the United States. One of these, the endangered Hawaiian monk seal is the most endangered marine mammal in the nation.

Before making some recommendations that may be used to address some of the most pressing issues facing Hawaii, let me begin by setting the stage for these recommendations.

As the only chain of islands in the middle of the Pacific, we are often affected by what happens around the rest of the Pacific Rim and especially activities occurring at sea. One of our most pressing challenges is the impact of marine debris. Not only do we generate some of our own; because of oceanic current patterns, we are also the collection point for significant amounts of discarded fishing gear annually.

In the past four years alone, federal, state and non-governmental partnerships have hauled over 150 tons of nets and line off reefs in State waters in the Northwestern Hawaiian Islands. Addressing this issue is an

international problem, yet it is our beaches that are fouled, our marine life that is threatened, and our landfills that are filling. This is a problem that not only affects the Northwestern Islands, but also is a continuous problem throughout the entire archipelago.

These nets are not coming from our local fisheries, as our local offshore fleet is a longline fleet. Some of you are probably aware of the recent federal court action against our longline fleet. The conflict was over the incidental take of leatherback turtles by a segment of our long-line fleet. Due to this problem, Hawaii's longline fleet has been excluded from approximately half of its most profitable fishing grounds.

A year after, the net result of the court action has been minimal with regards to total fishing effort, but has had an effect on the economy of Hawaii. Thirty-five to forty boats in our longline fleet have left, moving to California or elsewhere. Fishing effort by the international fleet continues, turtles are still being caught, and the intended outcome, which was to limit the impacts to the highly endangered leatherback turtles was only minimally achieved.

We need to recognize that our current efforts at fisheries management are not working appropriately, but that management by litigation, although an option, is not the solution.

Hawaii has recently been "discovered" by the cruise ship industry. The projections are for 233 port-calls in and among our islands this year by international cruise ships. This is about one third more visits than last year.

Although we welcome the visitors, our harbor infrastructure is inadequate to accommodate this demand. Our facilities have been under funded and are in dire need of repairs (both in our commercial and small boat harbors). We have not been blessed with a significant number of natural ports. Expansion to accommodate the new demand is needed but the permit process, lack of funds to finance the development, Presidential Executive

Orders that specify non-degradation of our coral reef resources, and the time it takes to build the facilities, makes our ability to respond difficult.

The maritime industry is our lifeline. As was stated earlier, 98% of our goods are shipped to Honolulu and then most are trans-shipped by tug and barge inter-island. We would be in dire need without these ships. A shipping strike or any policies that place undue harm on the shipping industry also affect our daily lives. Careful consideration needs to be given to ocean policies that regulate ocean transportation, as there are no roads or railways to our islands.

Our nearshore management challenges are even greater and far more complex. Hawaii receives over 7 million tourists annually. Our ocean tourism industry is valued at over \$800 million annually, and is made up of over 1,000 small businesses. All of these people in our nearshore waters are competing directly with our local residents. Traditional activities such as fishing, surfing, diving and swimming must compete with new technologies such as kite sailing, jet skiing and the like.

With so much dependence on tourism, many of our special places such as our marine protected areas are marketed as 'must see' destinations (scenic, unique, etc.). They are recommended by all facets of our tourism industry (tourist guide books, concierge desks, activity wholesalers, etc.) and are easily sold as an activity where a visitor is assured of a wildlife experience. Hawaii was a leader in establishing marine protected areas, as our first protected areas were set aside over 30 years ago and have proven highly successful in increasing fish biomass. However, limiting fishing activity is only one of the challenges in managing these scenic areas.

It has taken a concerted effort by all resource management agencies to begin to figure how to resolve the issue of overuse and associated impacts from tourism use at some of our most popular sites. The main point that needs to be made here is that as we strive to create a national network of marine protected areas, it is important to remember that 'no take' does not mean 'no impact' especially in the States and Territories where tourism is a critical component of the economy. There is a need to recognize that regardless of the initial justification for the establishment of the MPA, in

areas where tourism is the engine that drives the economy, the MPAs will become a defacto tourism destination and will need to be managed as such.

Our nearshore fisheries are in decline, and this trend has been going on for a very long time. Our nearshore fisheries have been heavily impacted by development, pollution and overfishing. The status quo is unacceptable - we can't continue down this road any longer. Nor can we afford to ignore or deny the problem. We are at a critical turning point in Hawaii's history with regard to taking care of our ocean resources.

Hawaii, as the Ocean State, has been moving forward with sustainable use of its ocean space for aquaculture. The State has issued its first commercial lease in State waters for a truly open ocean aquaculture project. This momentum needs to be sustained and opportunities to develop state and federal ocean waters should be vigorously pursued. While stock enhancement is not the answer to better managing nearshore fisheries, Hawaii has also had considerable success with the raising and releasing of a few types of native schooling species, which has greatly enhanced the abundance of these species in some selected parts of the islands.

The last nearshore management challenge I would like to focus on is the introduction and spread of marine alien organisms. We are presently facing a severe and critical time in our islands due to the introduction of several varieties of alien algae. Over the past three years in Kaneohe Bay on this island, we have seen whole patch reefs, with nearly 100% live coral cover, overgrown by the spread of these invasive algae. This change in primary species composition leads to changes throughout the coral reef ecosystem.

The need to limit the spread and control the extent of damage of these alien organisms is great but the science and technology to do so is still in its infancy. Unlike other parts of the country where the algal growth was limited by spreading tarps over the entire bottom and pumping the area full of chemicals, coral reefs are extremely complex communities with hundreds of organisms living inside them. Simply covering a reef and pumping it full of chemicals is not an option.

*So what do we have to offer in the way of solutions?*

### **MARITIME INDUSTRY:**

- Set up a national low interest loan program administered by the U.S. Department of Transportation to improve shipping infrastructure to meet the growing demands, the size of the vessels, and the associated technology. This could also potentially jump-start the ailing national maritime industry.

### **MARINE DEBRIS:**

- Work with the International Maritime Committee (IMO) to establish additional polices regarding the dumping of materials overboard at sea, focusing particularly on the dumping or discarding of fishing gear.
- Establish an international committee to that can work with the net manufacturers to develop methods of tagging the nets to begin to identify the specific fisheries that are the most likely to discard their gear.
- Set up an international bounty program to buy back discarded nets. Design an incentives program nationally for new methods to recycle the nets and/or reuse them for other products

### **FISHERIES:**

- Fishing Research: In the Hawaii situation, this bycatch problem might be reversed if there were improved technological ability to avoid catching birds, mammals and turtles. Additionally, any developed technology could be shared with other regions of the world that wished or were forced to reduce this type of bycatch, fostering mutually beneficial improved endangered and threatened species survival.
  - Provide funding through the National Marine Fisheries Service (NMFS) to the Western Pacific Regional Fishery Management Council to conduct bycatch avoidance research specific to

swordfish and tuna longlining. This could include research in better gear selectivity for target species.

- If research produces successful species avoidance measures, NMFS could modify their opinion on the impact of longlining on turtle populations to allow the Hawaii swordfish fleet to return to the excluded grounds and permit the tuna longline fleet to fish all year using the new fishing methods. In addition, NMFS should share the information on these improvements with foreign longline fleets that utilize the region and their respective government regulators.
- To mitigate the cost of equipping the fleets with avoidance technology and level the production cost playing field (as was done in the shrimping and purse seining industries), Congress could enact legislation requiring the use of the bycatch avoidance techniques for all longline products sold in the US.
- Promotion and Marketing of the Environmentally Sustainable Seafood Products: Support adoption of gear changes by providing funding for environmentally oriented promotion and marketing campaigns to improve prices for sustainable seafood products. The programs could include participation in an international environmental certification program, public events and market communications.
- Pacific Seafood Research and Education Center: Establish the Center to help bridge the information gap that now exists between the following three distinct groups
  - 1) the seafood users: consumers and seafood chefs and purchasers,
  - 2) the seafood producers: fishing and aquaculture industries,
  - 3) the scientists: fishing and aquaculture researchers.

This approach would address the current situation where groups are spreading misinformation, often leaving the fishermen who are doing things sustainably to suffer in the marketplace along with those who are causing environmental damage. The Center would help scientists understand the types of possible aquaculture products desired by consumers and chefs and the potential for bycatch marketing for underutilized wild and aquaculture raised species.

## AQUACULTURE:

- Open Ocean Leases. To continue the development of this vital sector of U.S. aquaculture, Congress should designate a lead agency for open ocean aquaculture and enact legislation granting authority to issue aquaculture leases in the Exclusive Economic Zone (EEZ). Currently, there is a Sea Grant project at the University of Delaware developing guidelines for EEZ aquaculture leases that could support this effort.
- Life Cycle Research: Establish a large-scale, national research and development effort to close the life cycles and develop mass culture techniques for economically and regionally important marine species in U.S. waters (inclusive of EEZ boundaries).
  - Fund research for Species Selection Ranking considering economic, technical, environmental sustainability and consumer gastronomic potential.
  - Fund research to understand and control the full life cycle of desirable seafood species and develop environmentally sound production technologies.
- Site Mapping and Designation: Establish a major national initiative to map state and federal ocean waters for potential sites for offshore aquaculture; to possibly include pre-permitting designated sites, zoning of sites and/or the establishment of public/private mariculture parks.
  - Fund pilot projects in interested regions to evaluate oceanographic and use characteristics and determine suitable site for ocean leasing for aquaculture.
- Technology R&D: Establish a large-scale ocean engineering research and development program and adapt existing ocean technologies and develop new, next generation technologies to farm the oceans, especially in relation to the operation of ocean cages.



- Develop engineering technologies to reduce capital cost, labor cost and risk for open ocean-based aquaculture in sea cages.
- Fund engineering-based risk analysis research to develop catastrophic risk probabilities data to be used by the insurance industry to lower the cost of crop insurance for open-ocean aquaculture companies (currently costing about \$2/lb).

### **ALIEN SPECIES:**

- Institutionalizing the Current Recommended Activities Relating to Ballast Water and Hull Fouling: Work with the National Aquatic Nuisance Task Force to implement regulations and inspections in ports and harbors. Fund a national campaign to raise awareness and limit the spread of these organisms between ports by uninformed recreational boat operators, commercial fishing vessels and the commercial shipping fleets.

### **OTHER SUGGESTIONS:**

- Innovative Partnering: Here in the Pacific where resources are limited, we have found the one of the best approaches to dealing with management challenges has been through innovate partnering where resources and assets are brought together to create solutions. Some of these examples include the relationship that presently exists between the State and the National Marine Sanctuary Program where both groups co-manage the Sanctuary waters. Other examples include the partnership that exists between NOAA's Office of Coastal and Ocean Resources, the Department of Interior's Office of Insular Affairs and the All Islands Points of Contact for the US Coral Reef Task Force. Joint research examples also are numerous and include the NOAA National Ocean Service, University of Hawaii and Department of Land and Natural Resources for funding and managing the Hawaii Coral Reef Initiative Research Program. The more these types of partnerships can be formed locally, regionally and nationally, the better the chances for information flow and informed decision making between all parties.

- Education of Constituencies: There is a need for developing outreach programs that are non-traditional and are focused on getting the information to the specific user group. To do this often means partnering with a members of that particular user group and asking for their input in the development of educational materials that will get the attention of their colleagues and send the messages in a way that they understand.

### Conclusion:

We are faced daily with difficult decisions about how to balance the use and the protection of our ocean resources. We have had our share of successes and challenges and I thank you for the opportunity to share some of these. I think I would be remiss if I did not again mention that although my talk has focused on management challenges in Hawai'i, the management challenges of our island neighbors are not all that different. We welcome your insights and look forward to the development of recommendations that will assist us in the management of our ocean resources.