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NAGLE

Mr. Kurt Nagle, President and CEO, American Association of Port Authorities
Washington, DC, Nov-14-2001, State/Local Perspectives Panel
Invited Testimony

Key Points:

- An overview of the Marine Transportation System (MTS) is provided. Investments being made in MTS include vessels; navigation channels; landside cargo handling facilities; and connections to interstate highway and rail.
- Federal government has been shifting financial responsibility for funding navigation services to others. General revenue funding is the most appropriate way for the federal government to maintain U.S. trade.
- Port authorities serve as environmental stewards of America's coastlines and waterways. Many port projects include conservation and enhancement features.
- Governance structure for ocean and coastal areas is a complex set of agencies, laws, and policies that can contribute to long delays and increasing costs for MTS projects.
- Research, education, and integration of technical information into marine operations are critical to continued improvements of MTS.

Recommendations:

- Consider innovative governance structures that provide alternative solutions to funding and discussion as ways to solve conflicts in MTS.

Responses to Questions:

- There is value in a wide range of ports: competition among ports is healthy and provides choices for consumers.

Documents Recommended:

- "Green Ports: Environmental Management and Technology at U.S. Ports" Urban Harbors Institute, University of Massachusetts, Boston.

NASH

Ms. Harriet Nash, Fisheries Campaign Director, Friends of the Earth
Charleston, SC, Jan-16-2002
Public Comment

Key Points:

- Believes fish stocks will remain healthy for future generations if managers carefully implement Individual Fishing Quota (IFQ) without privatizing the public resource.
- Use Individual Fishing Quota only in conjunction with other management tools and not as whole toolbox.
- A successful IFQ program will incorporate terms accommodating the specific fisheries criteria with mandatory national standards regarding quota allocation auctions, transferability restrictions (limits), and sunset provisions (expiration every 2-5 years).
- Maintain monitoring and enforcement as high priorities utilizing onboard observers, vessel monitoring systems, and accurate data reporting.

NELSON

Mr. Chris Nelson, Regional Director, National Fisheries Institute
New Orleans, LA, Mar-08-2002, Pollution and Hypoxia Panel
Invited Testimony

Key Points:

- Mobile Bay now produces very few oysters for many reasons: downstream movement of fecal coliform; oxygen depletion; lack of sedimentation; dredging of Intercoastal Waterway; deepening/widening of ship channel; and dams. Louisiana is still productive and has large estuaries. A big problem facing the oyster farming industry is coastal water, namely erosion and saltwater intrusion.
- Major freshwater diversion projects are planned that could affect oyster industry: sudden change in salinities and nutrients and water quality issues.
- Texas has primary problem of too much saltwater. Salinities are high and oyster drill and dermo disease invade. Red tide and ballast water are also problems.
- Good programs helping the Gulf area include National Shellfish Sanitation Program, Gulf of Mexico Program, and NOAA Habitat Restoration Center.

- We are looking at how Peconic Bay model for spawn setting out from sanctuary might apply to Mobile/Bon Secour Bays. This might answer questions about whether protected areas could have dual purpose.

NELSON

**Ms. Maryanne Nelson, (Volunteer) Director, Sierra Club in MA
Boston, MA, Jul-24-2002
Public Comment**

Key Points:

- The Sierra Club still supports the designation of Marine Protected Areas for both environmental and species protection and research.
- The MA chapter of the Sierra Club is pioneering the Sierra Club's position on marine fisheries in response to the collapse of the groundfish and scallop stocks in New England. [discussion provided]
- Work is also being done on the wind farm proposal on Cape Cod.
- The oceans are a public resource, and they should be treated as such. They should not be privatized and given over for private profit in a private way that is not open or transparent.

Recommendations:

- Make recommendations on the land-use impacts on the ocean and marine habitat.
- The Commission's recommendations on the energy policy should not be used to grease the skids for industries to take over our ocean resources. Look carefully at extraction of resources from the ocean, oil, and gas.

NEWMAN

**Dr. David Newman, Chemist, Natural Products Branch, National Cancer Institute
Los Angeles, CA, Apr-18-2002, Marine Biotechnology Panel
Invited Testimony**

Key Points:

- "Biodiscovery" encompasses all types of scientific work on marine invertebrates from taxonomic census to materials of use for agriculture, aquaculture, veterinary and human-directed pharmaceuticals and food.
- One major source for funding in the U.S. for work in biodiscovery related to human diseases is the National Institute of Health (NIH), particularly its National Cancer Institute (NCI). Other important U.S. funding sources are the National Science Foundation (NSF) and Sea Grant.

Recommendations:

- Marine reserves could become the equivalent of a "source country."
- Researchers who are recipients of competitively funded U.S. government grants would be permitted to remove small quantities (10g or less) of invertebrates and/or soil samples from marine reserve "plots."

Documents Recommended:

- Presenter provided the commission with a compact disk containing the following topic related documents:
 1. NCI's Letter of Collection
 2. Paper on United Nations Convention on the Law of the Sea (UNCLOS) as a method for recompense to source countries
- List of chemical agents currently in clinical trials or approaching clinical trials for treatment of human diseases
- Report on the discovery and development of two new drugs from nature by the NCI
- A scientific review that shows the influence of compounds from natural sources as leads to ethical drugs

NEWTON

**Mr. George Newton, Jr., Chairman, U.S. Arctic Research Commission
Anchorage, AK, Aug-22-2002, Arctic Issues Panel
Invited Testimony**

Key Points:

- The Arctic Ocean has profound effects on the world's climate and, in turn, is profoundly affected by climate change. The presence of sea ice and the changes in its abundance and distribution make the Arctic Ocean a unique and powerful indicator of climate change.
- Arctic Ocean sea ice is decreasing its summer extent by as much as 3.5% per decade, while average thickness of sea ice has decreased over the last 30-40 years by as much as 2.6 meters per decade.
- Changes in the location of the edge of sea ice have important biological, physical, and chemical effects of both regional and global significance. [Further description provided.]

- The principal climate change research program currently underway in the Arctic is the interagency Study of Environmental Arctic Change (SEARCh), established to coordinate the research of several institutions and programs on questions pertaining to natural vs. human-induced climate change. [Further description provided.]
- The principal funding agencies for research in the Arctic Ocean are the National Science Foundation, the Office of Naval Research, and NOAA.
- If warming in the Arctic leads to opportunities for trans-Arctic shipping (e.g., for Japanese automobile cargoes), then we can expect a large increase in ship traffic through the region.
- We expect the Senate will eventually ratify the UNCLOS. From the date of our accession to the Convention, we will have ten years to submit our claim to the sea floor beyond our 200 mile EEZ under Article 76. However, the U.S. currently has virtually no data in the Arctic Ocean Basin on which to base an Article 76 claim.

Recommendations:

- Restore the funding for the Office of Naval Research High Latitude Program to the \$10-15 million per year range.
- Ratify the UNCLOS and commence immediately a program of bathymetric surveys to meet requirements of Article 76 on all the U.S. coasts.
- Restart the SCICEX dedicated cruises either as part of the above or as essential research activities on their own merits.
- Commence planning for the replacement of the Polar Class icebreakers and review their operating mode.
- Integrate Arctic Ocean research in the National Ocean Research Plan and the Integrated Ocean Observing System. Integrate Arctic Ocean planning in planning by all ocean research agencies.
- Include Arctic Ocean studies in planning for the President's Climate Change initiative.
- Follow the Federal Oceanographic Fleet Coordinating Committee (FOFCC) Plan and build the Alaska Area Research Vessel (AARV).

Responses to Questions:

- People in this room are obviously interested in the ocean but other people must be convinced of the very vital importance of the Arctic Ocean. If we don't choose to be a dominant player then somebody else is going to take it from us. We, therefore, must generate the interest within the Executive Branch to make special exceptions, and to take advantage of unique opportunities, such as the Mendell Rivers decommissioning two years ago. We need a large resource, like a submarine, like the USS Hawkeville, to solve and answer some very vital questions. [discussion provided]
- We must be defined as important enough to justify a substantial scientific commitment and important enough to be put into the budget. We must have support on Capitol Hill, with not just the senators from Alaska, but also throughout the Congress and the House.
- One thing that we have not talked about very much is permafrost and the climate change. The permafrost is decaying significantly. The U.S. and the State of Alaska have already moved two villages in Alaska because of the threat to the ocean. We are seeing the decline of permafrost and sub sea permafrost because of global warming, causing a receding ice line, and an increase in storms and their severity along the coast of Alaska. It is going to mandate that we understand permafrost better. Seventy-eight percent of the state is under laid with permafrost. If we want to build a port in the Arctic when we turn it into a higher commerce area, we will need to understand the decay of permafrost and how we build structures that are reliable and long lasting on a dynamic environment as we see it now.
- Yes, there is certainly the appreciation that there are significant methane hydrate reserves, to be used as a potential energy resource, in Alaska.

NEWTON

Dr. Jan Newton, Senior Oceanographer, Washington State Department of Ecology

Seattle, WA, Jun-14-2002

Public Comment

Key Points:

- Estuaries and inland waters are strongly linked to the ocean. Climate variation is intimately entwined. Estuaries have a "triple whammy" in terms of their influence from climate: 1) influence from local weather; 2) influence from the ocean; 3) influence from the watershed.
- Concerned about the longevity of the monitoring systems; has experienced a 25 percent cut in on-going monitoring.

Recommendations:

- Endorse and recommend funding of the integrated and sustained ocean observing system.
- Recommend a funding mechanism for which to write proposals having a focus on regional studies. NSF and NOR are too regional, parochial. Sea Grant doesn't have the funding. We need a change to say that regional systems specific research is important-for the regions but also important to work together and see the collective view. The funding agencies need a change in their view of funding.

NICHOLS

The Honorable Mary Nichols, Secretary of Resources, State of California
Los Angeles, CA, Apr-18-2002, Official Welcome
Invited Testimony

Key Points:

- It is difficult to discern the many offices and programs in National Oceanic and Atmospheric Administration (NOAA), let alone interactions of other federal jurisdictions like Environmental Protection Agency (EPA), Army Corps of Engineers (ACOE), National Marine Fisheries Services (NMFS), United States Fish and Wildlife Service (USFWS), etc.
- California has excellent examples of stewardship, water quality, and economics. Establish National Coastal/Ocean Economic Assessment: consistent data collection, analysis, storage, and retrieval systems to assess impact of oceans on economy of coastal states and nation.
- Elevate Ocean Management to Cabinet level guided by new Ocean Policy Act with emphasis on ecosystem protection, rather than extraction, as guiding principle.
- Create Regional Ocean Councils-incorporate regional governance approaches: California's examples include CALFED Bay Delta Program and Shoreline Erosion Research.
- Consider recent California approaches to fisheries management and Marine Protected Areas (MPAs) along with an ecosystem approach. Establish National System for Beach Water Quality: consistent standards, monitoring, and notification procedures.

NICHOLSON

Mr. Robert Nicholson, President, Sea Solar Power International
Washington, DC, Jan-24-2003
Public Comment

Key Points:

- Sea Solar Power International is the oldest and most advanced firm in the world in commercial development of ocean thermal energy conversion or "OTEC." It has all the technology as well as full funding from private investors and is currently building a 10-megawatt plant. The plant will produce 3 million gallons of fresh water per day as well as \$30-40 million worth of fish and vegetables per year. In addition to the 10-megawatt plant, there is a standard design for a 100-megawatt plant that produces 32 million gallons of freshwater per day and will produce at least \$100 million worth of fish per year.
- We believe that this is a very critical commercial development. It addresses global warming and hunger on a global basis. We are all concerned about wars over water. We can convert our 100-megawatt plant, for example, to produce just freshwater. We can produce 130 million gallons per day.
- We are in the Middle East. We are talking to the Arab nations. They need 5 billion gallons of freshwater per day. That is seven of our plants. They are \$200 million each. This not only addresses a tremendous opportunity for a solution to global warming and all the other things I mentioned, but it is a tremendous ship-building opportunity for this country.
- We are working with the governor of Maryland. We have identified the possibility of building six ships per year at Sparrow's Point Shipyard. That would create a whole new industry of 25,000 workers. It would also address national security because this will have a tremendous impact on the distorted production of oil. Our country is relying too much on oil as is most of the rest of the world.
- By converting to OTEC, which is a baseload technology, it generates electrical power 24 hours a day. This is not part time like wind or solar; it is baseload power. We believe that this is one of the most important commercial developments.
- We have full funding. What we are seeking is government support not through dollars or finances, but support from a Commission such as yours, where you are trying to identify new opportunities and at the same time solutions to major problems. This technology provides that opportunity.

Recommendations:

- What I would like to recommend is that in the near future that we - our organization, my company, and your organization, your Commission - somehow create a dialogue so that we can help each other within the federal government.
- One of the critical junctions that we now face is that the Japanese government, the U.K. government, and other governments are now recognizing this opportunity. For example, the Japanese government is providing \$80 million to build a 3 megawatt plant in Palau.
- We are building a 10 megawatt plant for \$50 million, and we have private funding. We can show a profit on the first plant. There is this tremendous opportunity, economic and environmental, that we, the U.S., should take a lead position in. I think that by working together we accomplish that.

NORSE

Dr. Elliot Norse, President, Marine Conservation Biology Institute
Los Angeles, CA, Apr-19-2002, Habitat and Living Resources Panel
Invited Testimony

Key Points:

- America's fisheries are in crisis. We must move towards a policy of ecosystem-based management, not single species; vigorously protect naturally functioning marine ecosystems and ensure that resource extraction is truly sustainable; and move towards policies of recovery and stewardship of ocean ecosystem.
- Protecting and restoring biological diversity has become the driving force in conservation worldwide but biodiversity is conspicuously absent from 1996 version of Magnuson-Stevens Fishery Conservation Act (M-S Act).

Recommendations:

- Amend M-S Act: Enact the Fisheries Recovery Act, HR 2570 and Ocean Habitat Protection Act, HR 4003. Insert language into M-S Act to give strong, clear, unambiguous biodiversity conservation mandate putting resource first. Change the structure of the regional fishery councils and staff so fisherman, processors, and others have major role in determining their advice on allocation of the allowable catch but none on determining allowable catch levels. Add provision to establish strong and clear performance guidelines for councils. Add language that states clearly to National Marine Fisheries Services (NMFS) that councils are advisory bodies and NMFS must exercise ultimate regulatory authority. Congress should provide substantially increased funding for NMFS to develop and fully implement short, medium, and long-term components of ecosystem management systems, including research.
- Enact new stand-alone legislation-the Marine Fisheries Commission Act (MFCA)-to establish and fund a federal Fisheries Management Commission to provide independent oversight of the fishery management councils.
- Enact legislation to establish a national system of protected marine reserves to protect, within biologically sound, viable borders, the "best places" in undersea lands and representative samples of all ecosystem types in each of the marine biogeographic regions. The primary purpose is to protect and recover biodiversity within America's Exclusive Economic Zone (EEZ).
- Enact new legislation-Exclusive Economic Zoning Act (EEZA)-that would establish mechanism leading to comprehensive zoning of U.S. 4.4 million square statute mile EEZ as means to increase protection for biological resources while providing major classes of users greater assurance of being able to operate with minimal or no competition from other classes of users.
- National Science Foundation (NSF) and National Oceanic and Atmospheric Administration (NOAA), or new Departments of Oceans, should initiate and maintain funding program in marine conservation biology. Program would establish eight academic "Centers of Excellence" in research and training at universities or marine labs throughout coastal areas of U.S. states and territories, and extramural graduate fellowship program for students at other colleges and universities. NSF should attempt to increase participation in research and training by minorities who are significantly under represented in marine science at present.
- Establish cabinet-level Department of Oceans. Reorganize existing departments wherever practicable, whose purpose is to safeguard biodiversity within EEZ, to foster and regulate ecologically sustainable uses. New legislation should be governed by organic act that requires oceans be managed on ecosystem basis, with conservation as foremost objective and should require consolidation and perhaps elimination of existing single-focus laws. Encourage scientific research and monitoring to protect the safety and health of those who use our federal waters. Create Ocean Coordinating Council (OCC) to reduce conflicts.

Responses to Questions:

- Suggest oversight body for the fishery management council process and restructuring councils so that allocation is separated from the issue of what allowable catch is from conservation issues.

NORTH

Mr. Walt North, President, Community Action
Seattle, WA, Jun-14-2002
Public Comment

Key Points:

- Community Action is a small organization and is intensely involved in education. They have 23 schools in the Seattle area in which there are salmon in the classroom programs.

Recommendations:

- Recommend the expansion of the program.

NOTTHOFF

**Ms. Ann Notthoff, California Advocacy Director, Natural Resources Defense Council
Los Angeles, CA, Apr-19-2002, Coastal and Outer Continental Shelf Management
Invited Testimony**

Key Points:

- Environmentally harmful coastal development results from insufficient funding, perverse incentives, and lax or nonexistent standards.
- Conflicting federal programs provide perverse incentives to develop and do not attempt to manage development and protect vital areas.
- The coast is far from saved. After 30-years tenure, Coastal Zone Management Act (CZMA) has helped promote better land use management in some states, but failed to adequately protect coastal habitat and sensitive areas.
- Target acquisition of important wildlife habitat and resources (i.e., barrier islands, wetlands, etc.) and permanently protect them through funding mechanisms like competitive grants and public bonds. "Healthy coast surcharge" percentage of each real estate transaction for transfers goes to acquisition fund.
- End perverse federal incentives for coastally destructive development: National Flood Insurance Program and Army Corps beach nourishment and armoring; coastal Barrier Resources Act (CBRA) should be expanded to the pacific coast.
- Institute meaningful growth control measures to protect coastal resource lands. Limit impervious surfaces in watershed to less than 10% of total land area. Set residential densities at levels that can support transit and reduce vehicle trips per household.

Recommendations:

- New funding under CZMA should be tied to state and local governments instituting growth management regulations conforming to growth management principles. Strengthen polluted runoff controls in the CZMA. Coastal Nonpoint Pollution Control Program (California's Coastal Zone Act Reauthorization Amendments) must be authorized and integrated into CZMA with increased funding. It must provide meaningful incentives and penalties. Monitor and evaluate state nonpoint control programs to ensure implementation.
- Continue prohibitions on new leasing in environmentally sensitive areas. RDC opposes Minerals Management Service's (MMS) planned opening of "frontier" Outer Continental Shelf (OCS) basins in fragile Alaskan waters. Establish additional tanker safety routes along environmentally sensitive coastlines. Maintain state and federal partnership through strong consistency authority that is maintained legislatively and upheld legally.
- Develop a national policy to protect ocean ecosystems:
 1. Move fishery management away from single species model to one designed to sustain all living marine resources.
 2. Recognize importance of non-consumptive uses of the ocean. Encourage use of tools that protect ecosystems.
 3. Authorize and encourage use of fully protected marine reserves and other protected areas.
- Elevate oceans within federal system with a Cabinet-level ocean department. Give the new federal ocean agency and ecosystem protection mandate and broaden authority. Give responsibility for determining catch levels and other science-based management measures to federal agency. The role of industry-based councils should be advisory, focused on allocation. Zoning should be used to restrict potentially damaging gears.
- Strengthen the role of science and shift burden of proof. Establish national science commission with regional arms. Shift perspective of management. Assume new activity remains at pilot level until enough information is gathered to show no harm.

NOWELL

**Dr. Arthur Nowell, Dean and Professor, College of Ocean and Fishery Sciences, Univ. of Washington
Seattle, WA, Jun-14-2002, Ocean Science, Exploration and Education Panel
Invited Testimony**

Key Points:

- This Commission has an opportunity to make substantive and implementable recommendations that can affect the types and quality and availability of graduate and undergraduate students coming from the 60 or more academic institutions that produce doctoral students, and the one or two universities that are also engaged in undergraduate teaching of ocean science majors.
- Progress in the science of oceanography in America now suffers from one of its greatest handicaps, for progress in this science is a matter not only of ships, laboratories and money, but far more of men, which implies opportunities for education.
- Education is a shared responsibility between the academic institutions and the Federal Government.

Recommendations:

- NOAA should direct its labs in OAR and NMFS to encourage their scientists, in practical and beneficial ways, to join in partnership with nearby academic institutions in teaching courses, advising students and providing experiential learning opportunities for undergraduates.
- NOAA should take responsibility to provide training funds to universities to support students.
- NSF should break down the barriers between its science directorates and its education directorate.
- NSF should look at the NIH institutional traineeship model that has proved so effective in the health and medical sciences.
- ONR should reconsider its dwindling investment in graduate education and consider how it could provide increased number of fellowships under the NDSEG heading especially as a long-term investment in homeland security.
- The Commission should encourage universities to increase the teaching of oceanography at the undergraduate level.

Responses to Questions:

- One of the major goals of NSF should be to extend their remaining awards from the current two years, to five years. That is, copy not just what the DOD has done, but also the NIH model where the rewards are for five years, and an automatic renewal is subject to satisfactory progress. Otherwise we are just looking at the short term management of science, rather than the long term investment.
- The way to open up academia is for academic institutions to offer appointments to those in state and Federal labs who advise and support students, for affiliate faculty positions. It is recognition of their academic quality and makes them colleagues. There is another way, also, and that is to have part of their job as Federal employees to teach courses. That model does not exist in NOAA.
- As far as employment opportunities in the marine related areas, I can take a local example in the School of Oceanography at the University of WA. Forty percent of faculty will turn 65 by the year 2007. Many will retire, as will those of the same age in the Federal agencies. There was a boom of hiring in the 1970s. In the next five to ten years there will be a desperate need for those knowledgeable in the marine sciences.

NUGENT

Ms. Ingrid Nugent, Student, University of New Hampshire

Boston, MA, Jul-24-2002

Public Comment

Key Points:

- The young, like myself, should exercise their voice. Inexcusably, many young people who are eligible don't even vote. They don't even understand or follow the policymaking process. Maybe they're discouraged. Maybe they don't realize how important it is yet. Forgive us. We'll be in your shoes someday.
- Trying to clean up environmental policy mistakes became, in part, from the lack of foresight. The culture of science is such that there will usually be doubt. Please don't gamble with our future because of this inevitable uncertainty. Please be courageous by practicing just a little bit of our idealism.

NUSSMAN

Mr. Michael Nussman, President, American Sportfishing Association

Washington, DC, Nov-14-2001, Fisheries Organizations Panel

Invited Testimony

Key Points:

- Striped bass landings exceeded 12 million pounds per year in the early 1970s. By the early 1980s, that number was 3 million pounds per year from overharvesting and degradation of marine environment. After the passage of the 1984 Atlantic Striped Bass Conservation Act, striped bass populations rebounded. By 1996, recorded landings reached their highest levels since 1975.
- Fisheries must be managed to protect and rebuild overfished populations.
- Politically expedient solutions like ocean wilderness proposals that severely restrict or eliminate public access to national resources must be avoided.

O

O'KEEFE

**Ms. Sheila O'Keefe, Student, Oregon State University
Seattle, WA, Jun-14-2002
Public Comment**

Key Points:

- One thing that has not been addressed is the need for people to synthesize and apply what we do know about the oceans, what science has taught us.
- Fellowships should include a management policy component to encourage any scientists to not only do state of the art research but also to synthesize what we know now and apply it to ongoing policy programs so the best science can be used in making policy decisions.
- Less than half of one percent of the U.S. exclusive economic zone is presently protected marine reserves. This is an atrociously small amount.
- We want marine protected areas, firstly, for intrinsic value. The defense of the wilderness is an inherent part of the American character. They can also provide an insurance policy against overexploitation. So even if we predict wrongly how many fish we are going to have, then we will have some percentage where we haven't been fishing at all and those fish will be there to repopulate the other areas.

Recommendations:

- The Commission should encourage more scientists to synthesize and apply what is currently known about the science and the policy issues.
- The Commission should recommend that we enhance and expand our network of marine reserves to where it is a fully representative national network through the U.S. EEZ.

OGDEN

**Dr. John Ogden, Director, Florida Institute of Oceanography
St. Petersburg, FL, Feb-22-2002
Public Comment**

Key Points:

- The public is beginning to perceive that the ocean is only about fishing.
- Create a national goal. We need to create an ocean use plan for the EEZ.

ORBACH

**Dr. Michael Orbach, Director, Duke University Marine Laboratory
Charleston, SC, Jan-15-2002, Coastal Urbanization/Land Use Change and Effects on the Ocean Panel
Invited Testimony**

Key Points:

- The total population living, working, and recreating at coast is ever increasing. This population is getting older and richer. Traditional populations-often specific racial or ethnic-are being displaced by rising property values.
- In general, economies of coastal areas are converting from extractive/heavy industries to dependence on leisure, tourism, and retirement (i.e., commercial fishing becoming displaced by competition for waterfront land and marinas for recreational clients).
- Quality of beach and water access is extremely variable across the region. Access is affected because of trend towards "exclusive" business/residential.
- Most coastal municipalities and counties in the region lack basic comprehensive planning frameworks and resources.
- In general, there is still a lack of understanding of common natural phenomena such as barrier island movement, sea-level rise, tide and storm impacts on estuarine function. Problems worsen farther offshore.

Recommendations:

- As more second homes are built, significant socioeconomic effects on who can live at the coast. This has created opposition between development and environmental interests; need a different model that addresses it as design problem therefore need to involve more people.
- Formatting information for the public in ways that the public participates is an important change in delivering information. Coasts and oceans information need to be in front of people everyday.

- Science and education information format is an investment.
- Look at the Marine Protected Area (MPA) initiative: we should look at networks that cross the land/sea line.
- A professional whose business it is to stimulate an ongoing discussion network is yet another investment.
- Invest in the stimulation of public/private partnerships.

OSTROM

Mr. Robert Ostrom, Chief Counsel, U.S. Maritime Administration
Boston, MA, Jul-24-2002, Regional Coordination of Ocean Policy Panel
Invited Testimony

Key Points:

- One of the goals of the Maritime Administration is to actively promote and develop the domestic merchant marine so as to advance America's economic growth and competitiveness domestically and internationally through efficient and flexible transportation.
- The demand on our national transportation system is growing so rapidly that it will be difficult to build ourselves, physically or financially, out of the approaching capacity crunch. The existing infrastructure cannot handle the projected growth in freight movements, and there are clearly limits to how much capacity can be increased on interstates and rail lines.
- The expanded use of the marine transportation system has obvious benefits. In general, waterborne transportation is the most economic of modes on a ton-mile and a TEU-mile, that is 20 equivalent units mile basis. Congestion relief on main corridors will reduce business costs related to transportation delays. Marine transportation is also environmentally friendly. Vessels are less polluting on a per-container basis and have far fewer accidental spills or collisions than surface vehicles.
- Challenges facing U.S. ports:
 1. Landside access
 2. Marine terminal, including the ship-to-shore interface
 3. Vessel traffic.
- Intermodal connections between the transportation modes are often the weakest link in the nation's transportation system. The major ports of the nation are predominantly located in large metropolitan areas where truck and rail traffic compete with commuters on crowded highways. The Department of Transportation has been working on the issue of marine congestion for some time. The Maritime Administration and the U.S. Coast Guard have been charged with the responsibility of identifying and recommending water-based solution to transportation and planning needs.
- There are several intermodal projects which exhibit real potential for economic growth. The NY/NJ plan will feed containers to remote locations directly by barge, thereby alleviating congestion at NJ container terminals and on regional highways and effectively expand port facilities far beyond their present size. In San Francisco Bay, the Bay Area Water Transit Initiative believes an increased use of ferries for commuting will help the environment, relieve highway congestion, provide choice and reduce commuter stress. The only transportation system still functioning after the collapse of the world Trade Center, on 9/11, was the New York City maritime system. New York used the marine system VHF radios to maintain emergency communication after the attack. It was the only communication system still working.

Recommendations:

- The question of whether or not focus can be placed on trying to prioritize transportation projects is really dependent on if there is political will in the various segments. The various segments have long been operating on their own and them actually be pulled together, since not all projects can be funded is not an easy challenge.

OYNES

Mr. Chris Oynes, Regional Director, Minerals Management Service, U.S. Dept. of the Interior
New Orleans, LA, Mar-08-2002, Offshore Energy 1 Panel
Invited Testimony

Key Points:

- MMS seeks to assess availability of OCS energy and nonenergy resources; determine if resources can be developed in environmentally sound manner; and regulate all operations activities when leasing occur to ensure safety and environmental protection. Major MMS issues include: deepwater development (1,000 feet); deep gas in shallow water; ability to integrate conflicting mandates; safety; sand program; scientific and technical research; and Proposed Atlantic Pipelines.
- Revision of ocean governance must include regulatory structure to govern actions of those who use ocean resources with clear lines of authority to make decisions. New legal authority is needed to govern use of ocean for non-energy facilities associated with deepwater development. Facilities, housing, emergency landing, field hospitals, and waste management must be supported. Give MMS the primary responsibility for permitting OCS-related activities. OCS oil and gas development needs predictability and clarity.

- EPA and MMS have conducted studies concerning mercury levels associated with offshore platform operations and have found uptake levels in fish. Organisms near platforms did not differ significantly from those further away. Financial issues are the biggest problem with reusing platforms, especially for aquaculture. Changing legislation may make it easier for platforms to be reused for other purposes. MMS would probably not be involved with “organisms for pharmaceuticals” on OCS.
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P

PAGE

Captain Ed Page, Executive Director, Marine Exchange of Alaska
Anchorage, AK, Aug-22-2002
Public Comment

Key Points:

- Marine Exchange of Alaska is a non-profit organization. The marine industry has supported us in this and developed this organization. The organization's goal is to provide information communication services to insure safe, secure, efficient, and environmentally responsible maritime operations. Alaska is the nation's maritime state.
- Our position is that protecting Alaska's rich maritime environment is a shared commitment. Our group is committed to work with government, the maritime industry, and the collective public on a problem that requires attention. Marine Exchange of Alaska prevents maritime casualties and assists with compliance of safety and environmental regulations. There is a plethora of regulation but the challenge is to have the regulations in the hands of mariners so they have them readily available and they can comply with them.
- Eighty percent of maritime casualties are attributable to the human element and that is the first priority. The group tries to work together with the maritime community to develop a cadre of maritime professionals [discussion provided]

PAINE

Mr. Brent Paine, Executive Director, United Catcher Boats
Anchorage, AK, Aug-22-2002
Public Comment

Key Points:

- United Catcher Boats is an association of fishing vessel owners who primarily fish Pollock, cod, and crab in the Bering Sea, and a bit of fish in the Gulf of Alaska and off the west coast of Washington, Oregon, and California. There are 65 vessels in the organization.
- There are three important words that have come out during these testimonies...stewardship, governance, and information research or data gathering.
- There is a proposal to look at the effects on the Aleutian Islands of a fishery that is out there. That is the right place to do it. It should be done at a regional level; it should not be done at some Washington D.C. office with people who don't understand what really goes on at the fishery community level. This is an example that the Council process is working.

PALMER

Mr. Jimmy Palmer, Regional Administrator, U.S. Environmental Protection Agency
New Orleans, LA, Mar-08-2002, Pollution and Hypoxia Panel
Invited Testimony

Key Points:

- The region has talent. There is concern about capacity as resources are strained. Coping with the volume of work and issues is challenging.
- Gulf of Mexico Program is meant to bring state, federal, local, public, and private representatives to identify resources that could be joined to deal with issues. But as good science was generated, connections of solutions with human activity got people concerned. Program is now less than it was years ago. No national mandate for Gulf Program.
- Evaluate Program.
- Without mandates for programs like Gulf of Mexico, it is much harder to persuade federal counterparts to move through consensus. A certain degree of research competition among federal agencies is likely to always be there. We need a coordinated plan for agencies to work with. Better permitting for considering cumulative impacts best handles on local level through zoning and planning.

PANETTA

**The Honorable Leon Panetta, Chair, PEW Oceans Commission
Washington, DC, Nov-13-2001, PEW Oceans Commission Panel
Invited Testimony**

Key Points:

- Oceans are in crisis:
 1. Pollution contributes to the crisis from excess nitrogen from nonpoint.
 2. Coastal development impacts the ocean.
 3. Fishing is experiencing diminished stocks and increased aquaculture.
 4. There is too little coordination in governance.

**Washington, D.C., Oct-30-2002, Featured Speaker
Invited Testimony**

Key Points:

- It is very important to extent possible that both commissions try as much as possible to complement each other in terms of our recommendations. I think there's a huge danger that if one commission does one thing and the other commission does another thing.
- Governance: There is generally a broad lack of coordination. There is conflicting guidance that is often provided.
- Fisheries: The estimate is that 25 to 30 percent of all commercial fisheries are being impacted right now in some way by either overfishing or destruction of those fisheries. Bycatch, as you know, is a huge problem.
- Pollution: We've made good progress in over 30 years on direct sources of pollution, on point sources. But over the last 30 years, what's happened is we've had increased pollution from non-point sources.
- Development: It is clearly impacting on our wetlands and marshes and we are losing them as a result of that kind of development.
- The problem is that the threat from the resources largely is from our own -- from ourselves, from our own behavior.

Recommendations:

- Governance: This country has to pass some kind of national ocean policy act- implemented through what we would call regional ecosystem councils. We think it's very important at the national level to restore some coordination at the national level. So we are going to recommend the national oceans council that basically brings the agencies and departments together in some kind of coordinating council at the White House level. At least taking NOAA and making it an independent ocean agency that can operate separately in the ocean's area.
- Somehow we've got to make people think about the relationship between what happens on land does affect what happens in the ocean.
- We need to take this broad view of looking at the ecosystem and try to govern pursuant to that kind of approach.
- We've got to convince people that this is a public trust.
- Fisheries: We think we have to move away from single species management towards ecosystem managements and, again, we would like to see through these regional councils working with fishery councils, the implementation of tools that would allow for that kind of approach to sustainable fisheries. We are looking at how do you separate the scientific decision about how many fish ought to be caught from the process of dealing with whom should catch them.
- Pollution: We need to strengthen the Clean Water Act and try to deal with the non-point sources of pollution.
- Coastal Development: We need to expand ways to change land development practices to reduce runoff. We need to promote efficient development.
- Other Concerns: Aquaculture needs help to do the right thing; science needs additional funding; and, we need to improve the ability to educate and make citizens aware of these issues.

Responses to Questions:

- OMB ought to be at the table of the Ocean Council-once you get somebody involved with the money, the power flows very quickly.
- We concluded that fisheries councils are probably a good place to start for defining ecosystems.
- NOAA could probably stand on its own but should add some marine operations at Interior and even Dept. of Agriculture.
- For a Council to really work it should be established by law and the President has to say ocean policy is something I care about.
- Would like to see each regional council develop regional "plan" for issues of the area.
- Councils should have equal representation from key state agencies and not be dominated by Federal agencies.
- Protected areas or reserves should be part of a tool box and developed at the local level.

PARKER

**Mr. Walter Parker, Member, North Pacific Research Board
Anchorage, AK, Aug-22-2002
Public Comment**

Key Points:

- CITF was set up to ensure that the 1,500 small communities of the Arctic, most of which are in the Russian federation, would have adequate transportation, communications, and other infrastructure to maintain themselves in this century on a reasonably even playing field.

Recommendations:

- Recommend that the U.S. has a Bering council—a council made up of Canada, the U.S., Russia, Japan, and possibly Korea.
- The emphasis should be on contaminants.
- Alaska needs help in finding a way to cross-cut Federal budgets.

PARRAVANO

**Mr. Pietro Parravano, President, Pacific Coast Federation of Fishermen's Association; Member,
PEW Oceans Commission
Los Angeles, CA, Apr-19-2002, Habitat and Living Resources Panel
Invited Testimony**

Key Points:

- Observations from America's fishermen:
 1. Professionalism—Fishermen must be recognized as professionals. Programs are needed to teach next generation of fishermen and sustain industry and way of life.
 2. Knowledge—We need to find ways to bring knowledge about ocean and fish to resolve problems facing industry.
 3. Habitat—The most important thing we can do for industry is protect habitat.
- As a Fisherman:
 1. One of biggest impediments to good fishery management has been lack of good data.
 2. Best fishery governance and research will do us little good unless external factors to fish activities are also addressed.
 3. For fisheries, the number one issue of compatibility is to assure other ocean users do not destroy habitat or pollute water.
- There needs to be funding for management. Enforcement and research have an ad valorem fee on all seafood sold in U.S.

Responses to Questions:

- Funding is an important part of our change.
- We lack ability to adapt the harvest capacity of our fleet with what there is and to adjust the capacity with the size of the fish stocks.
- Magnuson-Stevens Fishery Conservation and Management Act (M-S Act) seems to work well in Alaska because the fishing industry and the communities are part of the process.

PATE

**Mr. Kerry Pate
Charleston, SC, Jan-16-2002
Public Comment**

Key Points:

- Long-term vision
- Ecosystem-wide issues
- Sustainable ocean management vs. exploitation

PAUL

**Ms. Linda Paul, Director of Aquatics, Hawaii Audubon Society
Honolulu, HI, May-14-2002
Public Comment**

Key Points:

- Living marine resources are a public trust resource. Harvesting is a privilege, not a right. Prohibit importation and processing of shark fins in U.S.
- Magnuson-Stevens Fishery Conservation Act (M-S Act) needs to be retired and a new national Living Marine Resources Conservation and Management Act developed.
- Saltwater Aquarium and live fish trade are damaging. Help curb alien species proliferation.
- National Wildlife Refuges in the Pacific all need a consistent 12-mile seaward boundary to provide adequate foraging area for nesting seabirds.
- The Department of Interior's (DOI) jurisdiction of the Migratory Bird Treaty Act needs to be extended to entire U.S. Exclusive Environmental Zone.

PAUTZKE

**Dr. Clarence Pautzke, Executive Director, North Pacific Research Board
Anchorage, AK, Aug-22-2002, Arctic Issues Panel
Invited Testimony**

Key Points:

- The regional approach to fisheries management is robust. Each region has unique and complex issues and tensions that collide in the management process. They must be addressed regionally.
- Fishery management off Alaska had a strong foundation.
- Responsible stewardship continues for Alaska fisheries. Components of our continuing resource stewardship are:
 1. Good science and frequent stock assessments.
 2. Firm catch limits.
 3. Conservative management.
 4. Monitoring and enforcement.
 5. Capacity restrictions and community protection.
 6. Mitigation of fisheries impacts on other elements of ecosystem.
- We must move toward ecosystems-based management.
- We must leave a legacy of better science and understanding to enable successful stewardship.

Recommendations:

- Have research boards divided up regionally, in the way that the NMFS is divided throughout the country. That would work with the local constituents and the local scientists to develop long-term research programs.
- Comprehensive marine research is needed.
- Recommend legislative changes that may prompt regional councils to move toward ecosystems-based management, but recognize that extensive information is needed to do it successfully.

Responses to Questions:

- Yes, the North Pacific Research Board is unique. We have an endowed fund that can generate from year to year a level of funding that we can use for research. As long as that fund is protected and it's available, we can support long-term programs, particularly monitoring programs. There are common types of research issues to all regions. The various regions should be communicating and learning from each other and building on each other. That would bring additional credibility to the science. Any improvement in the information and the science that is supporting your management decisions as vetted through an SSC would improve the credibility of the process.
- The Council is moving towards an ecosystem based management program for the last five or six years, from a focus on the individual species that they manage. Now they are looking at the broader community of species that are out there, particularly the ones that are very visible to everybody like the seabirds, the marine mammals, etc. Our Council is probably one of the first to incorporate a chapter in our SAFE document, which is a Stock Assessment and Fishery Evaluation document, which is required of all Councils. [discussion provided].
- When the Council examines its stock assessments, which they do every fall, it has information that comes before it at its December meeting when they're setting their actual harvest levels for the next year. And, consequently, they have this annual process where they are becoming more and more aware of the impacts of the fisheries and on other components of the ecosystem.
- There is a NEPA process the Council undertakes that is a complete analysis within the terms of NEPA and then they do a large ground fish environmental impact statement, which is an assessment to look at all of the dynamics of the ecosystem under various alternatives they could use for future management.

- Whether we try and wrap NEPA and ESA and all these other acts together, all those requirements into one, maybe under the umbrella Magnuson-Stevens fisheries Act or whatever, we still need that information there to make a decision in a structured format.
- It is not just trawls that affect coral. You also have long liners out there, crab pots, anything that comes crashing down. It takes a lot of ship time and a lot of money and research to map out coral areas. There is a lot to consider when thinking of closing down areas to protect corals. Remember the Council already closed down areas to protect sea lions, to protect crab, and so as you start to pinch in on one particular area you send the fleet into another area and pretty soon you have cordoned off major areas in fisheries and concentrated that fleet into other areas to get their quotas. And then you can have extreme impacts on those areas where they are all concentrating. There needs to be protection but there needs to be balance too.

PAWLOWSKI

Captain Bob Pawlowski, Thales GeoSolutions, Inc.
Anchorage, AK, Aug-22-2002
Public Comment

Key Points:

- In conducting marine surveys in Alaska, it is important to recognize the lack of coastal data and infrastructure. Alaska has 60% of the nation's charting backlog, and lacks accurate tidal datums for determining coastline.
- Multi-beam mapping, and other existing technologies, provide depth and other information, allowing scientists to define differing bottom types and to quantify slope areas known to support certain types of fish.
- There is an increasing need for data collection in our coastal zone to support management efforts of NOAA, EPA, USFWS, and state agencies. Through a national policy we can build programs that employ our local people in using their knowledge to support data collection for science based decisions.
- In order to have our local resident play roles in the data collection in their remote location, they must understand their waters, understand the communities, and be able to provide valuable hands for the collection of marine data. They need some training and they need some education in it.
- One or two jobs in the coastal community in marine research is a measurable percentage in the workplace. As jobs move out of fisheries it is important that there is recognition that marine research is a career field.

Recommendations:

- Support a strong program for the mapping of Alaska's coastal zone and EEZ
- Recognize the importance of existing technologies, like multi-beam mapping, in supporting science based decision making for coastal and marine programs.
- Support education and training programs that enable our residents to contribute to research data collection needs in their remote locations.

PAYNE

Dr. Roger Payne, President, Ocean Alliance
Boston, MA, Jul-23-2002
Public Comment

Key Points:

- "The Voyage of the Odyssey", an Ocean Alliance program, is aimed at quantifying a serious threat to ocean life from synthetic compounds known collectively as POPs (Persistent Organic Pollutants). Included are compounds such as DDT, DDE, PCBs, aldrin, endrin, dieldrin, dioxins, furans, etc. Their other name, Endocrine Disrupting Compounds (EDCs), describes their greatest threat to humans-that some of these compounds are hormone mimics which even at concentrations as low as a few parts per billion can upset fetal development, cause reproductive disorders and malformation of sex organs, compromise immune systems, do neural damage, and, in young children, diminish their ability to concentrate and learn.
- One of the best ways to study EDC concentrations in the seas is to analyze the fats of whales-especially predators like sperm whales. Bearing in mind that the U.S. government forbids the sale of fish containing more than two parts per million of PCBs, and that anything with more than 50 parts per million is classified as a toxic waste, killer whales have been found with 400 parts per million of PCBs. [discussion and more examples provided].
- The Voyage of the Odyssey, a 5-year research program currently in its second year, is designed to quantify pollutant concentrations in the world's oceans. The Odyssey is now in the middle of the Indian Ocean. [Background and details of the Odyssey experiment provided].

Recommendations:

- A national ocean policy is needed that supports work on the kind being done aboard the Odyssey and which also supports the kinds of programs Ocean Alliance is doing in partnership with educational institutions across the country.

PEAU

**Mr. Lelei Peau, Deputy Director, Department of Commerce, American Samoa
Honolulu, HI, May-14-2002, Ocean Use and Management Panel
Invited Testimony**

Key Points:

- Merge of traditional and cultural approaches with Western style of management of resources is an ongoing challenge for both small Pacific Island nations and U.S. federal structures.
- Acknowledgement of existing patterns and incorporation of traditions and cultural norms is the key to implementing successful resource management program in the Pacific.
- Recognizing integration is required when instituting resource management programs is advocated as critical starting point and is to be merged in implementation approaches.

PENNEY

**Mr. Robert Penney, Founder and Chairman Emeritus, Kenai River Sportfishing Association
Anchorage, AK, Aug-21-2002, Management of North Pacific Living Marine Resources I Panel
Invited Testimony**

Key Points:

- Alaska must find ways to protect the habitats on which production of living marine resources depend.
- Alaska must address critical needs for long-term biological and physical data on ocean and coastal habitats.

Recommendations:

- The Federal government needs to provide basic observations on ocean conditions to the managers of living marine resources who also serve millions. [discussion provided]
- A national backbone is needed to support the regional programs Alaska already has underway, such as the Gulf of Alaska Ecosystem Monitoring and Research Program (GEM), and the North Pacific Research Board (NPRB).

Responses to Questions:

- Every year we have a sport fishing contest tournament in the Kenai in which we practice catch and release. Senator Stevens is a sponsor. Each year we raise three-quarter to a million dollars net. We don't give any money away, we just give out prizes. All the money goes back into habitat restoration projects.
- All the baby salmon live within four foot of the bank-millions of them. We used to walk along the bank and as a result we destroyed the bank and knocked down the brush, like they still do in the south 48. We've learned you can't do that. We've restored the habitat back to where the fish have a place to live and be protected. The same thing that we did in the Kenai by learning and correcting what we've done is taking place in the ocean.

PENNINGTON

**Mr. John Pennington, Director, Northwest Regional Office, Federal Emergency Management
Administration
Anchorage, AK, Aug-22-2002, Marine Emergency Planning and Response
Invited Testimony**

Key Points:

- The Federal Emergency Management Agency (FEMA) is responsible for the National Flood Insurance Program (NFIP). Community participation in the NFIP is voluntary and each flood-prone community must assess its flood hazard and determine whether insurance and floodplain management would benefit the community's residents.
- In May 2000, FEMA commissioned a report by the Heinz Center for Science, Economics, and the Environment, which concluded that approximately 25% of homes within 500 feet of the U.S. coastline would fall victim to the effects of erosion with the next 60 years.
- One response by FEMA has been to develop a plan to achieve a nationwide updating of Flood Insurance Rate Maps (called the Map Modernization Initiative).
- FEMA has developed a Coastal Construction Manual that specifies coastal building design and construction standards for coastal areas.

Recommendations:

- Seek legislation to authorize the Map Modernization Initiative, as well as consideration of coastal erosion data in the flood insurance rating schedule.

Responses to Questions:

- The Federal government will never be able to force communities to make substantial changes just on the sheer politics of it alone.
- FEMA will not get involved unless the Presidential declaration comes forth. EPA and the Coast Guard have their programs and jurisdiction and FEMA has their programs and jurisdictions.
- FEMA has informal meetings and communications with the Coast Guard and NOAA.
- FEMA shares quite a bit of information with other Federal agencies in mapping special flight hazard areas. The flood model that is used actually belongs to the USACOE. That flood model was developed to map both river and coastal flood zone areas. The vast majority of the various flood maps were actually done by other Federal agencies, normally ACOE and USGS. Currently, private contractors do most of the mapping because they can do it faster than the Federal agencies that have fewer resources. There is great coordination both regionally and nationally.

PERFETTO

Ms. Stacy Perfetto
St. Petersburg, FL, Feb-22-2002
Public Comment

Key Points:

- We need more sanctuaries that are no-take.
- Good laws exist, but they are not enforced.

PHILLIPS

Mr. John Phillips, Director, Ocean Conservancy's New England Regional Office, Maine
Boston, MA, Jul-24-2002
Public Comment

Recommendations:

- Urge the Commission to recommend adopting a national oceans act that sets criteria, indicators, and policies to protect ocean ecosystems.
- Create a national oceans agency to consolidate the many Federal bodies responsible for ocean resource management.
- Reform the composition of the existing fishery management councils to expand the representation of stakeholders other than commercial and sportfishing interests.
- Clearly establish the authority to set target catch limits within the Federal fishery management agency rather than at the fishery council level.
- Establish a network of no-take Marine Protected Areas to protect and restore representative ocean ecosystems.

Documents Recommended:

- "Health of the Oceans", an Ocean Conservancy report.

PLETNIKOFF

Mr. George Pletnikoff
Anchorage, AK, Aug-22-2002
Public Comment

Key Points:

- Subsistence is the way of life for our Unangan people, and our tribe needs to direct research to ensure that we have healthy environments to provide adequate subsistence resources.
- Commercial, recreational, charter boat businesses, and subsistence needs are all competing for a limited amount of resources. [Further description provided.]
- The tribe should begin to develop a Local Area Management Plan (LAMP) for the Unalaska Bay Area, one that is based on ecosystem principles.

POOLE

Mr. Richard Poole
Seattle, WA, Jun-13-2002
Public Comment

Key Points:

- Human population growth has a great impact on environmental consequences. Demands on the resources of the world for feeding and sheltering this mass of people is reaching limits.
- We have reached a stage where all the events produced by man are intertwined and each affects the other.
- Fisheries resources are an excellent case where population growth has reduced the available fish and causes changes in the views of how this resource should be managed.

POWELL

Dr. James Powell, Wildlife Trust
St. Petersburg, FL, Feb-22-2002
Public Comment

Key Points:

- Issues always seem to come back to population growth because population is primarily oriented along the coast.
- Increased growth of recreational boats, impact on manatee mortality, and seaturtles and seagrass scarring is the result.
- Regulating agencies have become partially paralyzed. Decisions are reactive and not proactive.
- Summit workshops to bring people together.
- Good science requires accountability.
- Provide priorities and resources for research.

PRAGER

Dr. Ellen Prager, Assistant Dean, Rosenstiel School of Marine and Atmospheric Science, University of Miami
St. Petersburg, FL, Feb-22-2002, Ocean Science and Education Panel
Invited Testimony

Key Points:

- Oceans play a minor role in national science education standards, and are included as a small component within earth and space science sections. Kindergarten through 12th grade teachers are inadequately trained to teach marine science or incorporate ocean learning into the classroom.
- Federal programs have supported development of marine science teacher training programs and curricula. There are few means to provide funding to sustain, disseminate, or coordinate these programs.
- Many highly regarded teacher training and Kindergarten through 12th grade education programs are struggling or have disappeared altogether. Many seek funds through the National Science Foundation's (NSF) new Center of Ocean Science Education Excellence (COSEE) for programmatic support rather than for the coordination effort for which it was intended.
- Several federal agencies now require outreach to be part of research proposal. This is a good start but not necessarily effective means to combine science with education. Scientists are good at science not education.
- Few broadcast media give science a chance.

Recommendations:

- Oceans must be better represented within the national science standards.
- Excellent marine science curricula and activities must be coupled with adequate teacher training.
- Long-term coordination and commitment is needed. Establish an Office of Education and Outreach within National Oceanic and Atmospheric Administration (NOAA) to coordinate educational programs nationwide and facilitate national ocean outreach campaign. The National Science Bowl and Jason need a beginning budget of \$10-20 million.

Responses to Questions:

- NASA spends about \$150 million for education. Research has been integrated into education and outreach in the following areas:
 1. Our Ocean World radio spot (www.ouroceanworld.com)
 2. The Jason Project
 3. Teacher training programs that encourage research participation
 4. The Sea Education Association (www.sea.edu)
- Education should be the foundation of an ocean strategic plan. This is how we will engage citizens, politicians, media, and business community in support of oceans.

Q

QUAY

Mr. Paul Quay, University of Washington, School of Oceanography

Seattle, WA, Jun-13-2002

Public Comment

Key Points:

- We are concerned about the ocean research carbon cycling over the next few decades. The role of carbon dioxide and green house gases on the warming of the earth and the importance that the role of the ocean has in mitigating the release of carbon dioxide, is very important. The carbon dioxide releases in the air have influenced 35% of this industrial area. The ocean has taken up 30% of the carbon dioxide. If the ocean had not been such an efficient absorber, the current concentrations in the atmosphere would be double what it is today. That is why we are so concerned with planning research on this issue of carbon cycling in the oceans.

Recommendations:

- If we are going to improve our predictions of future carbon dioxide levels in the atmosphere, we must encourage government support for research of carbon cycling in the ocean.

R

RABALAIS

Dr. Nancy Rabalais, Professor, Louisiana Universities Marine Consortium

New Orleans, LA, Mar-07-2002, Coastal Land Loss Panel

Invited Testimony

Key Points:

- Areas of low oxygen (hypoxia) and degraded water quality from excess nutrients delivered to estuaries and coastal areas are of concern through U.S. Factors leading to degraded waters begin elsewhere in watershed and airsheds that deliver nutrients from point and mostly nonpoint sources. Oceans, coastal seas and estuaries are intimately linked to the land and air that border them and deliver water, sediments, nutrients and pollutants. The second largest zone of hypoxia (Dead Zone) in the world is on a continental shelf adjacent to outflows of Mississippi and Atchafalaya rivers.
- Federal interagency Integrated Assessment of Gulf of Mexico Hypoxia, Hypoxia Action Plan submitted to Congress and approved by federal, state and tribal nations in October 2001. Solving hypoxia problem in Gulf and improving water quality and habitat within Mississippi River basin will require 30% nitrogen load reduction. Plan outlines voluntary, incentive-based sub-basin strategies intended to sum to overall 30% reduction. No single strategy will account for most of nitrogen removal, but modified agricultural practices and restored wetlands and riparian buffer strips within Mississippi basin will provide most nitrogen removal. Successful plans generally span geopolitical boundaries: Chesapeake Bay Agreement, NEPs, etc.
- Incentive-based programs to take land out of production is needed. Aeration of water is not realistic. Volume of oxygen depletion is too great. Low flow in 1998 and 2000 delivered less nutrients and resulted in small dead zone. Hypoxia Plan had to avoid using the word "regulatory" for an agreement. Need to educate farmers that they don't necessarily need to risk crops if they make small adjustments in nitrogen use.

Documents Recommended:

- www.state-of-coast.noaa.gov/bulletins/html/hyp_09/hyp.html, www.rcolka.cr.usgs.gov/midconherb/hypoxia.html, www.cop.noaa.gov/projects/GMX.htm, www.cast-science.org/pdf/hypo.pdf, www.epa.gov/msbasin, www.riverwise.org, www.smm.org/DeadZone/top.html

RADER

Mr. Doug Rader, Senior Scientist, Environmental Defense
Charleston, SC, Jan-16-2002
Public Comment

Key Points:

- Coastal and marine ecosystems of the southeastern U.S. and northern Caribbean are critically important, ecologically complex, and geographically linked. These critically important ecosystems are increasingly threatened by a combination of water quality degradation, coastal habitat destruction, and overfishing.
- Most serious overall threat to ecosystems is the fragmentation of management systems. Effective restoration of these systems will require development of a scientifically derived and ecosystem-based management plan. A true ecosystem-based management plan will require the development of a new entity charged with its design and implementation.
- Important models exist to help build an integrated coastal and marine ecosystem management system.
- World-class resources require world-class management systems: status quo will not protect resources in the future.
- Marine Protected Areas (MPAs) will be an essential component of an effective ecosystem-based network in the Southeast.
- Up-current (international) needs must be addressed.

RADONSKI

Mr. Gilbert Radonski, Recreational Fishing Alliance
Charleston, SC, Jan-16-2002
Public Comment

Key Points:

- The panelists' previous comments did not broach the dissatisfaction of marine recreational anglers with the current infrastructure.
- The Marine Recreational Fisheries Statistics Survey is poorly understood and/or accepted by the constituency it serves.
- Science is adequate: the government uses risk adverse strategy and commercial fishing industry uses risk prone strategy. They use the same data but they operate from opposite ends.
- Panelists who lump recreational fishing and leisure tourism with recreation are a problem because infrastructure and policy needs of recreational anglers are not defined.

Washington, D.C., Oct-30-2002
Public Comment

Key Points:

- Currently a host of laws and Presidential Executive Orders constitute national ocean policy.
- Input from individuals or organizations representing facets of the marine recreational community has been sparse.
- The OC's, "Ocean Policy Topics and Related Issues, Working Draft for Public Comment, Topic 8: Technology and Marine Operations" asked many questions but few relating to recreational boating.
- The marine angling community creates a large economic benefit to society.
- The MAC recognizes the value of MPAs as a fishery management tool as part of a comprehensive management plan and in the past has called for such protection over artificial reefs (then called Special Management Zones) constructed with private funds meant to be solely for the use of recreational anglers. The MAC does object to MPAs whose objectives are undefined and exclusionary.
- Biodiversity is impossible to legislate. In simple terms, biodiversity is the variety of native organisms that exist in a specific area at any given time; a single frame from a never-ending motion picture.

Recommendations:

- The OC must recognize that sound marine fisheries depend on healthy and sustainable fishery resources.
- The OC must recognize our community's significant role in coastal communities' social and economic well-being.
- The OC must recognize the fragile and unique nature of the coastal and ocean environments, and that any development of those resources shall be done in the most environmentally safe manner possible.
- Recommend outreach programs to help the constituencies understand and accept how data is collected and applied.
- Another area that lacks outreach and constituent understanding is in the data collection efforts for recreational fisheries.

RAFTICAN

Mr. Tom Raftican, President, United Anglers of Southern California
Los Angeles, CA, Apr-19-2002
Public Comment

Key Points:

- Concerned recreational anglers are not recognized on any panel.
- There is concern about Marine Protected Areas (MPAs) being used as fishery management tool prematurely. This is destructive to the freedom of the people involved and the oceans.
- It is important to realize recreational anglers are the ones least likely to cause problems.

RAGSTER

Dr. LaVerne Ragster, Senior Vice President and Provost, University of the Virgin Islands
St. Petersburg, FL, Feb-22-2002, Management of Coasts and Oceans Panel
Invited Testimony

Key Points:

- Development and implementation of ocean policy in U.S. Virgin Island (USVI) is significantly influenced by, and often dependent on, physical, ecological, social, economic, and political characteristics of territory.
- The main ocean policy issues and concerns for USVI include:
 1. The serious impacts of land-based nonpoint sources of pollution on reefs and other coastal ecosystems are due to challenge of development on islands with steep slopes, dense populations, and fragile inshore coastal systems. Public education and communication programs and changes in development laws are major strategies to decrease effects.
 2. Solid and liquid waste disposal is a major challenge.
 3. Stress on coral reef from fishing and pollution has led to proposals for marine reserves. Other restrictions create social issues among different stakeholders. There is a need to address conservation and resource use as a community. The challenge is to realize appropriate level of integration of conservation efforts into development activities.
 4. Threats of natural hazards (hurricanes and earthquakes) raise concerns about how current policies address mitigation and recovery for mammals and natural systems. It is not always clear how to access information needed.
- Territory needs to build capacity to address policy development and implementation.

Recommendations:

- Require and provide opportunities for increased input from the territories in the development of policy and the strategies designed to implement them:
 1. Create local ocean and coastal working groups of federal and local officials.
 2. Recognize need for appropriate communication strategies for involving local stakeholders.
 3. Include and support active USVI representation on U.S. delegations for international or national environmental policy.
- Rationalize the coordination of federal agencies involved in development and implementation of policy.
 1. Communicate how it will work and how implementation will be more effective.
 2. Consider providing liaison for each policy under consideration.
- Recognize the need to include capacity building for the territory in the implementation phase of all policies. Identify local expertise that can assist. Ensure funding and provide assistance to develop strategy for a coherent framework.
- Recognize that federal and local government need orientation and strategies to enable them to work in multi-sector or cross-sector teams during policy development.

Responses to Questions:

- Setting up reserves was very participatory with council, local fish and game, and fishermen.

RAMIREZ

**Ms. Lisa Ramirez, Friends of Earth
Seattle, WA, Jun-14-2002
Public Comment**

Key Points:

- A specific issue of aquaculture has not been adequately addressed, and that is genetically engineered fish. There are 35 species of genetically altered fish being developed. Sixty engineered fish would wipe out a population of sixty thousand naturally occurring fish. They say they will be sterile. The native population would be wiped out. The sterile fish would deplete the resources and the wild male salmon would try to mate with the sterile female salmon, thereby repressing reproduction.
- The only government agency currently charged with regulating transgenetic fish is the FDA. There is not the scientific expertise to be viewing the environmental implications caused by these fish. The food safety agency is not an environmental agency.

Recommendations:

- Regulations must prohibit the use of genetically engineered fish in marine net facilities.
- Other agencies should be directly involved in the process, not only the FDA. The NMFS, the DOI or USDA should be involved.

RANEY

**Mr. David Raney, Chair, National Marine Wildlife and Habitat Committee, Sierra Club
Honolulu, HI, May-14-2002, Coral Reefs Panel
Invited Testimony**

Key Points:

- The eight major purposes of Oceans Act are not equal. Promotion of responsible stewardship provides overarching ethic and constraint within which the other purposes operate. Current U.S. policy is heavily weighted toward extraction of ocean resources under the Department of Commerce (DOC) and mandate of Magnuson-Stevens Fishery Conservation Act (M-S Act) to seek out and harvest fish. This policy must be balanced with the stewardship's responsibilities for those resources and the ecosystems impacted directly or indirectly by extractive uses.
- Northern Hawaiian Islands, the Pacific Remote Islands, and Atolls are the marine equivalent of wilderness areas and deserve special protection. Survival of monk seal, sea turtles, and sea birds should take precedent over extractive and nonextractive activities.
- There is concern about the fate of the monk seal because of reopening of the lobster fishery in Northwestern Hawaii Islands (NWHI) and the failing to assess and control cumulative effects of research and other activities that increase human visitation to NWHI.
- Cooperation at working level of agencies is outstanding. Cooperation is lacking at higher levels in Western Pacific primarily because of failure of Western Pacific Regional Fishery Management Council (WPRFMC).
- The majority of coral reefs in the U.S. lies within NWHI and deserve special attention from the Commission.

Recommendations:

- Improved coordination is needed between the National Marine Fisheries Service (NMFS), WPRFMC, and U.S. Fish and Wildlife Services (USFWS) to replace conflicting management regimes with an integrated approach that embodies the most stringent protections where there are overlapping jurisdictions. A NWHI National Marine Sanctuary should include state waters. Promote the implementation of the NWHI Coral Reef Ecosystem Reserve by supporting the NWHI Executive Orders; implementation of rule and regulations for the Reserve; revision of the Reserve Operations Plan to better incorporate the comments of the Reserve/Sanctuary Council; and pursuit of a NWHI Sanctuary that would complement and supplement the Reserve. Affirm as necessary the right of the USFWS to manage marine resources within the boundaries of national wildlife refuges.
- Implement reforms of fishery management councils to broaden the range of stakeholder interests represented, including those representing the interests of the public.
- Require NMFS to provide timely notification to regional fishery management councils when there is a need to revise proposed fishery management plans. This will save taxpayer dollars and avoid unnecessary adversarial contests with public interest groups.
- Prohibit expenditures for any efforts to re-open the lobster fishery in the NWHI, and require expenditures needed to fully support the efforts of the Monk Seal Recovery Team and NMFS projects intended to assist with the recovery of the endangered seal. Reopening the lobster fishery is prohibited under the NWHI Executive Order and would further reduce prey for the endangered seal at a time when juveniles are suffering from insufficient prey.

Documents Recommended:

- "Coral Reef Ecosystems of the Northwestern Hawaiian Islands, Interim Results Emphasizing the 2000 Surveys."

RARDIN

Mr. Eric Rardin, Outreach Coordinator, Marine Conservation Program at the National Environmental Trust (NET)

Washington, DC, Jan-24-2003

Public Comment

Key Points:

- We strongly support the directive contained in the report to begin implementation of ecosystem based management. This is clearly the future for ocean management and we can no longer afford to wait to gather all the scientific information that is necessary. In addition to supporting the comments of the Marine Fish Conservation Network in this regard, we strongly believe that ecosystems should be defined by science and not council jurisdiction. As we will point out, we also believe that independent scientific boards should be formed to make the scientific recommendations to the Councils on allowable biological catches (including bycatch) annually for each fish stock. Therefore, it is not critical that the current council boundaries be maintained.
- While we agree with the concept of participatory governance, it needs the following additions: after "importance" strike "and" and insert the following: "short term consumptive and non-consumptive" before "value" and retain the rest of the sentence.
- Adaptive management can be a useful mechanism; however, it can also be used, in the case of oceans, to avoid fulfilling one's legal obligations to take action. To minimize the chance for abuse, we suggest that the purpose of "adaptive management" is not to re-evaluate goals but to re-evaluate the effectiveness of management procedures. As such, we recommend the following change: after "future improvement. Reevaluation of" strike "goals and" and insert "the."
- NET is not opposed to the concept of multiple uses. However, the proposed definition is particularly problematic without it being made clear that management decisions on "multiple use" need to be made in context of the long term health of the marine ecosystem of which the activity is a part. At the end of the definition, after "competing interests" add the following: "consistent with maintaining the long term health of the marine ecosystem." Failure to include consideration of the ecosystem will lead the continuation of the very problems that the Commission was created to address.
- We support the changes in regard to precautionary approach suggested by Lee Crockett in his statement on behalf of the Marine Fish Conservation Network.
- We support the goals of the biodiversity section and believe that conservation of biodiversity must be a cornerstone of any effort to strengthen our ocean governance. As such we believe that conservation of biodiversity must be an explicit "goal" not just a "consideration" as stated in your draft.

Recommendations:

- We completely agree with the goals of Use and Review of Scientific Information: to separate allocation decision from the determination of allowable biological catch (ABC) and stock assessments in general. However, the solution recommended in the draft document is insufficient and will not work. Specifically, the establishment of SSCs rather than fully independent scientific assessment teams to perform the task of setting ABC levels does not provide a sufficient "firewall" between the councils and the scientific assessment process. Observations of councils that already have SSCs, such as the North Pacific Fisheries Management Council, clearly show that members of SSCs are vulnerable to political, economic, and social pressures that cause them to consistently overestimate ABC. The only way to ensure that scientific decisions are made by scientists free from outside influences is to establish scientific assessment teams that are completely independent from the regional fisheries management councils (RFMCs). In addition, members of the scientific committees responsible for establishing ABCs must not derive any economic benefit from the fisheries being assessed, or from any participant in those fisheries. Finally, members of the scientific assessment teams setting ABCs should be subject to all federal conflict of interest laws, as should all members of the RFMCs.
- The composition and conduct of the councils has consistently been one of the most serious problems with current fisheries management and we support the Commission's interest in this issue. However, the Working Group's recommendation that the governors be required to submit two candidates from the commercial fishing industry, recreational fishing sector, and general public will insure a more balanced slate of candidates, but will do little to actually insure balanced representation on the councils. The Secretary of Commerce should be legally required to appoint a balanced membership for each council. We also recommend that the Commission address the conflicts of interest of many council members. Given the fact that the many council members have an economic interest in the fisheries they regulate, there is little wonder that they are reluctant to vote for conservation measures that will cost them money. We recommend the members of RFMCs be subject to the same federal conflict of interest laws that every other American is subject to. The Commission should also clarify that members of the general public are individuals that do not derive any economic benefit either directly or indirectly from participation in either commercial or recreational fishing. Finally, persons who have been convicted of a criminal violation of the Magnuson-Stevens Act must be prohibited from serving on any council, advisory panel, or SSC.

- Renaming individual fishing quotas (IFQs) dedicated access privilege does nothing to address the harmful economic, social, and environmental impacts of these programs. We strongly urge the Commission to recommend a renewal of the moratorium on IFQs until Congress has established mandatory national standards that ensure equity and conservation benefits in all such programs. This was Congress' charge when the moratorium was established, and they have failed to fulfill this charge.

RASSAM

**Dr. Ghassan Rassam, Executive Director, American Fisheries Society
Washington, DC, Nov-14-2001, Fisheries Organization Panel
Invited Testimony**

Key Points:

- Fishery management must be improved:
 1. More marine fish stocks are fully/over-utilized today than prior to Magnuson-Stevens Fishery Conservation and Management Act (M-S Act).
 2. Long-term sustainability of fisheries and ecosystem function requires new approaches. Large, inter-connected systems of marine reserves are one tool.
- National, coordinated research program must be developed for living marine resources:
 1. Basic scientific understanding of how marine ecosystems function and how fishing activities interact with them must be enhanced. Biological studies should be integrated with studies that seek to understand physical environment.
 2. Technological tools must be adapted for remote sensing of the ocean environment; shallow water habitat mapping; and to improve stock assessments.
- Common objectives for fisheries and a plan for managing living marine resources to achieve those objectives should be developed:
 1. Public must be engaged in forthright discussion of what fisheries and ecosystems should resemble.
 2. Goals of M-S Act, Marine Mammal Protection Act (MMPA), and Endangered Species Act (ESA) are often contradictory.

Recommendations:

- Regional Councils are not effective management bodies. Thus, the following should be considered:
 1. National Science Foundation (NSF) program on Long-term Ecological Research or Land-Margin Ecosystem Research models should be considered. Specific input should be sought on what fisheries and ecosystems should resemble during public hearing process and consolidated and incorporated into final report.
 2. All stock assessments-federal, state, private, academic-should be considered and evaluated objectively if received in time for peer review. Funds for monitoring must be separated from strategic research and assessment funds to reduce emphasis of one over the other.
 3. National Marine Fisheries Service (NMFS) needs clear authority to modify council's action or act accordingly when the council does not. Harvesting capacity should be reduced and precautionary approach should be applied to address overfishing and declining fisheries. A new Department of the Oceans should be created with sub-agencies that would comprehensively address all human interactions with marine resources.
 4. An ecosystem must be adopted that explicitly considers foraging the needs of marine animals and other predators. Fishing mortality rate of 75% of level associated with Maximum Sustainable Yield is an appropriate management target.
- Canada (Oceans Act) and Australia (National Oceans Policy) provide integrated approaches to ocean management.

Documents Recommended:

- "Sharing the Fish" National Research Council (NRC).

REILLY

**The Honorable William Reilly, Chairman, Board of Directors, World Wildlife Fund
Boston, MA, Jul-23-2002, State Representatives Panel
Invited Testimony**

Key Points:

- The fate of the earth's oceans is inextricably tied to other U.S. strategic interests, including economic prosperity and national security.
- As ocean resources are depleted, the competition between countries or sectors intensifies and can trigger confrontations, including violent ones. One example is the recent incident at the maritime boundary between North and South Korea-triggered by a disagreement over access to fishing grounds.

- The development of some new structure, perhaps an interagency council with leadership from the White House, would enable agencies of government to talk to one another more frequently and more effectively.

Recommendations:

- Seek to not only protect life in the sea but also to advance the well-being of those whose livelihoods depend on the ocean. Seek to protect our national interest as well.
- Conserve the most biologically important marine areas:
 1. Use networks of protected areas to conserve the oceans' web of life.
 2. Focus on the tropical oceans-in particular, highlight the importance of the U.S. leadership in global coral conservation efforts and voice even stronger support for the International Coral Reef Initiative.
- Improve oceans governance:
 1. Establish marine zoning regimes, particularly in the near shore environment.
- Develop and apply better principles for fisheries management
 1. Recognize the benefits of precautionary management. The United Nations Food and Agriculture Organization has projected that fish catches could increase significantly in the future if overfishing is reined in now.
 2. Address the impacts of fishing on the environment-for example, reducing bycatch, and mitigating fishing's other impacts on the environment makes business sense as well.
 3. Make international fisheries management a bigger priority-our interests at home are affected in many ways by fishing that takes place far from our shores.
- Create a hospitable economic environment for ocean conservation-economic incentives are more often than not inconsistent with the stated objectives of current ocean policy. This lack of harmony is most pronounced in the fisheries sector, where economic incentives encourage the expansion of fishing fleets that are already too large, and stimulate a race for fish that is neither biologically sound nor economically prudent.
- Encourage the development of measures to address the problem of fishing fleet overcapacity.
- Consider the problems associated with current government subsidies to the fishing sector, and support the elimination of both domestic and foreign subsidies that contribute to unsustainable fishing.

Responses to Questions:

- A lot has changed in the last five years. Among other things, there is increased capacity to be more specific about our knowledge of the ocean and to be clearer about zoning boundaries, etc.

REINERT

**Dr. Thomas Reinert, American Fisheries Society
Charleston, SC, Jan-16-2002
Public Comment**

Key Points:

- National Issues:
 1. Improve fishery management: National Marine Fisheries Service (NMFS) needs authority to supercede councils when they make ineffective or potentially harmful decisions.
 2. Conflict resolution: develop a clear mandate on conflicts resolution for NMFS.
 3. National coordinated research program for marine resources: fund a national research program to enhance our understanding of estuarine and marine ecosystems functions and how fishing activities interact with them.
 4. Value: tangible recognition of the ecological value, not just economic value, of the estuarine system.
 5. Watershed-level: support watershed-level research of estuary functions and the effects of development on their health.
 6. Integrate the biological component of estuaries and marine communities with the physical.
 7. Vision: develop a vision and common objectives for fisheries, and a plan for managing living marine resources to achieve those objectives. This will involve educating the public.
 8. Management approach: management decisions should be adaptive and management results should be monitored. Incentives should be provided for conservation and efficient use of resources. Integrate the systems of data collection, decision making, enforcement, and monitoring.
- Regional Issues:
 1. Identify and protect Essential Fish Habitat.
 2. Research and study landscape/basin level effects on estuarine function (e.g., freshwater inflow).
 3. Research and study the effects of trawl gear on bottom habitat and non-target species (i.e., bycatch).
 4. Research and study the effects of coastal development on estuarine function, particularly the effects on water quality.
 5. Implement MPAs, including protection of the right whale calving areas.
 6. Research and study the effects of dredging and harbor development on estuarine and upland communities.

REUTTER

Dr. Jeffrey Reutter, Director, Ohio Sea Grant College Program
Chicago, IL, Sept-25-2002, Invasive Species Panel
Invited Testimony

Key Points:

- The invasive species problem is one of the most important issues we face.
- Invasive species are frequently transported by human activities such as the dumping of ballast water from transoceanic ships, transporting species via recreational boats, and emptying unwanted bait.
- Implementation of the National Invasive Species Act falls far short of national needs to effectively protect the region's coastal resources from expensive and environmentally damaging invasions by invasive species, e.g. invasive species are still appearing in the Great Lakes at the rate of about one per year.
- Current and accurate information is needed in each of these areas for every invasive species; biology and life history, effects on ecosystems, socio-economic analysis (costs and benefits), control and mitigation, preventing new introductions, and reducing the spread.
- The Lake Erie experience and effects on the ecosystem are explained.

Recommendations:

- Support and strengthen the National Invasive Species Act.
- Treat the Great Lakes as this country's fourth coastline.
- All Sea Grant Funding should be based on merit. Currently, the National Sea Grant College Program awards about 2/3 of its total support to the 30 individual state programs in a fashion that is not based on merit.
- It appears that earmarking within the National Undersea Research Program is hindering the program's ability to address issues in the Great Lakes. Currently NURP has 6 regional centers, but half the funding must go to the two centers on the west coast. Furthermore, the Great Lakes are lumped with the Northeast Regional Center in New England making it very difficult for dollars to reach the region. This support could be very helpful in documenting the expansion of mussels onto soft substrates.
- Support for equipment and facilities at marine laboratories within NSF is woefully inadequate.

Responses to Questions:

- The Sea Grant program is spending a tremendous amount of money to get out and reach individual charter captains, individual anglers and bait producers and stores. About \$2.2 million a year for research, education and outreach-but it is still not enough.
- I use two generations of existence to consider a species native.
- Even doubling the Sea Grant budget would make it just a little bit above decimal dust.

Documents Recommended:

- www.sg.ohio-state.edu

REVELL

Mr. David Revell, Surfrider Foundation, Oregon Chapter
Seattle, WA, Jun-13-2002
Public Comment

Key Points:

- Still lack the knowledge needed to sustain and restore ocean ecosystems.
- Need to cultivate an ocean ethic. The threats to our oceans need to be a part of a societal conversation, not a debate about marine reserves or private property rights.
- Acknowledge that the oceans are dependent on the beaches and estuaries-the marine environment does not stop at the water's edge.
- More financial support and educational opportunities are needed to help our Northwest coastal communities diversify.
- A bold vision is needed; one that is not hampered by political ties, but one that lays out a course of action for our future and the future of every living organism on our ocean planet.

Recommendations:

- Recommend additional funding and support for scientific research, and to engage local experts, surfers, ocean recreational users, and fishermen to understand their intimate knowledge of the ocean. Until we have the appropriate science, management decisions need to apply the precautionary principle and be conservative. Think long term.
- Prioritize living and renewable resources over non-renewable resources.
- Establish a networked system of marine protected areas and reserves.

- The Commission should build on our understanding of watersheds and take it to the next step. Take a “Sandshed” approach. While we do not understand all of the transport mechanisms in our oceans, we do know that sand and sediments move from the mountains, the sea cliffs, and the dunes onto the beaches and all the way offshore.
- Consider the entire sandshed and the linkages between each ecosystem that is dependent on the sandshed. Measure the health of each linkage to understand where to target our conservation and restoration efforts. One such indicator is water quality.
- Commission should recommend a research focus on understanding the relationships between pollutants, water quality testing indicators, and human and marine species health.
- Many of the impacts to our oceans come from pollutants washing off the land. The Commission should recommend that sections of the Clean Water Act that deal with non-point source pollution be significantly strengthened.

REYNOLDS

**Dr. John Reynolds, Chairman, Marine Mammal Commission
St. Petersburg, FL, Feb-22-2002, Ecosystem Management Panel
Invited Testimony**

Key Points:

- The single most critical deficiency in marine mammal conservation today involves a lack of proactive approach to conservation and management of resources.
- Global issues include noise and chemical pollution, fishing, oil and gas development, and global climate change.
- The best publicized issues in the Southeast involve the manatees and the North Atlantic right whales. The bottlenose dolphins stocks are poorly defined. A noise related (sonar) death of beaked whales occurred recently. Noise and chemical pollution are extremely critical in parts of Southeast.

Recommendations:

- Management solutions are hindered by a lack of data and basic rules:
 1. Management strategies based on species with high fecundity, which can recover quickly, do not work well for marine mammals.
 2. Precautionary principle is an established approach that guides managers to err on the side of resources. If used, even highly fecund fish stocks might not be in such bad shape.
 3. Place the burden of proof on those seeking to utilize a resource as endorsed in Marine Mammal Protection Act (MMPA).
 4. Marine mammal science and management should be more proactive.
 5. Powerful laws exist to protect marine mammals and their habitats (MMPA, Endangered Species Act (ESA), National Environmental Policy Act (NEPA)), but they are not enforced effectively.
 6. Good stewardship should accompany use of natural resources.
 7. There is a need to balance traditional economic benefits with other value systems that take into account all other user groups.

Responses to Questions:

- MMPA does not function as true ecosystem management model.

Documents Recommended:

- Marine Mammal Commission Annual Report

RHEAULT

**Dr. Robert Rheault, Board Member, National Aquaculture Association
Seattle, WA, Jun-13-2002, Aquaculture Panel
Invited Testimony**

Key Points:

- Aquaculture is the fastest growing sector of U.S. agriculture. There is an increasing demand for consistent, high-quality wholesome products. Additional aquaculture demand is created because many wild stocks have been diminished by over fishing or environmental changes. The challenge for aquaculture is to continue to deliver high quality product while maintaining profitability and environmental compatibility.
- While U.S. aquaculture continues to grow, it is also challenged by ever increasing competition for resources, a burgeoning population, continued urbanization, competition from foreign products not subject to U.S. regulations, and a wealth of misinformation.

- The commercial aquaculture industry is concerned about the importation of exotic pathogens into the U.S. Another concern is that commercially reared aquatic animals can be subject to significant predation by a variety of animals including birds, seals crabs, flatworms and starfish [discussion provided].
- Each aquaculture industry sector has unique production requirements, challenges and potential to impact the environment. Each aquaculture operation must be evaluated within a site-specific and watershed specific framework. Regulatory and voluntary efforts must be optimized to achieve cost-effective solutions. The NAA believes that if environmentally sound watershed management programs are to be developed, accurate information must be used.
- Piscivorous birds can cause significant predation on farm raised fish and shellfish. Considerable need exists to develop improved bird management techniques.

Recommendations:

- The NAA would like to see the Hazard Analysis Critical Control Point (HACCP) standards being applied internationally to improve competition in the global marketplace.
- NAA recommends:
 1. The U.S. Fish and Wildlife Service manage migratory bird numbers on basis of wild food supply.
 2. The USDA Wildlife Services program should be encouraged to actively develop additional control measures.
 3. Cumbersome regulatory processes that impede bird control efforts should be removed.
 4. Depredation permits should be readily available on a timely basis and should be administered equally by all USFWS regions.

Responses to Questions:

- As a member of the National Aquaculture Association, we support USDA as the lead agency to lead marine aquaculture. The USDA has supported the NAA extensively with research and as an advocate in the marine area. However, taking off my NAA hat, my work with a specific project has made me reach a different conclusion that the lead agency should be a new office in NOAA, Office of Offshore Aquaculture.
- There are two issues: one is research and the second is regulatory. The difficulty with aquaculture is that we are farmers, not fishermen. Minimize size makes no sense for farmers.
- You should keep the advocacy role in one agency, USDA, and put the regulatory role in the marine environment under NOAA.
- Just as humans have impacted every facet of our environment, we have to become managers for every part of our environment. That is why we need to manage the bird populations that feed off the fish. In Rhode Island, the cormorant populations have increased something like twelve fold in the last twenty years and they are eating 20 percent of the flounder population every year. We need to think about how to protect our aquaculture industry, as well as our wild fish populations, in a responsible fashion.
- We have a Sea Grant college program that has been very supportive of aquaculture and is an important player in the viability of the aquaculture industry. This is an example where academia is being used to help an industry. Sea Grant projects also work on developing offshore technologies on the east and gulf coasts.

RICHERT

**Mr. Evan Richert, Director, Maine State Planning Office, State of Maine
Boston, MA, Jul-23-2002, State Representatives Panel
Invited Testimony**

Key Points:

- There is growing recognition that a new era of fisheries management is urgently needed that is based on the management of entire ecosystems.
- The cost of insufficient information is high and it is important that an investment is made in a real-time ocean observing system.
- The cumulative impacts from individually planned and permitted coastal projects are undermining our larger efforts at coastal management. The individual projects add up to a wasteful pattern of development that has fiscal, environmental, and social consequences. [Further description provided.]
- Incentives need to be created, an infrastructure built, and regulations enacted that will direct development to suitable nodes in coastal watersheds, and that will preserve critical masses of habitat, coastlines, and rural areas.

Recommendations:

- Commit to achieving by 2010 a fully operational ecosystem approach to the management of ocean resources. [Further description provided.]
- Create comprehensive fishery monitoring programs that will improve both the quality and the timeliness of data for fisheries stock assessments and management decisions. [Further description provided.]
- Provide a mechanism, through the Sustainable Fisheries Act re-authorization, to develop new models for fishery management decision-making. [Further description provided.]

- Establish a National Coastal Ocean Observing System, coordinated by the Federal Government and implemented at the regional level by a federation of regional coastal ocean observing systems. [Further description provided.]
- Reauthorize and strengthen the Coastal Zone Management Act to make it fully consistent with and build capacity for state and local initiatives for “smart growth.” [Further description provided.]

Responses to Questions:

- The Gulf of Maine ecosystem should have predictive capacity in 2010. The linkages between the physical and biological, between habitat and the species, are now understood. It will be possible to say that if “X” percent of the habitat is disturbed, “Y” percent reduction or below can be anticipated. Part of it also has to do with the involvement of fishermen and others in the gathering of that information that will help build that predictive capacity. It is necessary to be comfortable with the science in order to have predictive capacity.

RICHMOND

**Dr. Robert Richmond, Professor, University of Guam
Honolulu, HI, May-14-2002, Coral Reefs Panel
Invited Testimony**

Key Points:

- Importance of coral reefs is described.
- Priority issues:
 1. Degraded coastal quality-both water and bottom characteristics;
 2. Exploitation of resources; and
 3. Global climate change.

Recommendations:

- There needs to be a marriage between modern and western science. The traditional basis for reef resource management is there and I recommend the Commission take a hard look at what information is available from these traditional societies.
- Restore those conditions that allow natural recovery to occur and that means the abatement of coastal pollution, sedimentation, run-off and trying to keep in touch with the issues of global climate change.
- There are a couple of models that are working successfully such as the U.S. Coral Reef Task Force.
- Establishing MPAs is absolutely essential.
- Clear, coherent legislation with appropriate management of human activities is needed.
- One of the biggest key pieces of legislation affecting coral reefs is the Rivers and Harbors Act of 1898 that puts the Army Corps of Engineers in charge of the permitting process. It’s easier to build on coral reef than it is on a wetland because coral reefs are treated in the legislation as hazards to navigation.

RIEDEL

**Ms. Monica Riedel, Executive Director, Alaska Native Harbor Seal Commission
Anchorage, AK, Aug-22-2002
Public Comment**

Key Points:

- The Marine Mammal Protection Act Reauthorizing Committee of the Indigenous Peoples Council for Marine Mammals (IPCoMM), recently proposed amendments to the Marine Mammal Protection Act that outline management before depletion, shared enforcement, and local co-management plans with Alaskan Native hunters and their tribes.
- It would be good to see the oil companies finish their on-going litigation with the local people affected by the spill before they are allowed to exploit more resources.
- We, the primary stakeholders and users of Alaskan marine resources, are conducting research and sound science upon which to base management decisions. We are most proud of the Youth Area Watch Project, which combines the traditional knowledge of hunters with the scientific protocols that are being taught to students.

Recommendations:

- Support the proposed amendments to the Marine Mammal Protection Act regarding improvements to co-management and Section 119 of the Act.
- Support participatory involvement by Alaska Natives through the co-management process, which in part is based on our long history of traditional knowledge.
- The Commission should see that the oil companies involved in the Exxon Valdez oil spill finish their ongoing litigation with the local people affected by the spill before they are allowed to exploit more resources.

RILEY

The Honorable Joseph Riley, Mayor of Charleston and Member of PEW Oceans Commission
Charleston, SC, Jan-16-2002, Featured Speaker
Invited Testimony

Key Points:

- Welcome Remarks
- PEW Commission on coastal development:
 1. Increased human occupation of the coast is irreversible. Occupation will continue.
 2. We need to understand the importance of our actions and the relationship of our actions to the environment.

ROBARDS

Mr. Martin Robards, The Ocean Conservancy
Anchorage, AK, Aug-22-2002
Public Comment

Key Points:

- Offshore oil and gas development off Alaska endangers the fragile marine environment, including endangered species, seabirds, and marine mammals, rich fishing grounds, national parks, wildlife refuges, forests, and wilderness areas. [Further description provided.]
- Statewide, the fishing industry provides more private sector jobs than any other source and a large portion of coastal residents rely on marine resources for subsistence. [Further description provided.]
- Unlike oil and gas, if managed properly Alaska's fisheries have the potential to be a perpetually sustainable asset to Alaska's economy.
- Coastal communities are at risk from potential blowouts and pipeline oil spills. [Further description provided.]

Recommendations:

- The Commission is urged to call for Alaska's immediate inclusion in the moratorium on offshore oil and gas development.

ROBERTS

Mr. Santi Roberts, Oceana
Washington, DC, Nov-22-2002
Public Comment

Key Points:

- Speaking on behalf of Tim Eichenberg
- Bycatch must be counted, capped, and controlled to levels approaching zero for all U.S. fisheries, and federal regulations must establish adequate observer coverage to provide scientifically acceptable information on bycatch and quotas. Sensitive areas of the ocean such as essential fish habitat, deep sea corals, sponges and rocky reefs should be closed to all bottom trawling, and bottom trawling should be allowed only in those areas where it can be demonstrated it will not harm bottom habitats and marine life. The fishery management council system is broken and must be fixed by removing the conflict of interests between resource users and managers, by including non-user public interest representatives, and by separating conservation and allocation decisions from scientific recommendations and allowing the conservation decisions to be made by regional ecosystem councils. A scientifically-based network of no-take marine reserve should be mapped and set aside to maintain marine ecosystem functions, rebuild depleted fish populations, protect sensitive habitats, and increase scientific understanding of ocean ecosystems.
- EPA should establish marine water quality standards and no discharge zones in special ocean sites in the EEZ as proposed in Executive Order 13158 and should develop water quality criteria for nutrients, PAHs, mercury and other contaminants. The Stockholm Treaty on Persistent Organic Pollutant (POPs) should be ratified after Congress adopts implementing legislation to allow the addition of new chemicals to the 12 POPs listed in the Treaty and amends the Toxic Substances Control Act to allow bans on additional POP characteristic chemicals. Funding should be substantially increased for NOAA, USGS, and EPA's ocean and coastal water quality monitoring programs, and the monitoring and public notification programs authorized under the Beaches Environmental Assessment and Coastal Health (B.E.A.C.H.) Act. Enforceable and effective federal programs that deal with polluted runoff - the number one cause of water quality impairment - must be reauthorized, strengthened and funded, including the nonpoint pollution programs of the management and total maximum daily load programs. Offshore oil and gas activities should be permanently prohibited in sensitive ocean and coastal habitats.

- Cruise ship sewage and gray water discharges should be regulated as point sources under the Clean Water Act and be subject to the same effluent limits, monitoring, reporting and enforcement procedures that apply to other industrial and municipal waste streams. Ballast water discharges from cruise ships and other ocean going vessels should be controlled through mandatory ballast water exchange and treatment programs, on board or in port, to prevent invasive species from harming U.S. waters. Potentially hazardous waste and byproducts should be brought ashore and disposed in appropriate landfills, not the ocean. Cruise ships should burn low sulfur fuels and utilize onboard technologies to reduce particulate and nitrogen oxide emissions.
- National standards should be established for the siting, design and operation of marine aquaculture facilities to protect the marine ecosystem; prevent the use of non-native species; minimize the use of chemical pesticides, antibiotics, fish meal and transgenic species; prevent escapes and adverse effects on wild populations; and reduce conflicts with user groups. Discharges from marine finfish aquaculture operations should be subject to Clean Water Act permitting requirements and effluent guidelines to address nutrient, chemical, pathogen, and parasitic discharges. A moratorium should be placed on locating new or expanding existing finfish aquaculture operations in the marine environment until such standards are established.
- The National Flood Insurance Program should be reformed to set premiums that reflect the true risk of coastal hazards, deny coverage for new development in environmentally sensitive or high risk coastal areas and phase out coverage of repetitive risk coastal properties. The beach nourishment and armoring programs of the Army Corps of Engineers should be reformed to protect natural beach ecosystems and coastal habitats. The Coastal Barrier Resources System should be strengthened and expanded to prohibit federal funding for new development in hazardous coastal areas on the West coast as well as barrier islands along the East and Gulf coasts.

Recommendations:

- Congress should enact a National Ocean Policy that establishes standards to protect, maintain and restore marine biodiversity and ecosystems, require the sustainable use of marine resources based upon the precautionary approach, and develop regional ecosystem plans to protect the marine environment and guide state and federal actions. An independent, cabinet level Oceans Agency should be established to implement the National Oceans Policy Act and consolidate the functions of federal agencies with ocean responsibilities. The U.S. should press for prompt and effective international implementation of the commitments to which the U.S. and other governments agreed at the World Summit on Sustainable Development in Johannesburg, South Africa on September 4, 2002, undertake specific actions to accomplish the agreed Plan of Implementation and establish a process for ongoing monitoring of progress to carry out the plan.

ROGERS

**Mr. Mark Rogers, Communications Director, Cape Wind Associates
Chicago, IL, Sept-25-2002
Public Comment**

Key Points:

- We are working to secure permits to build America's first offshore wind farm on Horseshoe Shoal in Nantucket Sound. We would harvest the winds on this shoal five and a half miles off the south shore of Cape Cod, to provide, on average, half of the power used on Cape Cod and the Islands from clean, renewable energy.
- US offshore wind resources are abundant, inexhaustible, sustainable and secure. Europeans are now greatly accelerating their use of ocean based wind power which they first pioneered twelve years ago.
- Of these ocean renewable technologies, offshore wind is the farthest along in being commercially available and cost competitive and it is consistent with the Stewardship Working Group's goal to promote ocean policy that enables the nation to use its ocean resources in a responsible and sustainable manner.

Recommendations:

- Cape Wind Associates respectfully ask this Commission to use your unique perspective and expertise to make recommendations that encourage and expedite our nation's development of ocean based renewable energy to help protect the health of the ocean and to demonstrate the commitment of the United States to ocean stewardship.

ROGNER

Mr. John Rogner, Chair, Chicago Region Biodiversity Council
Chicago, IL, Sept-25-2002
Public Comment

Key Points:

- My purpose is to describe this successful model for collaborative conservation, to specifically underscore the important role that the federal government has played in its success, and to suggest its use as a model elsewhere.
- As federal agencies increasingly take on the challenge of managing natural resources in urban areas, Chicago Wilderness offers an innovative model for urban resource management and helps federal partners accomplish their missions in this important metropolitan region.
- Chicago Wilderness is many things—a partnership, a model for consensus building, and a regional approach to problems solving.

ROSS

Mr. Dan Ross, Counsel, General Services Administration, Agency Liaison Division
Washington, DC Sept-17-2001
Invited Testimony

Key Points:

- Our role as the GSA today is to give an overview to the Ethics Rules and Regulations and then begin the dialogue with the Commission about the level of the ethics rules and regulations that apply to them.
- There are three categories of people who serve on our Commission and Boards: full time government employees, “special government employees,” and “representative members.”
- There are four conflict of interest laws that affect the Commission.
- If you are a government employee, you cannot be engaged in partisan political activities on the days that you are serving on the Commission.

ROSS

Captain Robert Ross, Chief, Office of Strategic Analysis, U.S. Coast Guard
Anchorage, AK, Aug-22-2002, Marine Emergency Planning and Response Panel
Invited Testimony

Key Points:

- Once an oil spill occurs, the best we can hope for is to minimize the 'total negative impact' of the event on public health and safety, environmental degradation, property damage, and direct and indirect economic losses and cleanup costs, both public and private.
- Oil spill response is the art of making difficult, time sensitive decisions with potentially major consequences and - all too often - making those decisions on less information than we would like to have.
- The legislative foundation for oil spill response is found primarily in the Clean Water Act and the Oil Pollution Act of 1990 (OPA '90), requiring the preparation of a National Contingency Plan, various Regional Response Plans, and robust Area Contingency Plans. [Further description provided.]
- In the U.S., the onus of conducting planning and response to an oil spill lies on the owners of whose businesses create the potential for spills (the Responsible Party); as a result a response contractor industry has grown up. [Further description provided.]
- The basic organizational model used by the Coast Guard is the Incident Command System (ICS), containing a multiple decision-maker structure that includes the Responsible Party. [Further description provided.]
- Among the issues the Coast Guard and other members of the response community are grappling with are the difficulties of maintaining a viable commercial response community in the face of declining accident rates.
- The National Response System, while not problem free, is a significantly better and stronger system than existed prior to the Exxon Valdez. OPA '90 deserves much of the credit for the improvements that we have seen.

Responses to Questions:

- The issue of port security is a complex issue because ports are both domestic and part of our border infrastructure. The port security efforts, the vulnerability assessments and the security measures that are going to be coming over the next few years will address both the domestic and the international sides.
- The Coast Guard is keenly aware of the economic implications for shutdowns. Some years back there was an incident of competing interests when a decision had to be made to refloat the crippled barge and run the risk of sinking it in the channel and cutting off four million people from their food supply, or take it out and sink it in deep water and then deal with the environmental consequences afterwards. The Governor made the decision and it was supported. Cutting four million people off from their food supply was not an option.

- To the contrary, the area of marine emergency planning and response will get better. The national strike force, the Coast Guard strike teams are critical elements that are critical for response to hazardous chemical events. The Coast Guard ran site safety at ground zero in New York. The Coast Guard strike teams ran site safety for the Anthrax response in Washington, New Jersey, and Florida. The Coast Guard is a national asset and the capabilities and skills to deal with oil, chemical spills, and whether they're industrial accidents or transportation accidents or deliberate criminal events are skills directly transferable. The solution is not to split the Coast Guard up or to put it in this department versus that department. The solution is to provide the Coast Guard with resources they need to do all of the things needed for the American people. [discussion provided].
- Until the Coast Guard receives the necessary resources it will rob Peter to pay Paul a bit-which is nothing new for the Coast Guard.
- The methods that are appropriate for point sources, whether it's an industrial facility or a tank ship, are not appropriate or suitable for non-point sources. EPA has a storm water runoff program (for petroleum hydrocarbons that enter the sea from storm drain runoff, etc.). That EPA program has not been well funded.
- There are a number of informal working relationships, for planning events for example, that exist between the Coast Guard and NOAA in the response arena. There are no existing effective mechanisms for a new initiative to require across agency funding. There is no knowledge of budget coordination mechanism at a high level.

**Washington, DC, Apr-03-2003
Public Comment**

Key Points:

- The recent GAO Report on Coast Guard levels of effort on its various missions is a valid measurement but it perhaps the crudest measure available. Another more pertinent measure is results. Despite a significant drop in resources devoted to drug interdiction in 2002, we achieved the third highest seizure total in history.
- By using new technologies, such as EPIRBs (Emergency Position Indicating Radio Beacons), and new capabilities, such as the position localization capabilities of the Rescue 21 system we are now building, we have been improving our ability to quickly locate vessels and people in distress.
- The U.S. is a leader in the International Maritime Organization (IMO) because we sought that role as a specific national strategic objective and then earned it through our sustained involvement and our technical expertise. Our national approach to IMO might serve as a model for U.S. interactions with other international bodies.

ROSS

**Mr. William Ross, State of North Carolina
Charleston, SC, Jan-16-2002
Public Comment**

Key Points:

- During the 1980s, North Carolina embarked on multi-year effort to identify its ocean resources and policy issues, as well as to begin identifying options and actions. Several reports have been prepared as a result of this endeavor.
- Severe weather emergency planning and management (e.g., hurricanes) should be expanded to include damage control for property and fiber optic cables.
- Reauthorization of Coastal Zone Management Act needs to happen immediately.
- More could be done to improve the state's understanding of the Endangered Species Act goals and to elevate the state's role.

ROTHROCK

**Ms. Heather Rothrock, Student, Boca Ciega High School
St. Petersburg, FL, Feb-22-2002
Public Comment**

Key Points:

- We need to protect more areas of the ocean to ensure the survival of all marine species.
- Fish and oceans belong to everyone.
- More laws should be passed regulating fishing, offshore oil and gas drilling, building and development on beaches and pollution control.
- Public awareness and education are key.

RUCKELSHAUS

**Dr. Mary Ruckelshaus, Staff, Northwest Fisheries Science Center, National Marine Fisheries Service
Seattle, WA, Jun-13-2002, Living Resource Management in the Pacific Northwest Panel
Invited Testimony**

Key Points:

- NMFS is engaged in two main approaches designed to meet the technical and policy challenges associated with salmon recovery planning: 1) establishing multi-stakeholder Technical Recovery Teams, and 2) participating in regional policy forums designed to foster participation from diverse interests in developing recovery plans. [descriptions and examples of both approaches are provided].

Recommendations:

- A Shared Strategy is a regional policy group that involves all levels of government in interest groups and that it involves a combination of the services, the National Marine Fisheries Service, the U.S. Fish and Wildlife Service, as well as the tribal and state co-managers in the state. The goals of the Shared Strategy are communicated to watershed groups that then take the goals and decide what actions they can take in their watershed group to achieve those targets that have been given to them by the agency.

Responses to Questions:

- The Shared Strategy approach encourages local regional administrators and Federal agencies to involve local groups in solutions. This process can be transferable to more traditional fisheries management techniques.
- It is difficult to combine the science and policy in the public arena. The public will hear our scientific results and not understand them. We then tried an alternative method and asked them to assist in picking target numbers within the range, and translating fish based goals into habitat actions. We won them over with this alternative method.

RUFE

**Rear Admiral Roger Rufe, President, The Ocean Conservancy
Washington, DC, Nov-13-2001, PEW Oceans Commission Panel
Invited Testimony**

Key Points:

- Ocean policy must move away from crisis-oriented management toward coordinated, adaptive, comprehensive decision-making.
- Focus has been on utilization over conservation.
- Oceans are under increasing pressure.
- Scientists have identified fishing as a primary cause of ecosystem change over time. Less than one-half of one percent of U.S. waters are protected by marine sanctuaries.
- Numerous federal agencies with different and often conflicting mandates have jurisdiction over ocean resources.

Recommendations:

- Marine Ecosystems
 1. Use ecosystem-based approach to conserve and manage marine resources. Utilize Marine Protected Areas (MPA).
 2. Amend existing federal and state laws to place increased emphasis on ecosystem protection.
 3. Enact new laws to fill gaps in current MPA system.
 4. Eliminate destructive fishing practices and other resource extraction activities in reserves.
 5. Increase funding and research for MPA and build national system of MPAs.
- Ocean Governance:
 1. Congress should modify current committee structure to reduce overlapping jurisdiction.
 2. Ocean Resources management and conservation should be vested in independent agency outside Department of Commerce (DOC).
 3. As an interim step: create permanent, cabinet-level interagency oceans advisory council to coordinate management; an intergovernmental panel to regularly assess status of oceans and resolve scientific controversies; and set research priorities.

Documents Recommended:

- Intergovernmental Panel on Climate Change model.

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SAFINA

**Dr. Carl Safina, Vice President for Marine Conservation, Audubon
Washington, DC, Nov-13-2001, Conservation Organizations Panel
Invited Speaker**

Key Points:

- Human population pressures increase competition for land, water, food, and dignity. Management of humans' ocean activities must account for land-sea connection (silt from clear cutting; agriculture induced silt; pesticide run-off; over fertilization from excessive fertilizer and farm-animal sewage; human sewage); air-sea connection (transport and deposition of pollutants; changes in atmospheric chemistry; warming; transport in water ship ballast carry species worldwide); direct exploitation (oil drilling; fishing).
- Fishing has two goals: develop fishing and maximize yield over long term by limiting catch to sustainable levels. Fishing has three main problems: overfishing, unintended catch, and habitat degradation. Fishing's inherent flaw is the conflict between trying to increase number of fish caught and the need to limit fishing and rebuild populations.
- Aquaculture causes a variety of problems: habitat loss, degraded water quality, movement of alien species and diseases.

Recommendations:

- View fish as wild animals, not commodity. Fishery management must be wildlife management.
- Change mandate and composition of Fishery Management Council (FMC): limits of how many of and what size fish caught determined by scientists and wildlife managers. FMC must require, in practice, that fish populations are rebuilt and overfishing avoided. Fishery management should be re-oriented from extraction to rebuilding and stewardship.
- Remove subsidies that encourage overfishing and distort market economics.
- Concept of zoning must be moved off the land into the sea; zone for fishing gear types. Whenever possible, fish farms should be located indoors.
- Move Fisheries Service to Department of Interior (DOI).
- Management should serve demands. Seafood labels must indicate how and where fish was caught or raised.

Responses to Questions:

- Fisheries provide a net benefit only when well managed and not depleted. Legislation is needed to set new habitat recovery goals, especially restricting bottom dragging. Farm runoff from agriculture and live-stock should be top pollution priority.
- Aquaculture should not be "fostered" by subsidies and discouraged in open water. Natural habitats that support wild marine fisheries should not be destroyed for aquaculture. Compliance with U.S. Sustainable Fisheries Act is necessary.
- Aquaculture should not seek to accommodate competing interests. It should serve long-term public interest (i.e., abundant wild fish populations and natural habitats).
- Sea floor should be mapped according to habitat types. 80% should be zoned for various or mixed use. Boundaries should be reserved based on seafloor maps and scientific advice.
- No country has good fishery management. U.S. is lagging behind many countries for Marine Protected Areas (MPAs).
- Coastal economies are best stimulated by recovery of abundant fish populations, sustainable fishing policies, tradable fish-access quotas, healthy habitats and corals, and attractive beaches.

Documents Recommended:

- "Hard Facts, Hidden Problems: A Review of Current Data on Fishing Subsidies" World Wildlife Fund (WWF).

SAMMARCO

**Dr. Paul Sammarco, Louisiana Universities Marine Consortium
New Orleans, LA, Mar-08-2002
Public Comment**

Key Points:

- Currently, there are 4000 platforms deployed in the northern Gulf. The region does not possess hard-substratum in shallow water. The platforms provide this.

- Many marine organisms settle on platforms including Caribbean sponges, gorgonians, and demersal fish.
- Magnuson-Stevens Fishery Conservation Act (M-S Act) and federal legislation regulating decommissioning of platforms should be reviewed in concert and brought into alignment in order to enhance protection of the coral communities developing in the Gulf.

SANFILIPPO

Ms. Angela Sanfilippo, President, Gloucester Fishermen's Wives Association
Boston, MA, Jul-24-2002
Public Comment

Key Points:

- The Gloucester Fishermen's Wives Association has a record, spanning three decades, of fighting ocean threats and developments that could harm our fishermen and traditional fishing grounds.
- No one is asking to end all regulations. But, when existing regulations are working and the stocks are rebounding, why not stay the course for a while? What is the point of imposing even more severe regulations in an attempt to reach what may prove to be unattainable targets a few years earlier?
- This year, fishermen in the Northeast are faced with the toughest reduction in fishing efforts in two decades. These unnecessary reductions will devastate inshore fishing fleets and local fishing communities. [discussion provided]
- Telling fishermen that they must rebuild stocks to reach harvest levels above historic sustainable maximums is sheer folly. It pulls the road to recovery right out from under the industry, which has endured many restrictions and closures to get there.

Recommendations:

- Manage fisheries based on data and not on theory. In this regard, it is imperative that fisheries are defined as "over fished" only when fishing caused the decline.

SARTOU

Ms. Cynthia Sartou, Executive Director, Gulf Restoration Network
New Orleans, LA, Mar-07-2002, Living Marine Resources Panel
Invited Testimony

Key Points:

- Many human-caused threats exist to the Gulf's sea turtles: commercial fishing, coastal development, pollution. Many human activities have adversely affected marine mammals: coastal development, offshore oil and gas, vessel traffic, military activities. Most impact analysis and mitigation activities are tailored to dolphins. Unaddressed are threats to whale species. We lack sufficient information that these activities do not have a significant adverse impact on whales, particularly the use of sonar. 72% of fisheries species in the Gulf are overfished. 36 species at risk of extinction are in the Gulf. 90% of nitrogen load causing the Dead Zone is from nonpoint runoff and over half is from the upper Midwest.
- Develop multi-agency ecosystem approach to turtle conservation with focus on comprehensive conservation program to address all threats to endangered and threatened turtles. Include proactive strategies for preserving important habitats (refuges) and addressing open water threats, including threats posed by fishing, oil and gas development, and shipping. Revisit present policy under Flood Insurance Program that fosters unwise coastal development by removing market forces from development decisions and drive much of the current coastal habitat destruction in Gulf states.
- Marine mammals: Call for comprehensive multi-agency research program by NMFS to determine impacts of shipping, pollution, and oil and gas activities on marine mammals, particularly whales, and methods for minimizing those impacts.
- Fisheries: Ensure that reauthorization of the FCMA contains provisions for broadening representation of the public interest on the councils. Convene a review panel to assess 25 years of the council system to identify strengths, weaknesses and recommendations. Call on Congress to amend the FCMA to set firm deadlines for the establishment of a standardized reporting methodology to collect and assess bycatch data in all fisheries and require annual reports to Congress updating the status of these efforts. Call on Congress to provide funding for fisheries research and data collection in the Gulf region commensurate to its contribution to the nation. Call on the administration to utilize strategies such as fishery observers and vessel monitoring systems to collect needed fishery management and marine ecosystem health data and ensure better fishery management regulation compliance to level the playing field for all fishermen. Call on Congress to amend the FCMA to require application of the precautionary approach to fisheries management to require the use of margins of safety against scientific uncertainty in all fishery management decisions. Call upon Congress to require that federal agencies bear the burden of proving that activities that affect the coastal environment will not have an adverse impact on fisheries habitat and increase NMFS', as well as the Gulf Councils', ability to veto federal non-fishing related activities that are found to cause unacceptable adverse impacts to fisheries

habitat. Consistent with the advice of the Ocean Conservancy, the Commission should make a commitment to the use of MPAs as a marine management tool and establish an adequate national system of MPAs, including no-take reserves and ocean wilderness areas. These areas are critical tools in moving toward ecosystem based management strategies. Call on Congress to amend FCMA to develop Fishery Ecosystem Plans for major ecosystems and ensure that management action is consistent with these plans.

- Dead Zone: Call on federal government to make long-term commitment of federal agency resources to address nitrogen pollution in Mississippi River Basin.
- Most critical changes needed at federal level to address major environmental problems in Gulf: Move away from current crisis-oriented management toward decision-making that is coordinated among various agencies, is adaptive, and comprehensive; identify changes in federal policy that drive coastal habitat destruction (flood insurance, transportation, etc.); make a commitment of federal resources aimed at addressing threat to Gulf's resources by nitrogen pollution; major overhaul of present management system.

Recommendations:

- Problems created by flood insurance policies and specific recommendations for change: Present requirements of NFIP to reduce flooding are not enforced; NFIP does not require development to be directed away from flood-prone areas; rates charged by NFIP remove development from normal market forces; and federal government is systematically subsidizing cost of living in risky areas.
- Overfished recovery plans should be in context of ecosystem plan so all interactions can be seen. IFQs are a tool that can be used with certain constraints, but there is concern about misuse by greedy people.
- Habitat protection is often seen as permitting rather than an actual protection issue. References used in testimony on whale population are provided. Councils put economics over fishery safety.

Documents Recommended:

- Jefferson, T. May 1995. PhD Theses on Distribution and Relative Abundance of Cetaceans in Upper Continental Shelf of the Northern Gulf of Mexico.
- Wursig, B. 1990. Cetaceans and Oil: Ecological perspectives. Pp 129-165 in Sea Mammals and Oil: Confronting the Risks. (J.R. Geraci and D.J. St. Aubin, eds). Academic Press.

SCHILL

**Mr. Jerry Schill, President, North Carolina Fisheries Association
Charleston, SC, Jan-15-2002, Management of Living Resources Panel
Invited Testimony**

Key Points:

- Government's inability/unwillingness to abide by congressional mandates is an adequacy in the fisheries management process. An example is the summer flounder which is managed by a "target," resulting in a recreational component overshooting the target for 7 consecutive years. A court challenge to the summer flounder management plan was lost, citing a 30-day statute of limitations-it is absurd to assume harm can be realized in 30 days.
- International cooperation is important, but should not come at the sacrifice of domestic fishermen.

Recommendations:

- Review the 30-day statute of limitations for regulations and management plans published in Federal Register.

Responses to Questions:

- Ultimate authority in deeming whether a state is out of compliance through Atlantic Coastal Fisheries.
- U.S. imports of fish that violate our own laws and regulations (e.g., swordfish).

SCHNEIDLER

**Mr. Dave Schneider, Chair, Puget Sound Harbor Safety and Security Committee
Seattle, WA, Jun-13-2002
Public Comment**

Key Points:

- Puget Sound Harbor Safety and Security Committee have taken the initiative to be proactive in issues of marine safety and environmental stewardship.

SCHOIK

**Mr. D. Rick Van Schoik, Managing Director, Southwest Center for Environmental Research and Policy
Los Angeles, CA, Apr-18-2002, Environmental Quality and Human Health Panel
Invited Testimony**

Key Points:

- Every drop of water in Rio Grande and Rio Colorado is allocated; occasionally these rivers never get to the sea. When they do, they dump wastes, toxins, metals, etc., into oceans.
- The following are reasons why this situation has been able to exist and persist:
 1. No one takes responsibility for oceans or monitors border waters.
 2. What reaches oceans far exceed U.S. standards because environmental infrastructure of the border region is inadequate.
 3. Governance is focused on other issues: International Boundary and Water Commission (IBWC), the North American Free Trade Agreement (NAFTA) created Border Environmental Cooperation Commission, and only have resources to address terrestrial contributions to human health issues.
 4. Issues require multiple attentions: multi-disciplinary expertise, multi-media pollutants, etc.

Recommendations:

- Apply principles of conservation design and begin all ocean protection measures well upstream on land.
- Transboundary environmental impacts should be assessed, minimized, and mitigated.
- Remind agencies and contractors who develop models, indices, and tests that arid and less rainy parts of the country cannot use the tools if developed only by and for temperate zones.
- A newly energized federal effort is needed to address complex and often bi- or multi-national issues.
- Endorse a new world environmental agency and court to make sense of the hundreds of laws, treaties, and disputes over ocean issues.

SCHWABACHER

**Mr. Rick Schwabacher, The Cousteau Society
Washington, D.C., Oct-30-2002
Public Comment**

Key Points:

- The Commission's concerns with regard to the Law of the Sea Treaty are well considered and noteworthy. At the same time, similar merits support ratification of the Convention on Biological Diversity and U.S. support for the Convention on Climate Change.

Recommendations:

- If we are truly to set the stage for revamping national ocean policy, we must turn to Congress and look at how better to integrate these interests within the legislative framework. Two options deserve further consideration: a joint House-Senate Oceans Committee (similar to the Joint Economic Committee) and a temporary or select Committee on Ocean Affairs established to evaluate and implement the recommendations from both the U.S. Commission on Ocean Policy and the Pew Oceans Commission.
- We urge the Commission, to call on Congress to provide a forum for debate and resolution of conflicts inherent in both the present and future ocean policy debate.

SCHWARTZ

**Ms. Suzanne Schwartz, Director, Oceans and Coastal Protection, U.S. Environmental Protection Agency
Honolulu, HI, May-14-2002, Coral Reefs Panel
Invited Testimony**

Key Points:

- A national action plan is needed to conserve coral reefs.
- Marine debris is perceived as a visual indicator of pollution. 80% of marine debris is from land-based sources.
- A National Monitoring Program was designed with 180 sites monitored monthly by volunteers. The amount of debris is decreasing. Five-year data in Gulf of Mexico may show trends.

Recommendations:

- Encourage Food and Agriculture Organization of the United Nations and International Maritime Organization to work together to address fisheries issues.
- Support allowing the International Convention for the Prevention of Pollutions by Ships the authority to enforce in special areas.
- Implement wider Caribbean Initiative on solid waste.
- Funding for net removal, monitoring, education, prevention, and mitigation is needed.
- Revive Marine Entanglement Research Program or similar program.

SCRANTON

**Mr. Russell Scranton, Student, Oregon State Univ. College of Ocean and Atmospheric Sciences
Seattle, WA, Jun-13-2002
Public Comment**

Key Points:

- Federal support is needed to combat the regional issues of national significance which have not been adequately addressed on the West Coast-species diversity and complexity, exotic species management, human population growth, fish maturation, chemical pollutant treatment and bioaccumulation.

Recommendations:

- Establish three additional National Estuarine Research Reserves located on the West Coast-in CA's Humboldt Bay, in Willapa Bay, and in a major port of the Puget Sound, such as Bellingham, Tacoma, Seattle, or Olympia-to analyze how ecosystems are affected by the human environment and provide a forum to promote public education and research.
- Expand an existing research program established to study Equatorial climatic variations.
- Establish a buoy array spaced 100 km apart along the West Coast of the U.S. covering coastal waters and waters of the EEZ to help oceanographers and atmospheric scientists create models for ocean and atmospheric conditions. They would also establish a baseline of information to aid in monitoring global warming and natural ocean and climatic oscillations.
- Speaking as an individual of the generation that may be severely impacted by global warming, I believe that the Administrations stance to ignore the precautionary principle and have future generations adapt to global warming impacts is unacceptable.

SEDBERRY

**Dr. George Sedberry, Assistant Director, Marine Resources Research Institute
Charleston, SC, Jan-15-2002, Management of Living Marine Resources Panel
Invited Testimony**

Key Points:

- Long-term monitoring and assessment programs by the South Carolina Department of Natural Resources (SCDNR) have resulted from, and stimulated interest in, several state/federal partnerships (i.e., National Oceanic and Atmospheric Administration-National Marines Fisheries Services) and provided data to management sections of SCDNR, Atlantic States Marine Fisheries Commission, National Marine Sanctuary Program, Minerals Management Services, and others.
- Single-species approach clearly does not work, thus the South Atlantic Fisheries Management Council (SAFMC) is now considering use of a Marine Protected Area (MPA).
- Exploration of unique regional habitats, such as spawning banks and shelf-edge upwellings, is needed. Additional research needed includes the mapping of habitats, as well as additional oceanographic work and study of reproductive biology to determine sources and fates of larvae from spawning aggregates.

Recommendations:

- Continue state/federal partnerships as a mechanism for meeting the objectives of the Commission and the Oceans Act of 2000.
- Continue development and improvement of technologies for use in ocean and coastal research and monitoring activities.
- Close cooperation between government agencies to ensure consistent management, appropriate funding, facilities support, cost-effective operations and enhancement of state/federal partnerships.
- Data and analysis should be made available on the web to scientists and educational networks as envisioned through the National Science Foundation's Center for Oceanographic Science Education Excellence program.

Responses to Questions:

- A detailed description of South Carolina's ecosystems monitoring programs. Programs determine what to measure in order to determine needed regulations. Program categories include: fishery monitoring, environmental, health monitoring, aquaculture and fish stock replenishment.
- MPAs should start as community-based (for buy-in) and developed from there. Further, MPAs should be monitored for effectiveness.
- Fishermen have input through fishery management council process (i.e., members and advisory panels) for what they think will work and what will not work.
- Important to involve fishermen the in development of monitoring plans or they will not buy into it (e.g., create partnerships with them for sampling, etc.).

SEIM

Dr. Harvey Seim, Assistant Professor, Department of Marine Science-University of North Carolina at Chapel Hill

Charleston, SC, Jan-16-2002, Partnerships at Work: Examples from the Southeast Panel

Invited Testimony

Key Points:

- Better information about the marine environment is a pressing need.
- Observing systems in East & Southeast:
 1. South Atlantic Bight Synoptic Offshore Observational Network (SABSOON)
 2. Delaware Bay (DBOS)
 3. Chesapeake Bay (CBOS)
 4. Pamlico Sound (FerryMon)
 5. Cape Fear River (CORMP)
 6. LTER sites in Virginia and Georgia
- Join the existing separate systems into a coordinated regional system using the Global Oceans Observing System model.

Recommendations:

- Establish direct funding to the National Oceanographic Partnership Program to ensure existence of a sustained program.
- Ensure that the proper support for a regional observing systems does not come at expense of basic ocean research.
- Provide incentives for federal agencies to be active participants in the regional systems.
- Address concern from the academic community that establishment of an observing system will cut into already slim funds.
- Developed industry interactions (e.g., partnerships with oil and gas industry to share their data; increase development of sensors; industry interested in product development for specific user groups, etc.).

Documents Recommended:

- "Toward a U.S. Plan for an Integrated, Sustained Ocean Observing System" National Ocean Research Leadership Council 1999

SENSMEIER

Mr. Ray Sensmeier, Alaska Native Brotherhood, Member of the Takutat Tlingit Tribe, Alternate Member of the Alaska Native Harbor Seal Commission

Anchorage, AK, Aug-22-2002

Public Comment

Key Points:

- The Alaska Native Harbor Seal Commission has co-management agreement with NMFS and is responsible for mandating and protecting the things that are within the purview of those Federal agencies.
- There is great concern about the increase in the cruise ship traffic to the Hubbard glacier in the Yakutat area. The National Park Service recently introduced legislations to limit that number to 107 because of the effect on marine mammals.
- There is a phenomena that exists on the coast of Alaska known as the Alaska coastal currant. It is a coastal currant that hugs the coast of Alaska and has its origins with the Columbia River down in Washington state and is comprised of all the fresh water inlets from British Columbia up through the coast. This fresh water lens lies on top of the ocean and hugs the coast and it's from 100 to 500 feet deep. It travels north at two to two and a half knots. The cruise ships utilize this in order to gain two and a half knots and save on oil, etc. Yet this coastal river has a lower salinity than the surrounding oceans and therefore has the capacity for carrying pollutants and materials that are dumped into it without significant dilution. These are then deposited on the shores.
- There has been a noted decline in the number of seals in the Hubbard Glacier area where the cruise ships frequent. A recent study showed undisputed evidence that the decline of the seal population there is of 32 percent to 48 percent since 1992. Since there is no hunting in Glacier Bay national monument, the decline cannot be attributed to hunting. There is a decline in Yakutat as well.
- The biggest concern is that the cruise ships come at May 14th or 15th, precisely the time that the harbor seal gives birth and nurse their young on the ice pans that break off of the Hubbard Glacier. The tribal government passed an ordinance two years ago setting a demarcation line that they wished the cruise ships to respect. They refused to heed the demarcation line. As a result there's been a market decline in the number of seals in that area.

SHAVELSON

Mr. Bob Shavelson, Executive Director, Cook Inlet Keeper
Anchorage, AK, Aug-22-2002
Public Comment

Key Points:

- Cook Inlet Keeper is a non-profit organization based in Homer, Alaska that represents hundreds of Alaskans deeply concerned about water quality and the health of our marine systems.
- The Federal Minerals Management Service (MMS) laid its five year plan for outer continental shelf oil and gas leasing including multi-million acre lease sales in Cook Inlet, in the Hope Basin, and in the Beaufort and Chukchi Seas.
- The current active regulatory paradigm ignores modern science and frustrates the sustainable oceans policy. Specifically between 300 and 200 miles it remains legal under the Clean Water Act to dump toxic drilling and production wastes into our fisheries and marine habitats. EPA has banned the discharge of drilling muds, cuttings, produced waters, and chemical additives in all coastal waters in the U.S. except for Cook Inlet. The discharge rules remain firmly fixed in the archaic notion that dilution is the solution to pollution. Now a growing body of apt scientific evidence is telling us what common sense already knew, that our fragile marine ecosystems are susceptible to toxic pollution. [discussion provided]
- A recent investigative news series in the mobile register showed how MMS' own studies found excessively high mercury levels in fish taken near oil and gas platforms in the Gulf of Mexico. Significantly, MMS found mercury levels known to pose harm to human consumers and these findings relate to the very same types of discharges currently allowed. Perhaps equally important, MMS' seems to appear to have a conflict of interest, which undermines public confidence.

Recommendations:

- Close the loophole on toxic oil and gas dumping.

SHELDON

Mr. Kirk Sheldon, Puget Sound Harvesters Association
Seattle, WA, Jun-14-2002
Public Comment

Key Points:

- In his absence, I have been asked to enter Peter Knutson's testimony. Peter Knutson is the director of the Puget Sound Harvesters Association, which represents the majority of Puget Sound nontreaty salmon harvesters. This hearing comes at a difficult time for us. Many of us have left or are leaving to fish our salmon season in parts of Alaska. Nevertheless, we wish to make a few comments regarding both individual fishing quotas and salmon net pen aquaculture. We officially support maintaining operator requirements for IFQ ownership. We also support provisions for centralized ownership, such as blocking.
- Coastal communities benefit tremendously by retaining the rights to fish in the communities of those who fish. The owner operator provision has been fundamental to the maintenance of our communities in the Puget Sound and Alaska.
- We have repeatedly called for the removal of net pen aquaculture from coastal waters. Escaped farmed salmon are now breeding in rivers. These fish are nonnative Atlantics and have no place in our waters. We have caught these fish in fisheries from the Bering Sea to Northeast Alaska to Puget Sound. We are fully aware of the horrendous disease problems which those floating feed lots pose to indigenous species. We are also concerned about the massive sewage, antibiotics, and pesticides which are freely released through the operation of these farms. We call for the immediate removal of these farms from public waters. These farms are directly subsidized by the destruction of wild ecosystems upon which we depend.

SHELLEY

Mr. Peter Shelley, Director, Conservation Law Foundation
Boston, MA, Jul-24-2002, Public Interest Panel
Invited Testimony

Key Points:

- Conservation Law Foundation (CLF) has worked for more than twenty-five years on marine resource management in the Gulf of Maine, starting with efforts to preserve and protect the living resources on Georges Bank from the potential negative effects of offshore oil and gas drilling.
- In 1997, CLF identified habitat protection as the missing link in the ecosystem safety net needed to insure the long-term sustainability and diversity of the Gulf of Maine and New England waters.

- The Gulf of Maine's challenges:
 1. The water quality of the Gulf of Maine is under tremendous pressure from population increases.
 2. The newest source of pollution in the Gulf of Maine is salmon aquaculture farming operations.
 3. The nightmare that looms over every ecosystem is a catastrophic event such as an oil tanker accident.

Recommendations:

- Review and consider all the recommendations that are emerging from the Pew Oceans Commission-an important initiative from the private sector.
- The ultimate biological health of the Gulf of Maine is a direct function of our capacity and effectiveness in four managing interactive system variables: water quality, living resources, extraction rates, habitat protection and governance. [discussion provided]
- Water quality recommendations: Federal and state governments must fully implement the provisions of the Clean Water Act and embark on a comprehensive and accelerated effort to clean up impaired coastal waters; U.S. EPA should expeditiously complete "aquatic animal production" effluent guidelines; U.S. Coast Guard programs must be upgraded and expanded; international mechanisms to improve coordination and management should be expanded.
- Living resource recommendations: Congress should: 1) strengthen the Sustainable Fisheries Act; 2) authorize the development of resource rents for all major commercial and recreational marine activities to create a dedicated funding stream; and 3) amend the CZMA to promote the development of inventories and identification of strategic coastal infrastructure.
- Biodiversity recommendations: Congress should enact legislation mandating and appropriating funds to support the development of a network of fully-protected marine areas; the Commission should: 1) recommend to NOAA that they actively pursue designating a portion of the Stellwagen Bank National Marine Sanctuary as a fully protected area; and 2) should charge each agency with marine resource management authority.
- Improve ecosystem governance recommendations: need new legislation or an executive order to develop the capacity for integrated Federal management at the scale of the regional sea; regional Federal task forces must be organized and charged with the task of identifying, integrating, promoting, and protecting strategic Federal interests in the nation's oceans; and ocean zoning or area management strategies must be developed.

Responses to Questions:

- Some people do not completely accept the premise that there is excessive litigation happening right now. This resource is managed under the law and the courts are the appropriate mechanism for doing that. "Law" is our middle name, so I'm probably not the best person to talk about how to take the courts out of the system.
- There is an argument that could be made that having a Federal government manage the sites and then sublease them out through RFPs to individual lessees with rents extracted might help with the monitoring and a lot of the shared costs that right now have to be completely captured by an individual applicant. So, there is a Federal role here.
- There should be a very clear scientific hypotheses associated with every MPA that is established. Research is needed for all MPAs. For biodiversity purposes, there has to be some no-take areas.
- The ecosystem is pretty efficient at growing fish if it's given half a chance, and if it's not over-harvested. So a future of a completely engineered ocean zone is not particularly attractive or necessary as long as it is managed appropriately.

SHIPMAN

**Ms. Susan Shipman, Director, Coastal Resources Division, Georgia Department of Natural Resources
Charleston, SC, Jan-15-2002, Management of Living Marine Resources Panel
Invited Testimony**

Key Points:

- Georgia achieves effective marine resource management and habitat stewardship through interstate and state/federal partnerships.
- Atlantic States Marine Fisheries Commission and Interstate Fishery Management Program both fall under the fishery management partnerships
- When Magnuson-Stevens Fishery Conservation Act (M-S Act), Endangered Species Act (ESA), and Marine Mammal Protection Act (MMPA) are applied together, they fuel litigation due in part to their conflicting mandates.
- Other Conservation Partnerships include state and federal research, Southeast Area Monitoring and Assessment Program, Marine Fisheries Initiative, Marine Resources Monitoring Assessment Program and Atlantic Coastal Cooperative Statistics Program.
- Enforcement is an area where new partnerships could be useful.

Recommendations:

- The Sustainable Fisheries Act is not responsive to emerging situations and must be streamlined.

Responses to Questions:

- A charter developed under the Atlantic Coastal Act was designed to guide the interstate fishery management program
 1. It is not as prescriptive as Magnuson standards. It has worked well for us.
 2. M-S Act has become so prescriptive it is imploding on itself.
- States and federal governments should decide together who manages what.
- Neither states nor federal governments have the resources to manage all the fish.
- Essential Fish Habitat (EFH) is part of the whole process and needs a holistic approach.
- In some regions fishery management and the M-S Act work better than others. This depends on complexity of the fishery and interaction with advisory panel.

Documents Recommended:

- National Governors Association Policy on Marine Fisheries

SHORB

Mr. Paul Shorb, Senior Attorney, AT & T Corporation; Vice President, North American Submarine Cable Association

Boston, MA, Jul-24-2002, Marine Industry Panel

Invited Testimony

Key Points:

- Submarine cables are essential infrastructure because they are the primary way that communication cuts across the oceans. The telecommunications services these cables provide consist not only of voice calls but also data transfers and Internet telecommunications traffic between the U.S. and points outside of North America. The main reason that submarine cables rather than satellites are the dominant international communications infrastructure is that modern fiber-optic technology allows huge and increasing capacity per cable. Submarine cable projects typically cost \$1/2 billion to \$1 billion each.
- Submarine cables are environmentally benign: Submarine fiber-optic cables typically have only the diameter of a garden hose. They typically are laid by a large specialized cable-laying ship, spooling the cable out of huge holding tanks.
- Four cable installation techniques may be used:
 1. At the shoreline, directional drilling is often used to install cable conduits passing under the beach and any near shore reef
 2. When crossing soft bottom areas that are potentially subject to ship anchoring and trawling or other bottom-fishing techniques, the cable typically is buried, to protect the cable from the fishing gear
 3. When crossing hard bottom areas where burial is infeasible and anchoring or bottom-fishing gear is expected, "armored" cable is used. It has a diameter no more than a soft drink can. The evidence shows that such cables do not move laterally once placed.
 4. When crossing the deep ocean where no anchoring or bottom-fishing gear is expected, the cable typically is just laid flat on the ocean bottom. It has no known adverse effects.
- Current government processes for reviewing proposed submarine cables have multiple problems. A proposed new cable system must run a gauntlet of Federal, state, and local reviewing agencies. On the Federal level, the FCC, the ACOE and NOAA each play a role.
- The current governmental review procedures have a number of problems that threaten not only to unfairly burden and delay projects that are in the national interest, but also to kill such projects through delay. [discussion provided].

Recommendations:

- North American Submarine Cable Association (NASCA) believes that the Executive Branch should clarify the jurisdictional issue, and that a nationally consistent Federal permitting regime should be created to set the conditions for installing submarine cables. This Federal regime would operate in lieu of state and local permitting processes.
- This recommendation may be carried out by NOAA more strictly policing the state coastal zone management programs. NOAA could protect the national interest in telecommunications infrastructure by requiring certain provisions and procedures as a condition of Federally approving those state programs.
- Legislation that recognizes the national interest in this infrastructure and creates a nationally consistent, Federally-implemented process for reviewing such projects and timely approving them, with appropriate conditions to protect the environment. Congress granted the Federal Energy Regulatory Commission similar power in Section 7 of the Natural Gas Act.
- Recommend that the U.S. not encourage other nations to violate the norms of UNCLOS by violating them ourselves.

Responses to Questions:

- A few of the countries signed UNCLOS reserving the rights to exert jurisdiction beyond the 12-nautical-mile limit but it is difficult to say what the mechanisms are to, for example, influence China or Russia.
- Cables have been taken out of telecommunication service, not because they don't work, but because they are not as economically effective as the high-capacity cables that have been used and are available to be used. So, there are owners that one could deal with and they most likely could convert those cables for scientific use. No cable is laid without the bottom first being surveyed by sonar techniques. Those records are also not kept forever but the last five years are still probably available and have been used for scientific research that hinges on topography such as wave effects on the ocean bottom.
- Regarding a special permit for cables to cross a National Marine Sanctuary, the August 2000 publication by NOAA was titled: "Advanced Notice of Proposed Rule Making." NOAA has not explained why special use permits should be required for commercial cables crossing sanctuaries and not other cables, for example. Two of the three commercial cables that have crossed National Marine Sanctuaries required a special use permit from NOAA. NOAA has been a bit inconsistent. Also, in dealing with the states and the Coastal Zone Management Act, there are routing restrictions or requirements for the cable to be buried or compensation to be paid to fishermen, out to 1000 fathoms, which is a practical limit for trawling on the West Coast. Similar permit conditions have gone out that far, dozens of miles from shore, which is beyond the state's territorial jurisdiction and going into offshore into Federal waters. That is also way beyond the limits where the Federal government should be restricting cables according to UNCLOS.
- The industry is asking for a more simple process from the principles of the CZMA, similar to what they did with the Natural Gas Act.

Documents Recommended:

- Documentation showing all the active cables.
- Sonar survey on ocean bottom prior to laying cable.

SHULTZ

**Mr. Ron Shultz, Executive Policy Advisor and Natural Resources Officer for the Governor of Washington, Office of the Governor, State of Washington
Seattle, WA, Jun-13-2002, Featured Speaker
Invited Testimony**

Key Points:

- Faced with limited fiscal resources, increased Federal contribution and greater cooperation with stakeholders will be needed.
- Invasive species: open ocean ballast water exchange difficult; need on-shore treatment. Consistency in regulation between ports would provide certainty for shipping companies.
- Land Use: Have laws to protect shorelines and ensure public access and enhance wildlife. Have acknowledged past mistakes and great strides have been made to correct them.
- Oil Spill: Priority in Washington is to prevent spills by focusing on large vessels and marine facilities, while working with Coast Guard and stakeholders.
- Fisheries and Marine Habitat: Need sustainable fisheries management

Recommendations:

- Invasive Species:
 1. Commission should recommend to Congress that regional approaches to invasive species response be allowed. [details provided]
 2. Coast Guard should provide sufficient resources to work with states. The Federal government should provide specific focus in discussions with other nations to develop international plans for the control of invasive non-native species. [details provided]
- Land Use:
 1. Reauthorize and amend CZMA creating a new coastal communities program to assist states in working directly with local governments to improve planning and management that balances growth and economic needs, protects critical resources and revitalizes waterfront areas. [details provided]
 2. Urge support for the establishment of a Coastal and Estuarine Conservation Fund-a permanent, dedicated funding source for coastal land conservation and habitat restoration. [details provided]
 3. Congress should provide financial assistance for state and local governments implementing the Clean Water Act. [details provided]

- Oil Spills:
 1. Should urge the Federal government to provide matching funds to support a dedicated rescue tug at Neah Bay.
 2. Coast Guard and DOJ should provide additional resources to address the intentional and illegal dumping of oil. [discussion provided]
 3. Recent U.S. Supreme Court decision has made it critical that the Federal government delegate appropriate inspection authority to states that have well-funded and effective oil spill prevention and response programs. [discussion provided]
- Fisheries and Marine Habitat:
 1. Recommend to Congress that as they consider the reauthorization of the M-S Act, that a system be put in place to provide for research and monitoring that will inform management decisions that will lead to a long-term sustainable fishery.
 2. Support regional marine research by recommending increased resources and National focus on these activities. [details provided]
 3. Support regional monitoring efforts.
- Need increased cooperation between states, Federal government, tribes, and the international community.

Responses to Questions:

- It would be helpful to have an amendment to the CZMA to be clearer on the expectations of the communities and local governments, and what guidelines they want regarding consistency along the coast.
- Growth issues should be included in the CZMA. It is a goal for local governments to direct growth new development away from the shorelines, and minimize the impact of shoreline ecosystems and habitats.
- Another priority for funding is for those effective programs that achieve national objectives, but are doing so on a regional level. For example oil spill prevention and response programs. We need authority and some additional resources through the Coast Guard to provide a tug and we can do the rest.
- Yes, the state would like to engage in inspections that go over and beyond the Coast Guard inspections. In the INTERTANKO decision, Washington State would enter in different standards of inspection than what the national standards are. Would like Congress to modify it: Congress would make the national standards, but they would allow states that have an effective program be able to have standards that could be more stringent or a little different than the Federal standard. This would relieve some of the burden on Congress. The Coast Guard, as we know, is being asked to do a great deal and this process would relieve some of their burden.

SIMONDS

**Ms. Kitty Simonds, Executive Director, Western Pacific Regional Fishery Management Council
Honolulu, HI, May-13-2002, Management of International Living Resources Panel
Invited Testimony**

Key Points:

- U.S. fisheries under the councils jurisdiction predominantly target other international resources. Unlike many other fisheries around the world, these stocks are healthy and harvested at or below maximum sustainable yield.
- Our fishermen have to be out fishing, it is the only way to find protective procedures to be used by our fishermen and that could also be transported to foreign fishermen targeting the very same stocks and encountering the very same bycatch species.
- Closure to Hawaiian longline sword fishermen of 1.2 million square miles south of Hawaii in mostly international waters has allowed less regulated foreign vessels to increase their operations and other vessels not under the Councils jurisdiction can continue fishing.
- Scientists and fishermen working together have developed promising new technologies to reduce the bycatch of seabirds.

Recommendations:

- Support and promote efforts of the regional Councils to convene international conferences and workshops to solve problems. Allow Councils to accept outside funding for these and other purposes.
- Develop binding international agreements to address native sea turtles in the Pacific.
- Support some sort of avenue for cultural takes when the sea turtle populations can sustain them.
- Support a policy of efforts that bring fishermen and scientists together to develop protective procedures and technologies to reduce bycatch of seabird.
- Recommend a policy that provides the American fishing industry the opportunity to play a greater role in partnership with government to discover innovating means to resolve current conflicts.

SIMPSON

Mr. Larry Simpson, Executive Director, Gulf States Marine Fisheries Commission
New Orleans, LA, Mar-07-2002, Living Marine Resources Panel
Invited Testimony

Key Points:

- Habitat is the key and should be the highest priority as it affects fisheries resources. Marine fish are especially interrelated with environment and man's influence. Commission must provide recommendations on future, large-scale policies for all our nation's oceans.
- Develop a national fresh water inflow policy. The main goal should be to ensure an ample supply of fresh-water inflow, applied at appropriate times, to maintain appropriate salinity regimes and concentrations of nutrients and sediments to sustain function and productivity of estuaries. Implement coordinated data collection and management system for fisheries. State and federal systems such as FIN and SEAMAP coordinate collection and management activities and provide data for all parties. Today's management regimes require data which are statistically sound, long-term in scope, timely, and comprehensive. Cooperative partnerships between state and federal agencies are most appropriate mechanism.
- Programs to increase public awareness of ocean issues and how living marine resources interact and are affected by man's actions. Farm runoff affects hypoxic areas in Gulf. Eutrophication has been greatly accelerated by human activity. Marsh loss due to natural (subsidence, sea level rise) and man-induced (reduced freshwater and sediment input, dredging) has reached crisis level. Flood control levees have an effect on salinity regimes and deprived marshlands of needed water and sediments. Consider new or modified oil and gas policies. With a concentration of anything, problems occur. Other areas of the country should be open to mineral extraction so effects may be distributed rather than concentrated in Gulf.
- Foster new and improved relationship with state partners. It should no longer be states versus federal. Joint Enforcement Agreements between NOAA Enforcement and Gulf states provide bi-partisan cooperative enforcement. This maximizes the effectiveness of law enforcement and enables interjurisdictional fisheries enforcement. Funding Agreements provide additional benefit to nation by increased presence of officers who are federally-commissioned to patrol.
- Elevate Living Marine Resources' Status in international issues. Consider consolidation of all fisheries agencies in the federal government under a single agency. Support an economic stimulus package for living marine resources under the Conservation and Reinvestment Act. Portions of OCS revenues should go to states for fisheries and coastal wetlands activities. Legislation like CARA would provide dedicated, much needed funds for fishery and habitat work. Revenue from onshore drilling is shared 50/50 with states. 100% of OCS revenue from oil and gas leases goes to U.S. Treasury.

Recommendations:

- Passage of MS Act greatly expanded the role of the federal government. Has it worked? System is expensive and not very responsive. Council system has fostered broader thinking and provided guidelines for rational management with several successes, but fishermen and processors pay a heavy price for Gulf-wide standards on many fish. Reduction of foreign fishing off our coasts has been successful. Act has been limited in causing change relating to habitat loss. Successful in engaging general public in management process by selection of individuals to serve on Councils. Whole system is data driven without initiative to improve and establish systems and mechanisms for future management needs.
- Returning primary role of fisheries management to states could technically and ideally be done but mechanically is doubtful. The costs would be lower and more responsive in a time sense. States in a region would need to agree upon overriding standards or means by which regions fisheries will be managed.

SINCLAIR

Mr. James Sinclair, Searex, Inc.
St. Petersburg, FL, Feb-22-2002
Public Comment

Key Points:

- The majority of shipwrecks in U.S. and Caribbean are in various states of progressive decay. Without the help of private sector who will rescue imperiled artifacts from shipwrecks.
- Governments and private sector need to learn to work with each other and support multiple use of the resources.

SKINNER

Mr. Tom Skinner, Director, Office of Coastal Zone Management, Executive Office of Environmental Affairs, State of Massachusetts

Boston, MA, Jul-24-2002, Regional Coordination of Ocean Policy Panel

Invited Testimony

Key Points:

- The Gulf of Maine Council on the Marine Environment was created as a cooperative body and has succeeded in establishing a framework for continued cooperation in research, education, data collection, and policy development.
- Even though the Council is held up as a product of state and provincial cooperation, the institutional, technical, and financial support of the Federal government as been invaluable.
- The Council was not created in response to any immediate crisis and was not designed to usurp regulatory or management functions of state, provincial, and national agencies or legislative bodies. [Further description provided.]

Recommendations:

- Make changes at the Federal level to more fully encourage, recognize, and support regional approaches to marine ecosystem management.
- In considering regional ocean policy, focus must be placed on regional needs shared by all partners:
 1. Emphasize regional issues that require collaboration or cooperation to be effectively addressed;
 2. Be inclusive in priority setting and provide adequate time for priorities to emerge;
 3. Initially take on tasks that can be achieved - look for quick successes;
 4. Build relationships with others that are lasting and productive;
 5. Focus on a small number of priorities and prepare a plan or strategy to achieve them;
 6. Set bold targets and be visionary; and
 7. Adopt measurable goals, create baselines and track progress - these produce accountability.
- Maintain continuity in commitment, leadership, and staffing; specifics include:
 1. Develop a proactive agenda that causes people at the right level to participate;
 2. Recognize that inertia and culture often impedes progress - develop approaches to overcome these obstacles;
 3. Create and nurture champions;
 4. Steadfast commitment pays off; and
 5. Develop and monitor indicators of commitment.

Responses to Questions:

- In order to sustain our operations, Congress has appropriated direct funds through agencies. In addition, applications have been submitted for competitive grants through NOAA's Coastal Services Center.
- No, the U.S. government should not give money directly to a foreign government to upgrade their sewers. The Gulf of Mexico Council just has to continue to work collaboratively.

SMITCH

Mr. Curt Smitch, Special Assistant to the Governor, Chair of Joint Natural Resources Cabinet, Natural Resources of the State of Washington

Seattle, WA, Jun-13-2002, Featured Speaker

Invited Testimony

Key Points:

- The region has been struggling mightily with addressing salmon issues.
- The area the region knows least about but clearly has one of the major impacts on resources, including salmon resources, is the ocean.

Recommendations:

- Would like the Federal government to tell us what they want and we will figure out how to get there. Need to know the ground rules for dealing with an issue, which is even more complicated because it is by definition transboundary and multijurisdictional.

Responses to Questions:

- There is State agency coordination, which is critical to managing the recovery of fish, but Federal government coordination is also crucial. Working without oversight or direction from the White House would be simply impossible. Working with the ocean issues requires White House coordination.
- It is difficult to get people to come to the table and do the difficult work that is necessary when they cannot get clear direction from the Federal government.

- California, Oregon, and Canada have not agreed on a regional cooperative approach yet, but Washington State is interested in it. The motivation for us all is consistency in the shipping industry.
- Sufficient resources to support research are important. For example, we need resources to meet the requirement of reporting to the Coast Guard. Resources for technology are also important.
- More resources are needed to research particular stocks when we think it is needed.
- One example of coordination is The Puget Sound Water Quality Action Team that is composed of several state agencies that work to coordinate a variety of activities within Puget Sound, including education
- In Washington State the needed structural change within the coastal zone management structure is carried out through our Shorelines Management Act, which does establish some state priority.
- The Puget Sound area has done a pretty good job at minimizing the amount of sewage being discharges, but the largest problem has been with British Columbia and Vancouver, both of which have dumped raw sewage into the straits. I do not know if there are any waivers but I will find that out.
- The priority scheme for funding is very difficult. The resources and the infrastructure necessary to do what is needed are lacking. More oceans related funding is needed.

SMITH

Ms. Cha Smith, Kahea
Honolulu, HI, May-14-2002
Public Comment

Key Points:

- Kahea is an organization of native Hawaiian cultural practitioners and environmental activists involved in protecting Northwest Hawaiian Islands.
- Great public support for protecting the Northwest Hawaiian Islands. They are unique and fragile [discussion provided].

SNYDER

Mr. Rex Snyder, Native Alaskan
Anchorage, AK, Aug-22-2002
Public Comment

Key Points:

- Speaker is a hunter of marine mammals.
- The North Slope provides approximately one-fifth of our nation's non-renewable resources of domestic oil. The rapid growth in population, economic development and national security are continuing to create more needs for energy. The responsible parties for offshore development in the ice ridden Beaufort Sea have not proven that they can respond to a major spill in an environment where heavy ice conditions and long, dark and severely cold winters are a reality.
- The Commission's vision to consider ecosystem based management is a very good one.
- Speaker supports the work and suggestions of our military, including the Coast Guard, the Department of Justice, and The Oceans Conservancy, and those oppose farmed fishing.
- Support citizen's oversight models and local involvement and training, and the reauthorization of the Marine Mammal Protection Act to further define the statutory language supporting co-management of marine mammals between Alaska Native tribes and Federal agencies.

Recommendations:

- Urge this Commission to help find creative ways to direct our managing Federal agencies involved with the Arctic Ocean activities to deal with the failings of responsible parties in spill response. Such creative mechanism may include moratoriums of offshore production or mitigation impact funds available to the local people.
- Urge this Commission to incorporate the proven science developed by Alaska Natives in ecosystem management that has been theorized.

SOLIDAY

Ms. Louise Soliday, Natural Resources Advisor, Office of the Governor of Oregon
Seattle, WA, Jun-13-2002, Featured Speaker
Invited Testimony

Key Points:

- Oregon's Coastal Management Program includes a statewide planning goal specific to Ocean Resources; one of 19 goals that frame the statewide land-use planning program. The Goal 19, Ocean Resources, sets the overarching policy standards for management and protection of ocean resources. All State and

- Federal agencies must meet the requirements of Goal 19.
- Ocean Resources Management program, created by legislature in 1991, builds on authorities of existing state programs and bring affected interests into a process.
- Believe regional ocean governance structure is required to enable all parties to regularly come together to address issues.

SPAIN

**Mr. Glen Spain, Northwest Regional Director, Pacific Coast Federation of Fishermen's Associations
Seattle, WA, Jun-14-2002**

Public Comment

Key Points:

- Fisheries management has in all to many instances failed to prevent overfishing, failed to protect the marine biological resources, and failed to provide a stable fishing economy for our future. In addition, there has been devastating loss of habitat and the various environmental threats that are depleting our living marine resources and pushing the Northwest region's primary fishing resource, Pacific salmon, ever closer to the brink of extinction.
- There are intimate biological connections between human activities far inland and the health of our nearshore oceans, and these impacts can and do cumulatively affect ocean health far out to sea, and eventually worldwide.
- The once legendary Pacific salmon and steelhead runs have been destroyed by the destruction of inland and estuarine salmon spawning and rearing habitat by the extensive damming of rivers and the almost complete diversion of major river systems. The only exception to this tragic story of declines and eventual ESA listings is the fall Chinook salmon run currently inhabiting the Hanford Reach, a 70-mile stretch of river that is the only part of the Columbia River that is not dammed and still running wild.
- Current ocean policies and fisheries management laws are unable to grapple with the inland problems. For the most part, fisheries management agencies do not have the legal jurisdiction over the inland issues, and thus do not have control over any portion of the salmonid lifecycle other than when actually in the oceans.
- Salmon are by their nature highly migratory and thus are a multinational resource. True fisheries management should be about managing fish through their entire lifecycle, not just managing fishermen and fish harvests at sea in a near-total vacuum.
 1. The fishing industry is a wetlands dependent industry. Wetlands protection should not be seen as a cost so much as it is an investment in the future of national commercial and recreational fishing industry that provides \$152 billion each year to the nation's economy and 1.5 million family wage jobs nationwide.
 2. The introduction of genetically modified organisms (GMO) into the ocean ecosystem creates a serious risk of ecological disaster including a whole range of risks that are well outside our experience to adequately assess.
 3. There is a need for better support for a national fishery observer program - better funding, more standardized training, and more rigorous, and the whole program should be made to be more professionalized.

Recommendations:

- Keep in mind that what happens far inland can and will greatly affect ocean resources. Salmonids provide the best example, since as anadromous fish they spawn in freshwater, rear in the oceans and return to spawn in their natal freshwater streams often far upstream.
- Oceans begin in the watersheds. Ocean protection policies must take this fact into account. The health of the ocean resources is directly related to human activities in our watersheds.
- Any comprehensive ocean protection policy must address the continuing influx of industrial and agricultural chemicals, in vast amounts, that wash into our estuaries and contaminate our nearshore environments and ocean ecosystems, threatening the nation's fisheries and human food chains.
- A comprehensive ocean policy should strengthen existing barriers or provide stronger barriers preventing offshore oil development in any area that may impact regional fisheries.
- More leeway should also be allowed the states in requiring additional protections for their coastal resources from the ravages of an oil spill.
- Although certain forms of aquaculture have promise, we need to proceed with caution, not recklessly, in developing that industry so that it does not jeopardize our wild fisheries. We would recommend that all aquaculture operations be closed systems that physically cannot release fish into the marine environment.
- Often, fisherman and their wives have pushed their children into higher learning in the hopes of bettering themselves. Let us encourage our children and crew to continue their educations and upgrade their fishing skills to become the thinkers and leaders of our fishing industry of the twenty-first century, the brains that will help us adapt to a constantly changing world. Make it a professional industry.

SPALDING

Mr. Curtis Spalding, Executive Director, Save the Bay, Narragansett Bay, Rhode Island
Boston, MA, Jul-24-2002, Public Interest Panel
Invited Testimony

Key Points:

- Two broad issues that have had dramatic ecosystem-wide effects in Narragansett Bay and other estuaries are nutrient pollution and climate change.
- Nitrogen that causes massive algae blooms has increased in the Bay by five-fold since records have been kept in the area. Additionally, nitrogen levels are expected to continue to increase exponentially.
- Regarding climate change, over the past two decades, the average spring water temperature of Narragansett Bay has increased by about 3.4 degrees Fahrenheit. Though it may not seem like much, small temperature changes can have big effects on what can live in the water. For example because of the warm winter and excess nitrogen non-stinging comb jellyfish were found in the thousands. They are able to grow unchecked and their population has exploded due to the increased water temperature and an abundance of the plankton to eat.
- Save the Bay works in three primary areas toward their mission of a clean and healthy Narragansett Bay: 1) Protection; 2) Restoration; and 3) Education.
- Several years ago, Save The Bay helped found Restore American's Estuaries (RAE) to advance estuarine habitat restoration at the Federal level. ROE has identified 74 separate programs related to habitat restoration, which fall under seven Federal agencies at several jurisdictional levels including the EPA, Commerce, Defense, Transportation, Health and Human Services. The fractured nature of governance sometimes leads to non-productive competition among agencies, lack of clarity and a lack of public understanding.
- The traditional focus of ocean and coastal policy and management has been on marine fisheries and the living resources of the ocean itself. Management of estuaries and near-coastal waters is much more complex.

Recommendations:

- What is needed is a full-scale coordinated habitat restoration plan at the Federal level, such as the one called for in the Estuary Restoration Act of 2000. This Act calls for the coordination and prioritization of coastal and estuarine habitat restoration efforts nationally.
- The kind of commitment that is being made to Chesapeake Bay must be made to all estuaries. In addition, the statutory framework must be reworked based on our years of experience a watershed management approach.

Responses to Questions:

- One of the roles the Federal government can play is to be much stronger about the needs for the nation's watershed, so other estuaries can get the same support that the Chesapeake Bay receives. They have firm agreement accountability and they have interjurisdictional conversation. The same is needed for all estuaries. Chesapeake Bay Foundation put a billion or more dollars in to the restoration of Chesapeake Bay. This should be properly calibrated. At some level, the same kind of commitment must exist across the board for all estuaries, within some kind of structure. Some of that exists within the National Estuary Program, but nothing like what you see for the Chesapeake Bay.

SPINDEL

Dr. Robert Spindel, Director, Applied Physics Laboratory, University of Washington
Seattle, WA, Jun-14-2002, Ocean Science, Exploration and Education Panel
Invited Testimony

Key Points:

- The Arctic is changing. There has been an observed decrease in ice thickness and ice cover.
- The end of the Cold War and under ice submarine operations has set our Arctic Ocean research program back a decade or more, and unless something is done about it, it will only get worse.
- We cannot answer the most basic questions about why the Arctic has changed without sustained, continuous observations, and we have stopped making them.
- Whatever research is now being done by U.S. agencies-NSF, NOAA, and NASA-is not coordinated, and is not part of an integrated observation plan.
- We are losing logistic capability.
- The Arctic Ocean is split by national jurisdictional claims, making research access difficult, and the trend is towards even more claimants.

Recommendations:

- Understand what is happening in the arctic, and why.
- Reinvigorate our Arctic Ocean research program.
- Develop and execute a plan for sustained, long-term observation.
- Establish an interagency authority for Arctic Ocean research. The National Ocean Research Leadership

- Council might be the right vehicle.
- Prioritize construction of a UNOL ice-capable vessel, and we need to support regular, continuous operations rather than sporadic forays.
- Include a high level diplomatic component in our plans for future arctic research to assure research access.
- Change the NSF's attitude and its bias so that the Commission will support an increase in Arctic support.

Responses to Questions:

- There is an NSF, Arctic support section. Some think it works well and others do not. In the context of logistic capabilities it has worked well. They are highly developed for the Antarctic.
- The Arctic component should be a major priority and receive emphasis in any integrated marine system plan. It plays a large role as an indicator of the climate. We have to have a global observing system and the Arctic must be a part of it.
- The Arctic Research Commission was established in part to make sure that we didn't wind up in the situation that we're in right now. They would not do as the vehicle to increase our active research efforts.
- Must balance the funding between the Antarctic and the Arctic. We maintain our presence in the Antarctic to maintain national presence so that essentially we establish some ownership to the continent. Certainly what is happening in the Arctic Ocean is quite different. In fact, maybe one reason the Russians are attempting to occupy the EEZ is to just establish a larger presence.
- The ocean scientists are part of the problem, because we each have our own agendas. We need to get our act together and put forward a coherent agenda. Two mechanisms may be appropriate: the NORLC, the newly formed Ocean Research Leadership Council. The other is the core of institutions.

SPINRAD

**Dr. Richard Spinrad, Technical Director, Office of the Oceanographer of the Navy
Washington, D.C., Oct-30-2002, Satellite and Data Management Panel
Invited Testimony**

Key Points:

- As our data acquisition platforms and sensors improve, our ability to collect environmental data increases at an exponential rate; as the capabilities of our customers grow, the performance of their systems is increasingly dependent on environmental data of even greater resolution and more rapid refresh rate. But our ability to assimilate and apply these data, and disseminate the associated products must keep pace with-and anticipate-these increased needs of the customers.
- Offer that two overarching themes are relevant to the issue of ocean data management:
 1. The U.S. Navy uses a set of operational principles governing data management strategies. These principles emphasize that the Navy data management is part of a greater overall process where we address the customers' needs, effectively utilize the capabilities of data acquisition, analysis, and fusion centers, and maintain a strong link with the research and development community while robustly supporting our operational fleet at sea; and
 2. The U.S. Navy has mechanisms and infrastructure to meet current data management needs, and plans to exploit fully the continued growth in volume and diversity of data (especially remotely sensed data) in order to meet future operational needs.

Recommendations:

- We must deal effectively and efficiently with the increasing data flow that supports customer needs.
- Need an effective data management governance framework. Authority for such a framework exists today in the National Oceanographic Partnership Program's National Ocean Research Leadership Council (NORLC).
- Need a data management infrastructure that integrates all appropriate systems, platforms, and sensors. This coordinated national strategy for ocean observation integration should include expansion of NPOESS's and NOPP's authority.

Responses to Questions:

- There really is no fundamental difference between the definition of a military operational oceanographic requirement and a civil operational oceanographic requirement.

STAHL

**Ms. Jane Stahl, Deputy Commissioner of Environmental Protection, State of Connecticut
Boston, MA, Jul-23-2002, State Representatives Panel
Invited Testimony**

Key Points:

- A great place to start when developing a comprehensive ocean policy would be to vigorously support the Federal Coastal Zone Management Act and the programs developed under it.
- Development of coastal areas, watersheds and habitats is essentially irreversible, a permanent loss of our natural capital.
- The ACOE's expertise and ability are not being used to best effect because the Corps' policies, processes, and the laws under which it operates remain historic.
- Without CZM consistency as a cornerstone of any national ocean policy, it will be difficult to effectively achieve balance of the diverse interests and values associated with our coast. CZMA must be as an essential foundation and then all Federal programs that affect ocean and coastal management can effectively coordinated and streamlined.

Recommendations:

- A Federal ocean policy must place a high priority on strengthening state and local capacity to manage development, reduce nonpoint source pollution, minimize exposure to coastal hazards, and preserve open space against development pressures.
- Move aggressively forward in acquiring and protecting undeveloped land on the coast and in coastal watersheds.
- Revisit the system of distributing OCS revenues proposed in the CARA legislation of previous years.
- National ocean policy should also stop providing incentives for regressive programs that endanger our security against coastal hazards. The Federal government should eliminate subsidies and incentives (e.g., availability of new government-sponsored insurance) for development and redevelopment in coastal high hazard, flood and erosion areas.
- The ACOE's regulatory and operational functions should be integrated so that both serve the same goals: the nation's natural infrastructure of beaches and wetlands.

STALLWORTH

**Mr. Henry Stallworth, Director of Natural Resources Policy, State of South Carolina
Charleston, SC, Jan-15-2002, State Governor Panel
Invited Testimony**

Key Points:

- One of the challenges for the Commission is to think carefully about the role of the federal government in helping to clarify federal interest.
- Charleston Bump is a good example of valuable state provided information to federal fisheries managers.
- Partnerships are important. Look at grants and loans to acquire interests in real property worthy of conservation. State and federal programs similar to the Conservation and Reinvestment Act (CARA) are needed.
- Commission should set guideline goals for federal and state governments concerning collaborative research, management, and education efforts.

STEINER

**Mr. Rick Steiner, Professor, University of Alaska
Anchorage, AK, Aug-22-2002
Public Comment**

Key Points:

- Undersea noise is deleterious to many acoustically sensitive organisms, particularly cetaceans. [Further description provided.]
- Speaker brought a jar of fresh Exxon Valdez oil collected a week ago from the beaches of Prince William Sound, thirteen and one half years after the incident. The jar was brought in to underscore the importance of this Commission to do its job boldly and strongly and do it right. The lack of clean-up is what happens when government and industry don't operate together effectively.

Recommendations:

- Establish the Pacific Environment Council. Authorize and finance U.S. leadership and participation in the establishment of a new, intergovernmental institution for ocean governance across the Pacific Basin, called the Pacific Environment Council. [Further description provided.]

- Establish the U.S. Marine Fisheries Commission. Authorize and appropriate funds for the establishment of an independent, professional oversight body (similar to the Marine Mammal Commission) to oversee implementation of all Federal fisheries legislation and administrative actions. [Further description provided.]
- Establish the U.S. Seabird Commission. Authorize and appropriate funds for the establishment of an independent oversight body to oversee implementation of all Federal legislation related to seabird management and conservation. [Further description provided.]
- Establish Regional Citizens Advisory Councils in sensitive and vulnerable U.S. coastal waters that empowers citizens to provide oversight of government and industry activities in coastal regions. [Further description provided.]
- Enact legislation to reduce undersea noise, mandating the incorporation of ship quieting technologies for all new merchant vessels.
- Enact legislation to establish new and expanded Marine Protected Areas and Ocean Wilderness. [Further description provided.]
- Mandate system redundancy on all new oil tankers in U.S. waters, by amending OPA '90 to require redundant steering and propulsion systems and bow thrusters, in addition to the existing double-hull requirements. [Further description provided.]
- Enact legislation to reduce U.S. carbon emissions to mitigate effects of global warming. [Further description provided.]
- Amend the Sustainable Fisheries Act, and appropriate sufficient monies into a newly established Fishing Fleet Capacity Reduction Fund, with which commercial fishing fleets in the U.S. EEZ can be retired.

STERNE

Mr. Jack Sterne, Trustees for Alaska

Anchorage, AK, Aug-22-2002

Public Comment

Key Points:

- The notion that killer whales are responsible for the decline of almost every marine mammal in Alaskan waters is not true. We are just beginning research in the Aleutian Islands to determine how many killer whales there are, and what percentage are marine mammal eaters.
- We should resist the temptation to look for single factor explanations for this, or any other problem, in the ocean. [Further description provided.]
- The most significant constitutional infirmity in the Magnuson-Stevens Act is Section 304(h), which mandates that the Secretary of Commerce can repeal or revoke a fishery management plan only if three-fourths majority of the voting members of a Fisheries Management Council approves such an action.
- With the existing Section 304(h), we have officials (i.e., on Fisheries Management Councils) who are outside the Federal system of government exercising supreme authority over the manner in which the Act is implemented, by virtue of their veto power over the Secretary. [Further description provided.]
- The Act, therefore, runs afoul of the Appointments Clause of the U.S. Constitution.

Recommendations:

- Remove NMFS from the Department of Commerce (which is inherently biased in favor of commercial interests) and create a new Department of the Oceans.
- The new Department of the Oceans should be governed by a National Oceans Policy Act, which provides an overarching protective mandate governing human exploitation of the oceans.
- Provide that NMFS-not Fisheries Management Councils-is responsible for the development of fishery management plans. [Further description provided.]

STEVENS

The Honorable Ted Stevens, U.S. Senator, State of Alaska

Anchorage, AK, Aug-21-2002, North Pacific Living Marine Resources Panel

Invited Testimony

Key Points:

- Today half of the nation's population lives in coastal areas. By 2025, the figure will grow to 70%. Over 30% of the gross domestic product and 40% of the new commercial and residential development occurs on our coastlines. 95% of our international trade is shipped over the ocean and by 2010 the value of that trade will double to \$5 trillion. In the Magnuson Act the domestic fisheries is defined to be out to 200 miles.
- The Alaska state Constitution mandates sustainable fisheries management insuring the resource will be there for future generations.
- The U.S. cannot become dependent now on gas from overseas the way it has become dependent upon oil from overseas. The gas potential of this country lies offshore.

- The pollock biomass is the greatest story in that the Pollock are harvested in such a way that increases their volume every decade. That can be done responsibly in every other area if it is based on sound science and upon good management judgment.

Recommendations:

- The Commission's report should recommend that the Regional Fisheries Management Council system continue to allow those directly involved in the fishery to manage the resource responsibility but without second guessing by Federal officials. A regionalization concept preserves resources much better than does a nation concept.
- The Regional Fisheries Management Council is the most successful Federal state management process yet created. But, the Councils cannot be successful unless their decisions are based on sound science.
- Scientists should study interaction predation has upon our system, other than from mankind.
- Urge the Commission to consider the energy potential of Alaska and remember that Alaskan natives have relied on living marine resources for thousands of years and will do so for 1,000 more. The effort to develop marine resources off our North Slope must respect their subsistence living tradition. If the future is to include energy exploration activity off Alaska's coast, due consideration has to be given to the subsistence traditions of our areas. History shows that energy can be developed without interfering with subsistence activities.
- The Commission must consider the future of the gas and not make proposals that will lead to Congress and the Federal government to make enormous withdrawals of the areas off the shores of Alaska that will prevent eventual exploration and development of the oil and gas resources of the outer continental shelf for future Americans.
- A coordinated body is needed that has input from the executive branch through the Office of Management and Budget that would deal with an integrated ocean policy implementation scheme that carries out policy, not just state a policy. It must be worked between the executive and legislative branches.
- Urge the Commission to help Alaska get more knowledgeable about climate change and to convince the national government that this is something that is not just for Alaska, but that it's of national interest.

Responses to Questions:

- Creating a new way of doing business, with Congressional involvement, is possible. The key to the Magnuson Act was regional participation. That was a new way of business at the time. There is now hands-on-management on a regional basis.
- Anything that sets up a process of withdrawals off the Alaska's shores that are not managed by the local area would be opposed by me.
- Yes, litigation has gone up across the country and that means that it's too bad that fish and ocean mammals cannot vote. We are doing something wrong. The problem is that the people that all this affects are the voters who don't vote.
- It is clear that the Arctic is more affected by climate change than Antarctica is. There are villages whose airports were inundated by sea water last year. Several of them may need to be moved back because of the ever-increasing water level.
- Alaska's coal, which at some point the U.S. will need to tap, will be affected in some way by this global climate change because the ice lens in those coal seams are getting smaller. Permafrost is not as deep as it used to be.

STINSON

Mr. Jay Stinson, President, Alaska Dragger's Association

Anchorage, AK, Aug-21-2002, Management of North Pacific Living Marine Resources II Panel

Invited Testimony

Key Points:

- The commercial fishing industry is the largest private employment sector in Alaska with an ex-vessel value of over \$1 billion and an average wholesale value of more than \$2.5 billion dollars in 200
- Alaska fisheries harvest would rank 12th in the world if Alaska were an independent country.
- Of the 63 species of groundfish managed under Federal Fisheries Management Plans (FMPs) in Alaska, none are listed as over fished and none of their population are threatened (NMFS 1999). Only three species of crab have been listed as overfished. Our state managed salmon stocks are regarded as the most viable and healthy natural populations in the world.
- Management by litigation does not encourage credible science. The level of science required for ESA is not consistent with traditional academic research which encourages transparency and peer review.
- Ecosystem based management plans must include people. Ecosystem based management considerations, including socio-economic implications and traditional knowledge need to be incorporated into regional FMPs.
- Rights based fisheries management would allow harvester and managers additional tools to meet increasing regulatory mandates. Federal fisheries in the Gulf of Alaska are being economically marginalized by entities with a more efficient market structure combined with the cumulative effects of severe environmen-

- tal regulation that constrains our ability to operate.
- A national fisheries observer program should be instituted, based on an equitable cost structure, regional needs and the information requirements of specific fisheries.

STRUHS

**Mr. David Struhs, Secretary, Florida Department of the Environment
St. Petersburg, FL, Feb-22-2002, Featured Speaker
Invited Testimony**

Key Points:

- Focus on measuring performance, not activities.
- Set your marker 30 years forward. Judge on cargo capacity of ports and health of reefs.
- Not all answers are up to the government. Maintain a sense of public and private partnership.
- Coastal America came about with people wanting to collaborate.

Recommendations:

- Federal agencies should consult with states during the planning of their operational activities to avoid surprises, especially the Department of Defense:
 1. Coordinate with states on all federal permit and approvals for activities in federal waters.
 2. Allot adequate time for effective consultation and problem solving.
 3. Establish state and federal agency place-based work groups to consider and reconcile complex issues.
 4. Consider specific statutory or rule changes to improve National Environmental Policy Act (NEPA) coordination and linkage to Coastal Zone Management Act (CZMA), Outer Continental Shelf Land Act (OCSLA), and state regulatory and proprietary evaluations.

Responses to Questions:

- Education played an important role in obtaining legislative approval for the \$3 billion Florida Forever Plan. Educational efforts to illustrate why natural resources matter encourages changes in social behavior. Commitment to develop sense of public responsibility or ownership of environmental assets requires awareness of the assets; understanding of their relevance; appreciation of their value; investment in their protection; and celebration of success.
- Conservation programs should provide for monitoring and periodic status reports. A detailed discussion is provided concerning how Florida chooses resource utilization priorities.
- The following are the top two issues Florida wants the Commission to address:
 1. Identify and implement institutional change that would improve integration of existing state and federal programs.
 2. Develop comprehensive state-federal ocean resource management partnership with specific strategies and performance goals.

STUPAK

**The Honorable Bart Stupak, Congressman, U.S. House of Representatives, 1st District of Michigan
Chicago, IL, Sept-25-2002
Public Comment**

Key Points:

- Institutional models for researching, managing and legislating are often even older than the issues.
- Budget is chronically scarce.
- Research needs to translate into action
- Alert, well-informed citizens are a key resource.

Recommendations:

- Help identify and highlight a family of action imperatives for managers, citizens and legislators.
- Need to become more inventive at restructuring traditional institutional arrangements-not by just reorganizing and renaming, but by fundamentally improving their effectiveness.
- Search for a more productive interface between public and private action, and encourage a broad vision that is not bound up in traditional roles.

SULLIVAN

Ms. Helen Sullivan, President, Webhannah Beach's Association in Maine
Boston, MA, Jul-24-2002
Public Comment

Key Points:

- This group is an overall association of the homeowners of Moody Beach, Wells Beach, and Drakes Island. The members do not earn our living from the ocean, but they respect and love the ocean. The organization represents a species that also can benefit from the ocean: the human being should also be considered along with the whales and the plovers, and everything else.
- Politics and management have ruined Wells Beach. The townspeople there are basically uneducated on oceanography. Then politics put a harbor into Wells Beach. There is, according to the books, the world's worst harbor there. The members of the community have no say about it. It has ruined our beaches and we're inundated with sand. The Webhanate River is choked.
- Humans should not be considered the enemy. [discussion provided]

SULLIVAN

Ms. Molly Sullivan, Tulane University
New Orleans, LA, Mar-08-2002
Public Comment

Key Points:

- The upper Mississippi River communities need to understand and help address concerns raised by the regional community regarding the Lower River/Gulf origin. A more cohesive and integrated view of the Gulf of Mexico is necessary.

SWECKER

The Honorable Dan Swecker, Senator, Washington State Senate
Seattle, WA, Jun-13-2002
Public Comment

Recommendations:

- We should go into the EEZ and develop a regulatory structure that meets the needs of that area and then bring some of the standards, patterns and models back to the near shore environment to help solve many of the emerging conflicts there. Have one or two agencies that are committed to leading this effort. They would be administrative lead(s); DOC/NOAA are recommended. A particular area of activity, such as aquaculture, should be focused.
- Must have participation by adjacent states if the desired outcomes are to be used as models for problem solving in the Coastal Zone. Resources should be provided to other jurisdictions to fund the cost of participation. The goal of the group would be to develop a streamlined permit process for aquaculture projects in the EEZ.

SWINGLE

Mr. Wayne Swingle, Executive Director, Gulf of Mexico Fishery Management Council
New Orleans, LA, Mar-07-2002, Living Marine Resources Panel
Invited Testimony

Key Points:

- The key to decision-making that result in successful management is having good management information. Having analytical capacity is necessary to assess the condition of each stock. Shrimp is the only Gulf fishery with good long-term data. Other aggregated into species groups. NMFS has never had stock assessment personnel or capability level consistent with needs of the Councils. Another major data deficiency is the lack of social and economic data on fisheries and especially on communities. Gulf Council and Council Chairs suggest rescinding prohibition on use of ITQs to be used as a management tool. Major problems exist with enforcement capability of both NMFS and NOAA General Counsel's office. There is not enough personnel to enforce and/or prosecute.
- A greater emphasis and additional funding need to be applied to the collection of management information, including continuation of cooperative programs with states (SEAMAP, RecFIN, ComFIN, MARFIN). There should be a greater emphasis on collection of information by observers. New England is a good example.

- Commission should support ITQ programs if they want to remove cost of buy-back programs from the public sector and to reduce overcapacity and excess effort of domestic fleets and transfer that cost to affected industries. Allow each Council to decide to implement ITQ program. Eliminate windfall profit for persons who first sell ITQs by adding language to allow federal government to collect windfall. Re-establishing ITQs was the recommendation of NRC.
- Commercial and recreational fishing industry is familiar with, and generally accepted use of MPAs as management tools, particularly for regulating gear use. Marine reserves where all fishing is prohibited is a newer concept and less acceptable to industries, especially to certain elements of recreational sector. It is unclear what is meant by “framework.” Currently states, NOS, USFWS and NPS have authority to establish MPAs. If framework is for other entities creating MPAs, then some of the industry will not be favorably disposed.
- We do not see an active enforcement role for Councils. We would like a greater role in specifying penalties for violations of rules. Increase cooperative enforcement agreements with states and provide funds to states for that purpose. MS-Act requires balance of interests, although this does not always happen. One suggestion is to look at the appointment process language for incorporation into Act.
- Focus labs on management information. Improve economic support. Allot more money for assessments and plans.

Documents Recommended:

- NRC “Sharing the Fish”

T

TALBERT

**Mr. J. Michael Talbert, Chief Executive, Transocean Sedco Forex
New Orleans, LA, Mar-08-2002, Offshore Energy 2 Panel
Invited Testimony**

Key Points:

- Development of resources from submerged lands of federal OCS involves coordination of converging interests. OCSLA and CZMA recognize importance of cultivating domestic energy; however, conflicts between many uses of ocean resources have appeared. Enhanced communication under CZMA is often not the case. Central and western Gulf multiple uses of oceans are generally successful. Other areas (Atlantic, Pacific coasts and eastern Gulf), CZMA is misused to block responsible energy development. Lessons from Gulf and common sense improvements in CZMA will go a long way to achieving reliable and efficient energy production.
- We caution using broad, new ocean governance laws and clear identification of “governing” problems before we solve them. Do not believe creation of new ocean “super agency” is necessary. Take care to maintain and improve benefits of existing federal structure. One of the greatest areas for improvement in federal agency coordination and industry involvement is in ocean exploration and observation.
- Industry has made significant technological advances that have application in defense, medicine, navigation, marine biology, etc. Industry wants to learn more about proposed ocean observing systems and explore voluntary partnerships. State and local governments have important roles in ocean policy. Communication and conflict resolution must be emphasized. Existing tools are not always sufficient. Answers lie in national policy guided by sound science.
- Focus on improvements in how we govern under existing laws as much as new regimes. There is a fundamental need to develop and implement clear ocean policy goals.
- Improvements to CZMA: Limit state's CZMA consistency review of private permits over activities outside of its own coastal zone; allow a single consistency certification for an OCS plan to cover all activities, including air and water permits; grant the Secretary of the Interior the authority to determine information requirements for consistency certifications; provide the Secretary of the Interior with the authority to determine state appeals concerning OCS energy activities; ensure timely decisions on override appeals; and examine efficient state consistency permitting practices that are already in place.
- Look into establishing a coordinating body of government agencies, academic representatives, and industry to begin tackling complex logistical issues for cooperative research programs. NOPP may be such a body with sub-groups (MMS lead).

Recommendations:

- The most serious impediment to implementation of a predictable offshore energy program is the lack of predictability caused by regulations and statutes that govern consistency determinations under CZMA.

- Potential for an industry-wide program to offer a broad range of research and data gathering, as well as data sharing options with ocean research community: Industry is interested in advancing accumulation of scientific understanding but its primary role is production and marketing of energy; extensive infrastructure throughout Gulf is an example of innovation and opportunity for cooperative progress in scientific arena; industry is not willing to should financial or liability burden of non-industry related research; industry vessels may be suitable platforms for instrumentation, but safety, liability, and maintenance issues must be resolved before industry can move forward with cooperative programs; some cooperative programs are underway.
- Industry is asking for authority to make balanced decisions in CZM override process. New deep water rigs are far advanced technologically and require special training for operators. Industry wants a clear process and timeframe for evaluating risks.

TAUFEN

Mr. Stephen Taufen, Founder, Groundswell Fisheries Movement

Seattle, WA, Jun-13-2002

Public Comment

Key Points:

- Transnational seafood corporations must be increasingly scrutinized to guarantee the protection of the U.S. Commerce, to deal with economic and tax returns from national assets.
- Abusive Transfer Pricing (ATP) is used to falsify the wholesale export prices and this in turn is used to ratchet down grounds prices paid to U.S. fleets: to destroy small businesses and our fishing communities.
- Abusive Transfer Pricing is predicted to be the largest global finance and tax topic in this Century. The U.S. has lost billions each year. [discussion provided]

Recommendations:

- The Commission should, like the United Nations and Organization for Economic Cooperation and Development, take Transfer Pricing abuses and issues into full consideration. Similarly, it should establish as Ad Hoc Committee on Transfer Pricing in order to gather the information and gain the insights needed to properly deal with these accounting behavioral problems.
- Solicit testimony and evidence from the Internal Revenue Service, Seattle International Division, Large and Medium-sized Business Group experts, and the public and academia, about Abusive Transfer Pricing.
- Issue a report to the U.S. Senate on findings of the Ad Hoc Committee, to such ATP experts as Senator Byron Dorgan.
- Consider additional efforts by the GAO regarding the economic structure of the U.S. North Pacific seafood industry, and its ATP practices.

TAYLOR

Ms. Avalyn Taylor, Conservation Outreach Coordinator, Audubon Society of Portland

Seattle, WA, Jun-13-2002

Public Comment

Key Points:

- Realizing the intricate connections between upland, coastal, and marine ecosystems, the Audubon Society of Portland recently broadened their conservation efforts to address the need for greater protections for Oregon's amazing diverse but fragile marine environment.
- Currently, the Ocean Policy Advisory Council (OPAC), a state ocean advisory body that reports to the Governor, is assessing whether marine reserves would be useful tools for achieving Oregon's statewide conservation goals.

Recommendations:

- The OPAC process would be much better served if there were a Federal oceans department to which they could address their recommendation for marine reserves in federal waters off Oregon and future recommendations for activities taking place in the Ocean Stewardship Area. Having one or more Federal representatives sit on the OPAC would also enhance opportunities for cooperation and coordination.
- The Commission on Ocean Policy should take a proactive role in protecting ocean biodiversity and vital ocean ecosystems by creating a legislative mandate for the establishment of a national network of marine protected areas, including fully protected marine reserves, incorporating the local, statewide, and regional initiatives that are currently taking steps to develop small-scale networks of MPAs.
- Also recommended is the strengthening of the MPA Executive Orders to provide more funding for MPA management and research. It is only by gaining more knowledge of how our ocean ecosystems function that we can preserve bountiful and diverse oceans for the future.

TENORIO

The Honorable Pedro Tenorio, Resident Representative, Commonwealth of the Northern Mariana Islands

Honolulu, HI, May-13-2002, Featured Speaker

Invited Testimony

Key Points:

- The Islands face many challenges:
 1. Poaching and exploitation;
 2. Pollution;
 3. Erosion of our beaches and coastline;
 4. Education for better stewardship; and
 5. Cooperation between federal and local agencies.

Responses to Questions:

- Funding and support for enforcement, capacity building and public outreach is needed for the development and control of sport fishing, commercial fishing and Marine Protected Areas.
- Assistance in managing and controlling pollution. Public education programs need to be developed and disseminated.
- Federal or regional assistance with studies and restoration programs are needed for fragile wetlands to become productive again.

THOMAS

Dr. Gary Thomas, President, Prince William Sound Science Center

Anchorage, AK, Aug-22-2002, Arctic Issues Panel

Invited Testimony

Key Points:

- Sub-regional, often referred to as bioregional scale, is a tool to do ecosystem information gathering. A workshop took place last July and there's a report that's forthcoming on ecosystem approaches around the U.S. and it will be submitted to the Commission as soon as it's completed.
- There is a tremendous interest in developing coastal observing systems in Alaska, and especially in the important bioregions, like Prince William sound, Kodiak, Bristol Bay, and Sitka Sound. There re a number of coastal communities that are rich in resources and have populations of people that are very dependent upon those resources and are interested in getting better information.
- The coastal community view to our ecosystem approach is to build the information system that provides the kind of information with which we can make better decisions on operating vessels, operating aircraft, managing fisheries, and managing hatcheries. The Science Center's formula for building an ecosystem program is to implement a comprehensive circulation model based monitoring program in the Sound syn-optically with acoustic optical monitoring based modeling program on the dominant animal populations. [discussion provided]
- For oil spill prevention and response, The Oil Spill Recovery Institute has both industry and Coast Guard, Federal and state agencies, and the public involved in helping to implement these technologies to make better decisions in the future.

Recommendations:

- Coastal management by regions really represents a scale that hasn't been addressed in a lot of the major programs that have been conducted by NOAA in the states, but they are extremely important to the public and they really deserve some consideration for programmatic funds in the future.

Responses to Questions:

- The Oil Spill Recovery Institute has been putting core money into the Prince William Sound Science Center and it's run between \$300,000 and \$600,000 a year. People have been able to receive grants through the competitive bidding process and have been able to either double to triple that kind of funding. So, the whole effort to build a bioregional program and have a regional host is really inexpensive and when one looks at the kind of information that comes out of it, it is apparent that we cannot afford to NOT have this kind of regional emphasis in the future.

THOMPSON

**Mr. Arni Thompson, Alaska Crab Coalition on Bering Sea Crab Rationalization
Anchorage, AK, Aug-22-2002
Public Comment**

Key Points:

- Since 1990, over 70 Bering Sea crab fishermen have lost their lives in our nation's most dangerous occupation. Once robust crab stocks have declined, and fisheries dependent coastal communities have suffered lost employment and diminished tax revenues.
- The new North Pacific Fishery Management Council approved a rights-based quota system that will slow the fishery, improve human safety, reduce handling mortality of undersize and female crabs, and help rebuild weak and depressed crab stocks. [Further description provided.]
- Most fisheries are unique and require unique management and allocation solutions.
- In 1998, the American Fisheries Act established an alternative Individual Fishing Quota (IFQ) for the one-million ton Pollock fishery off Alaska.
- The Act established a closed-class of processors and, for the onshore sector, allows IFQs for fishermen who are in a cooperative with a single processor. [Further description provided.]
- Fishermen joined with processors to seek legislation to remove the 2004 "sunset clause" to make the Act permanent.
- In 2000, Congress extended the IFQ moratorium. The Alaska Crab Coalition has since worked with affected groups for an alternative management system. [Further description provided.]

THOMPSON

**Mr. Nainoa Thompson, President, Polynesian Voyaging Society
Honolulu, HI, May-13-2002, Featured Speaker
Invited Testimony**

Key Points:

- Our relationship with the oceans in Hawaiian Islands has great challenges. We know what the environmental obstructions are-we even know the solutions. But we neither have, at least right now, the management nor the values of a society that can move forward in a way, with both the capacity and the will, to make changes in a long sustained way.
- Those two pieces of who we are in the Hawaii Islands-one is the importance of protection, and the other is the Northwestern Islands-it helps to look at what we need to do here at home in our backyards.

THOMPSON

**Colonel Richard Thompson, Los Angeles District Commander, U.S. Army Corps of Engineers
Los Angeles, CA, Apr-19-2002, Coastal and Outer Continental Shelf Management Panel
Invited Testimony**

Key Points:

- Coastal sediment management issues are: shoreline recession; reduction in sand supply; loss of coastal wetlands; contaminated sediment loading; and lack of coordination.
- Current activities to address coastal sediment management challenges:
 1. Bypassing of sediments where navigation structures interfere
 2. Restoration of coastal ecosystems: dredging in-situ polluted sediment and enhancing wetland and estuarine ecosystems by increasing circulation and restoring lost habitat
 3. Identify opportunities to beneficially reuse dredged sediments
 4. With EPA identifying and designating ocean disposal sites for non-contaminated sediments
 5. Studies to control contaminated sediments at their source
- National programs:
 1. National regional sediment management demonstration program: assessing benefits of managing sediment resources as regional scale resource
 2. Shoreline erosion control development and demonstration program: evaluates functional and structural performance of innovative approaches for abating erosion
- California programs: California Public Beach Restoration Act; Coast of California Storm and Tidal Wave Studies; California Coastal Sediments Master Plan
- Coastal Field Data Collection Program are as follows: Field research facility in Duck, North Carolina; Wave hindcasting program; Coastal Data Information Program; and Southern California Beach Processes Study.

Recommendations:

- Continue partnerships with federal, state, and local agencies
- Visit the Federal Research Facility at Duck, North Carolina.
- Begin work on a national shoreline management study.
- Participate in regional sediment management national policy development.

THOMPSON

**Mr. Robert Thompson, President, Louisiana Offshore Oil Port
New Orleans, LA, Mar-07-2002, Maritime Transportation Panel
Invited Testimony**

Key Points:

- Louisiana Offshore Oil Port (LOOP) is the only Deepwater Port licensed under Deepwater Port Act of 1974. The demand for energy continues to grow. Exploration, production, and transportation in Gulf of Mexico are key to keeping country supplied with energy.
- Attention must be given to effective allocation of resources for homeland security. Safety at sea must be a priority. Accurate navigation charts with clear delineation of designated safety zones are necessary. Clearly define roles and responsibilities of regulatory, enforcement, intelligence agencies, and coordination conducted by a lead agency staffed with expertise to identify and allocate tools available to protect Gulf resources. Sufficient resources should be allocated for development and improvement of onshore public infrastructure to support growth of marine-related commerce. Actions of federal, state, and local agencies must be coordinated and resources properly allocated. Designate lead agency to coordinate reviews by other interested regulatory agencies.
- System of regulation utilized in oversight of deepwater port activities like LOOP has been successful as well as user-friendly. Lead agencies were designated at federal and state levels to coordinate regulatory and permitting issues eliminating potential for conflicting requirements and expectations. LOOP could handle 3.2 million barrels/day with additional facilities added. Having a lead agency identified in statute to issue permit made permitting clear.

THOROUGHGOOD

**Dr. Carolyn Thoroughgood, Chair, Board of Governors, Consortium for Oceanographic Research
and Education
Washington, DC, Nov-13-2001, Ocean Research, Education, and Policy Organizations Panel
Invited Testimony**

Key Points:

- Funding for basic research in ocean sciences should be increased to 7% of federal research budget or \$1.4 billion/year.
- An integrated and sustained coastal and ocean observing system should be implemented. Ocean science education support and human resources development should be enhanced.
- Scientific infrastructure and support systems should be recapitalized. The highest priorities to University are National Oceanographic Laboratory System fleet and supercomputing capacity.
- The scientific basis for decisions about the use of marine resources and protection of marine ecosystems and public health must be improved.
- Interagency coordination and integration mechanisms must be improved. Rename and expand authority of National Ocean Research Leadership Council (NORLC). National Institute of Health (NIH) should participate in NORLC.

Recommendations:

- Building new partnerships with governmental, commercial and Non-government Organizations (NGOs) will strengthen U.S. leadership in ocean management and stewardship.
- Mechanisms for the academic community to engage in science and understand problems include:
 1. Providing public funding for competitive, peer-reviewed investigation; strengthening basic research components of agency budgets (e.g., time-series observations and ocean observing system).
 2. Integrating agency contributions with ocean research (i.e., National Oceanographic Partnership Program (NOPP)). NOPP funding FY 97-01 received more than \$90 million.

Responses to Questions:

- Ensuring robust and innovative technical infrastructure by:
 1. Restoring ocean sciences portion of federal basic research to 7%.
 2. Adopting new technologies for high-speed, large bandwidth communications.
 3. Developing and maintaining cadre of trained professionals and students; encouraging exchange of personnel between academic, industry, and government (i.e., Intergovernmental Personnel Act).

- Recognizing experimental capabilities as national assets requires balance between operational oceanography within purview of ocean agencies and innovative research, best served by flexible partnerships among academic institutions and government. Competition can be eliminated by clearly defining and observing scope of federal laboratory research.
- It is crucial that federal agencies, through NORLC, arrive at a consensus for the operational requirements of an ocean and coastal observing system.
- Operational systems need to include research goals to encourage continuous technological innovation and develop more effective capabilities to detect and predict meaningful changes.
- The observing system must accommodate change; address numerous scientific and practical objectives simultaneously; and encourage seamless relationship between research and monitoring.

TILLION

**Mr. Clem Tillion, Past Chairman, North Pacific Fishery Management Council
Anchorage, AK, Aug-21-2002, North Pacific Living Marine Resources Panel
Invited Testimony**

Key Points:

- Twenty years ago the Steller Sea lion population in western Alaska started declining so the panic button was pushed. The Council under pressure from NMFS closed all commercial fisheries within ten miles of the great rookery on Borgoslof Island. The sea lion in that area continued their decline so it was closed twenty miles off shore. Last year the survey showed a continued decline in sea lion but to every ones amazement there were ten thousand fur seal on the island. Was it a shortage of fish? Most likely not. We need to make sure we are really using biology and not having other agendas, such as possibly making the Aleutian Islands a park, making our decisions.
- We must use science, not emotion, in the management of our living resources.
- The people of the Aleutian Islands only have the sea. They understand the need for conservation but have trouble understanding why they must conform to a "Walt Disney" view of their world.

Responses to Questions:

- Some MPA management should be top-down and some should be bottom-up. MPAs should not be forced because 82% of the resource in the Aleutian Islands is in state waters. There are already areas closed there. On the other hand, coordinated work should take place with groups that are trying to find the Gorgonian coral beds because it's in our state and national interest to close destructive types of fishing in those areas. Areas should not be closed because of fear of Washington.
- Legislating morals is only a little easier than legislating intelligence. A law cannot be written that says they will come up with the right answer. It would be difficult to have public records to justify why all decisions are made, and hold the science committee accountable.

TIMONEY

**Mr. Timm Timoney, Commercial Fisherman
Honolulu, HI, May-14-2002
Public Comment**

Key Points:

- Have been harvesting fish in the Northwest Hawaiian Islands for almost 20 years. I am one of 4 boats in about an 800-mile radius, one of 14 or so boats in the whole range of the Northwest Hawaiian Islands.
- Reports describe Northwest Hawaiian Islands as pristine and this is proof of our good stewardship. Therefore I worry about the use of a club as big and brutal as the Executive Order to manage the Islands. The E.O. calls for sustainable fishing and long-range protection. It will not be successful at both as with the harvest cap in closed areas.

TOMLINSON

**Ms. Peggy Tomlinson, Vice Chair on Ocean Law, American Bar Association
Washington, D.C., Nov-13-2001, Ocean Research, Education, and Policy Organizations Panel
Public Comment**

Key Points:

- Note: Ms. Peggy Tomlinson accompanied Mr. Hirshon to the public meeting, but was not scheduled to testify. However, given her expertise in maritime law and her immediate availability, the Commission Chairman Admiral Watkins requested she speak. Ms. Tomlinson was amenable to this request and obliged.

Responses to Questions:

- Administration has requested Senate to ratify United Nations Convention on the Law of the Sea (UNCLOS).
- UNCLOS Convention is in Foreign Relations Committee; no hearings held.
- The next opportunity to elect representatives to the Outer Continental Shelf (OCS) Commission is May 2002.
- The Administration sees a need for U.S. representative to serve on OCS Commission.

TUNNELL JR.

**Dr. John Tunnell Jr., Harte Research Institute-Texas A&M
New Orleans, LA, Mar-08-2002
Public Comment**

Key Points:

- Texas A&M at Corpus Christi is prepared to contribute.

TURNER

**Mr. John Turner, Assistant Secretary for Oceans and International Environmental and Scientific Affairs,
U.S. Department of State
Washington, D.C., Oct-30-2002, International Panel
Invited Testimony**

Key Points:

- Because oceans and their resources do not recognize national boundaries, international cooperation is necessary to resolve most ocean issues.
- U.S. leadership is essential and should take several forms. First, we obviously need to be a model ourselves. We must practice at home what we want others to practice abroad. Second, we must continue to work the international forums to develop treaties and non-binding instruments necessary to address oceans issues. Third, we must be creative in finding new ways to address problems such as through work in the WTO to reduce or eliminate subsidies that contribute to overfishing and overcapacity. Finally, as a nation with many resources we must actively engage in capacity building for others to enable them to manage their coastal areas and resources. Our White Water to Blue Water initiative is one such example.

Responses to Questions:

- There is a constant need to remind ourselves about the need for science in policy arena.
- It is sometimes very difficult to convince Congress that an investment in science is needed.
- Science in the U.S. can be a very big door opener and relation builder with other countries.

U**ULERY**

**Mr. Scott Ulery
Anchorage, AK, Aug-22-2002
Public Comment**

Key Points:

- Farmed salmon is the most important issue. Farmed salmon is a multifaceted threat to Alaskans and all coastal people. Many people provide the science on this issue. The issues involved in farmed salmon are from the consumer end who eats the fish, the waste that's created by these ocean pens, and the feces that destroy the ocean floor.

Recommendations:

- Coastal peoples should be included in the decision making process, farm salmon impacts, and the economic issues facing the state.
- Demand the inclusion of equal weight of small boat fishers to any and all governing bodies set forth by this Commission. The inclusion of citizen oversight and third party review in the decision making process will ensure that all stakeholders are represented.
- The teeth of the Commission's policy recommendations should include jail time for all transgressions and violations of laws pertaining to the oceans. Fines are not enough. Actual removal from operation will ensure that people will respect the law.

- Demand that in the discovery process of this Commission it finds the keystone issues of these problems and create solution to these fundamental inequities in the current ocean policies.
- Establish your policy recommendations binding to all stakeholders, the knowledge and wisdom to be locked into place immovable by the lobbying efforts of special interest groups.

ULMER

The Honorable Fran Ulmer, Lieutenant Governor, State of Alaska
Anchorage, AK, Aug-22-2002
Public Comment

Key Points:

- Speaking as an 8-year member and 2-year chair of the North Pacific Anadromous Fish Commission. The Commission is an entity that was created to enforce the terms of the treaty that bans high seas driftnet fishing for salmon. The U.S. signed that treaty with Russia, Canada, and Japan and the Commission was created to enforce the terms and to coordinate international research on Anadromous fish among these four member nations.
- The Commission is an example of one model of international cooperation, which is so absolutely important if anything will be done for our oceans at this time. No one state, no one nation can really do the kind of research that is necessary to better understand our oceans. [discussion provided]
- Two years ago the Commission's work was taken a step beyond and it devised joint international research on the high seas where the four member nations' scientists would work together to better understand what has happened to the salmon in the North Pacific, and, more precisely, in the Bering Sea. That became known as BASIS, which stands for the Bering Aleutian Salmon International Survey. BASIS will provide critical information about what happens to salmon in the open ocean. This was not a mandate, but was something that nations voluntarily have agreed to do. The U.S. has made us proud and has stepped up and led this effort. It provides an effective mechanism for over a five-year period of time jointly conducting not only sampling, but also fundamental research upon which additional research among the nations can be based.

Recommendations:

- Urge the Commission to think about the big picture and the big responsibility of ocean policy and take it beyond the role that the U.S. government plays. The North Pacific Anadromous Fish Commission and its fledgling international cooperative research being done through BASIS is a good example of what is possible, when nations come together on a common goal.

UNDERWOOD

Rear Admiral James Underwood, Commander, 17th Coast Guard District, Alaska
Anchorage, AK, Aug-22-2002, Marine Operations and Enforcement Panel
Invited Testimony

Key Points:

- Nearly all of the 17th District's operational assets are multi-mission capable, giving the Coast Guard the ability to quickly transition from one activity to another (whether that be law enforcement, search and rescue, or homeland security).
- The Coast Guard's primary role in fisheries management is to enforce regulations, to and to assist with dockside boarding for monitoring catch offloads.
- The Coast Guard fishery enforcement operations in Alaska emphasize four areas: maritime boundary line in the Bering Sea; high seas driftnet; domestic fisheries; and regulations on endangered species. [Further description provided.]

Recommendations:

- Seek support for Coast Guard programs to recapitalize aging assets.

Responses to Questions:

- The use of remote sensing technologies in Alaska has not been great, primarily because there are not the assets that can respond.
- The roles and missions 2000 study of the Coast Guard has not been updated. All of the roles are still valid for the Coast Guard and the addition of the homeland security role being molded into the port security, is all a mission growth area. The need for or any additional staffing and vessel requirements will be relayed to the Coast Guard headquarters.
- The Coast Guard in Alaska has the authority against cruise ships in gray water, at this point. Also, throughout the U.S. internationally against any oil discharge. But we don't have gray water authority in the lower 48, or in other locations. The authority means that the Coast Guard could prosecute within the U.S.
- It is understood that the new cruise ships being built are conforming to the Alaska model if they are sailing in Alaskan waters.

- The nature of the cruise industry is not the same in Alaska as it is everywhere else. In Alaska the cruise ships come in and they're in inside waters for the majority of the entire cruise. That's not the case when the cruise stops in Los Angeles, San Francisco, Seattle, Miami, or Fort Lauderdale. In those ports they go in, they load their passengers, and they go back out to sea-to the high seas, and so they don't have the same restrictions on their capabilities in the international waters as they do here.

UNDERWOOD

**The Honorable Robert Underwood, Congressman, U.S. House of Representatives, Guam
Washington, DC, Nov-13-2001, U.S. House of Representatives Panel
Invited Testimony**

Key Points:

- Many coastal states have developed their own management expertise over coastal resources.
- States must account for long-term protection of diverse, healthy, and productive marine environment.
- Presence or scope of emerging environmental threats must not be underestimated.
- Concept of national security must be reexamined. Statutory authorities must be consolidated to reduce bureaucratic inefficiencies.

Recommendations:

- Innovative governance strategies must be investigated at all levels. Local governments, state governments, and interest groups are now part of the process and should be considered for future efforts. Indigenous cultures and traditions must be incorporated.
- Zoning and Marine Protected Area (MPA) concepts are new (did not exist during Stratton Commission's time). Locally established reserves in Guam help locally and nationally.
- Consideration and evaluation of cultural practices or traditional governance strategies of indigenous populations should be emphasized as they can provide insights and alternatives on how to manage marine resources' sustainability.
- New advances in technology and science allow better identification of future threats.
- National security must be reevaluated in context of ocean issues. More fish need to be imported.
- Statutory authorities must be streamlined and consolidated.

Responses to Questions:

- Seriously engaged members of Congress are bringing oceans to center stage and may help bring diverse "turf" focused committees and subcommittees together on these issues.

V

VAN DYKE

**Dr. Jon Van Dyke, Professor, William S. Richardson School of Law, University of Hawaii
Honolulu, HI, May-13-2002, Management of International Living Resources Panel
Invited Testimony**

Recommendations:

- The 1982 United Nations Convention on the Law of the Sea (UNCLOS) must be ratified.
- We must work with our Asia-Pacific neighbors to make the Honolulu Convention a success.
- The U.S. must continue to work to maintain the moratorium on exploitation of whales and to expand the sanctuaries within which exploitation of whale will remain forbidden.
- The U.S. must work through the World Trade Organization to strengthen the global commitment to environmental protection and to ensure that the value of free trade does not overwhelm the equally important values of promoting biodiversity and protecting threatened and endangered species.
- The U.S. must help establish a comprehensive and effective regime to govern the sea shipments of radioactive materials.
- The U.S. must allow its territories and commonwealths to manage the living and nonliving resources within their 200-nautical mil Exclusive Economic Zone and to utilize the revenues generated from these resources for their own prioritized purposes.

VAN TUYN

Mr. Peter Van Tuyn, Litigation Director, Trustees for Alaska

Anchorage, AK, Aug-21-2002, Management of North Pacific Living Marine Resources I Panel

Invited Testimony

Key Points:

- A general observation has been made: when NMFS or the councils suspect they will not like the answer to a particular question they go to great lengths to ensure the question does not get asked. This dynamic is particularly apparent in the discussions concerning the lack of standardized bycatch reporting methodology in New England and the North Pacific, and in the systemic failure of NMFS to comply with the environmental review provisions of the National Environmental Policy Act.
- NMFS often does not provide an explicit justification for its decisions, thus providing little transparency to its decision-making, frustrating the public and precluding meaningful debate.
- NMFS often ignores the express will of Congress, and will unilaterally modify its legal duties to give itself greater discretion. This discretion leaves NMFS vulnerable to undue political influence from commercial interests.
- NMFS has little political strength to accomplish its mission—it suffers from an inferiority complex created by its basement-level placement within a non-germane Federal agency.
- Time and again, NMFS and the Councils have revealed themselves to be incapable of implementing basic conservation-oriented actions when the best available information mandates such an approach.

Recommendations:

- Congress should announce a new policy aimed at protecting and restoring the health, abundance, diversity, and functioning of marine life, ecosystems, food webs, and habitats.
- Congress should create a new, independent agency (a Department of the Oceans) to implement U.S. Oceans policy, coordinate and regulate activities impacting ocean organisms, ecosystems, and habitats, and to oversee and administer funding for scientific research concerning ocean ecosystems.
- Regional marine ecosystem plans should be prepared and implemented and would serve as the overarching management document to guide human interaction with the marine environment.
- The new national oceans policy should authorize and obligate the Secretary to designate marine protected areas.
- The new law should emphasize that the National Environmental Policy Act applies to all Federal action in U.S. waters.
- The law should include provisions to ensure that an open and public process is used prior to final agency action. It should also allow for citizens to sue to enforce provisions of the law.

Responses to Questions:

- We need a stricter Federal presence. What we need to say is that activities that may affect the ocean should not be allowed unless the proponent demonstrates that the activity will not harm the ocean. That's an example of the authority that would have to be met
- It is an interesting dynamic that has occurred in the bycatch context. Because not one more fish is alive today than in a yearly basis than was alive before the 1996 amendments under this new system. So, we cannot say that bycatch reduction in the North Pacific has helped.
- Many of us have learned that you cannot separate allocation from conservation. And the best example for that is perhaps a total allowable catch that is below the allowable biological catch but is allocated to a bottom drawl fishery. This has cascading impacts through its habitat and increased bycatch.
- The North Pacific provides a very good example of what leads to the litigation. In 1990 the NMFS recognized that it was out of compliance with the NEPA in not looking at the full environmental impacts of the North Pacific ground fish fisheries. Sometimes the decisions that are made are not well justified by the agency and that's what leads to litigation. Because there are creative lawyers practicing administrative law we find flaws through that—what some people term as process we think is substance. The way to protect the environment in many instances is to force an agency to go through appropriate hoops and hurdles for transparent decision-making and informed decision-making. Maybe lessons in administrative law would be a good idea for Regional Administrators, for Council Chairs, to see if this is a legitimate structure for decision-making.
- We should not be making decisions in trying to avoid litigation.

VARANASI

**Dr. Usha Varanasi, Director, Northwest Fisheries Science Center, National Marine Fisheries Service
Seattle, WA, Jun-13-2002, Living Resource Management in the Pacific Northwest Panel
Invited Testimony**

Key Points:

- The marriage of science, policy, and implementation should be strong when discussing ocean policy.
- Sub-basin planning is one way of achieving success using all the technical teams' information. Local planning should be supported by some of the broad scale science issues and the management issues.
- Science seems to be brought in when we're almost at a crisis. Then, it is always too late and it takes too long to bring in the science.

Recommendations:

- The Commission should bring in the science ahead of the problems, and develop the science to work out the problems. It is just not possible to turn science on and off like a faucet.

Responses to Questions:

- The technical recovery teams are made of scientists from different agencies and groups. There are also observers from the political side. We do not wait until the science is complete, packaged and peer reviewed. We are constantly going through peer review and changing. All of this is time consuming but important. The Councils and Commission may consider some lessons from this process.
- It is important to do monitoring and evaluation of whatever planning we do. Whether it is a marine protected area, or basin planning and recovery, there has to be a large scale monitoring scheme to see how it is working.

VICK

**Ms. Gale Vick, Director, Alaska Coastal Communities Coalition (GOAC-3) and a Salmon Fisherman
Anchorage, AK, Aug-22-2002
Public Comment**

Key Points:

- GOAC-3 is a non-profit membership drive organization representing people who have made their living from the sea for millennia. There are 43 viable communities in the Gulf of Alaska with an approximate population of 44,000 people. These communities are almost totally marine dependent. This includes commercial, subsistence, recreational fishing, shellfish aquaculture, tourism, transportation, and offshore mineral development.
- While there are not the extreme problems here that face coastal communities around the nation, the essential problem is shared of how to continue making a decent living to keep the fabric of the communities and make sure they do not unravel.
- The Alaska Coastal Communities Coalition has recently submitted a Saltonstall-Kennedy grant application for a project called Alaska Coastal Communities Observer system or ACOS. The basic premise of this project is to create a corollary database to existing statistical models that incorporate the incredible knowledge and observational ability that our communities have. There may be a pilot project within the Gulf of Alaska that can ultimately be applied around the nation. This system will create much better awareness on both sides, better dialogue, and immense educational opportunity for everyone, including regulators, teachers, scientists, students, fisherman, and the general public.

Recommendations:

- The Commission must have clear definitions. Paranoia abounds from undefined terminology that could have the ultimate power to trump any local concern. Ecosystems, for instance, is such a vague concept it cannot truly garner the support it needs until the term itself is better defined and until the processes by which we apply ecosystems approaches are clearly defined. Everyone believes in the intent, but there must be a definition of the application.
- Be aware of any burden of proof that is not equally applicable to user, researcher, policy maker, or litigant. Alaska's coastal communities and fisheries have suffered the extreme form of burden of proof on the Stellar sea lion issue. The communities are bearing the price of being guilty until they prove themselves innocent. They do not have the resources or the science to fight litigation that is immune from its own premise.
- Get the stakeholders more directly involved.

VIRMANI

Ms. Jyotika Virmani, Student
St. Petersburg, FL, Feb-22-2002
Public Comment

Key Points:

- Once students are enrolled in graduate programs, there is a problem with attrition because of disillusionment with the program.
- Particularly important to women is the balance between family and science degree.
- After earning degrees, students have accrued large student loans and find it difficult to work in the field with little money.
- Capture the imagination of children with science at an early age and this will increase the chance that they will continue an interest in science and technology.
- Utilizing women and minorities would increase graduate recruitment, but intelligence should not be forgotten to overcompensate for diversity.

VONNAHME

Mr. Donald Vonnahme, Director, Office of Water Resources, Department of Natural Resources, State of Illinois
Chicago, IL, Sept-24-2002, Featured Speaker
Invited Testimony

Key Points:

- I support the Commission's list of 10 elements that should form the basis of a robust national ocean policy.
- The Great Lakes Governors have committed to the development of a Comprehensive Great Lakes Restoration Plan that will outline our vision, guiding principles and our priorities for action to ensure that needed restoration activities are undertaken, and which will allow for continued environmentally responsible economic growth in the region. Have established guiding principles.

Recommendations:

- I urge you to keep the Great Lakes in mind in all your discussions and hope that in your reports we merit specific discussion of federal policy and resource allocation needs.
- Give priority attention to the issue of aquatic nuisance species. I believe this is the most serious problem facing the Great Lakes today. We need an analysis of where our shortcomings are and how we as a nation can solve this problem.
- Another problem area that I would suggest for your consideration is the growing concern over the bacteriological quality of Great Lakes beaches. Illinois, as in other Great Lakes states, has seen an increase in the number of days that our public beaches have had to close because they did not meet minimum standards.
- There is a need to improve our understanding of the basin's hydrology, particularly the interaction of groundwater and surface water. There is also a need to undertake the research needed to determine how decisions regarding withdrawals can impact the Great Lakes ecosystem. The primary federal research institutions such as the National Oceanic and Atmospheric Administration's Great Lakes Environmental Research Laboratory and the United States Geological Survey, along with other federal agencies such as the Corps of Engineers and the U.S. Fish and Wildlife Service, need to be tasked and funded to develop the data bases and to perform the analyses needed to assist the States and Provinces in their efforts to "manage for sustainable water use" in the Great Lakes basin.

Responses to Questions:

- Restoration and protection plan for Great Lakes will cost about \$3-4 billion.
- Need for a regional council with authority is being discussed.
- Global change is a concern for Great Lakes.
- Existing Commissions and Councils of Great Lakes each have different purpose and intent.

W

WADE

**Mr. Stewart Wade, Vice President, American Bureau of Shipping
New Orleans, LA, Mar-07-2002, Maritime Transportation Panel
Invited Testimony**

Key Points:

- Classification is the mechanism by which the international maritime industry has traditionally regulated itself.
- Codifying standards through international conventions lies with International Maritime Organization. National agencies like the Coast Guard implement standards.
- Current system of self regulation through classification is most effective, practical method of further improving maritime safety.
- Nonindigenous species issue is before IMO now. There is concern from technical point that current procedures place stress on ship during ballast transfer. IMO Marine Environmental Protection Committee is considering it. Coast Guard is the lead agency to IMO.
- Coast Guard and private industry are looking at ways of onboard destruction of alien species. It is not very successful yet.
- IMO is looking at vessel identification issues.

WALKER

**Dr. Dan Walker, Senior Program Officer, Ocean Studies Board
Chicago, IL, Sept-24-2002, Non-point Source Pollution Panel
Invited Testimony**

Key Points:

- Clean Coastal Waters: Understanding and Reducing the Effects of Nutrient Pollution, provided a detailed analysis of the scientific and management issues posed by nutrient pollution and outlined the key elements of a nationwide strategy to address the problem. Oil in the Sea III: Inputs, Fates, and Effects suggests that oil may need to join nutrients, pesticides, and mercury on the list of non-point source pollution threats to the coastal environment.
- Chronic low-level releases associated with the consumption of petroleum account for 70 percent of total and may pose significant risks to the sensitive estuarine environments where these inputs most often enter the marine environment. Volumetrically the most significant anthropogenic source of petroleum entering the marine environment is land-based, non-point source pollution.
- Oil in the sea each year off North America: natural seepage of crude oil from geologic formations below the seafloor to the marine environment is estimated to exceed 47 million gallons; activities associated with oil and gas exploration or production introduce on average an estimated 880,000 gallons; transportation of crude oil or refined products (including refining and distribution activities) results in the release on average of an estimated 2.7 million gallons; and an estimated 25 million gallons are input from diffuse sources.
- Non-point source nutrient pollution-no single policy approach will be appropriate in all cases.
- The severity of nutrient problems and the importance of the coastal areas at risk led the National Academies to call for the development and implementation of a National Nutrient Management Strategy, which as proposed in Clean Coastal Waters would coordinate local, state, regional, and national efforts to combat nutrient over-enrichment in coastal areas, with the goal of seeing significant and measurable improvement in the environmental quality of impaired coastal ecosystems.

Recommendations:

- Broadly applicable approaches for addressing non-point source pollution include: accessible data, information, and expertise; expand Federal leadership in the setting and obtaining of nationwide goals; expand monitoring capabilities; conduct periodic comprehensive assessments of coastal environmental quality; develop a susceptibility classification scheme; and, expand and target atmospheric research.
- Oil in the Sea III recommends that federal agencies work to develop and implement a system for monitoring input of petroleum to the marine environment from land-based sources via rivers and storm- and wastewater facilities.
- Clean Coastal Waters recommended that USGS monitoring should be expanded with the objective of assessing nutrient inputs to estuaries and monitoring how these change over time.
- Monitoring efforts must move beyond fecal coliform counts and dissolved oxygen or simple "oil and grease" measurements to routinely and consistently monitor for dissolved nitrogen and phosphorus, TPH, PAH, and other known compounds of concern.

- The Commission should articulate to Congress the pressing need for the kind of integrated, nationwide effort envisioned here.
- The Commission should encourage a re-thinking of how the Executive and Legislative Branches can work together to more effectively provide the tools and resources needed to tackle what is clearly a problem of nationwide scope and importance, non-point source pollution and its impact on coastal environmental quality.

Responses to Questions:

- Academy is not an implementer, it remains separate from the process.

WALKER

**Dr. Sharon Walker, Administrator, J.L. Scott Marine Education Aquarium
New Orleans, LA, Mar-07-2002, Science and Education Panel
Invited Testimony**

Key Points:

- Mandate appropriate federal agencies implementing ocean sciences education programs to “bridge the gap” between scientist, research, and interpretation of data. Agencies should have a common focus. NOPP is an excellent example of 14 agencies with a common focus but underfunded to sustain over a long period of time. NSF-COSEE should be at 20-25.
- Promote ocean literacy within the national standards and through enhanced training and professional development programs for teachers. Appropriate use of technology is needed to support instruction, evaluation, and assessment of how students learn. It is critical that national strategies and complementary plans be implemented to lessen the disconnect between researchers and educators. Teachers are the key to reversing the lack of scientific understanding by school age generation. We need to make ocean science an integral part of NSES when it is revised in 2005.
- Establish and mandate funding for a nationally recognized Education and Outreach Office within NOAA, Oceans.US, NOPP or COSEE infrastructure to coordinate ocean sciences educational efforts. This should encompass pre- and inservice teachers' participation in and the public's awareness and understanding of ocean exploration, through observation, modeling, and information technology management. This should also be responsible for an Advisory Board for “stamp of approval” on exemplary ocean sciences, Great Lakes, and coastal process curricular materials.
- COSEE is a good model but needs to be funded at a greater level so more Centers can be developed. Ocean literacy should be integrated and interdisciplinary because water can be used as a medium to teach any particular discipline like writing or music. Use of “science” in testimony was meant to be “knowledge.”
- Science, social science, and geography standards should all include the oceans. National Research Council will revise science standards in 2005. AAAS to do the benchmarks.
- National Education Outreach Office would coordinate, evaluate, and assess across agencies. It is not decided whether it should be in NOAA, COSEE, CORE, etc.

Recommendations:

- Communication between researchers and educators is a two way street. It is possible to marry education with research through data exchange. Use underwater observatories for classroom teachers to get the first hand experience.
- The role of the Department of Education in ocean science is unclear, because the role of the Department of Education is unclear.
- An educational summit is worthwhile for researchers, students, teachers, graduate students, and technology folks to see what each needs from each other.

WALLEN

**Mr. Eric Wallen
Seattle, WA, Jun-13-2002
Public Comment**

Key Points:

- The streams and rivers flow into the ocean, and those waters are important fish runs. The wetlands are also integral aspects of the sea's health.

Recommendations:

- Consider the health of the oceans whenever industry or military uses are being promoted.
- The Navy's new planned anti-sub sonar system should not be allowed to be used due to the horrible damage it does to whales and the potential threats to sea life in general.

WAN

Ms. Sara Wan, Chair, California Coastal Commission
Los Angeles, CA, Apr-19-2002, Coastal and Outer Continental Shelf Management Panel
Invited Testimony

Key Points:

- The Coastal Commission jurisdiction is the State's Coastal Zone; through the Coastal Zone Management Act (CZMA), federal consistency has review authority beyond the coastal zone.
- Many federal activities have potentially significant affects on ocean and coast and only voice is through Commission federal consistency authority.
- Most importantly, the CZMA coastal management tool provided to California is the federal consistency review authority; yet the oil industry and Department of Defense (DOD) have asked for amendments to CZMA to weaken this provision.
- Key message: not only oppose any weakening of federal consistency, recommend strengthen it.

Recommendations:

- Strengthen federal consistency federal agencies should not be allowed to ignore states by claiming they "attempted" to be consistent to the "maximum extent practicable."
- Following remedies are encouraged:
 1. Preclude use of inadequate federal funding as excuse for non-compliance
 2. Any renewal of federal permits and licenses for Outer Continental Shelf (OCS) uses subject to consistency review
- Strengthen CZMA policies to improve ability to manage resources:
 1. Habitat protection on land must be considered part of any overall ocean ecosystem approach
 2. Concerned about nonpoint pollution
- Ocean governance regime should include strong role for coastal states and effective federal-state partnership with strong federal consistency review provisions.
- Strengthen habitat protection by establishing process to create MPAs that contain strengthened water quality protection policies and ends overfishing; and enact a National Ocean Policy that establishes ecosystem protection standards that must be followed.
- CZMA Sections 302 and 303 should recognize coastal watersheds and place greater emphasis on conservation of ocean resources.

WAYLAND

Mr. Robert Wayland, Director, Office of Wetlands, Oceans and Watersheds, U.S. Environmental Protection Agency
Washington, D.C., Nov-14-2001, Federal Agencies
Invited Testimony

Key Points:

- National Coastal Condition Report is expected out at the end of the month.
- Land and water are connected. People who live in Mississippi watershed must be engaged and energized to deal successfully with coastal problem.
- A major challenge is nonpoint pollution. An emerging problem is invasive species.
- Environmental information is an opportunity and challenge.

Responses to Questions:

- The written response to questions contains detailed responses to issues that address:
 1. Assuring independence of research while developing regulations.
 2. Environmental Protection Agency's (EPA) K-12 education program.
 3. Oil spill prevention, preparedness, and response.
 4. Managing antifoulants and biocides.
 5. How to address nonpoint pollution.
 6. EPA management of invasive species.
- EPA looking carefully at what information is publicly available since 9/11 (i.e., public drinking water locations).
- The possibility of geographically based stakeholder processes to take over federal activities should be considered.

Documents Recommended:

- www.globe.gov/fsl/welcome.html
- www.epa.gov/owow/invasive/species/
- www.epa.gov/grtlakes/about.html
- www.epa.gov/owow/estuaries/about4.htm#introduced

**Chicago, IL, Sept-24-2002, Nonpoint Source Pollution
Invited Testimony**

Key Points:

- Nonpoint source pollution is the most pervasive source of water pollution in the United States today. Much of our NPS pollution today is the result of past activities. However, many of our biggest future challenges lie in preventing new problems that are resulting from the continued development and growth of our coastal communities.
- Some of our greatest coastal resource challenges stem from the modification of habitat and hydrological regimes.
- Description of the National Nonpoint Source Pollution Program is provided.
- Opportunities to abate nonpoint source pollution include State Coastal Nonpoint Source Pollution Control Programs, watershed-based planning and TMDL's.
- Two major sources of funding, in addition to Section 319 funds, warrant special attention: Farm Bill and State Revolving Loan Fund.
- Left unaddressed, nonpoint source pollution could actually erode away the gains made by controlling point sources of pollution.

Responses to Questions:

- TMDLs are described.
- There are no overnight solutions to deal with nonpoint pollution.

WEBSTER

Captain Tom Webster, F/V Havana

Honolulu, HI, May-13-2002, Management of International Living Resources Panel

Invited Testimony

Key Points:

- The primary issue concerning longlining today is protected species interaction, including seabirds and seaturtles, most specifically seaturtles. Currently, we are operating within the constraints of area closures. The area from the Equator to fifteen degrees North latitude and from one hundred forty-seven degrees West longitude to the International Dateline is close to us during the months of April and May. Also, recently an indefinite emergency closure has been imposed on us involving the entire Pacific north of twenty six degrees North latitude. These area closures are designed to prevent interaction with seaturtles and apply only to U.S. vessels in possession of a Hawaii longline permit. Presently, a large international longline fleet is operating south of fifteen degrees, in the area closed to U.S. vessels, and the incidence of seaturtle interaction is, of course, unknown.
- Presently, the only data available concerning longline/seabird interaction has been provided by the U.S. fleet. We're approaching 40% observer coverage, and these interactions are well documented.
- Providing data provides a valuable foundation for an international management plan, and I do not believe we can depend on the international fleets to gather this information.
- Excluding the U.S. fleet from certain areas is ultimately detrimental to the welfare of seaturtles.

WEISSMAN

Eli Weissman, Ocean Conservancy

Washington, DC, Sept-18-2001

Public Comment

Key Points:

- The reason that the Ocean Conservancy so strongly supported the Oceans Act is because our oceans are in crisis. Last year there were over 11,270 beach closings and advisories around the country because of pollution. According to the National Marine Fisheries Service, more than 40% of assessed fish populations are overfished, and of those stocks, 57 are still being overfished. Numerous species of marine mammals, sea turtles, and seabirds are on the endangered species list with causes ranging from entanglements in fishing gear, to collisions with boats and ships, to loss of important habitat due to human activities such as shoreline development.
- As many of you know, the marine conservation community was extremely disappointed when not a single member of our community was appointed to this Commission. We urge you to keep the protection of the marine environment at the forefront of your agenda, as stated in the Oceans Act. I was pleased at the addition of a Stewardship Committee.

Charleston, SC, Jan-16-2002

Public Comment

Key Points:

- I would like to define MPA as an area of intertidal or subtidal terrain, together with its overlying water and associated flora upon historical and cultural features which has been reserved by law or other affected means to protect part or all of the enclosed environment. That is the ICUM definition. The U.S. executive order on MPAs was signed into law by President Clinton in May of 2000 but was also upheld by the current Bush Administration by Secretary Evans and others. That definition of MPAs is similar, but I would like to read it to you: an area of marine environment that has been reserved by federal, state, or territorial, tribal or local laws or regulations to provide lasting protection for part or all of the natural and cultural resources therein. The Ocean Conservancy defines marine reserves as MPAs that limit fishing and no-take marine reserves as MPAs that are closed to all forms of fishing.
- Our organization also has a term called ocean ordinance, which refers to large areas generally at least a hundred square miles that are closed to all extracted activities, including fishing, and to other damaging human activities as needed. They are also protected to preserve and restore their natural character, condition vistas, living communities and habitats for present and future generations to experience, but to leave ultimately unaltered.

Washington, DC, Nov-22-2002

Public Comment

Key Points:

- The Ocean Conservancy, through our Good Mate Program, has been working with the Coast Guard developing educational material and providing outreach to recreational boaters. I encourage you to keep the first principle on stewardship. The ocean resources must be held in the public trust.
- I would like to see more discussion on other areas of living marine resources, particularly marine wildlife, and also coral reefs, and national marine sanctuaries. The Ocean Conservancy is part of the Marine Fish Conservation Network, and we have a set of standards we have been pushing for. They are mandatory standards as opposed to guidelines. Also, I know that Senator Carey has a bill that lists standards as well as Congressman Gilchrist had a bill on his Magnuson. Those are three things you can consider for starters.
- As for nominations, the council is one thing that I think the Ocean Conservancy would definitely like to see instead of having the governors put people from the commercial, two from recreational, and two from the general public on the lists. We believe that conservation interests need to have equal representation because someone must look out for the resources.
- The current structure really is the fox guarding the hen house, and we do believe that conservation interests must be represented on the Council so that there are folks looking out for the resources specifically.
- As far as marine protected areas go, one thing that should be no surprise to many of you is that we have been pushing for ocean wilderness. We are certainly encouraged by the discussion on MPAs today.
- Ocean health is broader, in my opinion, than just water quality and human health and improving coordination. I think there were a couple of areas that were missing; ocean wilderness and certainly even marine protected areas could help filling some of that area.

Recommendations:

- As far as education goes, I would like to second Marc's comment about the need for an addition to ocean science, to open it up to other social sciences including liberal arts, conservation and other areas.
- The Coast Guard Commandant had talked about vessel management systems. That is a very important priority for the Ocean Conservancy. Each year we work on appropriations, and we specifically try to get funding for VMS so that NMFS can conduct their enforcement.
- I was disheartened because Coast Guard enforcement, even with their 20 percent growth, is still going to be 5 to 7 percent below current enforcement. We support what the Coast Guard Commandant had said on VMS.

WELDON

The Honorable Curt Weldon, U.S. Congressman, U.S. House of Representatives, Pennsylvania

Washington, DC, Nov-13-2001, U.S. House of Representatives Panel

Invited Speaker

Key Points:

- Political parties and Congress are closer on oceans agenda than any other environmental agenda.
- Oceans Partnership Bill is a good example of how to cooperate on ocean research.
- Appropriation and authorization committees need to understand that it is easier if there is a common unifying effort of oversight.

- Environmental/defense connection abroad (U.S./Russia/China) must be considered; oceans/environmental agenda can reduce conflict.

Recommendations:

- Military resources should be used where appropriate for environmental purposes.
- United Nations Convention on the Law of the Sea (UNCLOS) should be ratified.
- Legislation providing a comprehensive look at ocean policies and strengthening of programs should be passed.
- A formal curriculum for young people about the importance of oceans should be implemented.
- People need to be political, not partisan, to hold Congress accountable.

WERNY

**Mr. Scott Werny, Oahu Chapter Surfrider Foundation
Honolulu, HI, May-14-2002, Tourism, Development, and Coastal Management Panel
Invited Testimony**

Key Points:

- There is a lack of available and sufficient information or data that is understandable to concerned citizens.

Recommendations:

- Coastal Zone Management Act (CZMA) Enhancement Grants Program should be amended to facilitate the creation of a national standard of beach health indicators and provide incentives for state CZM agencies to maintain records on beach health indicators.
- CZMA Enhancement Grant Program should be amended to provide incentives for state CZM programs to increase public awareness regarding beach and coastal health.
- Continue to fund the Beaches Environmental Assessment and Coastal Health Act of 2000 (BEACH) to ensure that the program is fully implemented by all states and territories.
- Amend the Clean Water Act to remove the 301(h) waiver program.
- Support legislation such as H.R. 1310 to reform the Corps of Engineers.
- Congress should pass new legislation to establish a national system of fully protected marine reserves that protect the “best” places in America’s undersea lands and representative samples of all ecosystem types in each of the nation’s marine biogeographic regions. The primary purpose of the system is to protect and recover biodiversity within America’s Exclusive Economic Zone (EEZ).

WEST

**Rear Admiral Dick West, Oceanographer of the Navy, Department of Defense
Washington, D.C., Nov-14-2001, Federal Agencies Panel
Invited Testimony**

Key Points:

- Four issues are of critical importance to Department of Defense (DOD): navigational freedom, navigation, over flights, and stewardship.
- Encroachment restrictions are hampering training
- Ocean observations: DOD collects significant amounts of data and declassifying more data may bridge national security and civil communities.

Responses to Questions:

- The Navy is making an effort to release data and maps to oceanographic communities in accordance with national security.

Documents Recommended:

- The Importance of Ocean Observations to Naval Operations

WEST

**Mr. J. Robinson West, Chairman, Petroleum Finance Company
New Orleans, LA, Mar-08-2002, Offshore Energy Panel I
Invited Testimony**

Key Points:

- Federal and state governments have received funds from offshore leasing and development under Land and Conservation Fund and National Historic Preservation Fund. Precluding areas from preleasing activities inhibits, rather than promotes, gathering information needed to make informed decisions. We should look further at more

equitable OCS revenue support for coastal communities that directly support offshore energy production. Some revenues that flow into federal treasury should enhance local counties, parishes and municipalities that support development. Examine the ways some groups have attempted to educate about energy issues: National Energy Education Development (NEED) Project, network of students, teachers, businesses, and industry.

- Oil and gas program has so much difficulty along Atlantic and Pacific coasts and Florida because: Gulf of Mexico has a long tradition and realizes economic benefits; and industries' images were tarnished with 1969 Santa Barbara blowout. People need to understand technologies better.
- A clear and predictable regulatory structure adheres to a transparent and consistent process to arrive at determinations within reasonable timeframe. It is frustrating for companies involved in CZMA consistency disputes is lack of consistency.
- Industry's record of environmental performance is excellent, but its story is not communicated effectively enough. Performing in the safest and most environmentally sensitive manner is only one way of "telling story." NOIA and API websites post educational information.
- Industry is concerned about future talent and leadership in ocean and energy sciences. The decline in interest and school enrollment is rooted in dated perceptions of oil industry. Campus recruiting and partnerships with academic institutions beginning to turn the trend around.
- There are no large areas off-limits in the North Sea. International governments do all they can to encourage and support exploration and production.

WEST

**Ambassador Mary Beth West, Deputy Assistant Secretary for Oceans and Fisheries,
U.S. Department of State**

Washington, D.C., Nov-14-2001, Federal Agencies

Invited Testimony

Key Points:

- International cooperation is necessary to resolve most oceans issues.
- The issues affecting international ocean policy flow through four levels of government: local, national, regional, and global. Global and regional government must be linked to national and local government to ensure that international solutions meet local and national needs.
- The four current international oceans policy issues may be of interest:
 1. Ratification of United Nations Convention on the Law of the Sea (UNCLOS)
 2. Spread of invasive species through ballast water discharge: Shipboard technologies are needed to eliminate organisms and pathogens.
 3. Coastal management: U.S. could improve effectiveness in Caribbean countries.
 4. Marine transportation systems (ships, ports, offshore facilities) are vulnerable.

Recommendations:

- Consider the Oceans Act as a potentially new mechanism for crosscutting budget review/analysis through Biannual Report.

Responses to Questions:

- Optimal role of U. S. State Department in brokering international marine science collaboration is through diplomacy, policy development, and implementation of International Science Cooperation.
- Effectiveness of international large programs led by U.S.:
 1. There is a need to bring into force those instruments that are not yet in force (i.e., Food and Agriculture Organization of the United Nations Compliance Agreement).
 2. There is a need to continue to develop better measures where new technologies permit improvements.
 3. Ensure international measures are implemented.
- Department of State can help other agencies at Office of Management and Budget (OMB) and Congress with Department of State-related priorities.
- It is time for UNCLOS representatives' recommendations to be pushed into future (continental shelf May 2009).
- The horizontal budget coordination is primarily role of OMB.

Honolulu, HI, May-13-2002, Management of International Living Resources Panel

Invited Testimony

Key Points:

- We are facing a world where fishing capacity of fleets has outpaced reproductive capacity of fish stocks.
- Many of the world's primary fishery resources are under stress. Some of the causes are improved fishing technology, government subsidies, degradation of habitats, "flags of convenience," and gear types.
- International law framework includes 1982 United Nations Convention on the Law of the Sea (UNCLOS).

- The following list is of trends and prospects:
 1. There is a recognized need for greater conservation ethic in regulating ocean fisheries.
 2. New management regimes are being created to oversee important international fisheries (tuna fisheries in Central/Western Pacific).
 3. Some of the new tools for enforcing fishing rules, such as better coordination, monitoring, control and surveillance, are showing promise.
 4. International community has begun to think “outside the box” and is using ports' state controls to deter illegal harvests. It is also applying new restrictions on the importation of fishery products harvested in violation of rules.
 5. Asian Pacific Economic Cooperative has a growing track record of accomplishments.
- World Summit on Sustainable Development is August 26 - September 6, 2002.

WETZELL

**Ms. Lauren Wetzell, Student, University of South Florida
St. Petersburg, FL, Feb-22-2002
Public Comment**

Key Points:

- American students are disappearing from top science and engineering schools.
- One possible solution is to increase number of degrees offered which combine science with practical job-related training.

WHITE

**Mr. David White, Director, Ocean Conservancy - Florida Regional Office
St. Petersburg, FL, Feb-22-2002, Ecosystem Management Panel
Invited Testimony**

Key Points:

- The U.S. needs a national system of Marine Protected Areas (MPAs), including no-take reserves and ocean wilderness areas, to bolster and sustain dwindling fish populations; to restore health of ocean ecosystems; deepen understanding of the complexity of ocean life and our impacts on that life; and to ensure that our use of economically valuable marine resources is sustainable.
- Science tells us MPAs work. The U.S. lags behind other countries in establishing MPAs.

Recommendations:

- Make a firm and consistent commitment to the use of MPAs as a marine management tool. A decision must be made that an adequate national system of MPAs, which includes no-take and ocean wilderness areas, will be developed.
- The process of establishing a national system of MPAs should incorporate the following guidelines:
 1. All stakeholders, not just fishing and conservation interests, must be involved in collaborative process from the beginning.
 2. Education is a key first step. Include primer on MPAs, lessons learned from other sites, and a review of the current status including available biological and socioeconomic information.
 3. Discussion should begin by exploring specific objectives.
 4. Scientific information is critical and should be referenced at every step of the process.

WHITE

**Mr. Patten D. White, Executive Director, Maine Lobstermen's Association; Member, PEW Oceans
Commission
Washington, DC, Nov-13-2001, PEW Oceans Commission Panel
Invited Speaker**

Key Points:

- Habitat must be protected from impacts of fishing practices and gear.
- By-catch must be monitored and reduced.
- Problems in fisheries management/regulatory system must be addressed.

WHITE

Dr. Robert White, Principal, The Washington Advisory Group
Washington, D.C., Oct-30-2002, Featured Speaker
Invited Testimony

Key Points:

- The Stratton Commission was in an enviable position compared to the one in which the Watkins Commission finds itself today. In the late 60's, we were faced with similar problems, but legislation addressing most of them had not been enacted.

Recommendations:

- Recommend the development and implementation of a comprehensive Ocean Observation and Prediction System.
- Recommend further development and protection of our coastal resources. Interaction among agencies of the Federal, State and local governments needs to be regularized and implemented.
- Recommend arresting the further depletion and restoration of marine living resources. Global overcapitalization of vessels engaged in fishing must be attended by international agreements. There is a need to augment the present international agreements to take a census of marine life presently underway under the aegis of CORE. There is need for a major push in the area of aquaculture and mariculture so that ocean fisheries can be farmed much like we farm grains and livestock on land.
- Recommend strengthening and advancing present outstanding ocean scientific and technological capabilities. What is needed is a considerable investment in technological development so that thirty years from now, we can look back and say that the advancements in this period were also spectacular.
- Consider recommending the establishment of a new institutional framework for the conduct of oceanic and related environmental activities. Seriously consider wedding the Geological Survey and NOAA into an Ocean and Environment Administration. Serious consideration should also be given to divesting NOAA of certain conflicting regulatory functions. In this way the new institution would become the authoritative agency for observing, predicting, and assessing the environment, serving all governmental and private sector needs.
- From an economic as well as an environmental point of view an essential thrust of the Commission must be to emphasize the ocean's effects on the weather and climate.

Responses to Questions:

- Agencies need to ask for money in their budgets for environmental observation and prediction.
- We're never going to assemble all of the ocean-related activities from all the agencies of the Federal government to a single agency.
- I would look at the Corps and see whether the things that relate to the oceans, would they be better off in a new agency than they are in the Corps.

WHITING

Mr. Larry Whiting, Managing Partner, Terra Surveys LLC
Anchorage, AK, Aug-22-2002, Marine Operations and Enforcement Panel
Invited Testimony

Key Points:

- Alaska has the greatest amount of Critical Survey areas in the U.S., followed by the Gulf of Mexico.
- There is a need to consider the most effective use of (hydrographic survey) contractor assets and personnel.
- Procurement issues to be dealt with include: hydrographic survey contracts; shoreline initiatives through the NGS; vessel time charter; and new national contracts for LIDAR and Hydro.

Responses to Questions:

- The national survey capabilities in the private industry are more than adequate to take over this survey responsibility. A teaming arrangement is superior because somebody has to set the standard, somebody has to have that core capability in the government to provide the adequate oversight of contractor relationships and adequacy of our data. The government has the capability.

WHITMAN

**The Honorable Christine Todd Whitman, Administrator, U.S. Environmental Protection Agency
Washington, DC Sept-17-2001
Invited Testimony**

Key Points:

- The EPA tries to focus its investment on watershed management as perhaps the best way to determine how we can help out not just our rivers and streams but also our seas and oceans. We need better data on the quality of our oceans so that we can begin to truly benchmark our efforts. All of our resources are finite at some point.
- Under Executive Order 13158, the EPA has been directed to move forward to propose new science-based regulations to ensure the protection of the marine environment off our coasts.
- We expect to work with our partners in the federal, state and local governments, as well as our international partners. The ocean hasn't heard of the three-mile limit or the ten-mile limit.
- President Bush and I both believe that economic prosperity and environmental protection can and must go hand-in-hand.

WILLARD

**Rear Admiral Robert Willard, Deputy Commander in Chief and Chief of Staff, U.S. Pacific Fleet,
U.S. Navy
Honolulu, HI, May-14-2002, Ocean Use and Management Panel
Invited Testimony**

Key Points:

- Freedom of navigation is critical to Navy's ability to deploy ships, aircraft, and personnel. Training is the most critical component of nation's military readiness.
- Overarching policy for the fleet: "Protection of the marine environment is mission essential." From 1991-2001, Department of Defense (DOD) invested \$48 billion on environmental programs.
- Environmental limits imposed on training ranges have created overall impact to training readiness that is negative and cumulative. This is referred to as encroachment. Impacts preclude Navy's ability to execute its mission.
- Marine Mammal Protection Act (MMPA) and Endangered Species Act (ESA) pose the greatest challenges to Navy training and operations. "Taking" is broadly defined.
- MMPA, ESA, and Migratory Bird Treaty Act are overly broad and ambiguous. Regulations are subject to liberal application and inconsistent interpretation.

Recommendations:

- Regulatory agencies need to better understand and give due consideration to defense training and readiness requirements when within the law.
- Ambiguity in environmental laws must be clarified and eliminated without exempting DOD from compliance.

WILLIAMS

**The Honorable Brian Williams, Deputy Mayor, City of Los Angeles
Los Angeles, CA, Apr-18-2002, Featured Speaker
Invited Testimony**

Key Points:

- Welcome on behalf of the Mayor.
- Beaches and ports are critically important to City, region, and nation.
- With strict enforcement of the Los Angeles Stormwater Management Plan, the port has cleaned up the harbor making environment for sea lions, fish, and other creatures.

WILLIAMS

Ms. Lori Williams, Executive Director, National Invasive Species Council
Chicago, IL, Sept-25-2002, Invasive Species Panel
Invited Testimony

Key Points:

- Invasive species is defined in Executive Order 13112 that established the Council as an alien (or nonnative) species whose introduction does or is likely to cause economic, or environmental harm or harm to human health.
- The Oceans Act calls for a national ocean policy that, among other things, will promote responsible stewardship of ocean and coastal resources, and protection of the marine environment. Similarly, EO 13112 directs the Council develop a comprehensive management plan to deal with invasive species.
- The Oceans Act also calls for enhancement of marine-related commerce; similar to the invasive species EO 13112 and management plan which call for steps to protect the economy from the impacts of invasive species.
- There is a critical need to focus on prevention of both accidentally and intentionally introduced invasive species. Most aquatic invasive species are introduced accidentally through variety of means called pathways. The ballast water of ships is considered the most significant pathway resulting in the introduction of the zebra mussel, Asian clam and many other species.
- Although ballast water has received the most attention for obvious reasons, it is critical to look at other pathways including ship biofouling, accidental releases from aquaculture, release of live bait, seafood, and aquatic pets, and recreation - among others.
- In many cases we do not know enough to effectively deal with invasive species issues and their impacts our coastal and marine ecosystems.

Recommendations:

- Problems associated with the lack of critical biological and technical information, as well as need for better data on the environmental and economic impacts of invasive species points to the need to enhance and strengthen our invasive species research and information sharing capacities. Targeted and coordinated research is critical to enhance economic analysis of the impacts of invasive species and improve the ability to predict which species will become invasive.
- Both the invasive species EO and the Council's Plan also emphasize the important role of education and outreach is critical not only to inform the public and key stakeholders about the problem of invasive species, but what steps people can take to reduce the likelihood they will accidentally introduce or transfer an invasive species to region or ecosystem.

Responses to Questions:

- National Invasive Species Plan calls for a national, well coordinated, educational campaign.
- Federal Council is still young and going through growing pains.

Documents Recommended:

- National Invasive Species Management Plan (www.invasivespecies.gov)

WILSON

Mr. Jerry Wilson, Thales Geosolutions Pacific
Los Angeles, CA, Apr-19-2002
Public Comment

Key Points:

- A seafloor "base map" is essential as a foundation for seafloor issues. A recent issue of Marine Technology Society Journal has a collection of papers about new seafloor mapping technology.
- Urge this type of fundamental information be made available to fisheries resource managers quickly.

WILSON

Mr. Peter Wilson, President, Global Ocean Consultants
Honolulu, HI, May-14-2002
Public Comment

Key Points:

- A "Hawaiian Corporate Entity" should be established to prepare detailed business plans for the establishment of tuna processing facilities in several key locations in the western Pacific.

WILTSHIRE

Dr. John Wiltshire, Associate Director, National Oceanic and Atmospheric Administration - National Undersea Research Program - University of Hawaii
Honolulu, HI, May-14-2002
Public Comment

Key Points:

- There is concern about the state of marine technology compared to its potential.
- New technologies must be found and implemented. The visibility must be raised of the highly underutilized potential of marine technology sector.

WING

Ms. Kate Wing, Natural Resources Defense Council of San Francisco
Seattle, WA, Jun-14-2002
Public Comment

Key Points:

- The fish management Councils should act more in an advisory role. The idea should be that the secretary has the power to modify and amend fishery management plans, not simply reject or adopt them.
- User fees should be increased.

Recommendations:

- Recommend the Commission investigate a default fisheries management plan (FMP). Encourage looking into a baseline management plan that could be implemented in the case of emerging fisheries that gives a management framework to move along with until a more detailed FMP could be put into place.
- Look into zonal management and put more marine reserves in place as part of pre-cautionary management for the future. Look at assessing capacity, both the capacity of the ecosystem to produce, and the capacity of humans to be able to extract from it.
- The Saltenstall Kennedy grant program should be re-designed. It should fund development, gear modifications, more science and collaborative research.

WINTHER

Mr. John Winther, General Agent, Ocean Prowler LLC
Anchorage, AK, Aug-21-2002, Management of North Pacific Living Marine Resources II Panel
Invited Testimony

Key Points:

- Recognition of regional differences: what may work in one region of the U.S. may not necessarily make sense in another region due to many factors such as differences in ecosystems, population bases, or types of fishing fleet.
- Support for the regional management council system: this has proved to be a successful process in the North Pacific in developing practical management measures while providing for conservation of marine resources.
- A key element of sound fisheries management policy is an appropriate TAC setting process: the cornerstone of successful management is the ability to assess abundance and establish harvest levels that will provide for a sustained fishery.
- The management council process is being hamstrung by NEPA and ESA related lawsuits. [discussion provided]
- The longline fleet has successfully worked through a number of issues at the North Pacific Fisheries Management Council (NPFMC) resulting in rationalized and sustainable fisheries.
- The longline fleet has taken the initiative to reduce bycatch: the longline fleet has consistently shown its willingness to take the initiative to resolve difficult issues in a practical and effective manner. [discussion provided]
- The Bering Sea crab fisheries are working through a stock rebuilding and rationalization process. [discussion provided]
- Appropriate use of ecosystem management and the precautionary approach: these terms have their place in fisheries management. However, these are also very broad terms without a clear working definition.
- Appropriate use of MPAs: MPAs also have their place in fisheries management, if they are based on sound scientific research and fisheries management principles. MPAs seem more appropriate where a fish spends its whole life in that area.
- There is a strong need for additional research that is directly applicable to present management concerns: the U.S. does not appear to be the world's leader in applied fisheries research.

- Provide for more flexibility for input and innovation by members of the public: one database of information that is sometimes discounted and disregarded by NMFS is the fishermen themselves.

Recommendations:

- The Commission is urged to strongly recommend continuation of the regional management council system. The proof that it can work is the track record of the NPFMC.

WISEMAN

**Mr. Reid Wiseman, College of Charleston
Charleston, SC, Jan-16-2002
Public Comment**

Key Points:

- Everyday we ingest about 60 to 90 grams of nitrogen. Based on the growing world population, we will not be able to maintain nitrogen from estuaries and from our sea.

WITHEE

**Mr. Gregory Withee, Assistant Administrator for National Satellite, Data and Information Service,
National Oceanic and Atmospheric Administration
Washington, D.C., Oct-30-2002, Satellite and Data Management Panel
Invited Testimony**

Key Points:

- Ocean observation architecture: An integrated observing system will promote improved understanding of the oceans and climate with immediate applications for addressing a ranging of pressing problems ranging from agriculture to severe storms.
- Utilization of satellite data: A discussion of ongoing programs is provided.
- Scientific stewardship: A discussion of ongoing programs is provided.
- University partnerships: A discussion of ongoing programs is provided.
- Ocean data archive: A discussion of ongoing programs is provided.
- Access to ocean data: A discussion of ongoing programs is provided.

Recommendations:

- Ocean observation architecture: The United States and its international partners should prepare a global ocean observing architecture plan based on shared operational requirements to ensure the system 1) takes full advantage of planned observation systems, 2) orchestrate common intersections towards efficiency, i.e., getting the best ocean observing system with available resources, and 3) actively considers important synergies between satellite and in situ systems.
- Utilization of satellite data: The US should make an investment in finding optimal means to utilize satellite data, in combination with in situ data, in our ocean, and air sea coupled models, demonstrating their utility in an operational setting.
- Scientific stewardship: Operational observing systems should be budgeted and implemented as integrated, quality, end-to-end systems that provide sound scientific data.
- University partnerships: NOAA, in cooperation with the Navy and NSF, should continue to build partnerships with academia, building on such examples as the cooperative institutes.
- Ocean data archive: Current levels and anticipated increases in the amount of ocean data dictates that the community work together to address data management and archiving.
- Access to ocean data: Access to ocean data is of utmost importance. The Commission should endorse Ocean.US efforts to develop a national strategy for ocean data management.

Responses to Questions:

- If NOAA or the Navy gets data sets they are freely available. In the area of biology, fisheries, ecosystems, coastal data, those are more difficult and the restrictions more complicated.

WITTE

Mr. J. Arnold Witte, President, American Salvage Association
Boston, MA, Jul-23-2002
Public Comment

Key Points:

- Many countries around the world have recognized the environmental threat posed by the cargo and/or bunker oils and chemical cargoes remaining aboard shipwrecks located in their respective waters, and that the time had long since come when action must be taken to deal with those pollution threats.
- The risk of a major pollution incident will exist as long as bunker and/or cargo oils or other petroleum and chemical cargoes are not properly removed from shipwrecks. Studies performed have demonstrated that among other possibilities plate perforation and oil escape can be expected from corrosive pitting, and that corrosion rates have been found to increase dramatically after the first twenty years of submersion.
- There are many accounts of war wrecks and tankers that are thought to pose a hazard to the marine environment.
- Published accounts indicate that there are as many as 28,500 barrels of lubricating oil remaining onboard the COIMBRA in eight cargo tanks that were not inspected during the 1967 survey, which was directed by President Johnson to determine how to best meet the national need to address the problem of oil pollution.
- The threat to the environment that these wrecks represent is a most important issue for coastal and ocean protection; one of specific concern to the Northeast region of the United States as well.
- The cost to the public of removing the oil from wreckages now, while it is still contained, is significantly less than the costs will be if the oil is allowed to escape into the environment with the attendant destruction of natural resources, aquatic mammals, and fishery habitats, and significant economic losses suffered by seaside communities.

Recommendations:

- The U.S. must address the threat to the ocean environment posed by the aging population of shipwrecks located off its coasts.
- Congress and the Administration should provide the U.S. Coast Guard with both the mandate and the financial support that it will need to address and eliminate the threat of wreck related oil pollution.

WIYQUL

Mr. Robert Wiygul, Environmental Attorney, Waltzer & Associates
New Orleans, LA, Mar-08-2002, Offshore Energy 2 Panel
Invited Testimony

Key Points:

- Everything that happens on federal OCS affects state waters and the land and people of adjoining states.
- It is perhaps not too late to begin thinking about impacts of OCS development in a coordinated way.
- The debate for Central Gulf must be over how to live with the leases and development that are there: onshore cumulative impacts are not being fully evaluated now; NEPA does not capture full cumulative impacts (Port of Fourchon); overall approach to impacts and potential impacts; mercury from drilling muds moving up the food chain should be of concern to all; err on the side of caution; apply the precautionary principle (not without precedent in law); MMS could apply principle, particularly for rig removal.
- Applying a very risk-adverse (precautionary) approach is important to managing important resources. Use this for wetlands.
- Place a much greater emphasis on conservation. In Gulf of Mexico, we may need to manage what is already there to protect the remaining resources.

WOLF-ARMSTRONG

Mr. Mark Wolf-Armstrong, President, Restore America's Estuaries
Washington, D.C., Oct-30-2002
Public Comment

Key Points:

- Preserving currently healthy habitat now must be a starting point for any conservation restoration effort because annual loss of coastal and estuarine habitat far outstrips the rate at which degraded habitat can be restored.

Recommendations:

- Quantitative information about baseline habitat conditions should be developed and assembled in order to assist planning and funding efforts.
- In order to restore the necessary amount of coastal and estuarine habitats, we must foster a new mindset and policy regime that envisions projects on much larger size and time scales.
- Coordinate restoration policies and efforts more effectively. A central body should exist on the federal level to synchronize efforts and to minimize duplicative initiatives within the agencies. One template for such a body currently exists in the form of the Estuary Habitat Restoration Council.
- Encourage multi-sector partnerships.
- Make coastal habitat restoration a financial priority.
- Develop a restoration and stewardship ethic.
- Incorporate habitat restoration as a guiding principle and priority in decision making.
- Make the permitting process more conducive to habitat restoration.

WOOD

Ms. Maura Wood, Sierra Club
New Orleans LA, Mar-07-2002
Public Comment

Key Points:

- The Gulf of Mexico is interconnected; every action affects the whole system.
- Adaptive management will be important as we move ahead.

WOOLSEY

Ms. Carolyn Woolsey
New Orleans, LA, Mar-07-2002
Public Comment

Key Points:

- Do not focus on just large ports, but also consider smaller ones.
- Consider the impact of deep dredging. Focus on 50-foot draft boats.
- Include science-based approach along with engineering feasibility.

WOOLSEY

Dr. J. Robert Woolsey, Director, Center for Marine Resources and Env. Technology - University of Mississippi
New Orleans, LA, Mar-07-2002, Science and Education Panel
Invited Testimony

Key Points:

- Research relating to advancements in energy resource technology is critical to our long term economic strength and environmental responsibilities. Such research also imperative in providing good stewardship for the environment and accessing various new nonconventional energy sources.
- Division of research between industry and government: Energy industry in-house research relates to proprietary interests, improving operational efficiencies; government sponsored research successful in addressing long term and high risk areas.
- Example of appropriate government sponsored research is DOE and DOI gas hydrate research in U.S. EEZ.
- DOE and DOI are making valiant efforts with limited funds to study hydrate reserves.
- U.S. is lagging behind in dollars spent in intellectual leadership role for hydrates.

Y

YOUNG

**Ms. Sharon Young, Marine Issues Field Director, The Humane Society of the U.S.
Boston, MA, Jul-24-2002, Public Interest Panel
Invited Testimony**

Key Points:

- Key impacts in the Gulf of Maine: [discussion provided]
- 1. Incidental bycatch in commercial fisheries
- 2. Collisions with commercial and recreational vessels
- 3. Competition with commercial fisheries for common food resources
- 4. Increased noise in the oceans
- 5. Uses of sound by the U.S. Navy
- 6. Coastal Pollutants
- 7. Ecotourism and directed interactions
- 8. Killing of nuisance animals
- NMFS should heed the advise of the Take Reduction Team and place conservation measures for porpoises under the Marine Mammal Protection Act (MMPA) rather than the Magnusson Act.

Recommendations:

- Include human motivation and response as part of the system to be managed.
- Act before scientific consensus is achieved. Additional scientific studies are not necessary to tell us that human activities are affecting ecosystems.
- Rely on scientists to recognize problems, but not to remedy them.
- Distrust claims of sustainability. Past resource exploitation has seldom been sustainable. Claims of sustainability in the face of burgeoning populations and development may lead to false complacency.
- Confront uncertainty. Effective policies are possible under conditions of uncertainty, but they must take uncertainty into account.

Responses to Questions:

- It's a sad fact that unofficially sometimes think the agencies themselves want to be sued because they don't have sufficient resources. And once litigation is filed, everybody rushes to put resources in. And if you look at the marine mammal issues right now, sea lions, manatees, right whales, all of them have been accompanied by litigation. It sometimes becomes a really ugly circular thing at times.