

MINUTES
Fourth Meeting of the Commission on Ocean Policy
Florida Marine Research Institute
Florida Fish and Wildlife Conservation Commission
February 22, 2002

Commissioners in Attendance

Honorable James D. Watkins, (Admiral, USN (Ret.)) - Chair
Mrs. Lillian Borrone
Mr. Ted A. Beattie
Dr. James M. Coleman
Ms. Ann D'Amato
Mr. Lawrence Dickerson
Vice Admiral Paul G. Gaffney II, USN
Professor Marc Hershman
Mr. Christopher Koch
Mr. Paul L. Kelly
Dr. Frank Muller-Karger
Mr. Edward B. Rasmuson
Dr. Andrew A. Rosenberg
Honorable William D. Ruckelshaus
Dr. Paul A. Sandifer

Commissioners Not Present

Dr. Robert D. Ballard

Meeting Attendees

A list of meeting attendees, including affiliation where provided, is included in Appendix 1.

Welcome

The Chair called the meeting to order at 8:00 a.m. and introduced the Honorable Richard Baker, Mayor of St. Petersburg, and the Honorable David B. Struhs, Secretary of Environmental Protection for the State of Florida, who provided welcoming remarks.

Mayor Baker welcomed the Commission to St. Petersburg and expressed his appreciation for the service the Commission is doing for the nation. He noted the appropriateness of the Commission's visit to St. Petersburg in light of the area's growth and progress. Admiral Watkins commented on the informative site visits to facilities in and around St. Petersburg in which some Commissioners had participated the previous day and thanked the Mayor for the warm reception.

Mr. Struhs extended a welcome to the Commission on behalf of Florida Governor Jeb Bush. He commented that the lives and livelihood of Floridians are inextricably linked to the oceans and noted the many natural marine resources of the area that support the tourism industry so important to the state. He discussed the richness of scientific institutions in Florida and stated that these facilities are at the Commission's service. He commented on the legacy of the Stratton Commission, noting the work of the National Oceanic and Atmospheric Administration (NOAA) on weather issues, marine sanctuaries and estuarine reserves, and discussed the importance of the Coastal Zone Management Act (CZMA) to Florida. He stated that few issues unite all Floridians as the preservation of coastal resources for the future.

In a discussion of the institutional response of government to policy issues, Mr. Struhs described steps in the cycle of institutional relationships. He noted first the tendency to create new levels of bureaucracy leading to overlapping layers of government. He stated that once a particular interest is on the map, institutional advocacy is then required for it to stay visible. In the final consolidation phase, a realization that the offices supporting the many layers are not coordinated leads to the recognition of the need for consolidation. He noted the need to proceed with caution during the consolidation phase. By citing examples, he expressed lessons learned, including the need to resist the instinct to add a new layer and to look to new technology for a solution instead. He also suggested that the Commission set performance-based goals, not activity-based goals. In closing, he noted the need to recognize that not all the answers lie with the government. Admiral Watkins then opened the discussion to questions from the Commissioners.

It was noted that coordination among agencies and various interests is important if the nation is to have an integrated and coordinated ocean policy. Mr. Struhs was asked his thoughts on what institutional changes are needed at the national level to enhance coordination and effectiveness. Mr. Struhs replied that he will supply a more complete answer in writing, but stated that as long as good work continues, the source is immaterial. He commented that probably the most difficult question the Commission will address is how to retool the government. Regardless of what is done at the federal level, he emphasized the need for the federal government to maintain its relationship with the states as it presently exists under the Coastal Zone Management process.

The issues of how to address and provide support for unanticipated issues that may arise and how to fund the Commission's recommendations were raised. Mr. Struhs commented that in Florida, sovereign submerged lands are held in trust for Florida citizens. Lease fees are charged for access to these lands, for example permits for laying fiber optic cables. He commented that the state has explored ways to determine how much a resource is worth and is considering auctions to allocate access to the resources, an option which is not popular with the industry. He stated that Florida wants to be the hub for the telecommunications industry.

Regarding Mr. Struhs' statement that offshore oil and gas development is not consistent with Florida's resource utilization ideals, questions were asked on how the state made this choice,

whether the state's actions reflect alternatives, and how energy will be supplied in the future to Florida's growing population. In reply, Mr. Struhs noted pipelines on the west coast, new options under consideration for the east coast, and an increase in ports. He stated that electricity generation reserves are currently at 20% and that he is confident the state can meet a growing demand for energy. He also commented on programs that have been implemented across the state to increase efficiency and conservation. He stated that he can provide additional information on these programs in writing.

Admiral Watkins stated that he would like to open a dialogue between Mr. Struhs and the Commission to address additional questions in the future. Due to time constraints, the Commission requested that Mr. Struhs answer the following questions in writing: 1) what are the top one or two issues the state of Florida would like to see the Commission address and what recommendations does the state have for addressing these issues and 2) what is the next step in the evolution of the Coastal Zone Management Act to enable it to function better.

Accommodating Coastal Growth Panel

Dr. Charles Groat - Director, U.S. Geological Survey

Rear Admiral James Carmichael - Commander, 7th District, U.S. Coast Guard

Mr. John LaCapra - President, Florida Ports Council

Dr. Jeffrey Chanton - Professor, Department of Oceanography, Florida State University

Following their presentations, the panelists commented on a number of issues raised by the Commission. In response to a question as to whether the Commission should look to the National Oceanographic Partnership Program (NOPP) as the model for a new way of doing business, Dr. Groat replied in the affirmative, noting that NOPP identifies priorities, brings all parties to the table to address the priorities, has a mechanism for distributing funds and creates the next level of collaboration. He added that the biggest challenge for the program is the individual sources of funds, but it is an excellent model for collaborative work. In reference to the section on an ocean and coastal observing system in the Global Climate Change Act of 2001 (S. 1716), the question was raised as to whether this is a real opportunity to affect change. Dr. Groat again replied in the affirmative, stating that this is the time to be bold and that President Bush is open to ideas. He added that a NOPP-like model may emerge in the climate community. Dr. Groat was then asked if the National Ocean Research Leadership Council (NORLC) and NOPP would be accepted by the Office of Management and Budget (OMB) as the entity to be funded to address and coordinate efforts. Dr. Groat agreed that gaining the acceptance of OMB is the biggest challenge. When asked whether the NORLC could justify additional money for these efforts, Dr. Groat responded that OMB acceptance would be more likely if the NORLC could provide a mechanism to link research to societal needs and make the point that the needs go beyond the federal government.

Regarding the need for a maritime domain awareness technologically-based sensor to help identify threats, RADM Carmichael was asked if the technology is available now. He responded that the International Maritime Organization is discussing the inclusion of an automatic information system on some of the commercial vessels and that Congress is also interested in providing that kind of a transparency system for moving of certain commercial

vessels on the high seas. He noted that there is some evolving technology with regard to the Coast Guard search and rescue program, including global satellites to relay distress alerts and emergency positioning indicating radio beacons. The Navy is working on this as well. He pointed out that as the Coast Guard looks at maritime domain awareness and these sensor systems, it is working very closely with the U.S. Navy in creating domain awareness.

On the topic of the difficulties and challenges of working with different agencies on similar issues, RADM Carmichael was asked if it would be easier for the Coast Guard to deal with a single entity. He responded that he does not see any real problem working with different entities and does not consider any one agency more difficult to work with than others. He was asked to provide information in writing on lessons to be learned from the Coast Guard experience.

On the issue of non-point source pollution, Commissioners noted that they heard a lack of intent by residents of the area to change lifestyles to lessen the non-point impact. Dr. Chanton was asked for recommendations on control measures and to shed light on how the Commission can realistically address this issue in the context that there are well established communities already in existence. Dr. Chanton replied that educating the public is key. He noted what needs to be done is costly, and people need to be convinced that it is worth the expense. He added that peoples' minds need to be changed regarding how Florida should look e.g., no longer using exotic plants and fertilizer. He stated that he will provide additional information in writing on how to communicate with the public.

The Commission expressed concern that the additional homeland security tasking to the Coast Guard has decreased its ability to address other issues and asked RADM Carmichael how the Commission can assist. RADM Carmichael responded that the Coast Guard has increased security in ports, and this needs to be extended offshore. He stated that a strategy to address this is being developed. He also noted the need for more presence on the water and the ability to control the movement of high-speed vessels. With the Coast Guard's operational budget moved to increase security around ports there has been decreased activity on fisheries, pollution, drugs, etc. The Coast Guard is now rebalancing resources and returning to these other activities. He stated that the Coast Guard knows it needs to get back into balance and define "new normalcy."

On the topic of expanding the NORLC beyond research issues, Dr. Groat was asked how an expanded council would serve other needs and how it could be useful for fisheries, oil and gas or water quality issues. Dr. Groat commented that the way to focus science on management issues is to have management and policy drive scientific priorities. The council could be effective here. He raised the question, however, of whether separate councils are needed for separate issues.

Regarding the need for a fee system to provide funding for increased port security, Mr. La Capra was asked what the scope of the fee system is and if it could be used to address broader issues. Mr. La Capra commented on the Port and Maritime Security Act of 2001 (S.1214) and stated that a fee structure should be included to accomplish the vision and plan

of the act. He noted the problem of borders being defined only as land borders, not sea borders.

It was noted that decisions regarding urban encroachment issues are made at the local and state level. Dr. Groat was asked at what point should a higher level step in and about the role of federal government. He responded that some local and state entities are better equipped to address these issues, but they do recognize the need for higher level intervention in some cases. He noted that a federal role is more accepted in emergency or crisis situations.

In response to a question on how Florida port standards compare with other ports in the Caribbean area and other nations, Mr. La Capra responded that standards are higher in Florida. He noted that uniform standards for the cruise industry were accomplished without legislation because the cruise industry agreed it wanted such standards. It was a self-regulation issue. Regarding the funding process, he stated that the private sector is willing to pay a fee if it is assessed one time and is a uniform application at the national level.

The decrease in Coast Guard fisheries enforcement in Alaska was noted, and the Commission asked what it can do to help the Coast Guard get the funding it needs to adequately address all of its security activities. RADM Carmichael agreed that the Coast Guard has had to reduce its fisheries efforts somewhat but will gradually return to this and other issues. He noted that ratification of the United Nations Convention on the Law of the Sea (UNCLOS) is key and commented on the importance of science-based standards for performance-based measures. He stated he will provide the Commission with additional information on the Coast Guard budget.

In response to a request to provide suggestions on replacing or eliminating fertilizer use, Mr. Chanton stated that there is an attitude that if a little is good, more is better. He commented on the need for control mechanisms and the need to study the problem and take action to decrease impacts. He also stated that agricultural practices may need to change.

Ms. Borrone highlighted two points made by Mr. La Capra: 1) performance-based approach to management goals and 2) implications of funding the entire port security system. She noted that needs for financial obligations are addressed in a piecemeal approach, but the system is important from a national perspective.

RADM Carmichael was asked for specific thoughts on ecosystem management. He replied that while the Coast Guard does not conduct science, the interrelationships of species are important. He noted the array of complex regulations and commented that decreasing this complexity would be beneficial. Additional comments will be provided in writing.

The topic of UNCLOS signatories claiming an area beyond their EEZs was raised. It was noted that some nations have already begun mapping endeavors for this, but it is not clear that the U.S. is prepared to claim areas beyond the EEZ if it were to sign the convention. Dr. Groat was asked whether the USGS, or another agency, is considering this issue. Dr. Groat responded that the ability of multiple agencies to attract funds to do this work together is hindered by the U.S. not being a signatory to the convention. He expressed his hope that the

broader results of the Commission's deliberations will supply the fuel for USGS to work with NOAA and others. The Commission noted that agencies must be able to answer the question of why mapping is needed, including priorities and a strategy, and requested that information be submitted to the Commission on this matter.

Management of Coasts and Oceans Panel

Dr. LaVerne Ragster – Senior Vice President and Provost, University of the Virgin Islands

Mr. James Murley – Director, FAU Joint Center for Environmental and Urban Problems

Mr. Ken Haddad – Director, Florida Marine Research Institute, Fish and Wildlife Conservation Commission, State of Florida

Following their presentations, the panelists addressed follow-up questions asked by the Commission. The issue of how to reconcile the current stovepipe form of management with a new need for a horizontally-integrated, ecosystem-based, multi-stakeholder management structure was raised. Mr. Murley was asked whether he sees a move to change management structure and how the structural issue with a new form of management should be addressed. He responded that the Water Resources Development Act (WRDA) may be a tool that could be grafted into the work of Commission and that the WRDA could be used at a national level. He also suggested that incentives be developed to encourage people to take the next step, noting that incentives will lead to cooperation.

Dr. Ragster was asked whether young people of the U.S. Virgin Islands (USVI) are aware of their link to the sea and if there educational programs to inform them. She responded that the USVI are not as linked commercially to the sea as other island nations, but there are many education efforts, mostly in the form of stewardship awareness. She stated, however, that the way education is approached is important because of poverty issues. There is a need to explain to people why stewardship is important.

In response to a question on the scope and authority of the watershed management group described in his statement, Mr. Murley commented that the WRDA created a South Florida Ecosystem Restoration Task Force to provide policy guidance for working groups and science advisory committee, including oversight of the Everglades restoration. The goal is to enhance cooperation, but the structure is different in different areas. He noted that the existing government structure tends to have a one-size-fits-all approach, but problems vary by coastal area. When asked if there is one pattern or one model that could fit all, Mr. Murley responded that if the Chesapeake Bay and San Francisco Bay models were extrapolated, they would have common elements, but no one model suits all areas. When asked what recommendations the Commission should make regarding the Conservation and Restoration Act of 2000, Mr. Murley commented that the concepts and principals of the act should be supported.

When asked for suggestions on how best to integrate monitoring programs and what recommendations the Commission should make in this area, Mr. Haddad responded that the best example of a nationwide program is the Environmental Protection Agency's lakes and

streams monitoring program. The Commission requested that Mr. Haddad provide information on specific recommendations in writing.

The Commission noted that during the Puerto Rico site visit, the USVI were cited as an example of the way coastal management should be done. Dr. Ragster was asked how the USVI brought fishers on board with marine reserves. She commented that it was a collaborative effort with many opportunities for input on where sites should be. She added that the fishers' input was the key to making it work.

On the issue of aquaculture policy, Mr. Haddad was asked for specific suggestions for elements of national aquaculture policy. He responded that a national policy should set the direction on aquaculture. He also raised the question of whether the U.S. is willing to enter the aquaculture arena. The Commission requested that additional information be provided in writing.

The Commission noted that Mr. Murley testified strongly in favor of collaborative approaches. The question was raised that if it is necessary to have cooperation horizontally and vertically in order to succeed, is there a generic statute that the Commission could recommend to ensure cooperation takes place as a matter of course. Mr. Murley commented that recommendations are provided in his written statement, but these recommendations may not be appropriate for different places.

On the topic of healthy fish stocks, Mr. Murley was asked what is being done to ensure their health. He responded that he has been looking for models to use in this area. He also commented on enhancing the CZMA for areas where certain problems come into play, and noted that a good idea without implementation is of no use. He noted the need to identify funds to support implementation of these ideas.

On the distribution of Sea Grant funds, VADM Gaffney pointed out that only \$50K of Sea Grant's \$62M budget is provided to the USVI.

The definition of "harassment" of marine mammals was mentioned. Mr. Haddad commented that there is an issue between the Marine Mammal Protection Act and the Endangered Species Act. He stated the two acts should be examined to determine where adjustments are needed. He added that this is becoming a permitting issue in the scientific arena, with legitimate scientists facing the same time consuming permitting process as others.

Regarding the CZMA, the difficulties in pushing states to meet federal goals was noted, as was the CZMA mechanism of tying funds into ensuring quality control. The Commission asked whether a similar mechanism would work for ecosystem-wide management and if the Commission should examine this further. Mr. Murley responded in the affirmative but noted that the Federal Advisory Committee Act (FACA) deters formulation of venues where various interests can come together. The Commission asked for specific examples of this and the context in which Mr. Murley made the statements regarding FACA. It was noted that if the Commission recommendations go against FACA, exemptions to the act can be requested in certain circumstances.

Commission Business

Approval of Minutes of the January 15-16, 2002 Meeting

The minutes of the January 15-16, 2002 meeting (see Appendix 2) were approved without changes, but subject to review by the panelists at that meeting who will be given an opportunity to recommend edits. Once finalized, the minutes will be posted on the Commission web site.

Approval of Science Advisory Panel Members

Admiral Watkins reported that all proposed members of the Science Advisory Panel (SAP) accepted the invitation to join the panel. He explained that the members have been separated into working groups based on the Commission Working Group structure, but will be advisors to the Commission as a whole. The Commission approved the SAP membership with no changes. The list of members, with brief biographies, will be posted on the Commission website.

Investment and Implementation Working Group

The Commission discussed the draft issues paper for the Investment Working Group. It was noted that two of the items in the paper, options for Federal governmental structure to carry out the integrated recommendations of the Commission and cost impacts associated with implementing the Commission's recommendations, will be discussed by the other three Working Groups. Commissioners requested clarification of the role of the Investment Working Group with respect to these two items. Admiral Watkins commented that integration across the four Working Groups is essential to developing a national policy. The Investment Working Group will take options from the other Working Groups and integrate them to the federal level. The Investment Working Group will function at the federal level, including discussion of the federal budget and the federal government structure, while the other Working Groups will have a local/state perspective. It was further explained that the task of the Investment Working Group is to take recommendations from the other Working Groups and determine how to implement them. Based on this, it was suggested that the word "implementation" be used more in the paper. The Commission agreed to change the name of the Working Group to the Investment and Implementation Working Group. It was noted that "investment" should not become secondary, and the Commission agreed to add an additional item to the issues paper that reads "How may the U.S. Government investment in ocean programs be consistently and transparently expressed in a manner that best enables cross-agency and multi-agency management and cooperation and best informs related constituencies and the general public?" Admiral Watkins stated that the paper will be sent to the SAP for additional review, but the Commission approved the paper as modified during the discussion. The final paper will be posted on the Commission website.

Report Drafting Timeline

The Commission reviewed a draft timeline for completing its final report. Commissioners agreed that the meeting work schedule needs to be adjusted to allow for at least a half day of Commission work sessions at each of the remaining meetings. Concern was expressed over the lack of time the Commissioners will have to review the draft final report and that there is no time for the Commission to meet once the draft final is prepared. It was suggested that the time set aside in October 2002 for a public meeting be used as a Commission retreat instead, followed by a work session in November. A question was raised as to the purpose of the final public meeting in Washington, D.C. in October, 2002. Admiral Watkins explained that following the regional meetings, the final public meeting would provide an opportunity for the Commissioners to get an early indication from federal agency and national organization representatives regarding investment and implementation strategies. The Commission agreed that the times set aside in October and November should be kept on the schedule, but the Commission will determine at a later date whether these will be public meetings or Working Group sessions. The Commissioners were asked to submit their schedules for October and November to the Commission office in order to confirm final dates for meetings/sessions in these months. Concern was also expressed that the Commission have adequate time to address public comments on the final draft report. It was noted that this concern provides part of the justification for an extension of the deadline for report submission that Congress is currently considering. The timeline was approved with the changes noted and with the option to add additional meetings if needed.

Goals Paper

Mr. Ruckelshaus, chair of the Governance Panel, commented on a draft goals paper for a national ocean policy. He noted that the Commission is mandated to involve the public in a significant way throughout its deliberations and that this public participation is crucial to the success of the Commission. He stated that the Commission has developed a series of general goals/elements of a successful ocean policy. These general goals/elements will be posted on the Commission website for public review. The Commission will then develop specific questions that need to be answered in order for the elements to be realized. The Commission will seek public input in developing these questions and suggesting answers.

Public Statements

Mr. James J. Sinclair, an archaeologist with Searex Inc., commented on the historical importance of submerged cultural resources and their significance as a proving ground for public/private collaborations. He urged the Commission to keep in mind the importance of these resources and the need to allow for their multiple use.

Ms. Lauren Wetzel and Ms. Jyotika Virmani, students in the College of Marine Sciences at the University of South Florida, commented on the future of graduate oceanography. Ms. Wetzel noted that there is a lack of U.S. citizens in advanced science programs and that foreign students educated in the U.S. often return to their home nations once completing their schooling. She stated that there are not enough students currently enrolled in advanced programs to meet

national needs in the future. She suggested that science degree programs be combined with other job-related training in order to better prepare students for the workplace.

Ms. Virmani commented on the extensive time to graduation and the loss of scientific vision in pursuit of funding. She also noted that the field of marine science is dominated by white males and suggested a possible solution to this may be better recruitment efforts for women and minorities.

Mr. Charles B. Husick, President of OWA, Inc., expressed his concern about the state of the ocean environment. He stated that the EPA is not using the best science available in addressing the problem of sewage, nutrients and other pollutants flowing into the Florida Keys National Marine Sanctuary. He commented that rather than focusing on reducing or eliminating these threats, the EPA has proposed the establishment of a no discharge zone in the sanctuary which will make it illegal to use approved waste treatment systems on boats within the zone. He noted that the Commission charter mandates the use of the best science available in the Commission's deliberations and asked that the Commission urge the EPA to do the same in its efforts to protect ocean waters.

Ms. Heather Rothrot, a senior at Boca Ciega High School, commented on the need to protect more areas of the ocean, citing the Dry Tortugas Ecological Reserve as an example. She expressed her belief that more laws are needed to regulate fishing, offshore oil drilling, coastal development, and pollution and noted that public awareness and education are key to eliminate exploitation of the oceans. She urged the Commission to recommend legislation to preserve the marine environment for the future.

Dr. Sydney T. Bacchus with Third Planet commented on the adverse effects of groundwater alterations, including groundwater mining and aquifer injection, on Florida's coastal resources. She provided several documents to the Commission that address how to solve these problems.

Mr. Dennis Daughters, an engineer with the city of Sarasota, FL, requested that the Commission include in its policy recommendations the need to provide adequate funding for beach renourishment .

Mr. Geof Lane, Director of Marine Adventures at the Clearwater Marine Aquarium, commented on the importance of biodiversity. He noted the relationship between oceans and land and stated that protection for oceans needs to extend to land. He also commented on the need for enforcement of protected areas and that education is a top priority. He asked the Commission to examine the threats to the marine environment, such as invasive species.

Dr. John Ogden, Director of the Florida Institute of Oceanography, commented on the need to broaden discussions to a truly national goal and create a 20-year plan for ocean use. He suggested a zoning scheme that would allow for the use of the ocean without depleting marine resources. He raised the question of what is the governing structure that would allow this to happen. While he acknowledged not knowing the answer, he stated that there are good locally-based examples and noted the CZMA as specific good example.

Mr. James Powell with the Wildlife Trust commented on the recurring theme of managing population. With increased boating and shipping, the armoring of beaches, and the introduction of pollutants and invasive species, the environment will be changed from what it is now. He stated that lawsuits consume resources and drive decision making and regulations and that regulatory agencies and stakeholders are polarized. He commented that the Commission has an opportunity to be a catalyst to bring people together to work on these contentious issues and ensure that agencies use the best science available. He urged the Commission to be proactive.

Ms. Becky Clayton, Director of Education at the Florida Aquarium, stated that protection and conservation of the ocean is vital to the survival of the planet, and education is the foundation on which this conservation will occur. She commented on the opportunities the aquarium has had as a non-profit entity to cross boundaries and develop partnerships with other institutions.

Ms. Elizabeth Fleming stated that the Commission has the opportunity to make significant changes and move forward on a policy of ocean conservation. She commented on fish being considered commodities rather than wild animals and noted that fisheries are regulated by the Department of Commerce, in contrast to terrestrial animals which are regulated by the Department of the Interior.

Ms. Coralette Damme expressed her concern that the future of the ocean is limited. She noted the loss of resources, including mangrove and coral reefs, and stated that coral reefs need to be preserved not only for tourism and as a potential source of medicines, but also for the sake of the coral reef itself. She commented that more ocean areas should be set aside for preservation and that industries should be held accountable for their actions, including run-off, drilling and dumping. She urged the Commission to take action to preserve the ocean while there is still something to preserve.

Dr. David Hastings, Assistant Professor of Marine Science and Chemistry at Eckerd College, stated that the U.S. needs a national ocean policy driven by sound science, and research and education are the foundation for this. He added that action must be taken now based on the information available and stated that an increase in the level of greenhouse gases is the key problem. He commented on the need for a national effort to decrease greenhouse gas emissions and establish international cooperation in this effort.

Ms. Stacey Perfetto, an environmental educator with Sea World, expressed her concern with the declining state of the marine environment around the Florida Keys. She stated that no touch/no take zones should be expanded and new laws to protect the ocean and its resources need to be passed and enforced.

Ecosystem Management Panel

Dr. John Reynolds – Chairman, Marine Mammal Commission

Mr. Billy Causey – Director, Florida Keys National Marine Sanctuary

Mr. David White - Regional Director of the Southeast Atlantic and Gulf of Mexico Regional Office, The Ocean Conservancy

Once they had made their formal statements, the panelists addressed issues raised by the Commission. Regarding the Marine Mammal Protection Act (MMPA), Mr. Reynolds was asked how, on a daily basis, the Marine Mammal Commission has utilized ecosystem management. He responded that the MMPA does not advocate ecosystem management but couches marine mammals in terms of their place as a functional element in the ecosystem. He added that the MMPA is not a model for ecosystem management.

It was noted that Marine Protected Areas (MPAs) seem disjointed from the National Marine Sanctuaries Act (NMSA). A question was asked as to whether there is a way to bring together these two elements together. Mr. Causey stated that the NMSA is powerful legislation that provides the tools needed to do the job. Mr. White added that there is still confusion among agencies as to who has the ultimate authority to regulate fisheries, an issue which needs clarification. It was noted that the NMSA has the authority, but the problem exists of having authority and not being able to use it. Mr. Causey stated that with the Florida Keys National Marine Sanctuary, there was a history in the area of focusing on certain fisheries. This history carried over to the new sanctuary from protected areas that existed prior to sanctuary establishment. He added, however, that the sanctuary is not involved in fishery management. The National Marine Fisheries Service (NMFS) is responsible for management, and NMFS and the sanctuary need to work together to address this issue. Mr. Reynolds stated that when the MMPA was amended, the main concern was incidental take. NMFS tried to develop a system to address this. He noted that a strength of the system is that it caused the service to come to grips with stock assessment, but it does not address sex and age ratios and productivity level. He added that while it is based on certain assumptions, it is good start and that bringing people together to talk rationally about issues has been beneficial.

It was noted that the term MPA is fluid. A question was raised about what inadequacies there are in the existing federal law regarding designation of MPAs. The Commission also asked what criteria should be used to establish MPAs and with whom the final decision should lie. Mr. White commented that involving stakeholders early and providing information to all interests are key factors. He stated that the least productive method is for the federal government to come to the table with pre-drawn lines. Fishers want to know that MPA boundaries are based on science. He added that the regulatory system is complicated and additional layers are not needed. Mr. Causey agreed that equity is important. He stated that commercial fishers feel they have always been a target. Establishing the Tortugas Ecological Reserve was the culmination of a 10-year process. He noted that as scientific information was provided, fishers' reactions were positive because it was a collaborative effort.

The Commission then asked if the current process should be allowed continue unchanged or if the panelists had recommendations for modifications. Mr. White acknowledged that there is still a struggle to answer the question of if MPAs are working and if they are needed. He noted, however, that the questions are even harder to answer without establishing MPAs.

Regarding the system of MPAs Mr. White discussed in his statement, the Commission asked what he envisions as a system of MPAs for ecosystem management and how the system would fit into the concept of marine zoning to allow opportunity for other activities. Mr. White

responded that the core area of a no take marine reserve should be large enough to contain the full complement of species living in that area, noting that the keystone species concept for terrestrial areas does not seem to carry over to the oceans. He commented that the zoning concept could be implemented to create buffer zones around the core areas to allow for fishing and other activities. Mr. Causey added that the concept of marine zoning provides an alternative to blanket banning of activities.

Commissioners acknowledged confusion on how to address the MPA issue. Panelists were asked to submit in writing what recommendations they would make regarding MPAs if there were members of the Commission. Mr. White stated that education directed at resolving any confusion surrounding MPAs is important. He noted the need for maps and research in order to establish a basis of understanding. He suggested that using the precautionary principle and adaptive management could ease concerns about the next step to take.

Mr. Reynolds was asked to clarify which agencies have responsibility for marine mammal issues and how conflicts, if any arise, are addressed. He responded that the U.S. Fish and Wildlife Service (USFWS) is responsible for some marine mammals, such as polar bears, with NMFS responsible for all others. The U.S. Army Corps of Engineers, the U.S. Navy and other agencies are also involved and have become effective partners. Some federal agencies also have state agency partners. The oversight agency for all is the Marine Mammal Commission. He noted that at the federal level, implementation of the MMPA is perceived differently by the USFWS and NMFS. The Commission requested information of the federal investment in marine mammal research, including the magnitude of state versus federal investment and the contribution of the various agencies.

Economic Development Panel

Mr. Edwin Moore – President and Chief Executive Officer, James Madison Institute

Mr. Frank Jackalone – Senior Regional Representative, Sierra Club and Chair, Everglades Coalition

Mr. Dick Monroe – Vice President of Environmental Relations, Darden Restaurants

Ms. Julie Morris – Coordinator, New College Environmental Studies Program and Member, Gulf of Mexico Fisheries Management Council

Following their presentations, the panelists commented on a number of issues raised by the Commission. Ms. Morris was asked provide in writing examples of her efforts to work through the byzantine collection of fishery regulations, including examples of obstacles, voids in understanding and research needed to set priorities.

The Marine Stewardship Council (MSC) was mentioned, and Mr. Monroe was asked his opinion of certifying fisheries as sustainable. He commented that third party certification by NGOs is problematic, noting that it should be done by an impartial entity with enforcement power. He stated that the MSC does not have enforcement power and should not. The Food and Agriculture Organization of the United Nations should have enforcement power and should be responsible for certification, not an NGO. In response to a comment that advocating FAO certification is a complete turn-around from the previous stance, Mr. Monroe acknowledged that it is a change in

position. The Commission asked Mr. Monroe to submit additional information on this topic in writing.

The issue of having scientists, not the Councils, set the conservation goals for rebuilding stocks was raised. Ms. Morris commented that fishery councils should continue to set the conservation goals, but that these goals should be established in a separate step, prior to establishing management and allocation measures.

Regarding the fishery management council process, Ms. Morris was asked to provide insight on alternative mechanisms for fishery management. She stated that bringing research, management, law enforcement, and policy into one agency with the primary purpose of accomplishing the goals of the Magnuson-Stevens Fishery Conservation and Management Act could eliminate disconnects that exist between different agencies. She acknowledged this would be a major redesign and suggested the alternative of finding a way to make the existing pieces work better.

On the single agency point, Ms. Morris was asked whether her suggestion was to consolidate activities in NOAA or into the councils. By way of example, she commented on the Florida Fish and Wildlife Conservation Commission which oversees an agency that has ultimate rule making authority and has lawyers, scientists, and managers all working for the same executive director. This is a very different relationship than the councils have with NOAA. She stated that she does not see an appointed commission overseeing NOAA and its director, and, that fishery issues constitute only part of NOAA's activities. She commented that she sees a disconnect between the councils and NMFS and between NMFS and NOAA, with each disconnect creating a delay in decisions and actions. It was noted that the MMC oversees marine mammal issues for NOAA. Ms. Morris was asked to provide an answer in writing as to whether establishing a council like MMC for fisheries would solve problems.

The Commission asked Mr. Monroe for national-level recommendations for better management, promotion and regulation of aquaculture. He responded that the greatest challenge for land-based activities is the cost associated with land and labor. He stated that domestically there has to be a system to help get businesses through the ramp up period. Offshore, he noted, technology is the issue. He commented that if the U.S. could share technology with other nations, this would help bridge the gap. The Commission asked Mr. Monroe to submit information on organizational issues for the Commission to consider.

It was noted that during the Commission site visit to Ft. Lauderdale and Port Everglades Commissioners were told of the need to increase port size by several berths to accommodate increased shipping demands. Mr. Jackalone commented that the Sierra Club advocates a decreased dependence on oil through conservation, eliminating the need to expand ports for the sake of shipping more oil. Mr. Moore stated that the reality is Florida is growing and society is dependent on fossil fuels. He noted that often policies run cross-current to each other. While there are long-term objectives on which everyone can agree, there is still a short term dependency on fossil fuels. He stated that there are a number of expansions being planned. He encouraged the Commission to think for today but stay focused on the future, adding that the precautionary principle can become paralyzing.

It was noted that in Alaska, fish are more important than tourism. The Alaska council started as a science-based, not a politically-based, entity, and this council is now the best in the nation. Problems arise when politics are involved and parties have other interests in mind.

On the issue of science-based fishery management and scientists raising the alarm of fisheries in decline, Mr. Monroe was asked if he thinks fish populations are going to become completely depleted. Mr. Monroe commented that it is a good idea to get scientists on fishing vessels. He noted that one half of what his company buys is farmed raised. Promoting a farming mode more can help society move beyond the hunter/gather mode. He added that Darden Restaurants is doing its best to reinforce good behavior.

The Commission noted that it is challenged to balance stewardship with development and economic interests. When asked his thoughts on how the Commission should meet this challenge, Mr. Moore advised the Commission to stay its course and not make political decisions in its recommendations. He added that the Commission should do a firm analysis, considering the costs and benefits of both sides of any recommendation. He commented on the need for a balanced and reasoned approach to policy analysis, something which is often lacking, and noted that the Commission has the opportunity to stay insulated from politics.

Mr. Jackalone was asked to furnish the Commission with the figures quoted in his testimony.

Ocean Science and Education

Dr. Otis Brown – Dean, Rosenstiel School of Marine and Atmospheric Science, University of Miami

Dr. Peter Betzer – Dean, College of Marine Science, University of South Florida

Dr. Ellen Prager – Assistant Dean, Rosenstiel School of Marine and Atmospheric Science, University of Miami

Following their presentations, the panelists answered questions on a number of issues raised by the Commission. Regarding Dr. Prager's suggestion of establishing an Office of Education and Outreach with line item funding at NOAA, the question was raised as to whether this office would incorporate excellent educational elements already in existence. Dr. Prager commented that there are good elements in existence, but they are funded for development, not dissemination. While NOAA is not ideal, it is the best place to start. A national agency with funding and leadership could use and build on existing educational programs. She added that there is a need for teacher training, science presented in an understandable context and a dissemination mechanism. The Commission noted that one key goal is to bring education into the fore.

While the Commission applauded Dr. Prager's proposal concerns were expressed about NOAA being the home agency. It was noted that one has to work through the established educational bureaucracy to get oceans into science education. In the long term, the concern is that education be institutionalized, not an add-on. Dr. Prager was asked if there is a way to work through the educational bureaucracy. She responded that the key is getting ocean sciences into educational

standards. The Department of Education feels science education is the purview of NSF. Dr. Prager stated that she does not think the proposed Office of Education and Outreach should be in the Department of Education or NSF, though the office will have to work with them. She added that if ocean science can get into the standards at the national level it will get to the state level. An office with a staff dedicated to ensuring this is needed.

The issue of continuity of support in ocean science when moving from research to operations was raised. Dr. Betzer was asked how to involve entities other than the federal government while maintaining continuity. He cited the Physical Oceanographic Real-Time System (PORTS) as an excellent example of a program that began as research and is now part of three port systems. He commented on the connection with private groups that provided funding for the effort. The system is being expanded onto the continental shelf; if it can predict timing of events it will make a major contribution to energy management. The next step for PORTS is to expand the tide sensor system.

In response to an earlier question on educational efforts, Dr. Betzer noted that PORTS has had an ongoing education program. All curriculum materials for the program have been developed with teachers. He commented on the critical connection between teachers and researchers and stated that if these two groups work together, program materials will meet educational standards.

The Commission commented on the Center for Ocean Sciences Education Excellence (COSEE) initiative and asked Dr. Prager if she would advise the Commission to look at COSEE as a model. She responded that while COSEE is an excellent idea, it is too early to comment on whether it will succeed. She noted that it will not provide immediate program support, has limited funding, and will not provide a national coordination program, but it is a start.

On the issue of linking research to management, the Commission raised the question of where the balance lies between serving the function of science and developing tools. Dr. Brown commented on his view of ocean science a decade from now in which assimilation ocean models will allow the oceans to be viewed to the degree weather systems are now. He stated his belief that this is the level of knowledge the ocean science community will attain, but there is still the need to understand a great deal of science to achieve this. Technology alone will not reach this goal. He noted the need to engage the stakeholder community, including the Navy and the cruise industry among others.

Commissioners commented on their charge to perform an assessment of facilities and requested that Dr. Brown provide a one page description of the state of the health of ocean and coastal facilities. Dr. Brown noted that a number of groups have been trying to do this and have not come to consensus. He stated that the problem in the coastal zone is unique. The scale of what the community is concerned with ranges between the need to know information on the scale of hundreds of miles versus the need to know water level above the bottom to the scale of 1 foot. He added that science has been interested in the large scale, not instrumenting on the small scale.

Regarding Dr. Prager's suggestion of an Office of Education and Outreach, Commissioners noted that the \$10-20M proposed budget is not large, especially compared to the NASA budget. Dr. Prager commented that these funds could do much good and would be a substantial amount

for ocean education. She was asked to provide the Commission with NASA's annual education budget for reference to what should be spent on ocean science education and outreach.

Dr. Prager was asked to provide examples in writing of research efforts that have been successfully transferred to educational use. She commented briefly on a partnership with the NBC affiliate in Miami, FL and noted that innovative partnerships with media can help with outreach, but educators need to be proactive. The Commission asked if there are other mechanisms to get media interested in pieces on ocean sciences and ocean science education. Dr. Prager responded that the website ocean.com has requested story information. She added that groups are now willing to work together, and with people dedicated to the task, it can be accomplished.

In response to a question on new models for funding the transition from research to operations and whether the Office of Naval Research should be used as model across the board, Dr. Brown commented that the more general question to ask is who is the target of operations. He stated that he does not think there is a single mechanism that will work across the board, but that this issue needs to be a specific agency focus.

The meeting was adjourned at 6:35 p.m.

Appendix 1

February 21-22, 2002 Ocean Commission Meeting Attendees

Name	Affiliation
Bruce Ackerman	Florida Marine Research Inst.
Lenore Alpert	FAU Joint Center
Audra L. Ames	USF
Barbara Anderson	Citizens Concerned
Gordon Anderson	Citizens Concerned
Jay S. Arnold	3001, Inc.
Sydney T. Bacchus, Ph.D.	Third Planet
John Bain	Surfrider Foundation
Dave Ballingrual	S.P. Times
Linda Bauch	American Petroleum Institute
Brian Bendis	FWC/FMRI
Katie Benway	No Affiliation Provided
Jennifer Boehme	University of South Florida
Glenn Boledovich	NOAA
Rita Bowker	USF - Marine Science
John Brandon	Historical Shipwreck Salvor
Rene D. Braumstark	FMRI Endangered Species
Lois Bryce	USF-St. Petersburg - student
Kyle D. Buck	USF
Zhiqiang Chen	USF
Leonard L. Ciaccio	College of Marine Science - USF
Kate Ciembronowicz	USF/USGS
Andrew Clark	Marine Technology Society
Michael Clary	The Ocean Conservancy
Becky Clayton	The Florida Aquarium
Kendra Daly	CMS- USF
Coralette Damme	The Ocean Conservancy
Lucia de la Paz	USF
Linda Demler	Sierra
William Dent	U. of So. Fla
Kaiser Edmond	US Army Corps of Engineers
William Ellis	USF
David English	USF
E. Estevez	Mote Marine Laboratory
Scott J. Ferguson (CDR)	USCG MSO Tampa
Mike Flanery	Pinellas Co. Health Department
Elizabeth Fleming	No Affiliation Provided
Benjamin Flower	CMS-USF

Name	Affiliation
Joan Galvin	Mote Marine Laboratory
Rene Gibson	Shell
Jorge Gomez	USF
Mike Gray	USF
Keith Hackett	FMRI
John Haines	U.S. Geological Survey
Kelly Halimeda Kilbourne	Univ. of South Florida
Bob Hattoy	Consultant/American Oceans Campaign
Elsa Haubold	FWC-FMRI
Robert W. Helber	USF
David Helvarg	Journalist/Author
Marlene Hendrix	No Affiliation Provided
Christina Holland	USF
Pamela Hullock Muller	College of Marine Science - USF
Eric Hulsizer	WFLA-TV
Greta Hungress	USF Marine Science
Ryley Hunter	Florida Department of Health
C. B. Husick	BOAT/US
George Isiminger	Manatee County Port Authority
Jim Ivey	USF
Margo Jackson	National Marine Sanctuaries, NOAA
Jeff Jenner	NOAA-NCDDC
Bob Jolley	USF College of Marine Science
Robert P. Jones	Southeastern Fisheries Association
Cherie Keller	Florida Marine Research Inst.
Toy Keller	Florida Ports Council
Scott Kenney	DoD Ocean Policy Affairs
Breanne Klitze	No Affiliation Provided
Richard Knudsen	Florida Marine Research Inst.
Lindsey Kraatz	Eckerd College
James Krolick	FMRI
Kristen M. Kusek	USF Science Journalism Center
Susan Ladika	Associated Press
Geoffrey C. Lane	Clearwater Marine Aquarium
Nancy Lee	Friends of the Everglades
Ken Lindeman	Environmental Defense
Stan Locker	University of South Florida
Mark E. Luther	USF College of Marine Science
Matt Lybolt	FMRI
Kumar Mahadaran	Mote Marine Laboratory
David Mann	USF
John Marr	Caribbean Marine Research Center
Leonard Martin	No Affiliation Provided
Name	Affiliation

Lt. Jorge Martinez	U.S. Coast Guard
Mary M. Matthews	USF St. Pete
Rob Mattlin	Marine Mammal Commission
Bob Maxson (Capt.)	NOAA Aircraft Operations Center
Rich McBride	Florida Marine Research Inst.
Michael McCue	Sea World of Florida
Lauren McDaniel	USF Marine Science
David McDonald	Manatee County Port Authority
Laurie McDonald	Defenders of Wildlife
Tim McGurk	Island Marine Const.
Michelle McIntyre	Univ. of South Florida
John McKiernan	No Affiliation Provided
Rita McKiernan	No Affiliation Provided
Walter L. McLeod	Clean Beaches Council
Bob McVety	Florida Petroleum Council
Melissa Metcalfe	Endangered Species Coalition (SE Office)
John Meyer	Navy Meteorology and Oceanography Command
Bruce Molnia	House Oceans Caucus
Ed H. Moore	The James Madison Institute
Julie Morris	Gulf of Mexico Fishery Management Council
Mark Mueller	Eckard College
Jim Murley	Florida Ocean Alliance
Joe Murphy	Sierra Club
Bisman Nababan	USF
OASIS Program	D.O.P./Pinellas Schools
John Ogden	Florida Inst. Oceanogr.
Kevin O'Horan	Bradenton Herald
Dan Otis	USF Marine Science
John Ott	Pasco County Office of Emergency Management
Mark Page	USF
David Palandro	USF
Brooke Palmer	U. of South Florida
Charles D. Palmer	Private Citizen
Kerry Pate	Ocean Planet Strategies
Stacy Perfetto	Sea World
Virginia M. Perlman	Manatee - Sarasota Sierra Club
Gary D. Petrae	N.M.F.S. - NOAA
Shirley A. Pomponi	Harbor Branch Oceanographic
James Powell	Wildlife Trust
Tanya Pulfer	FMRI
Kelly Quinn	USF College of Marine Science
Dave Rathbun	NOAA
Fred Rosa (Capt.)	USCG
Name	Affiliation

Joan Rose	USF
Robert Ross (Capt.)	USCG Headquarters
Heather Rothrock	No Affiliation Provided
R. Mark Rouse	USDOI/Minerals Management Service
Denise Ruttan	Eckerd College Triton-Eco News
Bob Sandilos	Chevron Texaco
Beverly Sauls	FL FWC
Mark Schrope	Nature
Kerri Scolardi	USF CMS
Mitchell Shank	Naval Oceanographic Office
James J. Sinclair	SEAREX, Inc.
Mike Spranger	U. of Florida
Paul Stanek	Pinellas County Health Department
Karen Steidinger	FMRI
Greg Stemm	Odyssey Marine
Vembu Subramanian	USF
Beau Suthard	USF
Helen Talge	USF
Sarah Tebbers	USF
Allen L. Thompson	U.S.C.G.
Jose Torres	USF - CMS
R. J. Trumble	MRAG Americas
Sal Versaggi	Versaggi Shrimp Corp.
Mark Vincent	USF
Jyotina Virmani	USF, College of Marine Science
Anne Wakeford	MCBI
Leslie Ward	FMRI
Brian Warecki	Thorp & Co.
Tom Warnke	Surfrider Foundation
Denise Washick	The Ocean Conservancy
Boris Wawrik	USF
Ned E.J. Webster	MSUS
Robert Weinreb	Urban Environment League
Robert Weisberg	CMS - USF
Eli Weissman	The Ocean Conservancy
Lauren Wetzell	USF
Tabitha Whalen	USF St. Petersburg
Shannon Whaley	FMRI
Christopher Williams	No Affiliation Provided
Heidi K. Williams	FMRI
Lynn Williams	Mote Marine Laboratory
Ronald Williams	Public Citizen
Scott Willis	FMRI
Name	Affiliation
Kimberly Yates	U.S. Geological Survey

Dorothy Zimmerman

Florida Sea Grant