

MINUTES

Sixth Meeting of the Commission on Ocean Policy Cabrillo Marine Aquarium 3720 Stephen White Drive San Pedro, CA April 18-19, 2002

Commissioners in Attendance

Dr. Paul A. Sandifer - Acting 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. Paul L. Kelly

Mr. Christopher L. Koch

Dr. Frank Muller-Karger

Mr. Edward B. Rasmuson

Dr. Andrew A. Rosenberg

Meeting Attendees

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

Thursday, April 18, 2002

Welcome

Chairman Sandifer, acting for Admiral Watkins, opened the meeting at 10:40 AM. Executive Director Kitsos read a statement into the record by Admiral Watkins that explained his absence.

Commission Business

The Commission proceeded with the business portion of the Agenda.

The Commission approved for public distribution the minutes from the <u>Gulf of Mexico Regional</u> meeting in New Orleans.

The Commissioners discussed the "<u>Elements</u>" document that was initially discussed at the New Orleans meeting; there were several minor changes made to the document and it was approved by the Commission. The Commission staff was instructed to make these changes and post the document on the web.

The Chairman asked each Working Group Chair to report on their meetings held earlier that day. The "REMO" workgroup focused on three tasks. A plan was approved that directs Commission staff to draft a contract to acquire data on post-high school education. With respect to K-12 education, the staff will work through the Department of Education and outside groups if necessary. To fulfill the statutory requirement to inventory marine facilities, the group recommended that staff be directed to work with outside groups to acquire the necessary data. The balance of the REMO meeting was used to identify major issue areas that the REMO working group will explore as the Commission proceeds.

The Governance working group reported that the first phase of the contract to collect and analyze major ocean policy laws is done. The contractors have put together the list of major laws affecting the ocean environment. The next phase entails analysis of the laws. The analysis is scheduled to be conducted through the end of summer. In addition, the Governance working group suggested a list of major issues for exploration by the Commission. Staff was directed to work with the other working groups and compile the list of issues from each working group into one comprehensive list.

The Stewardship working group discussed the diagram put forward by VADM Gaffney which described his proposal on how the Commission could address issues raised in the public meetings. The Commission discussed his proposal and his diagram was forwarded to each Commissioner for further review.

The Chairman then directed the Executive Director to read the Commission Public Comment Policy and list the point on the agenda where public comment will be heard.

Commissioner D'Amato welcomed the Commissioners to Southern California.

The Chairman then briefly described each of the California site visits.

Dr. Sharon Miller, the Director of the Cabrillo Marine Aquarium provided a brief overview of the aquarium. The Cabrillo Aquarium educates thousands of schoolchildren from southern California each year. The aquarium focuses on the marine ecosystems of Southern California to make the lessons more relevant to the local schoolchildren.

The Commission then adjourned for a tour of the aquarium.

Mr. Brian Williams, Deputy Mayor of Los Angeles appearing on behalf of Mayor James Hahn, spoke before the Commission.

The Honorable Mary Nichols, Secretary of Resources, State of California, spoke before the Commission and accepted questions from the Commissioners. The Commission asked if Ms. Nichols had any comments on her suggestion that there should be a cabinet-level "Oceans"

Department" and that the Commission should recommend passage of an organic act to create such an agency. Ms. Nichols replied that she understood the difficulty in creating a new agency, but that she felt it would be worth it. Form needs to follow function and a new Department will allow a better focus on the problems facing our oceans and coasts. There are many problems unique to oceans – management, monitoring, and assessment. The process of creating an organic act, in itself, will help to resolve many of the questions because it will force decision-makers to focus on the problems that such an agency must address.

The Commission asked Ms. Nichols to expand on her recommendation for a regional council. She replied that her experience with regional planning in California could serve as a model. In California, regional planning organizations do not have much regulatory or management authority, but they do often review budgets and have some control over funding for such items as seeding regional projects. In addition, the regional wetlands planning organization has mobilized funds from the federal, state and local governments. In many cases, having locals design and implement a project that fits into regional plans leads to "ownership" of the project by the locals. Local organizations often have better knowledge of local conditions and are in a better position to prioritize and rank projects. Then, projects and funding can be pooled among many layers of government to reduce redundant or conflicting actions. This type of structure was created by statute via the Marine Life Protection Act in California

The Commission commented on the relationship between a regional ocean council and the councils created under the Magnuson-Stevens Act. Ms. Nichols was asked if the Regional Councils are not designed to have any real clout, won't the real authority then default to the Federal government? Ms. Nichols replied that in her experience, government agencies that have regulatory responsibility over environmental resources often do not have adequate resources, making it important for them to work with locals in order to carry out their responsibilities. In addition, agencies are often more willing to cede authority if there is some sort of formal regional council in place.

The Commission asked Ms. Nichols to provide more information on how California deals with the nonpoint source pollution problems and she agreed to provide the information at a later date.

The Commission asked how California deals with the problems surrounding development in the coastal zone. Ms. Nichols replied that California has a good portion of experience in dealing with difficult issues in the coastal zone. They have been able to protect a lot of the coast while maintaining access for the public. She stated that it is often not necessary to "buy and ban" but instead, easements can be used to accomplish the same goals. However, there are some circumstances where the state has had to come in and buy land to accomplish some goals. For example, the state had to buy land to create the California Coastal Trail.

The Commission asked how California imbeds education and outreach into their natural resource management agencies. Ms. Nichols replied that it is done at multiple levels with interactions between schools, agencies, and the media. It requires constant attention and it is also important to work with local communities. Ms. Nichols continued by stating that protection is imbedded in the public's conscience but there is a tension between the public's need for access and the need to protect a fragile resource. For example, many parks allow access to off-road vehicles.

However, some of these same parks are home to protected nesting plovers. One possible method of dealing with this is to sacrifice in one area while providing complete protection in others.

Jean Michel Cousteau presented formal testimony to the Commission and then agreed to answer questions. The Commission asked why federal agencies have not been successful at educating the public about the oceans. Mr. Cousteau replied that the missions of the agencies do not link directly to what the public needs to know. He recommended that the agencies get more support to inform and educate the public. The Commission asked if we need more sanctuaries. Mr. Cousteau replied that overall, the answer is yes. The west coast has an adequate number of sanctuaries, but the east coast needs more. He felt that the Northwest Hawaiian Islands is a good candidate for another marine sanctuary. In all areas, there is a need for more support to educate the public about marine sanctuaries.

The Commission asked how much additional investment needs to be made in education. Mr. Cousteau replied that by the 5th grade, every student should have experienced the ocean.

After Dr. Munk gave his formal presentation, he was asked about the diversity of measurements that have been traditionally been taken oceanographers. Chemical and especially biological measures are often only considered as an afterthought. Dr. Munk replied that this was true but that the revolution will be in the combination of physical with biological models of the oceans.

Environmental Quality and Human Health

Mr. Mark Gold – Executive Director, Heal the Bay Dr. Allen Dearry – Chief, Chemical Exposures and Molecular Biology Branch, National

Institutes of Environmental Health Sciences

Mr. D. Rick Van Schoik – Managing Director, Southwest Center for Environmental Research and Policy

After the formal presentation, the panel entered into a question and answer period. The Commission asked Dr. Gold what he would recommend for changes to the Clean Water Act. Dr. Gold replied that in the past, the "swimmable/fishable" standards did make a noticeable difference because everyone involved knew the specific standards they were trying to reach. In addition, funding for improvements for clean water needs to be a priority. He also recommended the creation of more multi-use urban park lands. Finally, he recommended that the CZMA, which makes nonpoint source pollution reduction voluntary, provide more funds to implement state plans.

The Commission noted that during the Puerto Rico site visit, it was made abundantly clear that reducing nonpoint source pollution is difficult without the money to implement plans. The Commission asked Dr. Van Schoik if the situation was the same in Mexico and if so, how he would recommend getting the money to implement NPS reduction plans. Dr. Van Schoik replied that the clearest way would be for consumers to pay the true value for the water they consume. Currently, California pays a fraction of the actual cost of producing and moving water from where it is to where it is needed. Indeed, some users have never paid for the cost of consuming water. He recommended developing an environmental impact statement on the provision of cheap water.

The Commission asked about the recent status of the NIEHS budget. Dr. Dearry replied that NIH has received a double-digit percentage increase over the last four years, but in FY 2003, it is expecting a 6-8 % increase. Dr. Dearry was asked if the ocean part of NIEHS has received its fair share of these increases. He replied that the marine centers have received some of the increases but the other areas of NIEHS are still in the planning stages of how to use the increased funding for areas related to ocean health.

The Commission asked Dr. Dearry how NIEHS has been able to increase its budget when others have failed. Dr. Dearry replied that the mission of NIEHS is well liked. In addition, NIEHS does a lot of their work by giving money to outside groups. This builds a constituency that works to promote the budget of NIEHS to the Congress and the Administration.

Dr. Van Schoik was asked to provide the Commission with a list of issues addressing why there are no agencies that address trans-boundary pollution issues.

The Commission noted that it was the 20th Anniversary of the UN Law of the Sea Treaty and that the UN is drafting "next step" resolutions, including encouragement for regional cooperation in the marine realm. Dr. Van Schoik was asked if his experience working with Mexico leads him to believe there is an opportunity for the U.S. to take the lead in world ocean stewardship. He answered that there are some encouraging aspects, but that many differences remain between the U.S. and Mexico. For example, language, culture, and legal systems present obstacles as well. In the 1990's, the relationship began to change and he believes the U.S. has a real opportunity to play a global leadership role.

The Commission asked Dr. Van Schoik if the lack of modeling tools for the arid southwest has been brought to the attention of the EPA. Dr. Van Schoik responded it is the responsibility of the EPA to address water quality issues, DOI to address water quantity issues, and the state to address groundwater issues. Some agencies do try to address the need for updated models, but re-directing resources competes with other missions.

The Commission noted that many of the laws that concern the ocean environment allow cooperation among agencies, but they don't promote it. Dr. Dearry was asked what his experience at NIEHS was like in this regard. He replied that NIEHS is successful and proactive in cooperating with other entities. Environmental health science is interdisciplinary by nature. NIEHS tries to integrate all the necessary disciplines to solve a problem, regardless of where they lie in a bureaucracy. For example, the Center for Children's Environmental Health is five years old. NIEHS created an infrastructure for an interdisciplinary approach and provided training and technology transfer. The infrastructure provided sustainability and resources for the new approach which promotes momentum and direction. A follow-up question was asked if this could be a model for other interdisciplinary efforts and the reply was yes. Dr. Dearry also stated that he would provide more information on NIEHS interdisciplinary programs.

The Commission asked Dr. Gold if he had any specific recommendations for standards and monitoring programs for coastal waters. Dr. Gold replied he has provided his recommendations to the EPA but would be happy to provide them to the Commission. He continued by stating that the programs in California seem to work well. They provide for weekly assessment, at least, of

fecal and total coliform. A bill at the capitol, AB 411, provides for notice of unhealthy results on the web and by press release. Heal the Bay provides grades for beaches depending on the results of monitoring. Overall, any monitoring program should be done on a weekly basis at least. With regards to pollutants, the EPA is currently very wishy-washy about monitoring every pollutant.

Marine Biotechnology

Dr. David Newman – Chemist, Natural Products Branch, National Cancer Institute Dr. William Fenical – Director, Center for Marine Biotechnology and Biomedicine, Scripps Institution of Oceanography

Mr. Dominick Mendola - President, CalBioMarine Technologies, Inc.

Following the panel's presentations, the presenters were asked several questions. The Commission noted that for non-living resources of the continental shelf, there are various agencies in charge of regulating most aspects of exploitation. However, for pharmaceutical companies interested in the exploration of new drugs, no one appears to be in charge. The panel was asked what it would recommend for regulating pharmaceutical companies' activities. Dr. Newman replied that for NCI, there is letter signed with each country that specifies the agreement between the parties. The Commission noted that this sort of "handshake" agreement probably cannot endure as more and more discoveries are made. Dr. Newman replied that these so-called Letters of Collection are not merely "handshake" agreements; they lay out many aspects that govern the exploration of new products. Once a new product is "discovered," the agreement needs to account for the development stage. Dr. Fenical stated that in the Rio conference, there was a movement toward the belief that all natural resources were the property of the nation in which they are found. In addition, many countries felt that scientific inquiry should not be free and this has already created problems for researchers. In the U.S., these resources are viewed as public domain and Dr. Fenical believes that the U.S. should not change in that regard.

The Commission noted that the recommendation to set aside areas of the ocean exclusively for "bio-prospecting," that there are many user groups that want their own designated areas, or set asides. The panel was asked why is a marine reserve absolutely necessary to accomplish the goal of looking for new drug agents. Dr. Newman replied that such an arrangement will allow laboratories to sample over a long period of time. Dr. Newman cited an example where researchers found a useful agent and after returning to the site, they found that it had been converted to a golf course.

The Commission asked if there is any potential for finding useful agents on manmade structure. Dr. Newman replied that the potential is good. In fact, the legs of oil rigs often contain organisms that are usually found only in much deeper waters. A follow-up question was asked as to why such ventures are not taken up. Mr. Mendola replied that the liability for a company prospecting on de-commissioned rigs would be too great.

The Commission asked Mr. Mendola what other problems he has experienced as an industry member. He replied that the time to get the necessary permits is too long, often making some projects not economically feasible.

The Commission asked Mr. Mendola what it would cost to get projects like his up and running. He answered that the Advanced Technology Program of NIST is funded at a total of \$30 million,\$10 million of which would be adequate to seed the program. Mr. Mendola was asked how much money pharmaceutical companies spend on discovery. He said that these companies do not fund discovery; they only fund activities after a useful agent has been found.

The Commission asked the panel what are the permitting requirement for their research. Dr. Newman replied that there are none required by the federal government. Dr. Fenical replied that in California, there is a simple process under which researchers submit their proposal and the scientific rationale in writing to the state. Since the permitting process does not seem to be problematic, the Commission asked the panelists their ideas on what is specifically needed from the federal government. The panelists responded that they have been unable to get a response from the federal government on their proposal to set aside one hectare for research purposes. Dr. Fenical added that Federal funding for research is lacking. Often, funding for this type of research is put in the same pot with all other ocean science programs, and is usually viewed as a low priority. What is needed is something along the lines of the funding arrangement enjoyed by NIEHS – a national program directed toward funding research to find new useful agents in the marine environment. The Commission noted that, in their deliberations concerning MPAs, the issue of bio-prospecting will need to be considered.

The Commission asked Dr. Newman to forward the proposal sent to NOAA on setting aside a one hectare area of the ocean.

The Commission asked Drs. Newman and Fenical to further explain why a "set-aside" with exclusive access is necessary for their research. Dr. Newman replied that costs have a lot to do with it. With a small area set aside for research, the costs are much lower than if they were required to constantly move around over a wide area. Dr. Fenical responded that the desire to set aside a small area is only one aspect of their research. They have and will continue to look in other areas as resources allow.

The Commission asked Mr. Mendola on the potential of using aquaculture principles and techniques in this field. Mr. Mendola replied that the potential is great, but in practicality, it is limited by high start-up costs. However, there is the possibility that it can be used as an investigative procedure.

The Commission noted that NOAA has in place a scientific permit process. It is important to maintain this process for maintaining scientific access to MPAs.

Public Comment

The Commission proceeded to a period of Public Comment.

Jeff Maassen – Board member, Heal the Ocean, commercial urchin fisherman.

He noted that the coastal areas are undergoing drastic changes due to stormwater runoff and increased sewage flowing into the system. He played a film which showed primary treated sewage flowing from a pipe near Goleta Beach. He noted that the sewage treatment plant should

be treating the effluent at the secondary level before releasing it into the environment. The plant is currently seeking a waiver from the EPA. He urged the Commission to push for stronger laws or regulations that cannot be waived or avoided.

The Commission took a temporary recess because no other public commenters were present. After waiting and determining that no other public commenters intended to speak, the Commission adjourned at 6:00 PM.

Friday April 19, 2002

Mr. Ted Danson - Founding President, American Oceans Campaign

Mr. Ted Danson gave an oral presentation before the Ocean Commission urging the Commission to recommend that the oceans be managed for the Public Trust, and not special interests.

John M. Olguin, Director Emeritus, Cabrillo Marine Aquarium

Director Olguin spoke to the Commissioners about the importance of educating local communities about the importance of the marine environment. He then led the Commissioners and the audience in recreating the "Grunion Dance."

Marine Protected Area Policy

Dr. William Hogarth – Assistant Administrator for National Marine Fisheries Service, National Oceanic and Atmospheric Administration

Dr. Charles Kennel – Director, Scripps Institution of Oceanography and Chair, Marine Protected Areas Committee, Pew Oceans Commission

Dr. Rod Fujita - Senior Scientist, Environmental Defense

Mr. Brian Baird – California Ocean Program Manager, California Department of Resources

After the formal presentations by the panelists, the Commission asked several questions. The Commission noted that several of the studies concerning MPAs are of little value because they have been poorly designed. The panel was asked if the best way to develop an MPA is to start with a strong mandate stating that a reserve will be created, and then going to the local community to develop the specific location and design and whether the Sanctuary program in NOAA is adaptable for accomplishing this approach? Mr. Baird answered that in his opinion, making it clear that something will be done, and then leaving the specifics to local users is a good way to proceed. This is how it was done in the Channel Islands. In addition, he believes that the Sanctuary process is sufficiently flexible to allow this. Dr. Fujita agreed, adding that the stakeholders need to be allowed to develop multiple alternatives for specific siting of the reserve. In addition, he believes it is important to develop stringent criteria for the goals that a specific MPA is to achieve, while being flexible with regard to choosing sites that meet the goals while minimizing economic and social hardship. He also believes the National Marine Sanctuaries Program has considerable potential to be used for this purpose. Dr. Hogarth stated that a related

fundamental question that needs to be answered is defining what the term "marine protected area" means.

The Chairman noted that the Commission asked the Administration to provide a map of existing federal MPAs and asked Dr. Hogarth to relay back the importance of this request.

The Commission asked panelists to respond to a specific example of how ecosystem management and MPAs could work together. Within an ecosystem, if eight or nine stocks were healthy and one was not, would the council necessarily have to use an MPA or shut down the fishery? Dr. Kennel responded that ecosystem management removes the one species focus as it currently exists. In such a system, one looks more at whether conditions are present for successful propagation of the whole network. Dr. Fujita noted that in the current regime, one species can shut down a whole multispecies fishery. In some fisheries, bycatch mortality constrains fishing opportunity. Ecosystem management and MPAs can potentially reduce constraints on fisheries by providing a haven for unhealthy, less productive, and unassessed populations while allowing fishing to continue on healthy stocks.

Dr. Fujita was asked if his recommendation for a Cabinet level office is realistic. He replied that while there are some concerns about the political viability of such a recommendation, he believes that the magnitude of benefits derived from the oceans, the complexity of threats posed, and the need to integrate disparate activities regarding the ocean merit a cabinet level office. He also believes that political viability depends on political will, which can change with public perceptions and values. In the short-term, even if a new department is not viable, there are incremental steps that can be taken to move the federal government towards the ecosystem ethos that is needed to sustainably manage the oceans.

The Commission noted that they have heard a lot of testimony on the arguments for expanded use of MPAs, but always with a caveat. They are not panaceas, but can be useful in some circumstances, and not others. The panel was asked to respond to the tentativeness of supporters. Dr. Kennel said it is reasonably certain that fishing is a major cause of ecosystem decline; in general, ecosystems are in decline; stopping fishing will help; scientists are increasingly able to predict some of the improvements which can occur with increased use of MPAs. In addition, it is known that historic ecosystems were incredibly rich and diverse, compared with those today. However, it is a social question with respect to at what level one wants to attempt restoration, but MPAs are thought to be a useful tool for restoration. Dr. Hogarth responded by stating that the purpose for which an MPA is to be used is important to keep in mind. They can be used for some purposes, but for others, such as protecting bottom habitat, looking at changes to gear design may be more appropriate.

The Commission asked how one can protect the MPA implementation process from being sidetracked by politics. Dr. Kennel replied that politics will always be a part of the process; therefore it is critical to maintain the independence of the science. Mr. Baird replied that one should endeavor to have objective criteria for creating MPAs and to involve people with the necessary objectivity. Dr. Kennel followed up by stating that scientists need to indicate their level of uncertainty with the data, and decision-makers need to get used to making decisions in the presence of uncertainty. Dr. Fujita stated that the precautionary principle lies at the heart of this question. Do you proceed with an activity because you cannot prove it is harmful, or do you

turn it around and stop an activity until research proves it is not? He believes that the latter approach is more prudent and risk-averse. The former approach has given rise to many severe environmental and natural resource problems.

The Commission noted that the Executive Order on MPAs assumes that the tools to develop MPAs are already in place, and that there is an adequate coordinating structure. The panel was asked if both of these statements are true. Dr. Hogarth stated that the tools are in place to implement the Executive Order. In addition, the coordinating structure – the citizen advisory committee – is very close to being named and it is hoped that it will be released to the public in 2 -3 months.

The Commission noted that everyone can agree about the general principles surrounding MPAs, but once specifics are discussed, agreement is lost. Because of this, the Commission urges the Pew Commission, through Dr. Kennel, to be as specific as possible in its recommendation on MPAs. Dr. Kennel was asked whether the regional council recommended in his testimony was intended to actually supplant existing management authorities, or coordinate their activities. Dr. Kennel replied that he envisioned the council as a coordinating mechanism. The Commission concluded by saying it is looking forward to working with the Pew Commission as both proceed toward issuing their respective final reports.

The Commission asked Dr. Fujita to expand on his recommendation for regional ocean ecosystem management councils, especially with regards to geographic scope, federal-state interactions, and the scope of federal and state responsibility. He replied the scope of the "ecosystem" being managed is critical; it needs be of a size that people can get a handle on. He was asked to provide the Commission with any further thoughts on this issue.

Habitat and Living Resources Panel

Mr. David Bunn - Deputy Director for Legislative Affairs, California Department of Fish and Game

Mr. Orlando Amoroso - President, Southern California Commercial Fishing Association Dr. Elliott Norse - President, Marine Conservation Biology Institute

Mr. Pietro Parravano – President, Pacific Coast Federation of Fishermen's Associations, and Member, Pew Oceans Commission

After hearing the panelists' presentations, the Commission asked several questions. The Commission noted that almost all extractive uses of public resources pay some sort of fee to the federal government. Mr. Parravano was asked if fishermen should also be required to pay a fee for access to a public resource. Mr. Parravano replied that this raises a larger question of how to treat the imports of fish, which comprise 65-75% of all fish consumed in the U.S. He recommended that a fee be charged to all imported fish. The Commission asked if only imported fish should have a fee levied on them. Mr. Parravano replied that it would depend on whether the state in which a fisherman resides charges a fee for access. The Commission asked Mr. Parravano to clarify if what he is referring to is license fees – do not most states charge fees only for a license and not a fee based on landings? Mr. Parravano replied that in California, Salmon licensing costs are based on last year's landings. Mr. Bunn added that the problem of funding

also hits the states because their mandate has broadened without an increase in funding to support that mandate.

The Commission asked Dr. Norse to expand on the governance structure recommended in his statement. Dr. Norse replied that without fish, there can be no fishing. Most domestic fisheries have declined and there is a need for a mechanism to ensure healthy populations. The governance structure for fisheries should have as its mandate that the resource come first. In addition, there should be an oversight body for the Fishery Management Councils. Allocation decisions should be separated from conservation decisions. In addition, he recommended that NOAA be part of a new Department of Oceans, along with parts of the Department of the Interior and the EPA.

The Commission noted that fishermen are one of the most innovative groups but their inventiveness is rarely directed at conservation. Mr. Parravano was asked his opinion on how to change the incentive structure so that fishermen work to conserve rather than work to get around the rules? Mr. Parravano replied that in order to make progress, there needs to be recognition that both sides are part of the solution; there are always two parties to a contract. This has not been the case in the past. To move in this direction, the fishery management process needs to be more open and transparent. Fishermen and managers need to work with scientists to come up with solutions. There should be a middleman/clearinghouse organization to increase communication between fishermen and managers. Finally, the steps they are taking in New England to employ fishermen in the stock assessment process should be implemented in all areas.

The Commission noted that many speakers have recommended splitting assessment from allocation. However, at this session, the Commissioners heard that fishermen can contribute to the stock assessment process. The panel was asked how to resolve the need to separate the science while allowing fishermen input into the process. Mr. Amoroso replied that this is a strategic question and that fishermen are tactical implementers of any management strategy. Fishermen can make their boats available to scientists as data collection platforms. Fishermen enter and leave the port on an almost daily basis; scientists might use this routine to conduct research and validate their findings. He concluded by stating that a cooperative spirit exists, but that more should be done to capitalize on these relationships. Mr. Parravano added that efforts in this area provide a tremendous opportunity. He supports such "bottom up" efforts. In addition, a regional focus is key, but with national standards to guide regional action. One size does not fit all. Dr. Norse stated that fishermen spend more time on the sea than most scientists. The key difference to note is input versus making decisions; fishermen should be allowed input into the process but not allowed a decision-making role.

The Commission asked Mr. Parravano and Mr. Amoroso for their perspectives on overcapitalization in fisheries and how to reduce it. Mr. Amoroso replied that it depends on whether one is a processor or a fisherman. From a processor's standpoint, fisheries are almost certainly overcapitalized. From a fishermen's perspective, it depends on what size/class vessel one is talking about. Some are overcapitalized and some are not. As to how to solve it, limited entry based on history within the fishery is the fairest way to reduce overcapitalization. Fishermen who enter the fishery at the last minute should be the first to leave. Mr. Parravano replied that the Magnuson – Stevens Act allowed for the building up of fishing fleets. However,

our ability to adapt the harvest capacity to the resource has failed. If we were better able to do this, we would not be in the situation in which we find ourselves. We need to couch this question in a larger question of how do we sustain communities, the industry, and stocks at the same time?

The Commission noted that fishermen can provide more valuable information. However, the real question is how to restructure incentives such that fishermen believe that it is better to provide additional and accurate information, rather than provide as little as possible. Mr. Amoroso replied that having more observers is one step that can be taken. Helping fisherman to work with biologists on a regular basis would also help. Biologists themselves should make an effort to get out on boats more often. Mr. Bunn replied that one fisherman told him that he would provide better data in the urchin fishery if urchin beds were leased like kelp beds; he would have an incentive to protect "his" things. In addition, he replied that technology could allow better data collection.

The Commission noted that in Alaska, observers are paid for by fishermen, fish tickets are generally very accurate, and the technology to provide management data is very good. Mr. Parravano concurred that the situation in Alaska could be a model for other areas.

The Commission noted that the Magnuson -- Stevens Act seems to work well in the North Pacific and not in other areas. Mr. Parravano was asked to comment on this. He replied that the fishing community is an integral part of the process and stays involved. Also, the Council is more representative of the actual fishery. In addition, in Alaska the number of species is much smaller. Mr. Amoroso noted that questions of how to manage a fishery should be asked of fishermen on the basis of gear type, not of fishermen as a whole.

The Chairman closed the panel by challenging each of the witnesses to think about the balance between managing fisheries at the local level while providing appropriate federal oversight.

Public Comment

The Commission entered into a period of public comment. The following are short summaries of the statements made by those who participated in the public comment session

Tom Raftican, United Anglers of Southern California

Mr. Raftican represents members that care about the ocean. Sport fishermen are the largest user group but are not represented on the Ocean Commission. Their concerns need to be addressed by the Commission. MPAs are a tool that is used too early; they are destructive to the freedom of users.

Karen Garrison, Natural Resources Defense Council

NRDC was involved in creating the new marine legislation in California. Over 70% favor the use of MPAs with total protection. A poll taken in California on protecting the oceans was summarized. A large majority of the public recognizes that the oceans are a vital public trust. A majority support the use, but not abuse of the oceans. In general, people are ready to help protect

oceans. A majority of those who participated in the poll support creation of a cabinet level office for oceans and the creation of an organic act, including management via the use of regional ocean councils. In addition, most favor creation of a system of marine reserves. The basic elements of the Marine Life Protection Act and the Marine Life Management Act were described. The two new laws embody the precautionary principle.

Philip J. Felando

Mr. Felando indicated that the family fisherman is an endangered species. Canneries are all but gone in California. San Diego used to have 298 fishing boats; there are zero now. There are now only 30 purse seiners in California. The public has an inaccurate perception of fishermen.

Conner Everts, Southern California Watershed Alliance

Mr. Everts encouraged the Commission to seek a regional approach, like the current review for the Channel Islands National Marine Sanctuary. He urged the Commissioners to start approaching problems at the local level first.

Joe Geever, American Oceans Campaign

Mr. Geever expressed his disappointment that the Commission did not have a panel on wetlands. The Marine Life Protection Act and the Marine Life Management Act could serve as models for the nation.

Jerry Wilson, Thales Geo Solutions Pacific

Mr. Wilson stated that NOAA contracts with his company for charting data. He uses a multibeam echo sounder. The technology has attracted attention of fishery habitat scientists. Such information could prove crucial to management if made more widely available.

Bruce Monroe, Sierra Club

Mr. Monroe explained that when he first became of member of the Sierra Club, most members were concerned only about terrestrial ecosystems; it was difficult to get other members to focus on the problems facing the oceans. That is now changing. He will submit more complete comments for the record and encouraged the Commission to continue their deliberations.

Chris Miller, Fisherman

Mr. Miller said that fishermen need to be part of the process when designing marine reserves. In addition, field biologists need to play a larger role because "experts" have lost contact with the environment and don't like working with the locals.

Tom Ford, UCLA Ocean Discovery Center

Mr. Ford said that one size does not fit all with respect to marine reserves. A reserve system can act as a buffer for mistakes. Progress is made only with everyone in the room.

Pete Halmay, Sea Urchin Harvesters Association of California

Mr. Halmay said that good data is needed more good science. Fishermen have the data but do not trust each other or regulators. A better system to gather data is needed. The system should not be used for enforcement and should not give trade secrets to other fishermen. With regards to MPAs, they can be used as an excuse to not mange the resource

Michael Jasny, NRDC

Mr. Jasny said that many factors are affecting our oceans: toxic waste, acoustic pollution, climate change, ozone, fisheries in decline. Mr. Jasny recommended a comprehensive effort to monitor ecosystem health; need to develop a regulatory and enforcement regime to reduce impacts (for example, MMPA is not sufficient to address pervasive and cumulative impacts). In addition he said there is a need to develop a policy to protect ecosystems, not just single species, including looking at trophic relationships and develop MPAs.

Jeff Jennings, Mayor Pro Tem, City of Malibu

Mayor Jennings said that Malibu has been successful in reducing water quality problems via a combination of carrots and sticks. In addition, they made a strong effort to educate people about best management practices. He said that citizen engagement is critical and urged the Commissioners to resist the temptation to develop regulations that are not enforceable.

Edward E. (Ted) Vaill, Malibu Planning Commissioner

Mr. Vaill said that the California Coastal Commission wrongly thinks it has authority over local planning processes.

Kathleen Burn-Ballestern, Los Angeles County Farm Bureau

Ms. Burn-Ballestern said that the California Coastal Commission is anti-agriculture

Dr. Jeff Harris, Malibu

Dr. Harris said that the California Coastal Commission is no longer the organization for which we voted.

Ruth Gerson, Recreation and Equestrian Coalition

Ms. Gerson said that the California Coastal Commission is driving horse owners from the land.

Peggy Ann Buckley

Ms. Buckley stated that the California Coastal Commission wrongly thinks it has authority over local planning processes. It operates beyond the law by illegally asserting consistency authority under CZMA.

Marine Science Facilities Panel

Dr. Margaret Leinen – Assistant Director for Geosciences, National Science Foundation Dr. Robert Knox – Associate Director, Ship Operations and Marine Technical Support, Scripps Institution of Oceanography and Chair, UNOLS Dr. James Bellingham – Director of Engineering, Monterey Bay Aquarium Research Institute

After hearing their presentations, the Commission asked the panelists several questions.

The Commission asked each panel to provide a list of private industry marine facilities to complement the list of federal facilities that is currently being compiled by the Commission staff

The Commission asked Dr. Leinen how all of the various funding proposals in her testimony, including the FOFC plan, would be prioritized. Dr. Leinen answered that within a week of acceptance of the FOFC plan, meetings with Navy, NSF, and later, NOAA had begun. Serious work is being done. However, the plan and the funding to implement a plan are two different things. They are working with OMB and others to make the case. As far as other funding initiatives, NSF is different from the Navy and other agencies with respect to how they work with Congress and OMB. They need to have the complete plans including a detailed, supporting budget before asking for funding. Other agencies can ask for funding with only a vague description of the planning process. Because of this, the NSF can appear to behind other agencies in the budget process.

The Commission asked about the vessel replacement process, noting that it will not be possible to ask for funds until the Fiscal Year 05-06 timeframe. Funding for vessel replacement could easily come down to pressuring individual members of Congress? However, such requests can easily be identified as "pork" and endanger the FOFC plan. Dr. Knox replied that he would rather have Sen. Stevens support the FOFC process. Dr. Bellingham replied that the process needs to be kept competitive. Dr. Leinen replied that we are in this situation because of long-term flat funding; there were no funds for innovation. Dr. Knox added that if we do not stick with the FOFC plan, individual institutions will go to Senate sponsors even more than now. The previous "soup-line" process is the root of the current problem

The Commission asked Dr. Bellingham how the ocean observing systems he discussed are related to the Neptune project. He answered that the Neptune project addresses the fundamental needs of communication and power by proposing the installation of extensive network of cables on the seafloor. Such a system would provide the infrastructure to support the next generation of sophisticated sensors and autonomous platforms discussed during Dr. Bellingham's presentation. The Commission asked Dr. Leinen what the next phase of submersible technology would be. She replied that a sub capable of submerging to 6500 meters is in the design process. A proposal for construction will be developed in the near future. NSF will continue to foster its development.

The Commission asked all the panelists to explore how we could better utilize smaller marine labs as well as non-traditional platforms such as fishing vessels to supplement large-scale ocean observing systems.

Coastal and Outer Continental Shelf Management

Colonel Richard Thompson, USA – Los Angeles District Commander, U.S. Army Corps of Engineers

Mrs. Sara Wan - Chair, California Coastal Commission

Ms. Ann Notthoff - California Advocacy Director, Natural Resources Defense Council Mr. Chris Kearney – Deputy Assistant Secretary for Policy and International Affairs, U.S. Department of the Interior

Dr. Judith Kildow – Senior Research Scientist, The Wrigley Institute for Environmental Sciences, University of Southern California

The Commission asked Ms. Notthoff if there is an inventory for new land acquisitions in California. Ms. Notthoff answered that the California Legacy Project is a program designed to identify valuable resources for possible acquisition. In addition, non-profits such as The Nature Conservancy and the Trust for Public Land also perform this function.

The Commission asked Ms. Wan to comment on the film shown to Commissioners which showed a large outflow of primary treated sewage being released near Goleta Beach. She replied that most plants in California treat sewage at the tertiary level. However, some plants have sought waivers at the secondary level. Each such waiver request has to meet certain conditions at both the federal and state levels before it can be granted. Currently, California has 4 such waivers from the EPA.

The Commission asked Col. Thompson to update the Corps' progress on revising the National Shoreline Inventory. The Corps was asked to provide this information in writing to the Commission. The Commission asked Col. Thompson if the situation in Puget Sound, where the corps has taken the lead in restoration, is a nationwide trend. He replied that the situation is different for each region and that there is no national direction in this regard. However, such actions at the regional level are supported by the Corps.

The Commission asked Ms. Wan her opinion of alternative resolution process. She replied that one should always try this process first, but they do not always work. Specifically, the CCC did try an alternate process on the lease renewals, but it did not work. Ms. Notthoff added that when the dispute comes down to a "yes/no" question, alternative dispute processes are not as effective. However, when it is not a zero-sum game, they can often be useful.

Ms. Wan was asked by the Commission to comment on the requirement within the §306 of the CZMA for states to have energy siting facilities. She replied that the CCC has policies on energy siting in state and local plans, e.g. one should have consolidated, not dispersed facilities. The CCC has worked well with the MMS in this regard.

The Commission asked Ms. Wan if the state provides funds to local communities to improve sewage treatment facilities. She replied that the state has such programs, but that funding is limited.

The Commission asked Mr. Kearney about the recommendation by others to create an ocean agency. His testimony states that coordination does not necessarily require centralization. Asked by the Commission, if not a central organization, what structural changes are required for better coordination? Mr. Kearney said that he would reply to this question in writing. The Commission also asked that in his written response he deliberate on what types of performance measures might be used during such structural changes.

The Commission asked Dr. Kildow if in her report she was able to discern that portion of the coastal economy that one can clearly and precisely relate to the marine environment, as compared to that portion of the coastal economy that simply just happens to occur in the marine environment. Dr. Kildow replied that it is possible to differentiate between these two types of activities.

The Commission asked Ms. Wan to provide for the record a response to the many charges made by public comment speakers and Col. Thompson to provide for the record the environmental ethics statement of the Corps of Engineers.

The Commission adjourned the meeting 5:51 p.m.

Appendix 1

April 18 & 19, 2002 Ocean Commission Meeting Attendees

<u>Name</u>	<u>Affiliation</u>
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Steven Aceti California Coastal Coalition Grieg Asher Councilwoman Janice Hahn

Claudia Avendano USACE

Megan D. Bailiff Hubbs SeaWorld Research Institute Karla Benedicto California Conservation Corps

Michele Bignardi Friends of CMA Glenn Boledovich NOS/NOAA Russ Boudreau Moffatt & Nichol

NO96/ Oceanographer of the Navy Kassandra Brown

Peggy Ann Buckley No Affiliation Given Steph Burkhart **US Coast Guard**

Kathleen Burn-Ballestern Los Angeles County Farm Bureau

City of Malibu Barbara A. Cameron Cathy Campbell **NOAA** Fisheries

Warner Chabot The Ocean Conservancy

Cynthia Decker NO96/ Oceanographer of the Navy

John R. Delaney University of Washington

Darren Druy **US Coast Guard** Linda Duguay USC, Sea Grant Program

Wendy Dunlap No Affiliation Given **US Coast Guard** Christina Dutton

Lyle Enriquez **NMFS**

Conner Everts Southern California Watershed Alliance Christina Fahy National Marines Fisheries Service

Christopher Fannino NOAA/NMFS

James A. Fawcett J. A. Fawcett Consultants Philip J. Felando Extinct Fisherman

Peter Flournoy American Fishermans Research Foundation Tom Ford UCLA Ocean Discovery Center Cabrillo Beach Docents/CLEI Doug Foster

Luca Gaetani Los Angeles City Lifeguard

Karen Garrison **NRDC** Joe Geever American Oceans Campaign

Recreation and Equestrian Coalition Ruth Gerson

Atillo Gioiello S.C.F.A

Paul Gregory California Department of Fish and Game University of Southern California Sea Grant Phyllis Grifman

Capt. Chris Gunderson DOD Task Force on Ocean Commission

Pete Halmay **SUHAC**

Jeff Harris No Affiliation Given Jill Harris No Affiliation Given Name <u>Affiliation</u>

Bob Hattoy
Greg Helms
Mark Helvey
The Ocean Conservancy
NOAA/NMFS

Terry Herzik Sea Urchin Harvesters Association of CA

Scott Hill NOAA/NMFS

Martin B. Hochman NOAA/SW Regional Counsel (retired)

Warren Iliff Aquarium of the Pacific Michael Jasny NRDC

Jeff JenningsCity of MalibuChristina JohnsonCalifornia Sea GrantJudith KaizukaNo Affiliation GivenLeon KeithAssociated Press

Geraldine Knatz Port of Long Beach

John Lane Minerals Management Service

LCDR Lou Rae Langevin N1O/ Navy Jag

Capt. Robert Lawson NAVPAC Meteorology & Oceanography Ctr

Judy Lemus Sea Grant

Angel Lizaola California Conservation Corps

Jeff MaassenHeal the OceanNan Marr-CousteauOcean Future SocietyMike MasinterNo Affiliation Given

Karen Masinter

No Affiliation Given

Drew Mayerson Minerals Management Service Mike McCarthy Moffatt & Nichol Eng.

Fran McClain

US Coast Guard

Kelli McGee American Oceans Campaign/Oceana

Anthony Michaels USC
Christopher J. Miller California Lobster & Trap Fishermen

Susie Ming

Russell Moll

California Sea Grant

Russell Moll California Sea Grant
Bruce Monroe Sierra Club

Thomas Nafou California Department of Fish & Games Kelly O' Reilly California Department of Fish & Game

Katie Owston Civic Solutions

Leslie Paoletti American Oceans Campaign
Anthony Parisi US Navy-NAVAIR Weapons Division
Nancy Pearlman Environmental Directions Radio

Nancy PearlmanEnvironmental ILinwood PendletonUSCDonald PetersenNMFSLee PetersonDaily Breeze

Matt Picett NOAA CINMS
Fred Piltz Minerals Management Service

Luis Pinel LEA

Johann Polsenberg Representative Sam Farr

Mike Prince University-National Oceanographic System Tom Raftican United Anglers of Southern California

<u>Name</u>

Heather Reynolds
John Richards
George Robertson
Dennis Robison
Capt. Bob Ross
Rebecca Roth
Bob Sandilos
Ricardo Santiago
Alex Stone

Edward E. (Ted) Vaill

Steve Vogel Keith D. Ward Ken Weiss Eli Weissman

Richard L. Wilhelmsen Nancy Wilhelmson Jerry Wilson **Affiliation**

Senator Betty Karnette's Office Citizen - Santa Barbara, CA Orange County Sanitation District

US Coast Guard US Coast Guard

CA Coastal Commission

Chevron Texaco Metro Networks

US Navy

Malibu Planning Commissioner Cabrillo Marine Aquarium

US Coast Guard, Pacific Area (Pm)

LA Times

The Ocean Conservancy Minerals Management Service

No Affiliation Given

Thales Geo Solutions Pacific