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U.S. Commission on Ocean Policy

FLORIDA AND CARIBBEAN REGIONAL MEETING ST. PETERSBURG, FLORIDA

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Advancing Ocean Policy in Florida New Approaches for a New Century

The social, economic, political, and regulatory conditions in the U.S. have changed considerably since the mid-1960s, when the Stratton Commission became the first commission to comprehensively review the status of U.S. ocean policy. Many of the issues it considered, however, are still prevalent. Pressure from population growth, pollution, and overexploitation of resources continue to stress our coastal and ocean resources. Those issues, and many others, are now under review by what many have called the Stratton Commission's successor, the U.S. Commission on Ocean Policy.

Like the nation as a whole, Florida is dependent on the oceans for economic stability and prosperity, environmental well-being, health, and security. Over the past several decades, the state has sponsored a number of efforts to review the status of its ocean resources and policies. In the mid-1960s, the Florida Coastal Coordinating Council, an independent body of four state agency heads, conducted a state level investigation paralleling the work of the Stratton Commission. In 1978, Florida adopted legislation necessary to meet the federal guidelines in the Coastal Zone Management Act. Governor Bob Graham's 1980 Save Our Coasts bond issue for land acquisition as matured into the nations largest state funded acquisition program, Governor Bush's Forever Florida program of 2000. In 1985, Florida fully integrated coastal zone management into the state, regional and local government plans required under our landmark Growth Management Act. In 1998, the Florida Governor's Ocean Committee was appointed and spent 18 months examining state ocean policy, culminating in a set of recommendations to the governor and legislature about how to improve ocean resource management. Today, the Florida Ocean Alliance, a nonprofit, nonpartisan organization, continues to advocate many of the ocean committee's recommendations, and works to raise awareness of the importance of the

ocean to Florida and the need for research and sound management that balances environmental and economic health

With this document, the Florida Ocean Alliance offers the results and recommendations of ocean policy review in Florida with the hope that it can provide insight, guidance, and assistance to the U.S. Commission on Ocean Policy.

Florida Ocean Policy Development

Various levels of government within the U.S. have stewardship obligations for ocean resource management that differ from their responsibilities for regulating activities on land. States are the "owners" of the seabed and its resources within their state boundaries, with the federal government "owning" the seabed and resources from the seaward state boundary to the extent of the territorial sea. In addition, local governments are called upon to regulate a variety of water use activities within their jurisdictions.

Because of their "ownership" federal and state governments are not limited by the scope of their regulatory powers or by principles of private property rights when regulating ocean uses. They are, however, obligated to fulfill certain trusteeship responsibilities. While these responsibilities do not require "preservation" of the ocean and its resources in the strictest sense, government is specifically required to ensure that public uses and interests be encouraged and protected over private appropriation.

Florida has been a leader for the state, the region, and the nation with regard to addressing ocean issues and promoting the need for effective ocean policy. Like several other states, including Oregon, California, Maine, Massachusetts, and North Carolina, Florida has recognized the need to include attention to "blue water" issues and activities in overall coastal management efforts. These states have recognized that the development and implementation of comprehensive ocean resources management strategies would allow them to execute their stewardship responsibilities in a considered manner. These strategies would also prepare them to speak proactively, rather than being forced to react without careful evaluation of issues and events that affect ocean resources.

The following is a brief description of activities that Florida has initiated in pursuit of a more comprehensive approach to ocean resource management and policy development. Inherent in most, if not all, of these endeavors is the recognition that government needs to move away from a single issue or single resource approach, and toward more integrated strategies that recognize the connectedness of natural systems and our dependence on their continued health and vitality.

Round One: Three Efforts

Florida has extensive policies, laws, and rules aimed at managing individual ocean resources. Beginning in 1996-97, the Florida Coastal Management Program, part of the state's Department of Community Affairs, began a concerted effort to encourage the

integration of ocean resource management. The coastal program began by initiating three efforts to acquire information about the current status of Florida's ocean resources and the state's management of them.

The **Florida Ocean Policy Roundtable** was an extensive dialogue among public and private groups concerned with ocean issues, including state agency representatives, maritime industry professionals, and technical experts. Sponsored by the Executive Office of the Governor and the Florida Coastal Management Program, the roundtable identified ocean management problems, conflicts, and priority issues that a comprehensive ocean management strategy should address.

Looking Seaward: Development of a State Ocean Policy for Florida is a comprehensive overview and assessment of law and policy related to the management of Florida's ocean resources. It includes background on ocean issues, reviews federal and state law and policy, and offers suggestions for improving Florida's regime for ocean resource management. It was prepared by the Florida State University College of Law.

The **Statewide Ocean Resource Inventory (SORI)** is a desktop geographic information system (GIS) for use by the marine resource management community. SORI catalogs the state's ocean resources, and includes the ability to correlate relevant statutes, regulations, management plans, and agency contacts for specific geographic points throughout Florida's coastal and near shore areas. Developed by the Florida Marine Research Institute, it has been the model for a national level GIS system initiated by the National Oceanographic and Atmospheric Administration called OPIS, (Ocean Planning and Information System). It also provided impetus for the development of another innovative ocean resource management tool, Florida BlueWays.

Round Two: Florida Governor's Ocean Committee

These three complementary pieces—policy assessment, legal analysis, and geographically based resource inventory—were put to good use as important tools for the work of the Florida Governor's Ocean Committee. Appointed in 1998, the committee was charged with raising public awareness of the importance of the ocean to Florida and with making recommendations about how to better manage its resources.

The committee brought together diverse ocean and coastal interests to seek a coordinated approach for the protection, enhancement, and management of the state's ocean resources. Composed of representatives from government, business interests, conservation, education, science, and recreation, the committee spent eighteen months studying and addressing pressing ocean issues related to environmental protection, living marine resources, economic development, and public education and outreach. At the end of its process, it had reached consensus on a report that contains a number of specific recommendations for addressing ocean management issues, promoting the

implementation of state ocean policy, and improving coordination between local, state, and federal agencies.

Round Three: Florida Ocean Alliance

Since 1999, the Florida Ocean Alliance (FOA) has advanced an awareness of the economic, social, and environmental importance of Florida's ocean resources to the state, the nation, and the world. The Alliance was formed by several former members of the Florida Governor's Ocean Committee, and expanded to include new partners in the discussion about balancing the use of our coastal and ocean resources. It is a nonpartisan organization dedicated to bringing together government, academic, and private sectors in Florida to protect and enhance coastal and ocean resources for continued social, economic, and environmental benefits. It serves as a clearinghouse for information on key ocean and coastal issues in Florida, and monitors and publicizes actions related to the oceans and coasts. In addition, it focuses on outreach and educational activities, including conferences, white papers, economic studies, and testimony to national or state groups concerned about coastal or ocean policy.

Living on the Edge: A Florida Perspective

Florida is a peninsula of sand and limestone with over 1,300 miles of coastline wrapping around it. It has beaches, islands, swamps, urban tourist destinations, and natural coastal areas. Florida's appealing climate and abundant natural resources have always attracted newcomers. And almost everyone, it seems, wants to be near the coast. Today, the state is populated by more than 15 million people, with 78 percent of then living in coastal counties. Growth is expected to continue unabated, with projections showing a population of 17 million by 2010. In addition, tourism is a cornerstone of the state's economy, with upwards of 50 million people visiting each year. As these numbers climb, the impacts of both tourism and increased land development threaten the very qualities that attract people to Florida.

Florida faces intense pressures because of increased development and the concomitant demand on ocean resources. As a result, we must develop policies and programs that approach watersheds in their entirety, and support focused research, increased public/private partnerships, and committed effort to educate all citizens about the ocean's importance.

Partners with a Purpose: Setting Milestones for Success

The uses of land and freshwater resources directly affect the health of the near shore ocean environments. Therefore, decisions regarding natural resources and human uses must be integrated across terrestrial, freshwater, estuarine, and marine environments.

Case in point: the Florida Everglades

The degree of relationship between the land and freshwater uses and the marine environment is evident when examining the health of the Florida Everglades and its contiguous watersheds. More than 100 years of land use changes to accommodate agriculture and urbanization have caused extensive degradation of the largest coastal wetland in North America. To revive the health and beauty of the Everglades, Congress recently passed the Comprehensive Everglades Restoration Plan (CERP), the most extensive (and expensive) environmental restoration program ever attempted. All levels of government as well as nongovernmental groups have been given responsibility to help implement the plan. The CERP sets a 30 year horizon for achievements, and mandates the development of strategies and plans that include specific milestones, performance measures, and budgets. The accountability built into the CERP, along with the partnership nature of the task force, is a hallmark of the program.

A more "ocean-based" example: the Florida Keys National Marine Sanctuary
The Florida Keys National Marine Sanctuary is another example of large-scale effort to
protect and restore one of the country's most important marine ecosystems. It, too, makes
use of a partnership that includes federal, state, and local government, and the private
sector. The unique Water Quality Steering Committee, co-chaired federal and state
officials, sets goals and policies and requires specific milestones to measure success.

The success of these regional, ecosystem-based partnerships, along with others such as the Chesapeake Bay Program, demonstrate that coastal and ocean resource management works better when the tools are customized to the particular ecosystems and agencies involved. These efforts have shown that plans and programs are most effective when they are designed and implemented for a specific watershed or ecosystem. In addition, engaging government, business, and nongovernmental organizations in collaboration toward mutual goals compounds the likelihood of success.

La Florida

Florida is connected physically, chemically, biologically, economically, and socially to the Caribbean, and thus, to Latin America. This changing social fabric is a testimony to the merger of culture and politics that is present in all border areas. Because of these connections, Florida has sought to develop alliances and has been successful in partnering with Caribbean and Latin American governments and businesses to address a variety of issues. These include port policies, Best Management Practices for the cruise industry, conservation through land acquisition, and collaboration among scientific organizations.

In summary

Coordination among local, state, and federal agencies, as well as with other states and nations in the region, is needed to ensure that Florida's economic base is maintained while minimizing the impact of development on ocean and coastal natural and social systems. There is also a need for partnerships that include government, private enterprise, and universities. Recommendations include the following:

- Develop partnerships to allow the public and private sectors to work together for effective decision-making regarding ocean resource management. An example is the agreement to improve the regulation of hazardous waste disposal from cruise ships. On December 6, 2001, Florida, with the leadership of Department of Environmental Protection Secretary David Struhs, entered into an agreement with the U.S. Environmental Protection Agency, the cruise ship industry, and nine other states. Instead of ships being forced to deal with different hazardous waste reporting procedures at each port at which they stop, under the new agreement, ships must eliminate sewage discharges in state coastal waters and must report the waste that is taken off ships at ports. This agreement is an excellent model to follow in forging public-private partnerships.
- Support federal-state partnerships in managing ocean and coastal resources. States have policy and management responsibilities for coastal and ocean areas within their jurisdiction. These responsibilities need to be integrated with similar federal mandates. Supporting partnership tenets of federal ocean and coastal related legislation such as the Coastal Zone Management Act, the Magnuson-Stevens Fishery Conservation and Management Act, the Clean Water Act, the National Sea Grant College Act, the Marine Protection, Research, and Sanctuaries Act, and others enhances the ability of these programs to address issues related to biodiversity, ecosystem management, habitat degradation, nonpoint source pollution, and fishery declines. Strong federal-state partnerships also increase the potential for local capacity building, public education and stewardship, and effective coastal management program implementation. The South Florida Ecosystem Restoration Task Force, created by Congress in Section 528(f) of the Water Resources Act of 2000 (Public Law 104-303) is a potential model for this approach.
- Collaborate among all levels of government to allow for shared decision-making about ocean-based activities that affect the interests of citizens of coastal states and communities. Coastal states and their local communities have a very real stake in the management of offshore resources. All levels of government should work together to reach decisions, and in so doing should include an equitable division of the costs and benefits associated with the development of ocean resources, a recognition of a responsibility to protect the interests of future generations, and an understanding that all ocean management decisions must be based on solid science.
- Support efforts such as the proposed Conservation and Restoration Act of 2000 (CARA) and the Coastal and Estuarine Land Conservation Program created in the FY 2002 Appropriations Act. These are critical to the preservation of the remaining ecologically sensitive coastal areas. By matching scarce state funds for land acquisition and restoration programs, the legislation represents significant opportunity for reinvestment in some of the county's most important natural areas

Healthy Oceans Depend on a Strong Stewardship Ethic

Continued health and vitality of Florida's ocean resources depend on achieving and sustaining diverse marine ecosystems that are capable of supporting multiple uses. Ever increasing pressures for development and land conversion, however, continue to cause the loss and degradation of important habitat—including wetlands, estuaries, mangrove forests, coral reefs, and seagrass beds. Marine mammals, sea turtles, and seabirds are threatened by increased human interaction, pollution, and disruption of the ecosystems that provide their habitat.

Florida's waters contain a rich biological diversity, and its living marine resources provide significant economic, environmental, aesthetic, and cultural benefits. Fishing, one of the most important examples, brings substantial economic advantages to the state. Commercial and recreational fishing, seafood processing and wholesale facilities, and the aquaculture industry represent billions of dollars in economic impact. Overfishing and bycatch, however, threaten the balance of delicate and complicated marine ecosystems and are but some of the problems that must be addressed in a manner that departs from single species management.

In addition, there is an increasing need for the state and nation to develop a comprehensive policy regarding other ocean-based activities such as oil and gas exploration and production, mineral extraction, and recreational opportunities. Other economic development activities such as those involving port development, commerce and trade, navigation, boating, beach use and development, aquaculture, artificial reef development, recreational and commercial fishing, tourism, mineral development, military activities, and the space industry all have the potential to profoundly affect marine resources and must be addressed in a comprehensive manner.

Hurricanes are a fact of life in Florida, and the state is extremely vulnerable due to its extensive coastline, low elevations, and concentrated numbers of people living along the coast. In 1992 Hurricane Andrew struck South Florida, causing over \$25 billion in damages and 24 deaths. In 1995 Hurricane Opal hit the Florida panhandle, resulting in over \$6 billion in damages due to flooding and erosion. Experts maintain that storms may increase in numbers and intensity in coming years. Population growth in coastal areas puts more people and property at risk, makes evaluation more difficult, and increases the challenges of educating residents and visitors about hurricane protection.

As our ocean and coastal areas become more threatened by increasing population, pollution, habitat destruction, and overexploitation, the need for special designations—or marine protected areas—becomes more apparent. Florida continues to be a leader in marine protected areas. As discussed, the Florida Keys National Marine Sanctuary is one of the country's most successful efforts to balance resource protection with recreational, commercial, scientific, cultural, and educational uses. In addition, a number of Florida estuaries are part of the National Estuary Program or the National Estuarine Research Reserve System. These programs strive to balance resource protection and use throughout their watersheds.

To be certain, Florida's ocean resources contribute significant economic value. But the list of negative consequences for the health of the resources continues to grow. Land conversion, pollution, overfishing, vessel groundings, damage to submerged natural and cultural resources, non-indigenous species introduction, oil spills, dying coral reefs, harmful algal blooms, depleted freshwater supplies, and climate change and the potential consequences of sea level rise are additional stresses caused or exacerbated by our ever growing use of marine resources and the disruption of delicate and unique ocean and coastal ecosystems.

With economic benefits come increasing challenges to protecting the health and vitality of the resources. The following recommendations address the need to develop or improve tools that address threats to living marine resources and the marine ecosystem in Florida. Many of these have application to the development of tools at a national scale.

- Pursue ocean management based on the best scientific understanding of
 ecosystem functioning and dynamics. Maintaining the ocean's biodiversity is
 essential in ways we are just beginning to understand. The ocean's resources,
 including its species, watersheds, and ecosystems, form a foundation for the
 quality of life on earth—important for healthy human life, a healthy environment,
 and a healthy economy.
- Determine the adequacy of and, if appropriate, develop refinements to current water quality standards for bays, estuaries, and near shore waters.
- Establish innovative techniques for habitat protection, restoration, and enhancement. Include concepts related to marine protected area management, such as limited use areas, seasonal harvests, and no-take/no-fishing marine reserves.
- Establish or improve programs to address threats to marine health by the introduction of non-indigenous species. Programs should include monitoring and tracking information, mitigating effects, and reducing opportunities for non-indigenous species introduction.
- Work for more effective management of highly migratory pelagic species, marine mammals, sea turtles, and sea birds.
- Work toward adaptive management practices that are based on the best science available and evolve as new information becomes available.

Research and Education

Through scientific research and exploration we have dramatically improved our understanding of the ocean and its resources. Florida has a large number of marine educational institutions and programs, aquaria, and research facilities. Several public

agencies are dedicated to understanding, protecting, and developing Florida's ocean resources. A number of environmental programs are offered by schools, private organizations, and state agencies. Many of the state's sixteen marine research laboratories are of world renown, and include public and private universities, agencies, and institutions. On February 13, these institutions, joined by non-governmental organizations and public agencies gathered in our state capitol, Tallahassee, to celebrate Florida Ocean Day. (Please see attached flyer)

Together these public and private institutions provide an impressive capacity for marine education and research. Nevertheless, there remains a great need for both natural and social science data, particularly in deep water and on a systems level. Substantial gaps exist in our understanding of the quantity, quality, and value of ocean resources. Furthermore, although there is widespread recognition that many of the threats facing marine areas are the result of human encroachment upon the resources, there is still a need for significant improvement of our awareness of the impacts of human actions and influences upon the ocean.

While Florida's ability to conduct marine research is outstanding, there is no comprehensive repository or guide to coastal and marine research data, and no consistent forum for scientists to integrate their knowledge. Effort is needed to leverage existing capabilities and eliminate duplication of effort. When examining these issues from a national perspective, the magnitude of the problems increasing greatly.

In addition to the need for greater understanding and awareness of the ocean and its resources, it is important to promote education and stewardship. Education regarding the importance of ocean resources is essential to their effective management and sustainability, and fosters a sense of stewardship that helps prevent careless disregard for the oceans and its resources.

The following recommendations would address these issues.

- Implement a long-term, comprehensive inventory, monitoring, and assessment program to establish a baseline that would facilitate the analysis of resource change. This would also create an information base to allow managers to understand whether their strategies were effective in meeting their goals.
- Develop protocols for data management that encourage integration and exchange through use of Web-based technology and other means.
- Coordinate efforts to educate all citizens about the economic, environmental, and cultural importance of ocean resources, and support and encourage—through a sense of stewardship and volunteerism—greater public participation in the protection and conservation of ocean resources.
- Recognize that the ocean generates incredible value to Florida's—and the nation's—economy. Several industries and organizations, including ports,

commercial fishing, and tourism, calculate the value contributed by their particular activity or interest. There is, however, no consistent, coherent view of the total value of ocean resources to Florida, or to the nation. An economic baseline of ocean assets is critical for making well-reasoned decisions about how to protect and sustain the health of the ocean and coastal environments and the economy.

- Increase educator training on coastal and marine science and on current ocean issues, and encourage teachers to introduce ocean themes in diverse curricula.
- Create and support innovative partnerships to engage the public in learning and caring about ocean resources.

Conclusion

The United States is blessed with a rich abundance of ocean resources, as well as a wealth of ocean dependent educational and business enterprises. Florida's experience shows, however, there are a number of challenges that make it difficult to maintain and even improve these ecological and economic assets. The Florida Ocean Alliance encourages the U.S. Commission on Ocean Policy to learn from Florida's experiences in developing ocean policy and management practices, and entreats it to pay particular regard to these specific needs:

- More collaboration among all levels of government and with other countries to enhance the ability to manage ocean and coastal resources comprehensively;
- Better use of public/private partnerships to help support and protect the symbiotic relationship between the health of the economy and the health of the ocean environment;
- Greater scientific understanding and information about marine resources and how they are affected by human activity;
- Achieving and maintaining diverse marine ecosystems; and,
- Improving awareness and understanding about the importance of the oceans and developing a sense of stewardship toward coastal and ocean areas.

Dr. Sylvia Earle, world-renowned scholar and explorer of the deep, is a daughter of Florida. She is a tireless advocate for the oceans, and is passionately committed to raising the awareness of the importance of healthy and sustainable oceans to life on this planet. When asked why she pursues her missions of discovery and advocacy with such zeal, she replies. "I care about our future. I have children. I have grandchildren. But even if I didn't, I would be very selfishly concerned about the future of our species. If we don't take care of the systems that take care of us, then our future is really in trouble."

Like the Stratton Commission before it, the U.S. Commission on Ocean Policy has a tall order. There are many problems, many challenges, and many obstacles to crafting a workable ocean policy and improving the way ocean resources are managed in this country. But there is also great promise. There is a growing attitude of passion and concern for our oceans, as evidenced by Dr. Earle and many, many other talented and committed people.

The Florida Ocean Alliance joins the chorus of those who have encouraged the U.S. Commission on Ocean Policy to think boldly. You must discover what works and what doesn't, understand the governance structure, and make recommendations that will improve our approach to managing ocean and coastal resources. Your boldness, discovery, and leadership will enable us—including government, business, communities, and individuals—to continue to benefit from the oceans' unparalleled contributions to our economic and environmental well-being.

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