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Florida Coastal and Ocean Policy Report Card

By Florida Coastal and Ocean Coalition

Authoring Organizations

Surfrider Foundation

Caribbean Conservation Corporation and Sea Turtle Survival League
1000 Friends of Florida
Gulf Restoration Network
Natural Resources Defense Council
Ocean Conservancy
Reef Relief















About the Florida Coastal and Ocean Coalition

The Florida Coastal and Ocean Coalition is a group of organizations working together to conserve, protect and restore Florida's coastal and marine environment. The Coalition emphasizes the implementation of an ecosystem-based approach to coastal and ocean management, as well as recognition of the important linkage between the health of Florida's economy and the health of its beaches and dunes, coral reefs, mangroves, sea grasses, wetlands and other natural resources. The Coalition calls on Florida's Governor, State Agencies, Cabinet, and Legislature for action and leadership to achieve the goal of healthy ocean and coastal ecosystems.

Acknowledgments

The following members of the Florida Coastal and Ocean Coalition Steering Committee authored this report: Gary Appelson, Caribbean Conservation Corporation and Sea Turtle Survival League; Sarah Chasis, Natural Resources Defense Council; Ericka D'Avanzo, Surfrider Foundation; Paul G. Johnson, Reef Relief; Joe Murphy, Gulf Restoration Network; David White, Ocean Conservancy; and Dan Pennington, 1000 Friends of Florida.

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Executive Summary

Plorida's coast is an essential component of the state's identity and well-being. With 8,500 miles of tidally influenced coastline and 825 miles of sandy beaches, much of Florida's economy is dependent upon its coastal environment. This environment, however, is facing enormous threats, including unwise coastal development, pollution, offshore drilling, overfishing and destructive fishing practices, lack of a comprehensive management system, and global warming. Actions must be taken now to counteract these threats or the health and welfare of Florida may be damaged beyond repair.

In an effort to reverse the decline of marine and coastal resources, the Florida Coastal and Ocean Coalition put forth a set of recommendations in its report entitled *Florida's Coastal and Ocean Future: A Blueprint for Economic and Environmental Leadership* (Blueprint). The Blueprint outlines how state and federal entities can curb unwise coastal development, protect coastal and marine habitats, implement and enforce coastal and ocean pollution laws, protect marine ecosystems, ensure robust and plentiful fisheries and marine species, reduce global warming pollution, and strengthen coastal and ocean governance in Florida. Since its original publication (September 2006), 160 coastal and ocean businesses, civic, outdoor, and conservation organizations have endorsed the Blueprint.

The Florida Coastal and Ocean Coalition evaluated legislative and government actions in Florida during 2007 and 2008 and compared these with the Blueprint's recommendations. The results of this evaluation are presented in this Coastal and Ocean Policy Report Card (Report Card). The Report Card presents a grade, from A to F, on each of the Blueprint's eight topics of interest and discusses the topics in separate sections. The eight sections are:

- 1. Curb unwise coastal development and protect valuable coastal habitats;
- 2. Reduce coastal and ocean pollution;
- 3. Keep offshore drilling away from Florida's coasts;
- 4. Restore marine ecosystems through ecosystem-based management;
- 5. Ensure robust fisheries;
- 6. Conserve protected marine species;
- 7. Reduce global warming pollution; and
- 8. Strengthen ocean governance.

Each section presents an analysis of progress made, critical opportunities missed, counterproductive actions taken, and steps that can be done to improve performance. The section highlights are summarized as follows (grades are in parentheses):

Curb Unwise Coastal Development and Protect Valuable Coastal Habitats (C+)

Notable progress includes passing the Inlet Management Bill, efforts to protect adequate water inflows to Apalachicola Bay, halting harmful development in Big Bend seagrass beds and the Nature Coast region, extending the Florida Forever Act and including a priority on barrier island habitat protection and land acquisition, and

proposing land acquisition to advance restoration of the Florida Everglades. Improvements needed include revamping the Environmental Resource Permit process and the Coastal Construction Control Line Program to better promote coastal protection, and strengthening state laws and policies in order to reduce or restrict high-risk and environmentally harmful coastal development.

Reduce Coastal and Ocean Pollution (C+)

Notable progress includes passing the Clean Oceans Bill and the Ocean Outfall Closure Bill, and addressing water quality issues at specific sites in the state. Improvements needed include bringing paper mills into compliance, setting numeric nutrient standards for springs and coastal waters, adopting strong stormwater rules, and passing legislation notifying the public of sewage overflows.

Keep Offshore Drilling Away from Florida's Coasts (D)

Notable progress includes maintaining protection of the eastern Gulf coast from offshore drilling. Improvements needed include reestablishing the moratorium on outer continental shelf drilling to protect the east coast of Florida.

Restore Marine Ecosystems through Ecosystem-Based Management (D)

The Department of Environmental Protection and the Florida Fish and Wildlife Conservation Commission made little significant progress in implementing ecosystem-based management for marine species or habitats in 2007 and 2008. Improvements needed include developing criteria for implementation of marine protected areas and reserves, strengthening Florida's aquatic preserve system, and implementing a transparent, science-based stakeholder process to develop a plan to protect coral reefs in Biscayne National Park.

Ensure Robust Fisheries (B-)

Notable progress includes establishing a catch share program for red snapper, undertaking efforts to end overfishing and adopting state fishing regulations that are consistent with federal regulations in the Gulf of Mexico, and protecting deepwater corals. Improvements needed include ending overfishing and rebuilding depleted fish populations in Gulf and South Atlantic, adopting measures to protect important fish habitat.

Conserve Protected Marine Species (B)

Notable progress includes strengthening the coastal armoring law that protects coastal habitat and public access, prioritizing minimum flows and levels for springs utilized by manatees, and reevaluating protected species listing criteria. Improvements needed include providing greater protection for listed coral species, adopting strong seagrass and coral reef protection laws, establishing a frontal dune setback, and strengthening the management of the state's aquatic preserves.

Reduce Global Warming Pollution (A-)

Notable progress includes signing multiple executive orders and legislation addressing climate change, stopping construction of new coal plants, and establishing the Governor's Action Team and Commission on Energy and Climate Change. Improvements needed include implementing the adaptation recommendations in the governor's Climate Action Plan, adopting climate-related regulations, exercising national leadership on climate issues, and considering long-range climate impacts in the management of ocean and coastal resources.

Strengthen Ocean Governance (D)

There has been little progress in this area except for providing some funding for the Florida Oceans and Coastal Resources Council. Improvements needed include creating an executive ocean and coastal policy office, reinvigorating the state's coastal zone management consistency review process, and expanding the governor's and the Department of Environmental Protection's leadership roles in the Gulf of Mexico Alliance.

The overall grade for the achievements of 2007 and 2008 is C.

Introduction and Report Card

his document is the Florida Coastal and Ocean Coalition's 2009 Coastal and Ocean Policy Report Card (Report Card). It is an evaluation of legislative and government actions in Florida during 2007 and 2008, based on recommendations set forth in *Florida's Coastal and Ocean Future: A Blueprint for Economic and Environmental Leadership* (Blueprint).¹

The mission of the Florida Coastal and Ocean Coalition (Coalition) is to promote state and federal action to curb unwise coastal development, protect coastal and marine habitats, implement and enforce coastal and ocean pollution laws, protect marine ecosystems, ensure robust and plentiful fisheries and marine species, reduce global warming pollution, and strengthen coastal and ocean governance in Florida.²

The performance assessments in this Report Card were evaluated by monitoring coastal and ocean policy and program actions, communicating with the legislature and government officials and agencies, monitoring litigation, and discussing topics among the organizations that comprise the Coalition's steering committee. The Report Card represents a good faith effort by the public interest marine conservation community to hold the governor, legislature, and state agencies accountable for their efforts to protect, conserve, and restore our marine and coastal resources. According to Governor Crist, government leaders must be accountable to the citizens of Florida for their actions and must follow what he refers to as "the People's agenda." Through this Report Card, we highlight important progress made, critical opportunities missed, and actions taken that are deemed to be counterproductive to the vitally important efforts to protect Florida's coastal and marine resources. We also identify opportunities for improvement going forward.

The Florida Coastal and Ocean Policy Report Card is modeled after the national *Joint Ocean Commission Initiative's* annual report card.³ The Florida Coastal and Ocean Coalition based each section grade upon our evaluation of the level of performance in implementing the recommendations in the Blueprint. In addition, actions that were positive or negative, but not discussed in the Blueprint, were also considered when determining a final grade. The grade breakdown is as follows: a grade of "A" or "B" shows positive action taken to implement the recommendations, a grade of "C" or below equates to little or no action taken, and a grade of "D" or "F" shows negative action taken or critical opportunities missed.

Throughout the Report Card, the Coalition provides recommended actions to improve upon a given grade and further the desirable outcomes described in the Blueprint. As with any school report card that presents feedback to foster constructive analysis and change, this Report Card is intended to provide feedback to Florida's leaders and decision makers regarding the need to strengthen Florida's coastal and ocean policies.

The Florida Coastal and Ocean Coalition remains committed to working with Florida leaders to improve coastal and ocean policy and programs in order to protect the saltier and sandier sides of Florida's environment. As a coalition, we strive to provide constructive input and support to Florida's decision makers through our Report Card so that Florida's coastal and ocean resources can be sustained and improved.

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SUBJECT	GRADE	COMMENTS The comments below do not reflect the full scope of activities upon which a final grade is based. See the following sections for details.
Curb Unwise Coastal Development and Protect Valuable Coastal Habitats	C+	Notable progress: Passage of the Inlet Management Bill Efforts to protect adequate water inflows to Apalachicola Bay Halting of harmful development in Big Bend seagrass beds/Nature Coast region Extension of the Florida Forever Act and inclusion of coastal acquisition Improvements needed: Improve the ERP permitting process and antiquated Coastal Construction Control Line Program
Reduce Coastal and Ocean Pollution	C+	Notable progress: • Passage of the Clean Oceans and Ocean Outfall Closure bills Improvements needed: • Bring paper mills into compliance and set numeric nutrient standards for springs and coastal waters • Adopt strong stormwater rules and legislation notifying the public of sewage overflows
Keep Offshore Drilling Away from Florida's Coasts		Notable progress: • Maintaining protection of the eastern Gulf coast from offshore drilling Improvements needed: • Reestablish OCS moratorium to protect east coast of Florida
Restore Marine Ecosystems Through Ecosystem-Based Management	D	Notable progress: None Improvements needed: Develop criteria for implementation of marine protected areas and marine reserves Protect coral reefs in Biscayne National Park from overfishing Strengthen Florida's aquatic preserve system
Ensure Robust Fisheries	B-	Notable Progress: • Establishment of a catch share program for red snapper • Efforts to end overfishing and establish consistent state/federal regulations in the Gulf of Mexico • Protection of deepwater corals Improvements needed: • Take action to promptly end overfishing and rebuild depleted fish populations in Gulf and South Atlantic • Adopt measures to protect important fish habitat

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Conserve Protected Marine Species B Reduce Global Warming Pollution A- Reduce Global Warming Pollution Strengthen Ocean Governance D Notable progress: Strengthen Ocean Governance Strengthen Ocean Governance A Strengthen Ocean Governance Revaluation of coastal armoring regulations that protect coastal habitat and public access Prioritizing minimum flows and levels for springs utilized by manatees Reevaluation of protected species listing criteria Improvements needed: Provide greater protection for listed coral species Adopt strong seagrass and coral reef protection laws Establish a frontal dune setback Strengthen management of the state's aquatic preserves Notable progress: Executive orders and legislation addressing climate change Stopping new coal plants Climate Change Commission Improvements needed: Implement adaptation recommendations in governor's Climate Action Plan Adopt climate-related regulations and exercise national leadership on climate issues Consider climate impacts in management of ocean and coastal resources. Notable progress: Funding for Florida Ocean & Coastal Council Improvements needed: Create an executive ocean and coastal policy office Reinvigorate the state's coastal zone management consistency review process	SUBJECT	GRADE	COMMENTS The comments below do not reflect the full scope of activities upon which a final grade is based. See the following sections for details.
Reduce Global Warming Pollution A- Executive orders and legislation addressing climate change Stopping new coal plants Completion of the governor's Climate Action Plan and creation of an Energy & Climate Change Commission Improvements needed: Implement adaptation recommendations in governor's Climate Action Plan Adopt climate-related regulations and exercise national leadership on climate issues Consider climate impacts in management of ocean and coastal resources. Notable progress: Funding for Florida Ocean & Coastal Council Improvements needed: Create an executive ocean and coastal policy office Reinvigorate the state's coastal zone management consistency review process	Protected Marine	В	 Strengthening of coastal armoring regulations that protect coastal habitat and public access Prioritizing minimum flows and levels for springs utilized by manatees Reevaluation of protected species listing criteria Improvements needed: Provide greater protection for listed coral species Adopt strong seagrass and coral reef protection laws Establish a frontal dune setback
• Funding for Florida Ocean & Coastal Council Improvements needed: • Create an executive ocean and coastal policy office • Reinvigorate the state's coastal zone management consistency review process		Α-	 Executive orders and legislation addressing climate change Stopping new coal plants Completion of the governor's Climate Action Plan and creation of an Energy & Climate Change Commission Improvements needed: Implement adaptation recommendations in governor's Climate Action Plan Adopt climate-related regulations and exercise national leadership on climate issues
DEP and the governor should expand their leadership role in the Gulf of Mexico Alliance			 Funding for Florida Ocean & Coastal Council Improvements needed: Create an executive ocean and coastal policy office Reinvigorate the state's coastal zone management consistency review process DEP and the governor should expand their leadership role in the Gulf of

Curb Unwise Coastal Development and Protect Valuable Coastal Habitats GRADE: C+

Responsible entities: Executive Office of Governor, Legislature, Department of Environmental Protection, Department of Community Affairs, Water Management Districts

Blueprint Recommendations To Consider:

- Abandon the state's effort to assume delegation of wetlands permitting from the federal government.
- Change regulatory permit requirements to reduce destruction and loss of coastal wetlands.
- Stop allowing wetlands destruction in exchange for wetlands recreation, also known as mitigation, as an accepted first course of action. Instead, reemphasize avoidance and minimization of wetland impacts.
- Give high priority to protecting dwindling coastal habitats.
- ▶ Reduce or eliminate subsidies that encourage growth in high-risk areas or in sensitive coastal systems.
- Explore a policy of "strategic retreat" to encourage moving development away from eroding shorelines.
- Reevaluate and strengthen the Coastal Construction Control Line Program.
- Research and invest in fixed-sand transfer plants as a long-term solution to coastal erosion problems caused by existing navigational inlets.

Why Is Protection of Coastal Habitat Important?

Excessive coastal development threatens our coastal environments, quality of life, and natural resource-based economic lifelines. Florida has 8,500 miles of tidally influenced coastline and 5 million acres of nearshore submerged habitats that are home to a diverse array of marine and coastal natural communities and associated species. These coastal habitats serve valuable functions such as attenuating floods, filtering runoff, protecting us from storm surges, recharging drinking water supplies and limiting saltwater intrusion, providing wildlife habitat, and maintaining healthy estuaries. Despite various policies to protect them, the coastal resources described below continue to be destroyed daily.

Coastal Wetlands

Florida's coastal wetlands are critical components of the vast mosaic of natural resources that are essential to the function and health of recreational and commercial fisheries and are vital to the survival of many plant and wildlife species, including some that are threatened and endangered.

Although the ecosystem value of coastal wetlands for fisheries, storm and flood control, and wildlife is well documented and understood, Florida continues to advance policies and actions that lead to permanent losses of critical wetlands (coastal and interior). From multiple new developments to mining in wetland areas, Florida's coastal wetlands still face unprecedented threats.

Seagrass Beds, Mangrove Forests and Nearshore/Offshore Reefs

Florida is blessed with miles of submerged seagrass beds, fringing mangrove forests, and nearshore/offshore reefs, which are critical to the ocean food chain and provide essential habitat for sea turtles, marine mammals, numerous fishes, and other wildlife species. For example, the Big Bend Seagrasses Aquatic Preserve along the Nature Coast of northwestern Florida represents some of the most extensive and pristine seagrass beds left in North America. These three habitat types—seagrasses, mangroves, and reefs—are delicately intertwined to support the biologically diverse and productive South Florida coral reef ecosystem, the only barrier coral reef system in North America. But reeflike habitats are not confined to South Florida. They abound wherever hard bottom and water conditions support their growth. Unfortunately, many of these marine habitats are in significant decline because of the cumulative impacts from boater damage, coastal pollution and nitrification, dredging activities, and coastal development. Without large and healthy seagrass beds, mangroves, and reefs, many of Florida's coastal and marine ecosystems face serious damage, along with a loss of the related benefits that come from seafood production and recreational tourism.

Coastal Estuaries

An estuary is a transition zone where nutrients and fresh water reach the ocean and mix with the marine system in a dynamic equilibrium. Estuaries are critically important for the health of our oceans and hundreds of marine species that live, breed, feed, and survive in these sheltered coastal waters. Salt marshes, oyster beds, and mudflats serve a similar role in estuaries as the marine habitats described above. It takes a reliable balance of clean, fresh, and salt water; sunlight; nutrients; and geography to create and sustain healthy estuaries. From the Indian River Lagoon to Charlotte Harbor to Apalachicola Bay, Florida has numerous estuaries that are essential to our natural heritage and resource-based economies. Each of these estuarine ecosystems is imperiled by coastal pollution, poor coastal management and development, climate change, and increasing human recreational use.

Sandy Beaches

Florida's 825 miles of sandy beaches are also under serious threat, being squeezed by shoreline development, coastal erosion, and rising seas. This ribbon of sand defines our state and is a major driver of the coastal economy. Our beaches are visited by tens of millions of tourists and residents annually. They are also visited or inhabited by a multitude of wildlife, like sea turtles and shorebirds, that depend on them for nesting. Nevertheless, this extremely valuable public resource suffers from a lack of coherent protection or management policy. Almost half of our beaches are designated as "critically eroded." Many have become overdeveloped and lined with encroaching highways, condos, and sprawling commercial developments. Original beach inhabitants, such as sea turtles (90 percent of all the sea turtle nesting in the continental United States occurs on Florida's beaches), have lost enormous amounts of habitat and natural protective beach dunes and have had their specialized vegetative communities cleared, lowered, and built upon. A healthy beach and dune system provides the first line of defense from storm surges and a buffer to climate-change sea level rise.

What Was Done in 2007 and 2008 to Curb Unwise Coastal Development and Protect Valuable Coastal Habitats?

In many cases, since 2006, the water management districts (WMD) and Florida Department of Environmental Protection (DEP) have granted Environmental Resource Permits (ERP) that resulted in losses of coastal habitats. From the Coalition's perspective, WMDs generally regard themselves not as resource protection agencies but as permitting agencies that use regulatory tools to protect remaining resources. Too often, WMD governing boards have a majority of appointees from the development and regulated communities. While WMDs and DEP get good marks for coastal wetlands acquisition and management and for public education about the value of these resources, these entities allow the loss of too many coastal wetlands.

Wetlands mitigation is frequently touted as an effective tool to offset the loss of natural wetlands ecosystems. DEP and WMDs have relied heavily on this tool and have not pressed hard enough in the permitting process to

ensure that avoidance or minimization tactics were fully utilized. Mounting evidence in Florida demonstrates that wetlands mitigation rarely works as it is supposed to and is inadequate to counteract the loss of healthy, functional natural wetlands.

From the coastal land use planning perspective, Florida's Department of Community Affairs (DCA) is a positive force. The DCA helps to ensure implementation of existing planning law and has increased coastal wetland and seagrass protection (e.g., limiting the environmental impacts of the large development project Magnolia Bay/ Reserve at Sweetwater Estuary).

During the reporting period of 2007 and 2008, the Florida Legislature has generally continued to pursue or weaken existing policies that make permitting the loss of coastal habitat easier. Legislators have not provided the leadership to enact meaningful growth management or regulatory policies that limit development in sensitive coastal areas. The legislature has continued pursuing the delegation of federal wetlands permitting authority to the state, increased mitigation banking to include nearshore seagrasses, and preemption legislation to weaken the local government's ability to regulate or protect wetlands. With the exception of Florida Forever, the legislature has done little to provide a coherent coastal development or regulatory framework per the Blueprint's suggestions and has attempted to pass policies that would diminish coastal wetlands protection.

In 2008, the Florida Legislature enacted legislation to provide increased protection for seagrass beds, but because an amendment was added that could have facilitated more coastal development, the governor vetoed the bill. (See also Section 6 on protected species).

The build-out of Florida's coastline has continued at a rapid pace throughout the last decade, only showing a recent slowdown in 2007 and 2008 because of the insurance, mortgage, and financial crises. Despite the recurrent onslaught of hurricanes, tropical storms, increasing erosion of Florida's beaches, and a heightened public awareness of the need to prepare for sea level rise, there have been no specific or sustained initiatives to encourage less density in the coastal high hazard area or to slow down or restrict development on the frontal dunes of eroding beaches. State and local governments continue to subsidize coastal development and grant almost every shoreline development permit application.

In late 2006, at the recommendation of the governor's Coastal High Hazard Study Committee, the legislature funded a study to assess the need for stronger coastal development setbacks. The report has just been completed but has not yet been released. It is not known if this study will result in any strengthening of coastal setbacks as recommended by the Blueprint.

In 2008, the legislature also established a working group to reassess the mission and policies of the state-subsidized Citizens Property Insurance Corporation. Subsidized, low-cost coastal homeowners insurance has long been a driver of high-risk shoreline development. The Blueprint recommends reducing such shoreline development subsidies. The legislature is to be commended for looking at this issue. Whether or not this effort will result in a reduction of subsidies and an assessment of how these policies can support coastal protection remains to be seen and will require leadership at the state as well as federal levels.

Some progress was made to advance sustainable beach management policies and to directly support the recommendations of the Blueprint. Three new laws were passed that positively address the coastal policy concerns of the Blueprint. First, in 2006, the legislature passed a bill placing strict controls on the installation of geotextile tube armoring. This form of armoring utilizes massive 1,000-ton sandbags to protect structures from erosion. The tubes can adversely impact the functioning of the beach system and deter sea turtle nesting. DEP followed up with strong rules to implement the new law and ensure adequate protection for nesting sea turtles. In addition, DEP is to be commended for recently denying a number of "after the fact" permits for emergency seawalls constructed illegally by Florida Panhandle residents. Many of these walls extend too far out on the active beach, which is in violation of state law.

Second, a significant achievement was the passage of the Inlet Management Bill during the 2008 legislative session. The bill was widely supported by legislators and the governor's office. The intent of the bill is to restore the natural flow of sand along the shoreline, which is now disrupted by inlet construction and maintenance and jetty and groin placement. The law requires developing and implementing inlet management plans, which,

if successfully implemented, will reduce pressures for future coastal armoring and decrease the need for beachbuilding projects. Unfortunately, there is currently little funding to support the management planning process.

Third, with strong support from the conservation community, the legislature renewed and funded the Florida Forever program, the state's successful and world-renowned land conservation program. Significantly, for the first time the program places a priority on barrier island habitat protection and land acquisition. Although the recent special legislative session suspended funds and cast worrisome clouds over this effort, the governor vetoed the cut. Competing interests and further funding constraints may limit the program's ability to accomplish its goals.

Since 2006, Florida government leaders have done a good job fighting for the people and ecosystems of Apalachicola Bay and using legal and political tools to ensure that an ecologically sustainable flow of fresh water from the Apalachicola River reaches the Gulf of Mexico. DEP and the governor have been effective advocates for the region and the resource. The state has been willing to push both in the courts and in the political arena to ensure that the Gulf of Mexico and those who depend on it in Apalachicola Bay are well represented in the tri-state water conflict.

We applaud the efforts of Governor Crist and the South Florida Water Management District to purchase 187,000 of agricultural land from U.S. Sugar to advance restoration of the Florida Everglades. The proposed land acquisition will allow for substantial new capacity for water storage in the Everglades and minimize the devastating discharges of polluted stormwater through the St. Lucie Canal and the Caloosahatchee River, which are degrading critically important estuaries on the east and west coasts. Acquisition of these lands will also facilitate the delivery of clean fresh water to rehydrate Everglades National Park and enhance water deliveries to Florida Bay, which will help restore the ecological integrity of these critical coastal and nearshore habitats.

What Can Be Done to Improve Grade?

In the face of increasing pressures, the state of Florida needs to redouble its protection efforts to ensure the health of our fisheries and wildlife, provide coastal storm and flood protection, and sustain our coastal-based ecotourism industries. The following should be done:

- The ERP permitting process needs to be improved to reflect the full ecosystem services value of coastal wetlands to both human and natural system communities. Greater emphasis should be given to the public interest balancing test by granting fewer ERP permits and adding tougher permit conditions, and aggressively implementing policies requiring avoidance and strict minimization of wetland impacts, rather than using mitigation as an acceptable offset to such impacts.
- Permitting agencies need to significantly restrict new development in highly sensitive coastal systems to protect the resources and reduce risk to human life and property from hurricanes, storm surge, and inundation that will likely be exacerbated by climate change.
- The governor needs to address the environmental and economic consequences of the continued build-out of the coast and the cumulative impact and conflicting demands on our coastal resources.
- While the governor has taken an important lead in addressing climate change, there has been a lack of substantial efforts to implement a program of related enhanced coastal protection strategies, such as "coastal relocation," increased landward siting of development farther from eroding shorelines, or protecting and improving the long-term sustainability of our first-line defense—the beaches and dunes.
- The legislature needs to strengthen state laws and policies in order to further restrict coastal development.
- DEP and its Bureau of Beaches and Coastal Systems have supported changes to legislation and tightened coastal armoring rules, but the Coastal Construction Control Line Program, the regulatory program administered by DEP that governs the location of coastal development, needs to better conserve our natural coastal systems and provide a clear mandate of resource protection to the bureau.

- Overall, there is a heightened need to reevaluate coastal building and beach management policies, reduce subsidies for development on highly erosive and dynamic beach systems, and integrate climate change projections into beach management planning.
- With regard to the acquisition of the U.S. Sugar property, the South Florida WMD should ensure that the land is used to clean up polluted water entering Lake Okeechobee and the Everglades, significantly decrease the damaging discharges of fresh water into the St. Lucie and Caloosahatchee estuaries, and provide a reliable water supply to the Everglades and Florida Bay.

Reduce Coastal and Ocean Pollution GRADE: C+

Responsible entities: Executive Office of Governor, Legislature, Department of Environmental Protection, Water Management Districts, Local Governments

Blueprint Recommendations To Consider:

- Strengthen watershed-based planning to protect springs and karst features, which feed coastal waters.
- Update the state's stormwater regulations.
- Require at a minimum that adequate capacity and infrastructure for sewage and stormwater treatment exist prior to issuing permits for new development.
- Bring polluting industrial facilities, such as paper mills and power plants, into compliance with modern pollution regulations.
- Update management plans for the 41 aquatic preserves.
- Develop a comprehensive program to treat, regulate, and reduce wastes from the many cruise ships and gambling boats that dock in the state's ports.
- Revise Chapter 403 of the Florida Statute to include quantified nephelometric turbidity units (NTU) in southeastern Florida's waters during coastal construction projects in order to protect coral.

Why Is Reducing Coastal and Ocean Pollution Important?

Florida is defined by its coastal and ocean resources. Our coastal waters describe not only our borders, but also our quality of life and the lives of myriad ocean creatures. Protecting Florida's marine resources requires that these waters remain clean and the natural rhythms of tide, upland drainage, and groundwater recharge remain relatively dependable and uninterrupted. Additionally, with the economy and livelihood of many Floridians driven by our environment, maintaining water quality to support coral reefs, seagrass beds, fishing, and beach activities must be a high priority.

Water quality degradation from overdevelopment, inadequately treated wastewater and stormwater discharges, agriculture, and industrial pollution is killing coastal reefs and seagrass beds. These environments are home to recreationally and commercially important fisheries; fouling the coastal and nearshore waters is harmful to our economic base. Although major strides have been made over the years to recognize and correct past practices, Florida continues to have over 1,000 waterbodies considered too polluted for drinking, fishing, and swimming. According to the Environmental Protection Agency's National Water Quality Inventory 2000 Report, 31 percent of surveyed Florida rivers and 21 percent of estuaries are impaired. The health and economic values of these coastal and ocean ecosystems must be priorities for action.

What Was Done in 2007 and 2008 to Address Coastal and Ocean Pollution?

The Coalition is encouraged by certain actions taken by the legislature, governor, and DEP to promote and support pollution prevention legislation. The passage of the Clean Oceans Bill is the beginning of the end for waste

dumping by gambling boats.⁶ The governor's support and legislature's passage of the Ocean Outfall Closure Bill was a major water quality landmark.⁷ This bill requires six wastewater facilities in Palm Beach, Broward, and Miami-Dade counties—which collectively discharge daily over 300 million gallons of inadequately treated sewage to the Atlantic Ocean—to go to advanced waste treatment and transition this discharge to water reuse and to end ocean discharge by 2025. This action will help reduce the loss of valuable fresh water and eliminate major pollution inputs to our coastal waters. The legislature also stopped the passage of the fertilizer Protection of Urban and Residential Environments and Water Act, which would have allowed further weakening of state water quality standards.⁸

Additionally, state agencies and WMDs are making strides to develop and address water quality issues in specific areas. Examples of such projects are: St. John's River Water Management District is considering special basin designation for Matanzas River Estuary to increase water quality protection; DEP is considering upgrading to Outstanding Florida Waters status certain aquatic preserves (AP) and national estuarine research reserves (NERR); and DEP is nearing completion of three AP and one NERR management plan updates and has scheduled others to be completed by 2010.9 Additionally, DEP is holding workshops to aid in developing nutrient criteria for estuaries and coastal waters, and has been developing amendments to the statewide stormwater rule and applicant's handbook to better address nutrient pollution and incorporate low-impact development practices. Furthermore, DEP released a draft stormwater rule ordinance for public review and consideration; the final rule awaits gubernatorial and legislative direction. The WMDs continue to identify and fund water resource restoration projects, particularly in Surface Water Improvement Management (SWIM) program areas. Furthermore, there have been numerous stormwater and wastewater improvement projects funded and implemented throughout the state.

Whereas the governor must be commended for his support of the successfully passed ocean outfall and vessel discharge legislation, there has been a major lack of leadership in getting paper mills and other large industrial and municipal polluters to better comply with state and federal water quality laws. In general, DEP has failed to protect the public interest in compliance and enforcement efforts for paper mill operations. Three examples are International Paper, Florida Buckeye, and Georgia Paper. International Paper in Pensacola continues to operate on an outdated permit that expired in 1994, when they received a temporary operating permit. The receiving waters for their discharge are now the most polluted waters in the state and are considered severely impaired. Florida Buckeye has been operating on an expired permit since the early 1990s when they received a Class V industrial river permit. Their discharge has contributed to a 10-square-mile dead zone in the Big Bend Aquatic Seagrasses Preserve.¹¹ Georgia Paper's mill in Palatka has been operating on an expired permit since 2007. As an alternative, DEP proposed a 1,000-foot-long discharge pipe across the St. Johns River and a permit that allows for eight different mixing zones in the river just south of Jacksonville on the way to the Atlantic. Recently, Georgia Paper asked to forgo the pipeline alternative because of economic concerns. The governor and the legislature need to direct DEP, as the implementing agency, to enforce the law and ensure these facilities meet water quality standards sufficient to protect natural ecosystems. If these facilities cannot be brought into compliance and must cease to operate, the governor and the legislature should help the affected communities.

DEP needs to move forward on specific nutrient water quality rule revisions. The current narrative nutrient criteria make it very difficult to protect streams and estuaries from nutrient pollution as the rule can only be applied after damage to an ecosystem has occurred and imbalance in flora and fauna is evident.

Finally, recognizing the need to take matters into their own hands, some local governments are trying to go above and beyond state and federal nutrient water quality controls. For example, to protect canals from being designated as ditches with lower water quality standards, Broward County maintained home rule, claiming its right to self-government, and Indian River County analyzed the possibility of implementing a barrier island sewage system to make septic systems obsolete. Monroe County passed ordinances to better enforce the Florida Keys No Discharge Zone for sewage from vessels, and Wakulla County has implemented significant water quality ordinances to protect springs and karst features from development impacts and require higher-level treatment for new septic systems. Neither the legislature nor the DEP should preempt or restrain these efforts; instead they should work with local governments and provide incentives and models for similar actions to be taken elsewhere.

What Can Be Done to Improve Grade?

- The governor should direct DEP to report on the status and future of individual cleanup plans for paper mills and other large industrial and municipal polluters.
- The governor should encourage stormwater rule revisions to move forward to ensure that post development runoff meets predevelopment water quality conditions for new developments (particularly for nutrients) and that, for redeveloping areas, a net improvement over previous pollution impacts occurs.
- While the legislature should be commended for the phasing out of ocean outfalls, there was a missed opportunity to require advanced wastewater treatment (AWT) for deep-well injection of this waste. 12 Furthermore, the standards for AWT should be strengthened and standardized for multiple levels of reuse in the environment. The legislature should also fully fund the state revolving loan fund and other budget requests along with federal and local economic stimulus infrastructure development projects to enable full implementation of the Ocean Outfall Closure Bill in a timely manner.
- The legislature should pass legislation requiring public notice of sewage overflow problems.
- The Environmental Protection Agency recently issued a formal determination under the federal Clean Water Act that "numeric" nutrient water quality criteria are necessary in Florida and that Florida needs to accelerate its efforts to adopt numeric nutrient criteria into state regulations. The Coalition recommends that immediate legislative and agency actions take place to make this happen.
- DEP put out a draft stormwater rule for public review and consideration that needs to go farther in ensuring that runoff from development does not degrade Florida's valuable waters. 13

Keep Offshore Drilling Away from Florida's Coasts

GRADE: D

Responsible entities: Executive Office of Governor, Cabinet, Legislature, Department of Environmental Protection

Blueprint Recommendations To Consider:

- Depose offshore drilling and related activity off the Florida coast.
- > Support renewal of the annual congressional moratorium against new offshore drilling leasing.
- Oppose legislation that would allow individual states to "opt out" of the congressional moratorium against new offshore drilling leases.
- Oppose the Department of Interior's plan to open 2 million acres off Florida's coast to drilling.
- Support the cancellation of the 98 existing drilling leases off the coast of Florida.
- Oppose legislation that would provide a financial incentive to the state for allowing offshore drilling in Florida waters.

Why Is Prevention of Offshore Drilling Important?

Florida's coastlines and coastal communities form a mosaic of natural and human communities, joined in their dependence on clean, healthy, and vibrant coastal waters that sustain wildlife, recreation, tourism, fishing, and human health. From the vast coastal marshes and seagrass beds of the Nature Coast to the fishing destinations like Destin, San Carlos, and the Florida Keys, a healthy ocean is essential to the Florida economy and the state we know and love.

Florida's coastal ecosystems, economies, and military training areas would all be threatened by expanded outer continental shelf (OCS) activities along Florida's coast. The risk of routine pollution or a catastrophic spill is too great to justify any new exploration, leasing, or drilling in the eastern Gulf of Mexico or along Florida's eastern coast. The complex infrastructure needed to explore, produce, and bring carbon fuels ashore is highly vulnerable to specific mishaps and cumulative impacts. Ocean currents can take pollution from this industry far from its source to sensitive and important resources and coastlines. The expansion of OCS activities threatens the natural coastal resource-based economies we have worked hard to protect and develop.

Protecting Florida's unique coastal resources is vital to our residents and visitors alike. In 2007, VISIT FLORIDA documented 84.5 million visitors, with more than 77 million from other states and parts of the world. Those visitors spent \$65 billion and supported almost 1 million tourism-related jobs. Military testing and training off Florida is critical to our national defense and local economies. Drilling and related oil-extraction industry poses a direct threat to these jobs, missions, revenues, and a way of life central to Florida's prosperity.

What Was Done in 2007 and 2008 to Address Offshore Drilling?

Florida's Governor Crist moved away from the opposition to offshore drilling espoused by previous governors and announced his support of Senator McCain's proposal to expand oil and gas drilling in the eastern Gulf of Mexico.

In doing so, he undermined years of relatively unified support from Florida's elected leaders on this issue and sent a clear signal to Congress that Florida was in play when it came to offshore drilling.

The governor later went on to clarify that drilling could only occur if it was "clean enough, safe enough, and far enough," though no specifics were added to that statement. He has since made few, if any, public comments concerning offshore drilling and was virtually silent as Congress debated the issue in the fall of 2008.

In 2008, with the acquiescence of many of Florida's elected leaders, President Bush lifted the presidential protections and Congress allowed the long-standing congressional moratorium on drilling to lapse, thus exposing Florida's east coast (as well as the entire Atlantic and much of the Pacific coast) to potential offshore oil and gas leasing. Only the 2006 congressional legislation, which protected Florida's Gulf Coast, remained intact due to the hard work and political courage of several members of the congressional delegation and Florida's chief financial officer.14

What Can Be Done to Improve Grade?

- Support the reestablishment of both a presidential and congressional moratorium to prevent drilling in the OCS waters off Florida that were previously protected before repeals in 2008.
- Link the excellent climate change work being done by Florida to renewed efforts to reduce the production and use of fossil fuels from the eastern Gulf of Mexico and the Atlantic coast of Florida.
- Reestablish Florida's leadership role among coastal states in opposing OCS drilling in sensitive and valuable areas.
- Strongly support the 2006 compromise legislation that protects Florida's Gulf Coast.

Restore Marine Ecosystems GRADE: D

Responsible entities: Executive Office of Governor, Department of Environmental Protection, Florida Fish and Wildlife Conservation Commission

Blueprint Recommendations To Consider:

- Focus on managing special places and ecosystems.
- Use innovative management tools, including marine protected areas and no-take/no-fishing marine reserves.
- Develop more information on the ecological effects of fishing.
- Develop a systematic monitoring process to evaluate the ecological health of marine ecosystems.

Why Is Restoring Marine Ecosystems an Important Goal?

Our understanding of ocean ecosystems has greatly expanded over the past 30 years. Marine scientists have become aware of the many ecological linkages within and among ecosystems and have called for a more sophisticated and integrated approach, known as ecosystem-based management. The goal of ecosystem-based management is to maintain the health of the "whole" as well as the "parts" by recognizing the connections among components of the system. Vigorous marine ecosystems are important because they help support healthy fish and wildlife populations, as well as provide many other important services—from ecotourism and nonconsumptive recreation, to climate regulation, increased resilience to adverse impacts from climate change, and identification and development of important medicines that may be derived from marine species.

Although threats as different as pollution and overfishing may seem unrelated, they all affect ecosystems—often synergistically—through cumulative negative impacts on marine populations and habitats. Because of its extractive nature, fishing reduces stocks of harvested species and can alter the natural distribution, density, age-class distribution, sex ratio, and behavior of many marine species. In many cases, stocks have been exploited far beyond management targets, ultimately reducing the potential productivity of the fishery. New research indicates that the abundance and composition of nontargeted organisms in marine ecosystems are radically changing as a result of fishing pressure expressed through food-web interactions. Depleted, imbalanced, and unhealthy marine ecosystems are less resilient to both human-caused and natural perturbations, such as climate change, harmful algal blooms, and extreme weather events.

Florida's expanding population, coupled with increased tourism, is overexploiting marine resources and degrading marine ecosystems. Recent predictions indicate that Florida's human population may double to 36 million in the next 50 years, further stressing our marine resources. ¹⁶ Two national ocean commissions have recommended that we proactively move towards ecosystem-based management of marine resources in order to better maintain or restore ecosystems to a healthy, productive, and resilient condition. ¹⁷ More than 160 of the nation's marine scientists have reached a consensus that the declining state of the ocean and collapse of many fisheries have created a critical need for new and more effective management of marine biodiversity, populations of exploited species, and overall health of the oceans. In their consensus document, these scientists conclude

that networks of marine reserves "are uniquely capable of protecting biodiversity and habitats, producing the large-bodied individuals who contribute disproportionately to reproductive output, providing insurance against management uncertainties, and providing a benchmark for evaluating the effects of activities outside of reserves." ¹⁸

What Has Been Done in 2007 and 2008 to Restore Marine Ecosystems?

Florida's two marine resource agencies, the Florida Fish and Wildlife Conservation Commission (FWC) and DEP, have received clear direction from the legislature that "Florida's marine biodiversity at the species, natural community, seascape, and regional levels must be protected by restoring, rehabilitating, and maintaining the quality and natural function of ocean and coastal resources through an ecosystem-based management approach, as recommended by the U.S. Commission on Ocean Policy." Other coastal states, such as California, Massachusetts, New York, Oregon, and Rhode Island, are making significant progress in advancing ecosystem-based management by developing comprehensive ocean management and marine protected area (MPA) strategies. Most recently, participants at a Florida conference of scientists, marine managers, and stakeholders entitled "Reef Resilience Conference 2008: Coping with Climate Change" ranked developing a comprehensive plan for marine zoning based on resilience principles as one of the most important regulatory strategies for protecting Florida's coral reefs. 21

Despite numerous public stakeholder forums that strongly support movement to an ecosystem-based approach to managing marine resources, in 2007 and 2008 the FWC and DEP made little significant progress in implementing ecosystem-based management for marine species or habitats. Nor have the FWC and DEP made any further progress in employing innovative management tools, such as marine protected areas and no-take/no-fishing marine reserves. Moreover, they have not developed criteria for marine protected area implementation, as recommended by the Florida Governor's Ocean Committee, as well as the FWC's "Future of Saltwater Fishing: A Vision for Florida's Marine Resources" stakeholder forum.

The FWC and DEP have shown little progress or leadership in advancing ecosystem-based management in Biscayne National Park (BNP). BNP, the largest national marine park in the United States, contains more than 87,000 acres of the northernmost coral reefs in the Florida Keys reef tract, and its marine resources are jointly managed by the National Park Service and FWC. DEP manages Biscayne Bay State Aquatic Preserve (BBSAP), which is contiguous to and surrounds BNP. Scientific research demonstrates that fishery resources within the park are more depleted than anywhere else in the Florida Keys and are on the verge of "imminent collapse" and that there is more fishing-related marine debris on the reefs in BNP than anywhere else surveyed in the Florida Keys. Despite these findings, FWC and the NPS have decided that they will only consider marine reserves as a management strategy if it is determined to be "absolutely necessary." DEP has exerted no leadership in this area either, making BNP and BBSAP nothing more than "paper parks."

Governor Crist has not shown effective leadership on efforts to implement ecosystem-based management in Florida state waters. Although he supported a 46-square-mile research natural area (no-take marine reserve) in Tortugas National Park as attorney general, he subsequently voted against the protected area as governor-elect. As a result, DEP has not evaluated marine reserves in order to advance ecosystem-based management in any of Florida's 41 state aquatic preserves. This analysis has not occurred despite DEP's legislative mandate to maintain natural conditions, promote the propagation of fish and wildlife, and preserve public recreation within aquatic preserves so that the aesthetic, biological, and scientific values of these areas "may endure for the enjoyment of future generations."

Florida's participation in the Gulf of Mexico Alliance, a regional partnership among the governors of the Gulf Coast states with support from federal agencies, has been a good first step to develop a regional approach to marine resource conservation. This action needs to be strengthened, however, given the extent of our natural resources in the Gulf and the unique opportunity for the Alliance to promote a regional approach to ecosystem-based management.

What Can Be Done to Improve Grade?

- FWC should support measures at the federal fishery management councils to protect deepwater corals, reefs of all kinds, hard bottoms and other habitat areas of particular concern, and essential fish habitat from destructive fishing practices as well as from other activities that impair these habitats.
- FWC and DEP should jointly develop criteria for marine protected area implementation to advance "place-based" management in state aquatic preserves and other designated conservation areas (e.g., state and national parks) as recommended by the Florida Governor's Ocean Committee, as well as FWC's "Future of Saltwater Fishing: A Vision for Florida's Marine Resources" stakeholder forum and the "Reef Resilience Conference 2008: Coping with Climate Change."
- FWC and DEP should jointly support a transparent, science-based, and stakeholder-driven process to consider the establishment of marine protected areas that will restore the ecological integrity of coral reefs in Biscayne National Park, increase resiliency in light of climate change, and benefit nonconsumptive users (e.g., divers, snorkelers, glass-bottom boat visitors).
- Strengthen the management of the state's aquatic preserves to ensure the protection of their associated habitats and diverse marine life.
- Governor Crist should clarify his position about marine protected areas and marine reserves and support their use for management of marine biodiversity and populations of exploited species, and for increasing the health and resilience of coral reefs and the oceans.
- Governor Crist should exert his leadership with other Gulf State governors to increase the effectiveness of the Gulf of Mexico Alliance in promoting a regional approach to ecosystem-based management.

Ensure Robust Fisheries GRADE: B-

Responsible entity: Executive Office of Governor, Florida Fish and Wildlife Conservation Commission

Blueprint Recommendations To Consider:

- Affirm that the principal objective of marine fishery policy is the protection of marine ecosystems.
- Achieve an integrated and adaptive ecosystem management framework that includes marine fisheries.
- Establish partnerships among resource agencies to advance ecosystem-based fishery management.
- End overfishing.
- ▶ Hold an annual open forum on fisheries.
- Rebuild and maintain healthy fisheries by replacing destructive open-access fishing regulations with more carefully managed fisheries.
- Extend monitoring of fish harvests beyond the commercial fishing sector, with substantial increases in the data development and accuracy for recreational fishing.
- The governor should recommend academic and conservation experts for appointment as voting members from Florida on the Gulf of Mexico and South Atlantic fishery management councils.
- Assure strong and protective law enforcement for fisheries.
- Work with fishers to identify fishery spawning aggregation sites around the state, physically validate these areas, and ensure their long-term protection.
- Ensure a healthy shellfishing industry by identifying and removing the pollution sources that are causing the shellfish beds to be closed.
- Establish and improve programs to address threats to marine health caused by introduction of nonindigenous species.

Why Is Ensuring Robust Fisheries an Important Goal?

Robust fisheries are critical to Florida. Florida is one of the nation's premiere destinations for recreational fishers, and commercial fishing contributes immensely to our economy, quality of life, and to the character of our coastal communities. Statistics from a recently released NOAA report identify that Florida commercial fishing sales generated \$5.2 billion and 103,000 jobs. Recreational fishing generates \$7.6 billion in sales and 131,000 jobs. Numerous fish species found off of Florida are under increasing pressure, with many already overfished (fish abundance too low to support long-term sustainable yields) or currently experiencing overfishing (harvest levels exceeding sustainable yield). Florida restaurants, once renowned for fresh local seafood, are coming up short on popular local dishes as species decline and reliance on foreign imports grows.

The two national ocean commissions have identified overfishing as one of the major threats facing our oceans. Stopping overfishing is a win-win situation for the fish, fishermen, and coastal economies that depend on sustainable fishing. Only through responsible stewardship and science-based regulations can we reverse the chronic decline of Florida's signature species and ensure healthy fisheries that will benefit both the ecosystem and those who harvest fish for sport or commerce. Ending overfishing immediately will allow more and bigger fish to thrive in Florida and adjacent federal waters.

What Has Been Done in 2007 and 2008 to Ensure Robust Fisheries?

FWC representatives on the South Atlantic and Gulf of Mexico fishery management councils have supported the red snapper and grouper individual fishing quota programs in the Gulf of Mexico and a similar planning process for select South Atlantic fisheries. This support follows our blueprint recommendation to rebuild and maintain healthy fisheries by replacing destructive open-access fishing regulations with market-based, limited—access privilege programs. However, implementation of the recommendation to develop ecosystem-based marine protection zones has been mixed. We applaud FWC's support of the deepwater corals in the South Atlantic and encourage them to more fully investigate how protected areas for things like spawning aggregations and essential fish habitat could be beneficial in the Gulf. Additional positive developments include Florida Wildlife Research Institute's (FWRI) public awareness campaign to stop the release of nonindigenous species and the continued cooperation between state and federal marine law enforcement.

FWC designees on the fishery management councils showed some improvement but also missed some opportunities in establishing partnerships among resource agencies and ending overfishing. Although the FWC initially moved forward with inconsistent state regulations, they recently reversed their decision, which will help lead other Gulf Coast states to end overfishing of important federally managed species on the Gulf side. The same cannot be said of the Atlantic side. For example, while the Gulf grouper regulations were science-based, had Florida's support, ended overfishing, and were approved by the FWC commission, the South Atlantic regulations that ended overfishing using the same scientific methodology were opposed by Florida's representatives and were not effectively implemented.

Florida has sought additional funds through Congress to establish monitoring of fish harvests by the charter boat sector to aid in the data development and accuracy for recreational fishing.

Key reef fish populations in the southeastern United States do not recognize political boundaries. It is therefore essential that the various states and federal government work cooperatively to manage these public trust resources for the benefit of our region. Successful management of the reef fish complex requires state and federal cooperation. Compatible state and federal regulations will also ease the burden on fisheries enforcement officials and reduce confusion among the angling public. If regulations are inconsistent in state and federal waters, enforcement officials will have a difficult time determining where fish were actually caught, especially in cases of dockside enforcement for bag and season limits. Adopting compatible fishing regulations in state waters will ensure healthier fishing communities now and in the future.

It is critical that FWC commissioners ensure consistency with federal regulations. The adoption of consistent regulations for grouper, amberjack, and triggerfish in the Gulf and the recent action reconsidering a decision not to implement consistent, science-based federal red snapper regulations in the Gulf of Mexico are major steps in the right direction. The commission will soon have a chance to show this same leadership on fishery issues affecting the Atlantic coast.

What Can Be Done to Improve Grade?

- The legislature needs to remove shore-based saltwater recreational fishing license exemptions, consistent with the pending National Saltwater Angler Registry requirements, to close data collection loopholes and generate additional funding for fisheries management, enforcement, and research.
- The legislature should approve pay raises for FWC law enforcement officers to ensure proper staffing.
- FWC should support actions at the federal fishery management councils to promptly end overfishing and rebuild depleted fish populations to healthy levels as quickly as possible.
- FWC needs to support strong measures at the federal fishery management councils to reduce bycatch of marine fish and other marine life in fishing operations.
- FWC should support measures at the federal fishery management councils to protect deepwater corals, reefs of all kinds, hard bottoms and other habitat areas of particular concern, and essential fish habitat from destructive fishing practices as well as from other activities that impair these habitats.
- FWC must continue to adopt state regulations that are consistent with federal fishery regulations.
- Governor Crist should appoint members to the Gulf of Mexico and South Atlantic fishery management councils who have a proven track record of putting the conservation of fisheries first.

Conserve Protected Marine Species GRADE: B

Responsible entities: Executive Office of Governor, Department of Environmental Protection, Florida Fish and Wildlife Conservation Commission

Blueprint Recommendations To Consider:

- Renew the state's commitment to protecting the beach and dune system from overdevelopment.
- Discourage beach dredging during sea turtle nesting season.
- Make greater public awareness and support for sea turtle conservation a priority.
- Encourage local governments to pass ordinances to eliminate or control artificial beachfront lighting.
- Establish a "frontal dune setback" line to protect frontal dunes, encourage the landward siting of new construction, and better protect the beach and dune system.
- Repeal the state's "gap closure law," which allows the armoring of undeveloped shorelines.
- Better enforce state regulations to protect seagrass beds that provide habitat for valuable fishes, sea turtles, and manatees.
- Protect natural spring flows and enhance access to springs for manatees.
- Expedite contingency plans for protecting manatees in the event of power plant closures.

Why Is the Conservation of Protected Marine Species Important?

Florida is home to many unique but imperiled marine wildlife species, including corals, sea turtles, and manatees. Florida hosts 90 percent of all sea turtle nesting in the continental United States, and three species that nest in Florida are either endangered or threatened. Florida is the primary place in the nation to find manatees, which are listed as endangered under state and federal law and face major threats as they navigate the waters around Florida. Notably, the warm waters of our shallow coastlines host the largest and most diverse grouping of corals in the continental United States.

Sea Turtles

Florida's middle and southern Atlantic beaches host some of the largest aggregations of nesting loggerhead sea turtles in the world, and protection of these beaches is critical to the loggerhead's long-term survival. Juvenile sea turtles migrate from the beaches where they hatch in order to forage, develop, and seek refuge in inshore and offshore habitats along the Florida coast, including seagrass beds and Florida's extensive coral and "worm rock" reefs. How Florida manages its beaches and its nearshore marine environments significantly impacts international protection and recovery of sea turtle populations. Sea turtles are protected under the federal Endangered Species Act of 1973 and Florida's Marine Turtle Protection Act. The fate of these turtle populations depends largely on the state's coastal management policies.

Manatees

The Florida manatee, a subspecies of the West Indian manatee, lives in shallow coastal waters on Florida's east and west coasts, as well as in freshwater rivers and springs. Florida manatees are listed as endangered under the federal Endangered Species Act and under Florida law. Manatees face many threats in Florida, including being injured and killed when struck by motorboats. Valuable manatee habitat is being degraded by stormwater pollution and boat activity; for example, vessels operating in shallow water churn up the seabed, leaving long-lasting propeller scars in seagrass beds and turning the water turbid with sediment.

Manatees are a tropical/subtropical species, and Florida is at the northern limit of their range. Historically, in cold months when water temperatures drop below 68 degrees Fahrenheit, manatees would migrate to the most southerly waters in Florida or to natural springs where they would find warmer water. Currently, nearly 80 percent of the state's manatee population relies largely on water warmed by discharges of electric-generating power plants for their thermoregulation needs, and many of these aging facilities may be reaching the end of their existing operational lifespan. In addition, all over the state the volume of flow in natural warm water springs is declining because of increased groundwater withdrawal to accommodate new development, limiting the amount of warm water available to manatees during the winter months. Whether manatees will adapt and find other sources of warm waters or suffer catastrophic die-offs is unknown, but scientists consider this the ultimate threat to long-term manatee survival.

Coral Reefs

Florida is the only state in the continental United States with extensive shallow coral reef formations near its coasts. The Florida Reef Tract off the Keys is the most extensive living coral reef system in North American waters and the third largest in the world.²² These reefs extend from Martin County on the Atlantic coast, to the Dry Tortugas in the Gulf of Mexico. Coral reefs are specialized habitats that provide shelter, food, and breeding sites for numerous marine plants and animals. They form a breakwater for the adjacent coast, providing natural storm protection. They are tremendously important to Florida's economy, providing billions of dollars in revenues to the state, and contribute greatly to the total value of Florida's fisheries.²³

Underneath Florida's picturesque waters and out of sight to most, these precious coral reefs are dying. From 1996–2001, the Keys experienced a staggering 40 percent decrease in coral cover. There are numerous contributors to this decline. Overfishing, as explained in the previous section on marine ecosystems, is one of them. Rapid human population growth, use of more efficient fishing gear, and inadequate management and enforcement have led to depletion of key functional groups of reef species in many locations, with cascading impacts on coral reef habitats and associated species and ecosystems. Many sources of pollution are causing harm, such as sewage from boats and land, in addition to water runoff containing chemicals, fertilizers, silt, and debris from residential, industrial, and agricultural areas. Construction activities (like dredge-and-fill) can damage coral habitat by causing burial, sedimentation, and murky water conditions. Every year, careless boaters run aground or are not using designated anchoring buoys and moorings, destroying coral colonies that are hundreds of years old. Two coral species, elkhorn and staghorn, have reached such perilously low numbers that the federal government has added them to the Endangered Species List. They have declined by 97 percent since the 1970s. 26

What Was Done in 2007 and 2008 to Address Protected Marine Species?

The FWC is involved in numerous sea turtle conservation activities and, by its actions, appears committed to sea turtle protection. The FWC provides science-based comments on various DEP permits for activities impacting sea turtles. In 2007 and 2008, FWC staff issued almost 300 comment letters in its review of DEP's Coastal Construction Control Line Program, Joint Coastal Permit, and Environmental Resource Permit applications. It works closely with both DEP and federal agencies to ensure that beach restoration activities avoid harmful impacts to sea turtles, nesting beaches, and critical nearshore habitats. In 2007, the agency offered extensive comments aiding in the development of new coastal armoring regulations for giant sandbag "geotubes." The resulting regulations adopted by DEP ensure that geotubes are adequately regulated and will not harm sea turtle nesting habitat. In 2006 and 2007, the agency implemented new policies to eliminate sea turtle hatcheries and promote

in situ nesting throughout the state. In order to reduce the impacts of artificial beach lighting on turtles, the agency works with local governments to develop protective lighting ordinances. Through workshops and web-based information, the agency has recently developed a lighting fixture/lamp certification process for developers and citizens to facilitate the installation of "sea turtle friendly" lighting.

In 2008, the Florida legislature considered proposed legislation to provide increased protection for seagrass beds, which are important manatee habitats.²⁷ Whereas the legislation initially received widespread support from the conservation community, a controversial amendment was adopted that largely negated the benefits of the original bill. Although the bill was passed by the legislature, there was a united effort by the conservation community requesting the governor to veto the bill, which he did.

In 2008, the legislature also considered a bill to increase protection for Florida's natural springs; this would have provided greater protection of essential habitat for manatees and many other aquatic species.²⁸ The proposed legislation would have developed mechanisms to identify best management practices for protection, restoration, and preservation of Florida's springs; promoted educational awareness programs; and created a Florida Springs Stewardship Task Force to promote and facilitate conservation of Florida springs. Unfortunately, the bill died in committee.

The majority of Florida's springs that manatees use as warm water refuges during colder months do not have established minimum flows and levels. The FWC has acknowledged the need to establish such flows and levels and has included this as a priority action within the Florida Manatee Management Plan that was adopted in 2007. The management plan also recognizes the importance of maintaining warm water sources during winter months and calls for identifying alternatives to industrial warm water outflows like power plants.

In 2007, the FWC commissioners, at the behest of Governor Crist and in response to an overwhelming outpouring of concern from the conservation community, voted to reconsider controversial new rules that govern the process for listing and delisting species to be protected under the state Endangered Species Act. These rules were widely expected to result in the downlisting of manatees from endangered to threatened, although there was little indication that the actual population status of the species had changed. The FWC is in the process of conducting a review of the new listing rules to evaluate this complex issue and better ensure the long-term survival and recovery of manatees.

DEP's Southeast Florida Coral Reef Initiative (SEFCRI) has four working groups that have been working for four years on identifying and implementing a number of actions needed to reduce key threats to coral reefs and associated reef resources, including educational public service announcements, brochures, a list of best management practices, and other guidance reports. Also in 2008, the governor supported and the legislature passed the Ocean Outfall Closure and Clean Oceans bills, which will help alleviate ongoing pollution damages to these reefs. (See Section 2 on reducing coastal and ocean pollution for more details).

What Can Be Done to Improve Grade?

- The legislature should enact strong seagrass protection measures in state aquatic preserves and promote efforts to increase public boater education about the value of seagrass to manatees and other marine species. Extension of these protections in all Florida waters should be strongly considered.
- The legislature should take up coral reef protection to reduce destruction and increase education on impacts to corals from boaters and other activities.
- ▶ Effectively implement a "frontal dune setback" to protect frontal dunes and encourage the landward siting of new construction, which would better protect the beach and dune system and would minimize the need of dredging projects that adversely affect coral reefs.
- Repeal the state's "gap closure law" that is allowing the armoring of undeveloped shorelines.
- Strengthen the management of the state's aquatic preserve system to ensure the protection of the habitats and diverse marine life associated with these preserves, including implementation of marine protected areas.
- The recommendations from SEFCRI to DEP need to be better implemented as requirements rather than just voluntary best management practices, especially regarding kind-for-kind mitigation, water quality improvements, and nutrient standards in coastal nearshore waters, particularly where corals exist.

Reduce Global Warming Pollution GRADE: A-

Responsible entities: Executive Office of Governor, Legislature, Public Service Commission, Department of Environmental Protection, Florida Fish and Wildlife Conservation Commission

Blueprint Recommendations To Consider:

- Reduce the pollution that causes global warming.
- Dramatically increase federal funding to state fish and wildlife agencies.
- Engage in the national debate advocating for mandatory limits on the nation's global warming pollution, and reengage in international cooperation on global warming.
- Address climate change issues, such as sea level rise and increased storm frequency and intensity in Florida coastal management policies.
- Use energy efficiency, renewables, and other clean energy technologies to meet growing energy needs.

Why Is Reduction of Global Warming Important?

Few coastal states are as vulnerable to the consequences of global warming as Florida, and we are already starting to see its effects. Average temperatures in parts of the state have increased by about two degrees Fahrenheit since the 1960s. Without a significant reduction in global emissions by carbon dioxide and other heat-trapping greenhouse gases over the next few decades, average temperatures in Florida will continue to increase, with average low temperatures in winter increasing three to ten degrees Fahrenheit and average high temperatures in summer increasing three to seven degrees Fahrenheit by 2100.²⁹ Global warming means more than just hotter weather. It is contributing to higher ocean temperatures, more extreme weather events, and rising sea levels. The higher concentration of carbon dioxide in the atmosphere is directly altering the chemistry of our oceans, causing the water to become more acidic. Left unchecked, all these changes will have a profound impact on Florida's coastal and marine ecosystems.

What Was Done in 2007 and 2008 to Address Global Warming?

In July of 2007, the governor held his first "Serve to Preserve Florida Summit on Global Climate Change" in Miami. Governor Crist signed multiple executive orders to address global warming pollution. These executive orders called for a target reduction in greenhouse gas emissions of state agencies and the State of Florida, and a mandate for creation of a greenhouse gas emission cap-and-trade program.³⁰

Also, Governor Crist and the Florida Legislature in the 2008 legislative session created the Florida Energy and Climate Commission. Housed within the Executive Office of the Governor, it is the primary organization for state energy and climate change programs and policies and will aide in implementing the recommendations of the Governor's Action Plan.

Additionally, the governor played an integral role in stopping new coal plants in Florida and appointed new commissioners to the Florida Public Service Commission (PSC) that shared his energy goals.

In 2008, the FWC commissioners held a wildlife and global warming summit. Through this summit, FWC passed a resolution acknowledging that climate change is causing negative impacts on Florida's ecosystems. FWC has also created an oversight board on climate change. Relying on the recommendations from the breakout groups of the summit, FWC plans to develop an agency strategic action plan.³¹

The legislature passed House Bill 7135 in 2008. This bill created the Florida Climate Protection Act, which authorizes DEP to develop a greenhouse gas cap-and-trade program. The legislature also directed the PSC to develop a renewable portfolio standard (RPS) of 20 percent. The legislature required that these initiatives must come back to the legislature for ratification, thereby slowing their implementation.

Legislators also delayed implementation of the newly enacted California clean car standard by mandating that DEP's clean car rule must come back to the legislature for authorization prior to implementation.

The Department of Community Affairs has been instructed, through the governor's executive order, to improve the energy efficiency of new buildings and appliances by revising the Florida energy code for building construction.

The Governor's Action Team on Energy and Climate Change established technical work groups (TWG), one of which was the Adaptation Technical Work Group that addressed ways to prepare for the coastal impacts of global warming, including sea level rise and coastal storms. Its final report includes a host of strategies and goals aimed at ensuring the long-term protection and resiliency of the coastal system. Many of the recommendations of the Coalition's 2008 global warming report *Preparing for a Sea Change in Florida*, ³² including regarding the development of coastal retreat/relocation strategies and a reassessment of the Coastal Construction Control Line Program, are noted in the TWG's final report. The challenge now is to begin implementation of these recommendations. DEP has been instrumental in providing support to the work of the Action Team.

DEP has also finished rulemaking on the diesel idling standard, which prohibits idling for greater than five minutes if certain criteria within the rule are met.³³

What Can Be Done to Improve Grade?

- The governor should continue to exert his leadership on the issue of climate change and be more engaged in the national debate on greenhouse gas emissions.
- There needs to be greater consideration of climate change impacts in agency decisions on ocean and coastal resources.
- There needs to be greater emphasis on coastal and ocean ecosystem resilience in order to withstand additional stresses of climate change and ocean acidification.
- There needs to be agency implementation of the recommendations contained in the Adaptation Technical Work Group report.

Strengthen Ocean Governance GRADE: D

Responsible entities: Executive Office of Governor, Cabinet, Legislature, Department of Environmental Protection, Florida Fish and Wildlife Conservation Commission

Blueprint Recommendations To Consider:

- Hold a governor's ocean and coastal symposium in the first six months of the new incoming governor's administration to develop a plan of action for better oceans and coastal protection.
- Create an ocean and coastal policy office.
- Restore the operating budget of the Florida Oceans and Coastal Resources Council.
- Create a coastal commission/council to reinvigorate the Coastal Zone Management Act consistency review process.
- Develop increased coordination among the numerous state and federal agencies. (See Blueprint for detail.)
- Make Florida an innovative leader in the informal regional group, the Gulf of Mexico Alliance.
- Develop science-based, regional ocean and coastal governance plans to protect, maintain, and restore ecosystems.
- Make the public more aware of Florida's marine fisheries and coastal habitat issues and needs.
- Provide permanent funding for environmental education and stewardship projects.
- Provide more support for volunteer research and conservation programs.

Why Is Strengthening Ocean and Coastal Governance Important?

Fractured government programs on ocean and coastal policy create a confusing array of regulations that prove frustrating to citizens and businesses and undermine effective marine protection. Florida has coastal and marine programs housed in various entities, including within the departments of Environmental Protection, Agriculture, and Community Affairs, and the Florida Fish and Wildlife Conservation Commission, with little policy coordination or synergy among them and no overarching vision of how these resources should be managed. Despite many laws and plans, our valuable coastal and ocean natural resources continue to decline. A more coordinated, integrated approach needs to be developed for marine and coastal resource protection and management that emphasizes ecosystem management and maintenance of ecosystem services, with higher priority given to such management by the state. This would help reverse the declines being experienced by these valuable resources.

What Has Been Done in 2007 and 2008 to Strengthen Ocean and Coastal Governance?

There has been little high-level attention paid to the overall health of the state's coastal and ocean resources despite their importance to the state's economy and ecology. There is no comprehensive strategy, policy, or coordinating mechanism for managing and protecting these resources. The state's Coastal Zone Management

Act consistency review process, which used to be an important means of coordinating state agencies' actions on important development issues, has fallen into disrepair, with nothing to replace it. Issues are dealt with on a piecemeal basis with no overarching strategy to guide individual agency decisions or to help coordinate decision making among different state agencies. The Florida Oceans and Coastal Resources Council, an advisory body to the governor, legislature, and state agencies, has done well to make recommendations regarding the state's ocean research priorities and commission an economic valuation of the state's ocean and coastal economy, but has yet to make management recommendations, despite the legislative directive to do so. The governor and legislature did fund the Council this past year. Finally, while Florida has done good work up to this point, the state needs to increase its leadership role in the Gulf of Mexico Alliance (GOMA) with the help and support of the governor's office. GOMA is a partnership of Gulf Coast governors supported by federal agencies, which is seeking to address issues of common concern to the Gulf region, including water quality, coastal hazards, and other issues of regional significance.

What Can Be Done to Improve Grade?

Most of the Coalition's recommended actions regarding ocean governance remain to be acted upon. The following should be done:

- Create an ocean and coastal policy office under the Executive Office of the Governor.
- The governor should hold a major ocean and coastal symposium to promote better coordination of an action plan among state and federal agencies responsible for managing coastal and ocean resources.
- Invigorate the Coastal Zone Management Act consistency review process, which could be used to coordinate and streamline state and federal funding and permitting decisions, particularly in light of federal and state economic stimulus infrastructure development plans.
- The Florida Oceans and Coastal Resources Council should identify new management strategies to conserve coastal resources.
- DEP and the governor should take more of a leadership role in the Gulf of Mexico Alliance.
- FWC should engage in ways to better protect and manage marine fisheries and other coastal and marine resources through an ecosystem-based approach, including involving federal partners in these decisions.

Endnotes

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