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**CLIMATE CHANGE ACTION PLAN
FOR THE**
**Florida
Reef System**
2010-2015

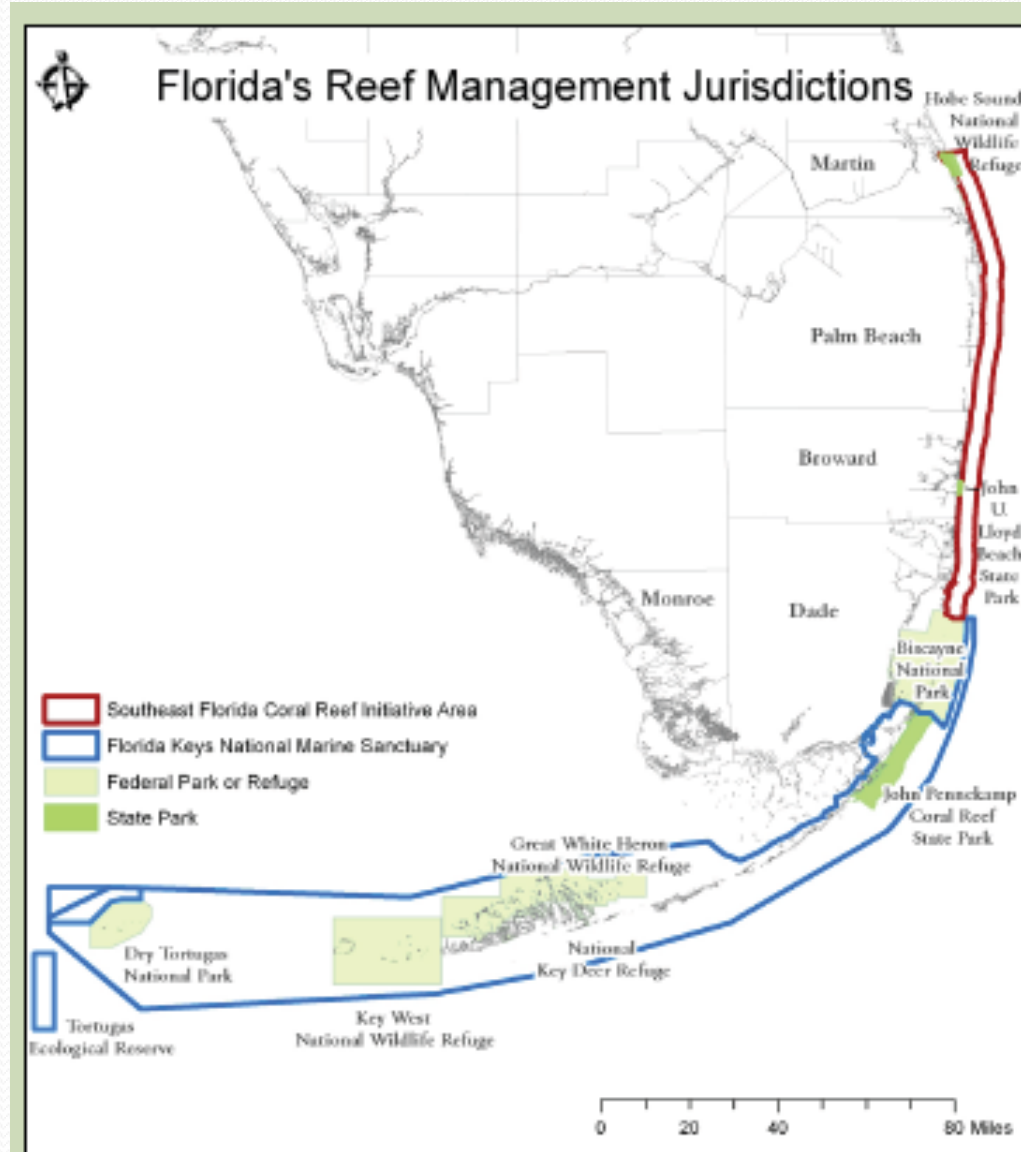
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A product of the Florida Reef Resilience Program



Climate Change Action Plan for the Florida Reef System 2010-2015

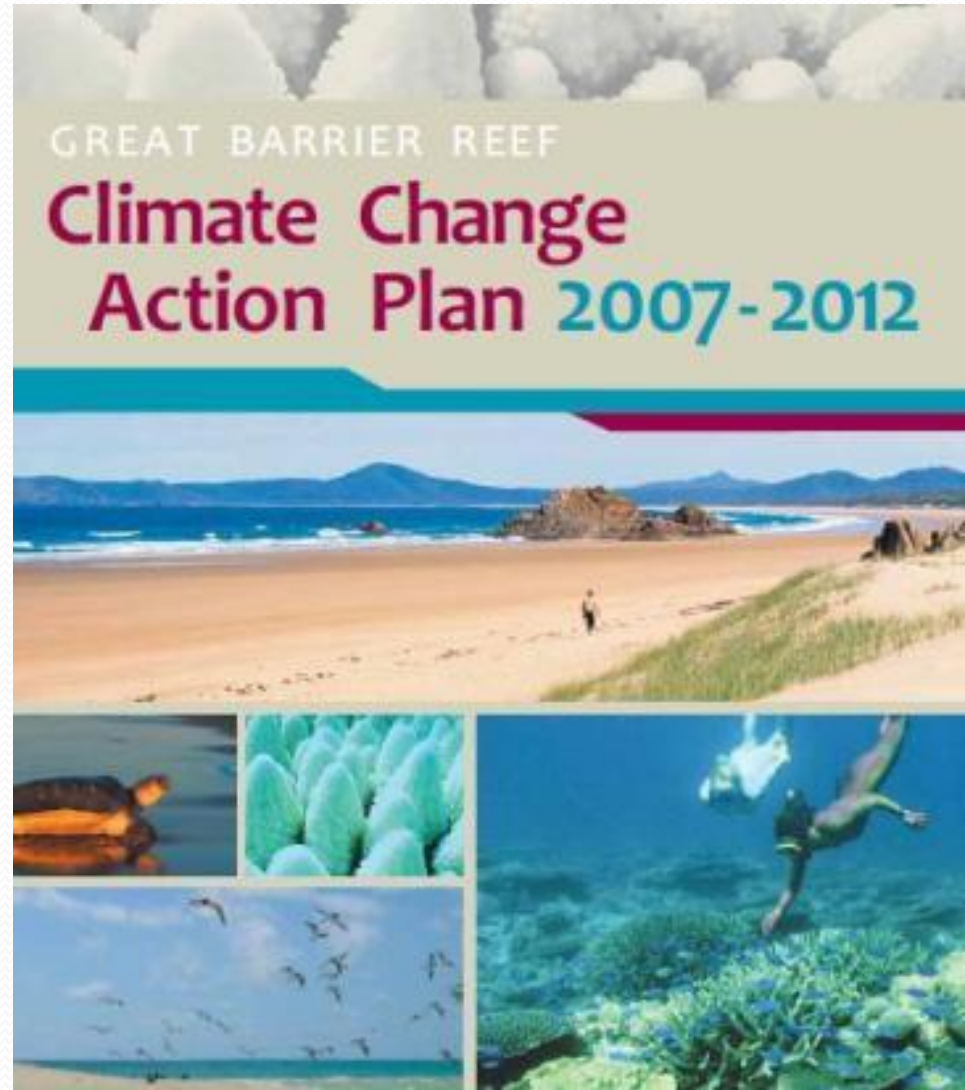
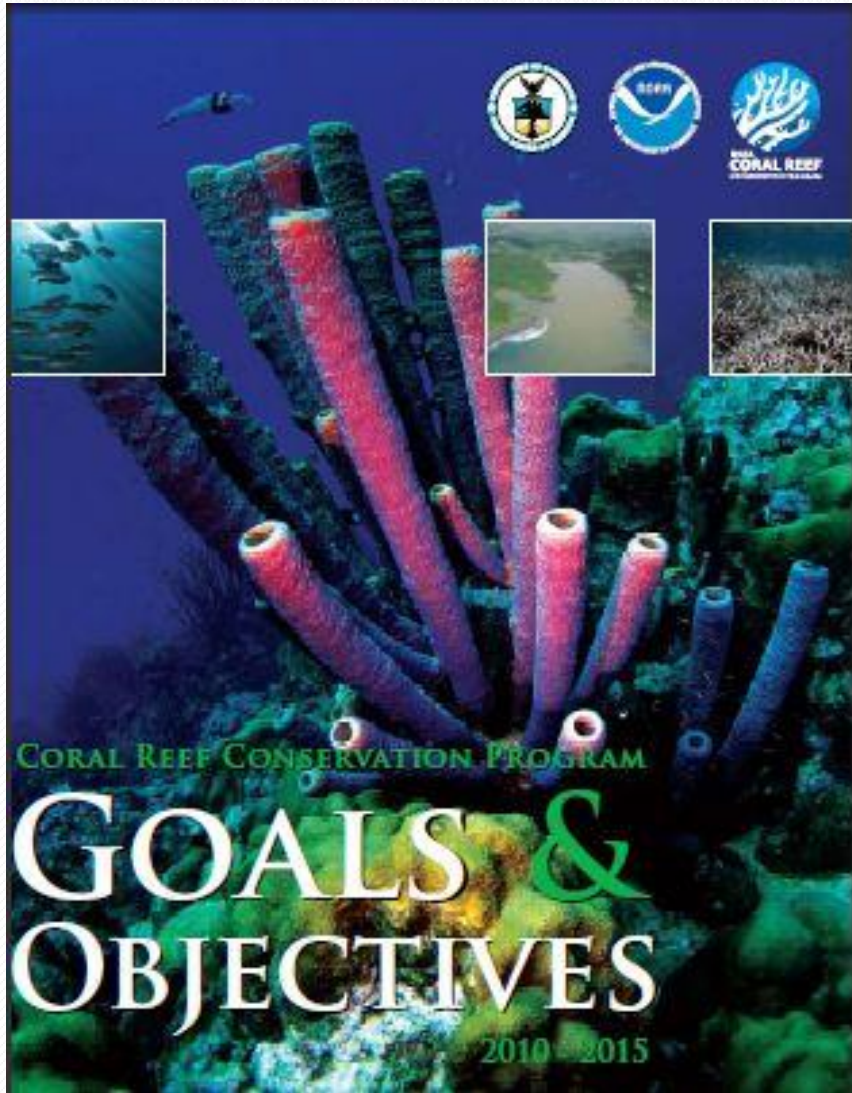
Recognizes the need to reduce local impacts to increase resilience and offers a framework of adaptable actions throughout the entire 300 nm of the FL Reef System to comprehensively address the complex factors associated with climate change.



Action Plan Goals

- Goal 1: Increase coral reef resilience to climate change and ocean acidification through effective management strategies and actions.
- Goal 2. Identify, understand, and communicate risks and vulnerability of Florida's coral reef ecosystems, ecosystem services, and dependent human communities to climate change and ocean acidification.
- Goal 3. Enhance strategic management of Florida's coral reef ecosystems through improved and applied understanding, forecasts, and projections of climate change and ocean acidification impacts.

Draws heavily from...



...and numerous other sources

Actions derived from:

- **Great Barrier Reef Climate Change Action Plan 2007 – 2012**
- **NOAA Coral Reef Conservation Program Goals & Objectives 2010-2015**
- **The FRRP “Coping with Climate Change” Conference 2008**
- **The Florida Governor’s Action Team on Energy and Climate Change**
- **Miami-Dade County CC Advisory Task**
- **Florida Coastal and Ocean Coalition**
- **The Florida Oceans and Coastal Council**
- **Report by the Environmental Defense Fund -Corals and Climate Change: Florida’s Natural Treasures at Risk**
- **Report by Tufts University -Florida and Climate Change – The Costs of Inaction.,**
- **Florida Fish and Wildlife Conservation Commission (FWCC)-Florida’s Wildlife on the Frontline of Climate Change – Climate Change Summit Report, 2008**
- **US Coral Reef Task Force**
- **Draft Priority Coral Reef Management Goals and Objectives for Florida 2009,**
- **“A Call to Action for Coral Reefs.” Dodge et al. Science Vol 322 10 October 2008**
- **The Honolulu Declaration on Ocean Acidification and Reef Management 2008**
- **Florida’s Resilient Coasts: A State Policy Framework for Adaptation to Climate Change 2008**
- **Fourth Assessment Report of the Intergovernmental Panel on Climate Change**

Ranked by members of the Florida Reef Resilience Program Steering Committee

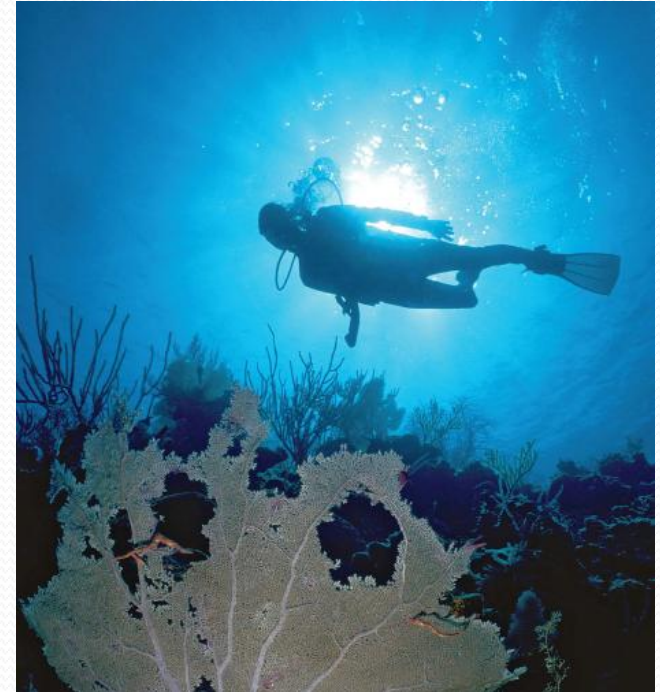
❖ 40 Specific Actions

- 22 Management
- 10 Social/Outreach
- 8 Research

❖ 6 Overarching Enabling Conditions

Summary of Top Ten Actions

1. Work with Florida's coral reef management jurisdictions to improve regulations and management that facilitate adaptation to climate change and ocean acidification. Evaluate and revise existing programs and strategies to optimize their effectiveness and make them more robust in the context of creating resilience to climate change.



2. Develop and implement a marine zoning plan that incorporates resilience-based concepts to provide maximum protection from non-climate stresses for all reef types and associated habitats in the Florida Reef System. This plan must also ensure connectivity between reefs and their associated nursery habitats.

3. Integrate climate change predictions and uncertainties into Florida's comprehensive planning laws and procedures, particularly in coastal areas. Include sea level rise adaptation and mitigation planning in county and municipal comprehensive plans.



4. Continue and expand the Florida Reef Resilience Program's "Disturbance Response Monitoring" and Mote Marine Laboratory's "Bleach Watch" activities throughout the five-county area.



5. Decrease the likelihood of negative fishing, diving, and other reef use impacts to key habitats and important functional groups of plants and animals (e.g. herbivores) by increasing law enforcement presence and regulatory compliance.





6. Develop scientific climate change fact sheets tailored for reef users, community members, visitors, elected officials, businesses and industries to increase understanding of and support for actions to increase resilience. Use multiple outlets (e.g. news media, radio, brochures, community meetings, social networks, blogs and websites) to communicate facts.

7. Forecast the potential social and economic effects of climate change on reef-dependent industries and communities to measure their vulnerability and resilience and determine cost-to-benefit ratios of any proposed climate change mitigation/adaptation measures. Support the creation of industry-specific business adaptation plans for diving, fishing and tourism industries.



8. Increase awareness and appreciation of the Florida Reef System and encourage a sense of urgency for its sound management and protection.



9. Ensure long term, question-driven monitoring of environmental variables linked to coral bleaching and other climate change impacts throughout the Florida Reef System. Integrate monitoring results into a coastal observing network that informs the evolving questions underlying protection and management of marine resources.

10. Develop scientific models of the Florida Reef System to help predict its responses to physical, chemical, and socio-economic shifts associated with climate change and ocean acidification, and the interactions of these global processes with local stressors (e.g. pollution, over-fishing, etc).
Determine and map areas of high and low resilience to climate change in order to prioritize management efforts.

Enabling Conditions

1. Greenhouse gas reductions worldwide
2. Completion of Everglades Restoration
3. Clean up of the Mississippi River Watershed
4. Coastal Marine Spatial Planning at regional scale
5. Regional management and connectivity of Gulf of Mexico and Caribbean Sea
6. Actions of this plan need to be incorporated into regional and local government comprehensive plans



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