

Biscayne Bay Regional Restoration Coordination Team

Draft Combined Objectives

January 16, 2004

Goal O: Overarching Themes	Goal 1: Readily Accessible & Appreciated	Goal 2: Support Uses & Economic Activity	Goal 3: Ecological/Physical Restoration
A. Coordination	A. Education & Awareness	A. Fishing	A. Pollution/Water Quality—Land Based
B. Resources and Funding	B. Vessel Traffic	B. Boating Uses	B. Pollution/Water Quality—Marine Based
	C. Vessel Access	C. Sustainable Uses	C. Watershed/Coastal Development
	D. Public Access	D. Marine Industries (Infrastructure)	D. Fishing Impact
	E. Signage	E. Overarching	E. Water Management (timing and flow)
	F. Land Use		F. Native Biodiversity & Imperiled Species
	G. Miscellaneous		G. Habitat

Goal O: Overarching Themes
Sub-Group A: Coordination

Draft Combined Objectives

1. Integrate and coordinate ongoing regional restoration plans and land-based activities occurring in the watershed with existing management processes in protecting Biscayne Bay. (BBPI, Overarching Themes and Key Actions, p. 13 and BBPI, Specific Issues and Recommendations, p. 26)
2. ~~Continue Form~~ a Science Committee, integrated with the Science Committee of the South Florida Ecosystem Restoration Task Force, to coordinate the identification of needed scientific research, monitoring, and restoration activities necessary for the welfare of Biscayne Bay. This committee ~~shoud~~ provides a vehicle for formal interaction with science, management, and regulatory groups in Biscayne Bay and associated ecosystems. (BBPI, Overarching Themes and Key Actions, p.13)
3. Guide efforts and prioritize activities to balance appropriate economic use with improved public access, increased habitat restoration, and environmental protection consistent with the BBRRCT's Biscayne Bay Action Plan. (BBPI, Overarching Themes and Key Actions, p. 15)
4. Expand the Marine Advisory Support Team (MAST) to include interagency marine regulatory task force to address baywide enforcement issues. (BBPI, Specific Issues and Recommendations, p. 25) (3)

5	4	3	2	1

Notes:

Objectives Already Included

None

Objectives Not Included

1. Reduce duplication, eliminate “gaps” and resolve conflicts among agencies and groups by securing formal approval/agreement before project implementation. (BBRRCT) (1)
2. Increase the profile of Biscayne Bay in CERP. (BBRRCT) (2)
3. Management of Biscayne Bay must possess a dynamic research, policy, management, and regulatory structure that is responsive to dynamic long term stressors such as sea level rise and water and sediment quality, and that incorporates improved scientific knowledge. (BBPI, Overarching Themes and Key Actions, p. 17)
4. Ongoing regional restoration plans and land-based activities occurring in the watershed should be integrated and coordinated with existing management processes in protecting Biscayne Bay. (BBPI, Specific Issues and Recommendations, p. 19) (similar to 1 above)
5. Build any future management activities upon existing efforts, rather than “reinventing the wheel”. (BBPI, Specific Issues and Recommendations, p. 26) (1 above)
6. Form a Biscayne Bay Project Coordination Team as part of the Working Group of the South Florida Ecosystem Restoration Task Force. (BBPI Overarching Themes and Key Actions, p. 15 and BBPI, Specific Issues and Recommendations, p. 27)
7. Improve interagency coordination to enhance management processes and result in better protection and restoration of bay resources. (BBPI, Specific Issues and Recommendations, p. 27) (1 – 4 above)
8. Increase enforcement. (BBRRCT—Supports Uses & Economic Activity, Overarching) (4)

Goal O: Overarching Themes
Sub-Group B: Resources and Funding

Draft Combined Objectives

1. Obtain funding for the most urgent science need, which is using ecological and physical criteria, including the application of numerical models, to determine the quantity, timing, and distribution of freshwater flow needed to protect and restore Biscayne Bay and to reestablish a viable estuarine ecosystem in the near shore and coastal wetland zone of western Biscayne Bay. (BBPI, Overarching Themes and Key Actions, p.13)
2. Obtain long-term research funding to build scientific knowledge about the bay that can be used in regional water management planning processes to protect and restore the bay, as well as funding for interaction with the public and its representatives. (BBPI, Overarching Themes and Key Actions, p. 13 and BBPI, Specific Issues and Recommendations, p. 22)
3. Obtain funding to support the continuation of major habitat restoration projects and the development and implementation of a process for comprehensive planning and oversight of bay habitat restoration. (BBPI, Overarching Themes and Key Actions, p. 14)
4. Obtain adequate funding for acquisition of lands currently identified as important in providing protective buffer or water redistribution functions and accelerate identification of any additional lands needed to provide these functions. (BBPI, Overarching Themes and Key Actions, p. 14)
5. Obtain funding to mark channels, seagrass beds, and coral areas and provide for maintenance for markers and signage. (BBPI, Overarching Themes and Key Actions, p. 14)
6. Obtain adequate funding for the administrative costs and dedicated staff for the Biscayne Bay Project Coordination Team (now BBRRCT). (BBPI, Overarching Themes and Key Actions, p. 15)
7. Obtain funding for the purpose of public education and outreach regarding the long term health of the Biscayne Bay ecosystem and south Florida's dependency on it. (BBPI, Overarching Themes and Key Actions, p. 16)
8. Increase funding and other resources for enforcement, public information, signage and its maintenance, and regulatory efforts to increase compliance rate. (BBPI, Specific Issues and Recommendations, p. 25)

5	4	3	2	1

Notes:

Notes Continued:

Objectives Already Included

None

Objectives Not Included

1. Secure funding support to implement Biscayne Bay restoration projects (\$10 million per year). (BBRRCT)
2. Acquire coastal wetlands and other open lands in southeastern Miami-Dade County near the bay to create a protective buffer for the bay and help redistribute freshwater inflows to Biscayne Bay, and accelerate identification of any additional lands needed to provide these functions. (BBPI, Specific Issues and Recommendations, p. 20) (same as 4 above)
3. Obtain funding for the development of a strategic science plan. (BBPI, Specific Issues and Recommendations, p. 22)
4. Obtain a greater and more consistent level of funding to assist management programs and scientific studies aimed at restoration and enhancement of Biscayne Bay, especially with regard to ongoing regional water management planning processes. (BBPI, Specific Issues and Recommendations, p. 27) (2 and 3 above)
5. Obtain additional state funding of Biscayne Bay projects in order to leverage matching funds, greatly enhancing the value of the initial state allocation. (BBPI, Specific Issues and Recommendations, p. 27)
6. Increase dedicated funding from marine law enforcement returned to Bay and users. (BBRRCT—Supports Uses & Economic Activity, Overarching)
7. Acquire coastal and watershed lands. (BBRRCT—Supports Uses & Economic Activity, Overarching) (4)
8. Establish a dedicated and consistent funding source for education outreach / access for several million dollars annually within the next 3 years. (BBRRCT—Readily Accessible & Appreciated, Education & Awareness)
9. Establish a dedicated and consistent funding source to increase enforcement by \$xx,xxx,xxx within x years in order to decrease the number of violators within the next 3 years. (BBRRCT—Readily Accessible & Appreciated, Vessel Traffic)
10. Establish a dedicated and consistent funding source to increase access by \$xx,xxx,xxx within x years. (BBRRCT—Readily Accessible & Appreciated, Public Access)
11. Establish a dedicated and consistent funding source to increase educational signage by \$xx,xxx,xxx within x years. (BBRRCT—Readily Accessible & Appreciated, Signage)
12. Establish a dedicated and consistent funding source to increase interpretive signage by \$xx,xxx,xxx within x years. (BBRRCT—Readily Accessible & Appreciated, Signage)
13. Establish a dedicated and consistent funding source to increase regulatory signage by \$xx,xxx,xxx within x years. (BBRRCT—Readily Accessible & Appreciated, Signage)
14. Establish a dedicated and consistent funding source to increase directional signage by \$xx,xxx,xxx within x years. (BBRRCT—Readily Accessible & Appreciated, Signage)
15. Establish a dedicated and consistent funding source to increase land acquisition by \$xx,xxx,xxx,xxx within x years. (BBRRCT—Readily Accessible & Appreciated, Land Use)

Goal 2: Supports Uses & Economic Activity
Sub-Group A: Fishing

Draft Combined Objectives

1. Restore 100% sustainable native fish populations by 2013. (BBRRCT)
2. Restore 100% native fish population diversity by the year 2013. (BBRRCT)
3. Increase size of fish to historical size frequencies by the year 2018. (BBRRCT)
4. Reduce 100% incidental by-catch by the year 2008. (BBRRCT)
5. Optimize 100% commercial harvest by the year 2010. (BBRRCT)
6. Increase 100% use of sustainable fishing techniques and practices by the year 2008. (BBRRCT)
7. Increase 100% environmentally knowledgeable employment in commercial / recreational fishing and related industries by the year 2013. (BBRRCT)

5	4	3	2	1

Notes:

Objectives Already Included

None

Objectives Not Included

1. Improve fishing harvest and effort information by the year 2006 and ongoing. (BBRRCT) (moved to action steps) (5)

Goal 2: Supports Uses & Economic Activity
Sub-Group B: Boating (uses)

Draft Combined Objectives

1. Increase adherence to boating laws and regulations as measured by reduction in accidents/fatalities, reduced lack of compliance to laws and regulations given maintained law enforcement effort by 20% by the year 2005 and 50% by the year 2008. (BBRRCT)
2. Decrease groundings and propeller scars by 50% by the year 2008 and 100% by 2013 and ongoing. (BBRRCT)
3. Decrease boating casualties (human & manatees) by 50% by 2008 and 100% by 2013. (BBRRCT)
4. Decrease debris from boaters including derelict boats by 50% by 2007, 100% by 2010 and ongoing. (BBRRCT)
5. Increase number of boating facilities by 2003. (BBRRCT)
6. Balance security and impact on boater experience *and commerce (cruise, fishing and shipping industries)* by 2008 and ongoing. (BBRRCT)
7. Decrease conflicts between recreational and commercial use by 2008. (BBRRCT)
8. Decrease damage from boat anchorages by 50% by 2008 and 100% by 2013 and ongoing. (BBRRCT)
9. *Increase boating related business as measured by the gross annual economic value by 20% by 2015. (PM input).*

5	4	3	2	1

Notes:

Objectives Already Included

None

Objectives Not Included

1. Minimize commercial delays due to increased security 2008. (BBRRCT)

Goal 2: Supports Uses & Economic Activity
Sub-Group C: Sustainable Uses

Draft Combined Objectives

1. Increase number of visitors to parks by 25% by 2007 and 50% by 2010. (BBRRCT)
2. Reduce negative impacts of park visitors by 50% by 2006 and ongoing. (BBRRCT)
3. Increase number of scuba/snorkel activities by 25% by 2007 and 50% by 2010. (BBRRCT)
4. Increase *the eco-tourism employment, value and facilities of eco-tourism* by 25% by 2007 and 50% by 2010. (BBRRCT)
5. Increase number of trips via water-taxi in appropriate locations by 25% by 2007 and 50% by 2010. (BBRRCT)
6. Increase kayak/canoe sales/rentals by 25% by 2007 and 50% by 2010. (BBRRCT)
7. Increase opportunities for observing wildlife by 25% by 2007 and 50% by 2010. (BBRRCT)
8. Increase number of environmentally friendly food/drink establishments near the water by 25% by 2007 and 50% by 2010. (BBRRCT)
9. Increase *cultural/historical opportunities and visitors to cultural/historical sites experiences* by 25% by 2007 and 50% by 2010. (BBRRCT)
10. Increase historical signage by 25% by 2007 and 50% by 2010. (BBRRCT)
11. Assure Biscayne Bay activities are included in convention and visitors bureau promotional material by 2006 and ongoing. (BBRRCT)

5	4	3	2	1

Notes:

Objectives Already Included

None

Objectives Not Included

1. Increase employment in eco-tourism by 25% by 2007 and 50% by 2010. (BBRRCT) (4)
2. Increase eco-tourism facilities by 25% by 2007 and 50% by 2010. (BBRRCT) (4)
3. Increase number of visitors to cultural/historical sites by 25% by 2007 and 50% by 2010. (BBRRCT) (9)

Goal 2: Supports Uses & Economic Activity
Sub-Group D: Marine Industries (Infrastructure)

Draft Combined Objectives

1. Increase, or no net loss of, waterfront land for marine industry by 2006 and ongoing. (BBRRCT)
2. Increase employment opportunities in marine and boating industry by 2007 15% and 25% by 2010. (BBRRCT)
3. Increase efficiency and contiguity of deep and shallow water port areas by 10% by 2008. (BBRRCT)
4. Decrease non-water dependent uses on waterfront land by 5% by 2006 and ongoing. (BBRRCT)
5. Decrease negative impacts from dredging by 2005 by 100%. (BBRRCT)
6. Increase use of environmentally protective boat maintenance techniques 100% by 2005. (BBRRCT)
7. Improve sewer infrastructure for ports and marine facilities by 50% by 2008 and by 100% by 2013. (BBRRCT)
8. Increase ability to monitor port security 100% by 2006. (BBRRCT)

5	4	3	2	1

Notes:

Objectives Already Included

None

Objectives Not Included

1. Increase enforcement resources 100% by 2006. (BBRRCT) (8)
2. Phase out economic activities with negative Bay impacts that can't be mitigated or minimized. (BBRRCT—Supports Uses & Economic Activity, Overarching) (5, 6, 7)

Goal 2: Supports Uses & Economic Activity
Sub-Group E: Overarching

Draft Combined Objectives

Objectives moved to other sub-groups

5	4	3	2	1

Notes:

Goal 3: Ecological/Physical Restoration
Sub-Group A: Pollution/Water Quality—Land Based

Draft Combined Objectives

1. Assess and evaluate the applicable/appropriate methodologies and indicators to address tropical & subtropical water and sediment qualities and adjust methodology accordingly (predecessor to Objective #3) by December 31, 2006. (BBRRCT)
2. Develop and adopt water quality standards - toxics, emerging pollutants of concern, heavy metals, nutrients, bacteriological and other contaminants - for the restoration of Biscayne Bay as defined by biological requirements of native flora and fauna by December 31, 2006. (BBRRCT)
3. Reduce inputs of toxics, emerging pollutants of concern, heavy metals, nutrients, bacteriological and other contaminants from groundwater and surface water to the Bay by 10% per year until water quality standards are met by December 31, 2016. (BBRRCT)
4. Reduce contaminated sediments in canals by 80% by the year 2020. (BBRRCT)
5. Develop and implement a comprehensive BEST MANAGEMENT PRACTICES program to minimize stormwater runoff, point and non-point source pollution by December 31, 2005. (BBRRCT)
6. Develop a regulatory program to implement and enforce the above objectives 1-5 by December 31, 2016. (BBRRCT)
7. Evaluate impact of waste water reuse on wetlands of Biscayne Bay by December 31, 2004, *and if needed, develop an alternative to wastewater reuse to meet the ecological goals and objectives of Biscayne Bay to provide freshwater flows to the central and southern Biscayne Bay.* (BBRRCT)
8. Evaluate the potential impacts of air pollution and air deposition by 2005 on water quality by 2013. (BBRRCT)
9. Evaluate impacts from degraded infrastructure (old sewers and stormwater systems) and address necessary upgrades by 2010. (BBRRCT)
10. Minimize impacts from canal and river dredging to water quality via implementation of a BEST MANAGEMENT PRACTICES program by December 2005. (BBRRCT)

5	4	3	2	1

Notes:

Notes Continued:

Objectives Already Included

1. Assess and evaluate the applicable/appropriate methodologies and indicators to address tropical & subtropical water and sediment qualities and adjust methodology accordingly (predecessor to Objective #3) by December 31, 2006. (BBRRCT)
2. Develop and adopt water quality standards - toxics, emerging pollutants of concern, heavy metals, nutrients, bacteriological and other contaminants - for the restoration of Biscayne Bay as defined by biological requirements of native flora and fauna by December 31, 2006. (BBRRCT)
3. Reduce inputs of toxics, emerging pollutants of concern, heavy metals, nutrients, bacteriological and other contaminants from groundwater and surface water to the Bay by 10% per year until water quality standards are met by December 31, 2016. (BBRRCT)
4. Reduce contaminated sediments in canals by 80% by the year 2020. (BBRRCT)
5. Develop and implement a comprehensive BEST MANAGEMENT PRACTICES program to minimize stormwater runoff, point and non-point source pollution by December 31, 2005. (BBRRCT)
6. Develop a regulatory program to implement and enforce the above objectives 1-5 by December 31, 2016. (BBRRCT)
7. Evaluate impact of waste water reuse on wetlands of Biscayne Bay by December 31, 2004, *and if needed, develop an alternative to wastewater reuse to meet the ecological goals and objectives of Biscayne Bay to provide freshwater flows to the central and southern Biscayne Bay.* (BBRRCT)
8. Evaluate the potential impacts of air pollution and air deposition by 2005 on water quality by 2013. (BBRRCT)
9. Evaluate impacts from degraded infrastructure (old sewers and stormwater systems) and address necessary upgrades by 2010. (BBRRCT)
10. Minimize impacts from canal and river dredging to water quality via implementation of a BEST MANAGEMENT PRACTICES program by December 2005. (BBRRCT)

Objectives Not Included

1. Urgently pursue the goal of identifying and eliminating all sources of water and sediment quality degradation, including toxicity. (BBPI, Specific Issues and Recommendations, p. 19) (3, 6)
2. Decrease debris from land sources. (BBRRCT—Supports Uses & Economic Activity, Overarching) (9)
3. Decrease beach closures. (BBRRCT—Supports Uses & Economic Activity, Overarching) (3)
4. Improve sewage infrastructure. (BBRRCT—Supports Uses & Economic Activity, Overarching) (9)

Goal 3: Ecological/Physical Restoration
Sub-Group B: Pollution/Water Quality—Marine Based

Draft Combined Objectives

1. Eliminate 70% of 2004 baseline of trash and marine debris from natural environment and surrounding shoreline by December 31, 2010. (BBRRCT)
2. Eliminate 70% of 2004 baseline cruise ship pollution from discharges (bilge water, debris, oil/gas, anti-fouling agents, wastewater) December 31, 2010. (BBRRCT)
3. Eliminate by 70% of the 2004 baseline pollution levels from users/boats by Dec. 31, 2010. (BBRRCT)
4. Establish and implement a BEST MANAGEMENT PRACTICES program by 12/31/04 to minimize impacts *to water quality* from Bay and ocean dredging ~~and blasting to water quality~~. (BBRRCT)

5	4	3	2	1

Notes:

Objectives Already Included

1. Future dredging and filling should be the focus of scientific study to determine its impact on the water quality and hydrology of north Biscayne Bay. (BBPI, Specific Issues and Recommendations, p. 19) (4)

Objectives Not Included

1. Establish a 2004 baseline of trash, and marine debris by December 31, 2004. (BBRRCT) (moved to action steps) (1)
2. Establish a 2004 baseline of existence and levels of cruise ship pollution from discharges (bilge water, debris, oil/gas, anti-fouling agents, wastewater) by December 31, 2004. (BBRRCT) (moved to action steps) (2)
3. Establish a 2004 baseline level of pollution from users/boats by 12/31/2004. (BBRRCT) (moved to action steps) (3)
4. Establish and implement a BEST MANAGEMENT PRACTICES program by 12/31/04 to minimize impacts to water quality from Bay and ocean blasting (i.e. port expansion). (BBRRCT) (4)
5. Incentives to perform best management practices. (BBRRCT) (moved to action steps) (4)
6. Create process and identify funding to remove derelict vessels. (BBRRCT—Supports Uses & Economic Activity, Marine Industries) (moved to action steps) (1)
7. Establish a 2004 baseline of trash, and marine debris by December 31, 2004. (BBRRCT) (moved to action steps) (1)
8. Establish a 2004 baseline of existence and levels of cruise ship pollution from discharges (bilge water, debris, oil/gas, anti-fouling agents, wastewater) by December 31, 2004. (BBRRCT) (moved to action steps) (2)
9. Establish a 2004 baseline level of pollution from users/boats by 12/31/2004. (BBRRCT) (moved to action steps) (3)

Goal 3: Ecological/Physical Restoration
Sub-Group C: Watershed/Coastal Development

Draft Combined Objectives

1. Develop a land conservation plan for 100% of land necessary for Biscayne Bay restoration including increase acreage of natural habitat landward of the shoreline to maintain optimal estuarine productivity by 2006. (BBRRCT)
2. Achieve 100% compliance with permitting for coastal development. (BBRRCT)
3. Eliminate coastal development permits issued with variances to regulations. (BBRRCT)
4. Ensure all existing and future permits issued are consistent with Biscayne Bay Aquatic Preserve Act and rules by 12/31/2004. (BBRRCT)
5. Reduce negative impacts of coastal construction. (BBRRCT)
6. No net increase in impervious surfaces of development and redevelopment in Biscayne Bay watershed starting in 2006. (BBRRCT)
7. No net increase in coastal armoring starting in 12/31/04. (BBRRCT)
8. Increase the acreage of natural shoreline by 20% by 2010. (BBRRCT)
9. No net loss of natural habitat due to development starting on 12/31/04. (BBRRCT)
10. Use proactive growth management strategies rather than a reactive approach to the projected increase in human population growth in the watershed. (BBPI, Overarching Themes and Key Actions, p. 17)
11. The U. S. Army Corps of Engineers, District, and Miami-Dade County should safeguard the ecological needs of Biscayne Bay as they develop and implement land use and water management plans and projects. (BBPI, Specific Issues and Recommendations, p. 19)

5	4	3	2	1

Notes:

Objectives Already Included

None

Objectives Not Included

1. Implement BBPI recommendations on overpopulation and sustainability. (BBRRCT—Readily Accessible & Appreciated, Miscellaneous) (10)
2. Determine carrying capacity of Biscayne Bay. (BBRRCT—Readily Accessible & Appreciated, Miscellaneous) (10)
3. Carrying capacity of Biscayne Bay should be determined and not exceeded. (BBPI, Specific Issues and Recommendations, p. 24) (10)
4. Moratoria (BBRRCT) (moved to action steps) (1)
5. Move UDB (BBRRCT) (moved to action steps) (1)
6. Increase enforcement effectiveness (moved to action steps) (BBRRCT) (2)

Goal 3: Ecological/Physical Restoration
Sub-Group D: Fishing Impact

Draft Combined Objectives

1. Obtain reasonable understanding of ecology and population dynamics for target species. (BBRRCT)
2. Define sustainable take for all species. (BBRRCT)
3. Complete Fisheries Management Plan for BNP by December 31, 2004. (BBRRCT)
4. Complete Fisheries Management Plan for the rest of Biscayne Bay (including Barnes Sound) by December 2008. (BBRRCT)
5. Develop and implement commercial and recreational fisheries regulations to protect habitat and reduce *by-catch* by December 31, 2009. (BBRRCT)

5	4	3	2	1

Notes:

Objectives Already Included

1. Determine the status of fish and shellfish species, the extent of fishing effort, relative to the past, and the effect of fishing on target and non-target stocks in Biscayne Bay. (BBPI, Specific Issues and Recommendations, p. 20) (1, 2)

Objectives Not Included

None

Goal 3: Ecological/Physical Restoration
Sub-Group E: Water Management (timing & flow)

Draft Combined Objectives

1. Improve timing, distribution, quality, and quantity of freshwater inputs into Biscayne Bay by 50% of the difference between current and historical levels by 2020; and by 75% by 2050. (BBRRCT)
2. CERP to include Biscayne Bay restoration as an equal objective to Everglades restoration with regard to water resources as soon as possible, but no later than 2005. (BBRRCT)
3. Sea level rise effects to be determined as soon as possible, but no later than 2008, and considered in Biscayne Bay restoration, and other relevant studies and projects. (BBRRCT)
4. Increase water storage capability to address 80% of 100-year flood by 2016 to reduce the ecologically damaging pulse discharges to the Bay. (BBRRCT)

5	4	3	2	1

Notes:

Objectives Already Included

1. Implement BBPI recommendations on sea level rise. (BBRRCT—Readily Accessible & Appreciated, Miscellaneous) (3)
2. Determine relationship between water quantity and ecosystem health. (SWIM, Water Quantity, Objective 1) (1)
3. Develop methodologies to enhance surface water flow to the Bay. (SWIM, Water Quantity, Objective 2) (1)
4. Promote more groundwater flow into Biscayne Bay. (SWIM, Water Quantity, Objective 3) (1)
5. Improve circulation and flushing characteristics in identified problem areas. (SWIM, Water Quantity, Objective 4) (1)

Objectives Not Included

1. Coordinate the requirements for reestablishing estuarine conditions in Biscayne Bay with the redesign and replumbing of the Everglades flow. It is of the highest priority to take advantage of this opportunity. (BBPI, Specific Issues and Recommendations, p. 20) (1)
2. Using United States government and United Nations predictions of future sea level rise, carefully evaluate the resulting changes that will occur to Biscayne Bay, its margins, circulation, freshwater inflow, and habitats in response to global warming over the next 50 to 100 years. Incorporate resulting models of the future Biscayne Bay in all management, policy, economic, and remediation decisions. (BBPI, Overarching Themes and Key Actions, p. 17 and BBPI, Specific Issues and Recommendations, p. 21) (3)

Goal 3: Ecological/Physical Restoration
Sub-Group F: Native Biodiversity & Imperiled Species

Draft Combined Objectives

1. Reduce human-related mortality of imperiled species by 10% per year. (BBRRCT)
2. Increase the acreage of suitable imperiled habitat by 5% per year. (BBRRCT)
3. *Establish and implement* BMPs for dredge and blast activities to minimize their effects on imperiled species by December 2008. (BBRRCT)
4. Reduce habitat loss impairing native species diversity and imperiled species; especially critical habitat by xx% by 20yy. (BBRRCT)
5. Improve water quality parameters affecting imperiled species by 50% of the difference between current and historic conditions by 2020; and by 75% by 2050. (BBRRCT)

5	4	3	2	1

Notes:

Objectives Already Included

1. Promote population recovery of rare, threatened and endangered species. (SWIM, Environmental Protection, Objective 3) (5)
2. Continue to improve and expand monitoring of human-related impacts to endangered species, species of concern, and their habitats. Implement protection and recovery strategies for these populations. (BBPI, Specific Issues and Recommendations, p. 20) (1)

Objectives Not Included

1. Identify effects of dredging and blasting on imperiled species by December 2006. (BBRRCT) (3—moved to action steps)

Goal 3: Ecological/Physical Restoration
Sub-Group G: Habitat

Draft Combined Objectives

1. No net loss of seagrass and other benthic habitat coverage; degraded seagrass and other benthic habitat acreage enhanced by 5% per year until quality is restored. (BBRRCT)
2. No net loss of coastal wetland habitat; degraded coastal wetland habitat acreage enhanced by 5% per year until quality is restored. (BBRRCT)
3. Restoration of the water column habitat through improvement of water quality by reduction of pollutants by 10% per year until water quality standards are met. (BBRRCT)
4. Restore with native vegetation 5% per year of acreage infested with invasive exotic plants until exotics are completely removed; maintain restored acreage and prevent future spread. (BBRRCT)
5. Improve invasive exotic management techniques to eliminate impacts on native flora and fauna by xx% by 20yy. (BBRRCT)
6. Restore salinity regime along nearshore western Bay by improving timing, distribution, quality, and quantity of freshwater inputs into Biscayne Bay by 50% of the difference between current and historical levels by 2020; and by 75% by 2050. (BBRRCT)
7. Evaluate impacts of existing and proposed artificial reefs in Biscayne Bay (including unauthorized reefs). (BBRRCT)
8. Evaluate current and future impact of sea level rise on Bay ecology. *Incorporate resulting models of the future Biscayne Bay in all management, policy, economic and remediation decisions.* (BBRRCT)
9. Continue to pursue aggressive efforts that will continue the further reduction in turbidity within the waters of central and northern Biscayne Bay and will reduce physical damage to benthic communities and substrate. (BBPI, Specific Issues and Recommendations, p. 20)

5	4	3	2	1

Notes:

Objectives Already Included

1. Improve water transparency where needed to promote healthier and expanded bottom communities. (SWIM, Water Quality, Objective 7) (3)
2. Preserve and restore natural environments in the Bay and its watershed. (SWIM, Environmental Protection, Objective 1) (1, 2, 3, 4, 7)
3. Control non-native plants and animals so that they do not adversely affect the bay ecosystem. (SWIM, Environmental Protection, Objective 2) (5)
4. Develop and apply scientifically and economically sound methods for restoration and maintenance of freshwater wetland, coastal mangrove, and benthic seagrass and coral communities. (BBPI, Specific Issues and Recommendations, p. 20) (1, 2)

Objectives Not Included

1. The Biscayne Bay Aquatic Preserve Act is inviolate and should never be weakened. (BBPI, Overarching Themes and Key Actions, p. 14)
2. Adhere to the letter and intent of the Biscayne Bay Aquatic Preserve Act. (BBPI, Specific Issues and Recommendations, p. 26)
3. Revise permitting rules and regulations to achieve habitat restoration objectives by 2007. (BBRRCT) (action step for objective 2)
4. Revise permitting rules and regulations to achieve habitat restoration objectives by 2007. (BBRRCT) (moved to action steps)