

Biscayne Bay Surface Water Improvement and Management Plan - An Update

Restoration Plan Database: Crystal Reports of Individual Plan Summaries

I. BASIC PLAN DATA

Plan name:

Biscayne Bay Surface Water Improvement and Management Plan - An Update

Brief description of plan:

The Surface Water Improvement and Management (SWIM) Act which was passed by the Florida Legislature in 1987 and amended in 1991, mandated the preparation and implementation of a SWIM plan for Biscayne Bay. This document is an update of the Plan that was adopted in 1988 and modified in 1989. The purpose of this plan is to evaluate the effectiveness of initial strategies, identify new issues and opportunities facing the bay, and develop goals, objectives, strategies and projects to address these items. Solutions may involve continuing current efforts, changing ongoing projects or initiating new actions. This updated plan provides analysis of the extensive data collected since 1988 to document the effectiveness of the initial plan's strategies, new issues and problems, and solutions consistent with the SWIM Act. It attempts to identify all specific water quality problems and recommend solutions to many of them. The broad categorizations are (1) Degradation of Water and Sediment Quality, (2) Alteration of Hydrology, (3) Loss and Alteration of Natural Systems. Management goals and objectives were developed to provide direction and efficient management of Biscayne Bay. Projects are proposed that address the highest priority objectives and strategies. The goal categories of issues are (A) Water Quality, (B) Water Quantity, and (C) Environmental Protection. Not every objective necessarily leads to a project. Many recommended projects are broad in scope and address multiple strategies in their implementation. The plan emphasizes geographical areas where the most serious problems exist as Arch Creek, Miami River Canal, and South Dade County. The planning area is along the southeastern coast of Florida and is a marine ecosystem comprised of about 428 square miles and a drainage area of about 938 square miles, including 350 square miles of wetlands. Numerous reserves, National Parks, sanctuaries, and preserves are encompassed.

Region the plan is located within:

South-Atlantic Region

Watershed(s) included within the plan:

S200x

Area plan covers (in square miles):

938.00 square miles

Plan scale:

Multi-county

Plan's lead organization(s):

South Florida Water Management District

Plan's Main Contact Information:

Richard Alleman
South Florida Water Management District
Planning Department
P.O. Box 24680
West Palm Beach, Florida 33416-4680
(561) 682-6716
ralleman@sfwmd.gov
www.sfwmd.gov/index.html

On-line version of plan:

www.sfwmd.gov/org/wrp/wrp_ce/projects/biscayne_bay_swim.html

Date of original plan:

1988

Date of plan update:

11/1995

II. TECHNICAL INFORMATION

Plan includes restoration goals: Y

Level of detail of the goals:

G

Summary of the goals:

(1) Preserve and restore natural environments in the Bay and its watershed □ mangroves, marshlands, restoration of coastal plant communities. Delineate and prioritize areas for enhanced protection and-or acquisition (wetlands inventory, GIS data), monitor epibenthic habitats and other appropriate communities as indicators of health and stability of biological resources. Initiate projects to stabilize shorelines, remove spoil, and create or enhance wetlands and reestablish freshwater flows as opportunities arise. (2) Control non-native plants and animals so that they do not adversely affect the bay ecosystem. Monitor recovery of mangrove swamps from Hurricane Andrew to determine if action is needed to control exotic vegetation. Support restoration of native vegetation to replace Australian pines destroyed by the hurricane. (3) Promote population recovery of rare, threatened and endangered species □ such as American crocodile, West Indian manatee, and Everglades snail kite. Evaluate potential sites identified for protection of critical habitat, continue to improve the salinity control structures to eliminate manatee fatalities, work with local governments and other agencies to develop and implement recovery and protection plans for threatened and endangered species. (4) Promote public understanding of habitat value and the benefits of restoration and endangered species protection.

Plan recommends or uses criteria for selecting restoration sites (e.g. cost benefit ratio, ecological benefits):

Y

Summary of the criteria:

Priority areas were selected based on the following criteria: a) These areas have significant known and documented problems and opportunities due to existing or pending land development, sources of pollution and water quality threats to Biscayne Bay resources. b) Each of these areas has a locally-supported, area specific planning initiative or support committee that functions as a local sponsor. The combination of local and regional involvement provides unique opportunities to build and leverage local interests and support, and to develop and implement coordinated and cooperative planning, construction and land acquisition projects. c) Previous SWIM planning efforts have initiated or identified specific remedial actions that can be taken to address at least some of the problems through cooperative basin-specific construction projects or action plans. d) Problems and opportunities in each of these areas can be linked, at least in part, to design or operation of the regional water management system, which lead to opportunities for leveraging of investments in District works.

Plan recommends restoration of specific project sites:

Y

Plan includes a discussion of funding sources:

N

Plan addresses long-term protection of restored sites:

N

Partners included in developing the plan:

Federal
State
Local

Type(s) of public outreach included during plan development:

Information not available

Plan includes public outreach as part of plan implementation (e.g. annual public meeting, local group participation):

Y

Plan discusses the application of innovative approaches to restoration:

N

Plan make use of GIS mapping capabilities:

Y

Plan addresses monitoring/reference sites for ecosystem level monitoring (baseline conditions) by:

G

Plan addresses monitoring/reference sites for project level monitoring by:

G

The plan discusses or coordinates with other restoration plans covering the same geographic area:

Y

Other plan names:

Biscayne National Park General Management Plan, C-111 General Reevaluation Report, Florida Keys National Marine Sanctuary, Biscayne Bay Aquatic Preserve Plan, Card Sound Aquatic Preserve Plan, Everglades Surface Water Improvement and Management (SWIM), SFWMD Water Management Plan, Lower East Coast Regional Water Supply Plan Florida Keys Area of Critical State Concern Plan, Dade County Comprehensive Plan, Biscayne Bay Management Plan, Miami River Master Plan, Miami River Water Quality Plan, Stormwater Master Plans

Plan contains detailed information on historic and/or current habitat size, rate of loss, acres restored or protected, etc.):

Y

Summary of this habitat information:

Coastal Upland Communities hammock, pineland, beach and dune. Coastal Wetland Communities mangrove (red, white, black and buttonwood) forests (basin, riverine, fringe, overwash and dwarf), mangrove shorelines and saltmarsh. Other Intertidal Communities sandy, muddy and rocky shores. Submerged Aquatic Communities seagrasses, hard bottom and bare bottom. Water Column Communities plankton and nekton.