

Florida Bay Science Program

A Synthesis of Research on Florida Bay

Compiled for the Science Oversight Panel

April 2003

with support from:
U.S. Geological Survey
Florida Caribbean Science Center
7930 NW 71st Street
Gainesville, Florida 32653

About this report

This report draws its material directly from syntheses compiled for the 2001 Florida Bay Science Conference. The Florida Bay Science Program organizes itself around five strategic research questions. Topical teams associated with each question consist of modelers and researchers working in the Bay and adjacent marine systems. These teams compiled the original synthesis documents.

In preparation for the 2003 Florida Bay Science Conference, the research teams have modified the existing synthesis documents to bring them up to date and implement a more uniform, common format. In some cases, entirely new documents have been drafted, such as the information here on ecosystem history and on nutrient dynamics. The present report compiles these separate documents into one and provides the reader with summary material as a guide to the contents.

Team Leaders:

Ecosystem History

Lynn Brewster-Wingard (USGS, Reston)

Physical Processes

Thomas Lee (University of Miami), Elizabeth Johns (NOAA/AOML), Peter Ortner and Dawn Boyer (NOAA/AOML, PMC)

Nutrient Dynamics

Joseph Boyer (Florida International University), Brian Keller (Florida Keys National Marine Sanctuary, PMC),

Algal Blooms

Gary Hitchcock (University of Miami), Ed Phlips (University of Florida), Larry Brand (University of Miami), Douglas Morrison (ENP, PMC)

Seagrass Ecology

Michael Durako (University of North Carolina at Wilmington), Joseph Zieman (University of Virginia), Michael Robblee (USGS, PMC)

Higher Trophic Level Species

Joan Browder (NOAA/NMFS), John Lamkin (NOAA/NMFS, PMC)

Editing and production:

William Nuttle (consultant), John Hunt (Florida FWC, PMC) and Mike Robblee (USGS, PMC)

Contents

Florida Bay Science	1-1
Summary of Findings	2-1
Ecosystem History	3-1
Physical Processes	4-1
Nutrient Dynamics	5-1
Plankton Blooms	6-1
Seagrass Ecology	7-1
Higher Trophic Level Species	8-1
Looking Ahead	9-1