



Technical Report No. 99-03

Data Management, Analysis, and Exchange Strategy

June 1999

Peace River and Watershed - Myakka River & Watershed
Coastal Venice/Lemon Bay/Gasparilla Sound/Cape Haze
Charlotte Harbor Proper - Pine Island Sound/Matlacha Pass
Estero Bay & Watershed - Tidal Caloosahatchee River & Watershed



Charlotte Harbor National Estuary Program

Policy Committee

Ms. Margaret Highsmith, Co-chair

*District Director, South District
Florida Department of Environmental Protection*

Mr. Tom Welborn, Co-chair

*Branch Chief, Wetlands, Coastal, & Water Quality
U.S. Environmental Protection Agency, Region 4*

Honorable Adam Cummings

Commissioner, Charlotte County

Honorable Bill Gorvine

Councilman, City of Punta Gorda

Honorable Ray Judah

Commissioner, Lee County

Honorable Paul Monroe

Councilman, City of Cape Coral

Dr. Molly Krival (Ex-officio member)

*Past President,
J.N. "Ding" Darling Wildlife Society*

Mr. Robert Tewis

Natural Resources Manager, City of Fort Myers

Honorable Joseph Fink

Commissioner, City of North Port

Honorable Steve Brown

Councilman, City of Sanibel

Honorable Patricia Glass

Commissioner, Manatee County

Mr. William Hammond

*Past Member, Governing Board
South Florida Water Management District*

Mr. James Beever

*Biologist
Florida Game and Fresh Water Fish Commission*

Mr. Jim Sampson (Ex-officio member)

*Director, Environmental Affairs
CF Industries, Inc.*

Mr. John Mulholland

Councilman, Town of Fort Myers Beach

Mr. Medard Kopczynski

Director of Growth Management, City of Venice

Honorable A.C. Cal Adams

Councilman, City of Bartow

Mr. Joe Kowalski

Planner, City of Arcadia

Mr. Gary Oden

County Manager, Hardee County

Honorable Shannon Staub

Commissioner, Sarasota County

Honorable T. Felton Garner

Commissioner, DeSoto County

Honorable John Albion

Commissioner, Lee County

Mr. Douglas Leonard

*Executive Director
Central Florida Regional Planning Council*

Mr. Edward Wotitzky

*Peace River Basin Board
Southwest Florida Water Management District*

Mr. Steven Seibert

*Secretary
Florida Department of Community Affairs*

Mr. Mike Perry (Ex-officio member)

*Senior Environmental Scientist, SWIM Section
Southwest Florida Water Management District*

Mr. Jeff Spence

*Director, Polk County Natural Resources
and Drainage Division*

Management Committee

Mr. Wesley "Bo" Crum, Chair

*Section Chief, Wetlands, Coastal, & Water Quality
U.S. Environmental Protection Agency, Region 4*

Technical Advisory Committee

Mr. Mike Perry, Coastal Co-chair

*Senior Environmental Scientist, SWIM Section
Southwest Florida Water Management District*

Mr. Jim Sampson, Inland Co-chair

*Director, Environmental Affairs
CF Industries, Inc.*

Citizens' Advisory Committee

Dr. Molly Krival, Chair

*Past President
J.N. "Ding" Darling Wildlife Society*

Mr. Robert Croft, Vice-chair

Charlotte County

Charlotte Harbor

National Estuary Program

4980 Bayline Drive, 4th Floor

North Fort Myers, FL 33917

Tel. 941/995-1777 Fax 941/656-7724

E-mail: chnep-upton@mindspring.com

Executive Summary

The strategy's purpose is to efficiently provide information to public and technical audiences, to link existing university resources and pertinent web sites, and ensure information is easier to find and in a usable format.

The Charlotte Harbor National Estuary Program undertook the development of a Data Management Strategy to provide improved access to data and to effectively communicate research being conducted in southwest Florida. As our region continues to grow, resource management issues increase in complexity. This, in turn, intensifies the need for citizens and scientists to efficiently access information, evaluate resource change, and monitor the quality of the environment.

The Data Management Strategy, a requirement as part of developing a Comprehensive Conservation and Management Plan (CCMP), documents priorities and alternatives for data gaps, data analysis, and data exchange for the greater Charlotte Harbor watershed. During its first year, the program's Management Conference identified and prioritized where data gaps exist, what data exchange needs are, and what data analyses need to be performed. As a result, recommendations were made to establish a regional system to support the exchange of new and existing technical information as well as methods to measure cumulative impacts. This report describes the progress of our data management strategy and presents specific recommendations.

To evaluate the public and scientific communities' data management interests and needs, the Charlotte Harbor National Estuary Program distributed public and technical surveys to citizens and scientists, respectively. The surveys contained questions concerning what types of resource information people use and how they obtain it, their degree of interest in resource topics such as water quality and wetlands, and even their use of the World Wide Web. The survey results and conclusions of this process are presented in this report.

The strategy's purpose is to efficiently provide information to public and technical audiences, to link existing university resources and pertinent web sites, and ensure information is easier to find and in a usable format. The implementation of this Data Management Strategy began in 1999 and will continue through the next several years. As new information is produced, the means of conveying that information must improve and adapt to the needs of citizens and scientists alike.

Acknowledgments

The Charlotte Harbor National Estuary Program would like to especially thank the following individuals who participated in Data Management Strategy workshops:

James R. E. Smith	Sam Stone
Ellen Hawkinson	Gary Beardsley
Albert Walton	Dan Ceilley
Carolyn Gray	Tomma Barnes
Keith Kibbey	William Protheroe
Stephen Saua	Annette Nielsen
Bob Vincent	Derek Burr
Ralph Montgomery	Jon Ryan
Tony Janicki	Mike Mitchell
Judy Ott	

Thanks are also extended to the citizens and resource management professionals who took the time to respond to the public and technical data management surveys.

Program Staff

Tiffany Lutterman, Director
Melissa Upton, Public Involvement Specialist
David Moldal, Environmental Planner/Administrator
Jock Robertson, Technical Writer

This report was written by Dr. Tom Fraser, *W. Dexter Bender and Associates*, and funded by the Charlotte Harbor National Estuary Program. Copies of this report may be obtained by contacting the Charlotte Harbor National Estuary Program, 4980 Bayline Drive, 4th Floor, North Fort Myers, FL 33917, or by calling (941) 995-1777.

This document is funded in part by the U.S. Environmental Protection Agency, Region 4 through a cooperative agreement for the Charlotte Harbor National Estuary Program.

Table of Contents

Management Conference	-ii-
Executive Summary	-iii-
Acknowledgments	-iv-
Table of Contents	-v-
Introduction to the Data Management Strategy	-1-
Identification of Data Gaps and Needs	-2-
Regional Data Exchange System	-2-
Document Existing Data Collection Efforts	-3-
Utilize New Technologies to Promote Information Exchange	-3-
Compile Site Specific Land Use Information	-4-
Cumulative Impact Assessments	-4-
Actions Needed to Fill Data Gaps and Encourage Data Exchange	-4-
Summarize Existing Monitoring Programs	-4-
Survey Information Users to Identify Critical Information Needs	-5-
Evaluating the Effectiveness of a Centralized Database System	-6-
Conclusions from the Data Management Surveys	-6-
General Conclusions from the Public and Technical Surveys	-6-
Information Source Preferences	-7-
A. General Public Preferences	-7-
B. Technical Group Preferences	-7-
Recommendations for the Data Management Strategy Based on the Surveys	-9-
Recommendations Based Upon the Results of the Public Survey	-9-
Recommendations Based Upon the Results of the Technical Survey	-9-
Recommended Data Management Strategy and Implementation	-9-
Strategy	-9-
Implementation Projects	-10-
Background on Existing Web Systems	-11-
Sample List of Relevant Web Sites	-11-

Geographical Information Systems and CD-ROM Data	-14-
Sample List of Relevant CD-ROM Databases	-14-
Newsletters and Reports	-14-
Centralized Information Directory	-15-
Conclusions	-15-
Products and Partners	-15-
Schedules	-16-
Funding	-16-

APPENDIX I

EXCERPTS FROM THE "INFORMATION RESOURCES FOR THE CHARLOTTE HARBOR WATERSHED" WORKSHOP, DECEMBER 3, 1996	-17-
--	-------------

APPENDIX II

SURVEY DATA RESULTS FOR THE CHARLOTTE HARBOR NATIONAL ESTUARY PROGRAM DATA MANAGEMENT STRATEGY	-22-
Technical Survey Results	-25-
Public Survey Results	-42-

APPENDIX III

FLORIDA MARINE RESEARCH INSTITUTE	-64-
--	-------------

APPENDIX IV

FLORIDA BIOTIC INFORMATION CONSORTIUM	-66-
--	-------------