

Goals and Objectives

The primary objective of the Waterway Management System, as developed by the WCIND and FSG, is to provide a comprehensive, regional, GIS-based planning tool for resource management and channel maintenance. The four-county region that comprises the WCIND provides an ideal setting to test and revise the Project methodology and to gauge the success of its objectives, results, and recommendations. As outlined above, the value and necessity of the Project has been recognized, as reflected by the political will that has been exercised, at the local, regional, state, and national level, to implement and expand upon project recommendations and goals. The initial implementation of the Waterway Management Project for three WCIND counties will be completed this year. Upon completion, FSG and the WCIND expect to work with local, regional, and state entities to expand Project efforts throughout the state of Florida.

The principal goals of this NOAA-sponsored project are: 1) to enhance and standardize the bathymetric data collection procedures that have been used by the WCIND and FSG during prior implementations of the Waterway Management Project, 2) to provide a reliable and recurring source of bathymetric data, for areas not covered by NOAA surveys, that meets NOAA standards and that can be included on NOAA nautical charts, and 3) to evaluate survey equipment and procedures that could be used by third-party organizations, such as the Coast Guard Auxiliary or United States Power Squadrons, to collect bathymetric data under supervision provided by the WCIND or FSG. Improving past bathymetric survey and quality control procedures and acquiring additional hydrographic survey equipment and software have accomplished these goals. The project integrated DGPS and echo soundings with hydrographic survey software, which resulted in an increase in the efficiency of field operations and an improvement in the quality of the data collected.

Soundings were collected for approximately 313 miles of canals and waterways in Lee County (Figure 1), within the Caloosahatchee River system, from its mouth (west), to the county line. The soundings were thinned to a 5-foot spacing, and the final dataset includes over 700,000 depth points. The survey area includes numerous shore-parallel channels and approaches to open water from boating facilities, canals, and tributaries. The procedures implemented during this study will be used by the WCIND, on a recurring basis, to maintain bathymetric data for Manatee, Sarasota, Charlotte, and Lee counties. WCIND will make available to other entities, such as the Coast Guard Auxiliary or Power Squadrons, the survey procedures and equipment purchased from project funds so that they may collect bathymetric data in other areas. All bathymetric data collected utilizing the project procedures and equipment are on a CD that accompanies this report.

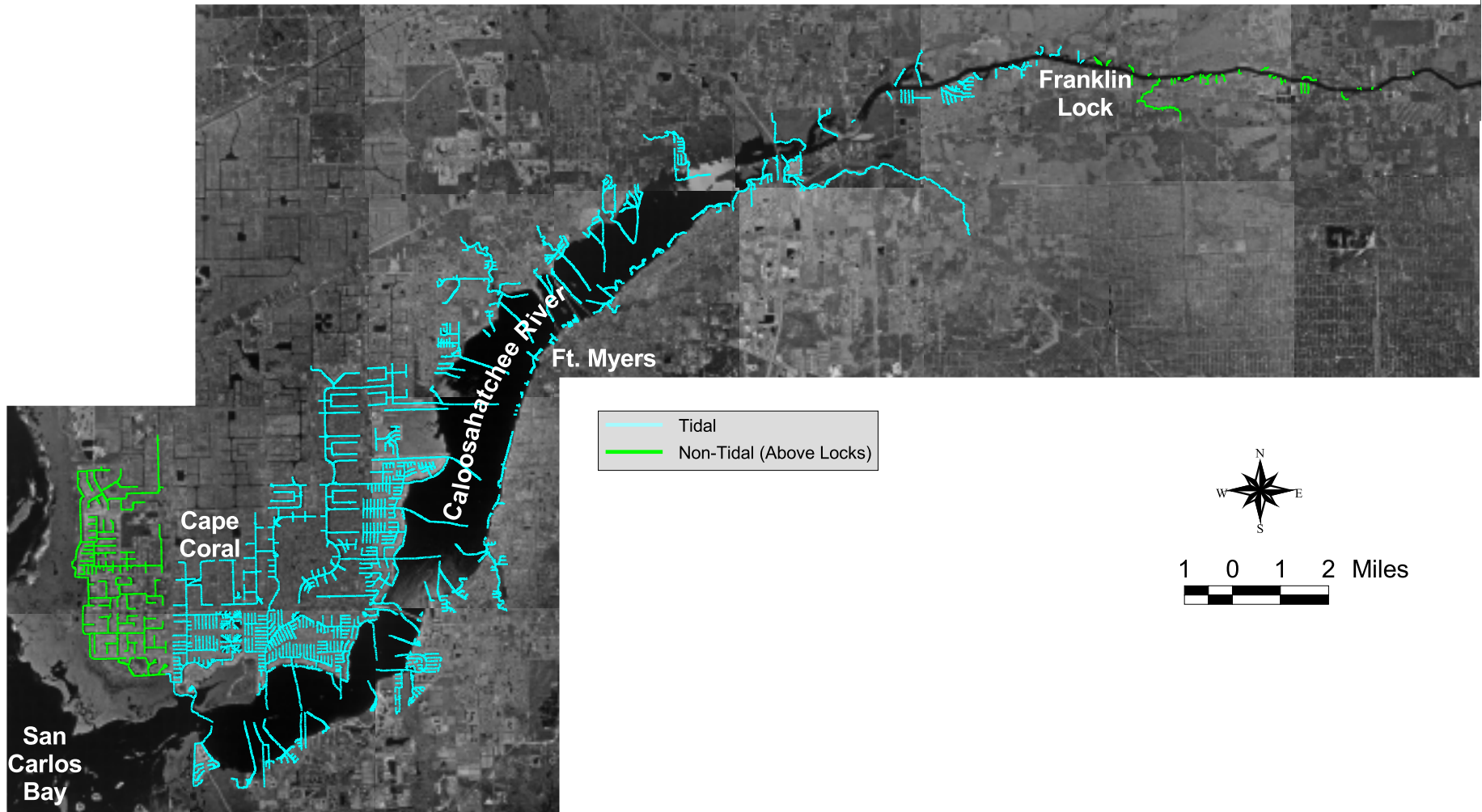


FIGURE 1. WATERWAYS IN THE STUDY AREA