NOAA COASTAL MAPPING PROGRAM
PROJECT COMPLETION REPORT

PROJECT FL1706-CM-T

Banana River at Indian Harbor Beach, Florida

Introduction

Coastal Mapping Program (CMP) Project FL1706-CM-T provides highly accurate digital shoreline data for a portion of the Banana River at Indian Harbor Beach, Florida. The Geographic Cell (GC) may be used in support of the NOAA Nautical Charting Program (NCP) as well as geographic information systems (GIS) for a variety of coastal zone management applications.

Project Design

The design of Project FL1706-CM-T was accomplished as the result of a request for updated shoreline data received from the Office of Coast Survey's Marine Chart Division (MCD). Based on analysis of project requirements and results of a source data search, it was determined that CMP procedures for multiple source projects would apply for this project. Available source data deemed adequate for successful completion of this project included one orthorectified, pan-sharpened natural color WorldView-3 satellite image from DigitalGlobe, with a spatial resolution of 0.3 meters.

Field Operations

Routine CMP field operations did not apply for this project based on the origin of the project source data.

Georeferencing

The satellite imagery was assessed for positional accuracy using the published locations of NGS third order geodetic control and compared very well spatially, with all checked control points observed within Digital Globe's standard accuracy. Therefore the imagery was determined to be suitable for feature compilation without need for additional image georeferencing tasks. Positional data for this project is referenced to the North American Datum of 1983 (NAD 83).

Compilation

Data compilation was performed by RSD personnel in June 2017. Digital feature data was compiled in shapefile format from the WorldView imagery using ArcGIS. Feature attribution was assigned in compliance with the Coastal Cartographic Object Attribute Source Table (C-COAST), which provides the definition and attribution scheme for the full range of cartographic features pertinent to the CMP. Spatial data accuracies for FL1706-CM-T were determined according to standard Federal Geographic Data Committee (FGDC) practices. Cartographic features were compiled to meet a horizontal accuracy of 6.8 meters at the 95% confidence level (CE95).

The table below provides additional information on the satellite image used for this project:

Sensor	Derivative Image ID	Acquisition Date/Time	Tide Level
WorldView-3	20170529_1629_WV03_ORI_R1C1.jp2	2017-05-29 16:29:04 GMT	0.9 m

* Tide levels are given in meters above MLLW and are based on observations recorded by the NOS gauge at Trident Pier, FL (sta.#8721604), at the time of photography. The elevation of MHW is 1.09 meters above MLLW.

Quality Control / Final Review

Quality control tasks were conducted by a senior member of RSD. The final QC review was completed in June 2017. The review process included analysis of image georeferencing and assessment of the identification and attribution of digital feature data within the GC according to image analysis and criteria defined in C-COAST. The quality control process concluded with an inspection of topological connectivity within the GC using ArcGIS. The entire suite of project products was evaluated for compliance to CMP requirements. A Chart Evaluation File (CEF) resulted from comparison of the project imagery with the largest scale NOAA nautical chart covering the project:

- Chart 11472, Palm Shores to West Palm Beach, FL, 1:40,000 scale, 36th Ed., Feb. 2014

End Products and Deliverables

The following specifies the location and identification of end products generated during the completion of this project:

Remote Sensing Division Electronic Data Library

- Project database
- GC11341 in shapefile format
- Project Completion Report (PCR)
- CEF in shapefile format

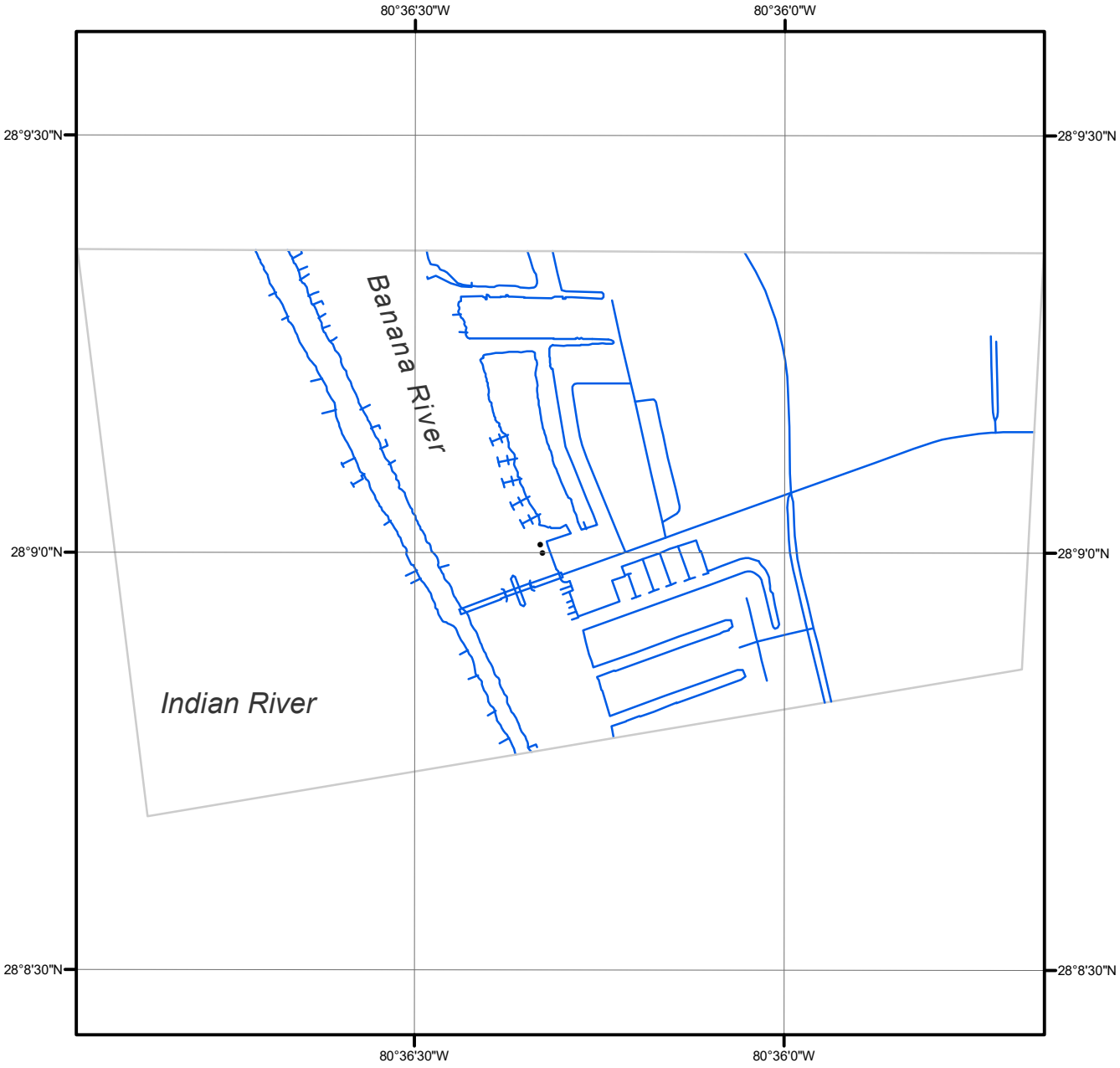
NOAA Shoreline Data Explorer

- GC11341 in shapefile format
- Metadata file for GC11341
- Digital copy of the PCR

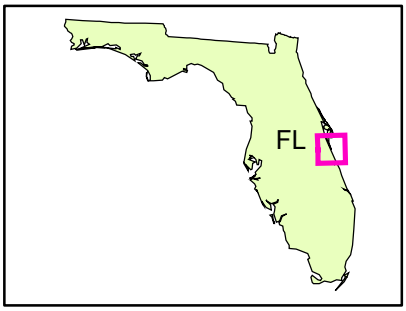
End of Report

BANANA RIVER AT INDIAN HARBOR BEACH

FLORIDA



Overview



FL1706-CM-T

GC11341