

# **NOAA COASTAL MAPPING PROGRAM PROJECT COMPLETION REPORT**

## ***PROJECT FL1102***

### ***Port of St. Petersburg/Weedon Island, Florida***

#### **Introduction**

NOAA Coastal Mapping Program (CMP) Project FL1102 provides a highly accurate database of new digital shoreline data for the port of St. Petersburg/Weedon Island, 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 FL1102 was accomplished by the Requirements Branch (RB) of the Remote Sensing Division (RSD) in response to the need for updates to NOAA's Electronic Navigational Chart series. Project requirements were formulated as a result of analysis conducted within the Coast and Shoreline Change Analysis Program (CSCAP), in which NOAA nautical chart products are compared to contemporary high resolution imagery in order to ascertain the need for more current shoreline data. Refer to the updated CSCAP memorandum of August 22, 2012 for more details of the analysis.

#### **Field Operations**

Routine CMP field operations did not apply for this project based on the origin of the project imagery, which was obtained from external sources.

#### **Georeferencing**

Two orthophoto mosaics from the National Agriculture Imagery Program (NAIP) utilized for CSCAP analysis were assessed for positional accuracy and determined to be suitable for feature compilation without the need for further image georeferencing tasks. At least twenty (20) photo-identifiable check points from previously compiled GC10770 were used for this assessment. A horizontal circular error of 1.6 meters was calculated based on a 95% confidence level. This CE value was doubled and added to the accuracy (CE95) of the source data from which check points were measured in order to conservatively predict the accuracy of well-defined points measured during the compilation process.

#### **Compilation**

Data compilation was performed by RSD personnel in December 2013. Digital feature data was compiled in shapefile format from the ortho imagery using Esri ArcGIS (ver. 9.3.1) desktop GIS software. 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 FL1102 were determined according to standard Federal Geographic Data Committee (FGDC) practices. Cartographic features were compiled to meet a horizontal accuracy of 4.5 meters at the 95% confidence level.

The following table provides further detail on the imagery used to complete this project:

Sensor	Resolution	Source ID	Acquisition Date	Tide Level
USDA/FSA	1.0 m	ortho_1-1_1n_s_fl103_2010_1a.tif	4/24/2010, 5/3/2010	n/a
USDA/FSA	1.0 m	ortho_1-1_1n_s_fl103_2010_1b.tif	5/3/2010	n/a

### **Quality Control / Final Review**

Quality control tasks were conducted upon project completion by senior CMP quality assurance personnel in December 2013. The review process included an 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 9. The entire suite of project products was evaluated for compliance to CMP requirements.

### **End Products and Deliverables**

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

#### **RSD Applications Branch Archive**

- Hardcopy of the CSCAP memorandum
- Hardcopy of the Project Completion Report (PCR)
- Page size graphic plot of GC11037 file contents, attached to PCR

#### **Remote Sensing Division Electronic Data Library**

- Project database
- GC11037 in shapefile format
- Digital copy of the PCR in Adobe PDF format
- Chart Evaluation File in shapefile format

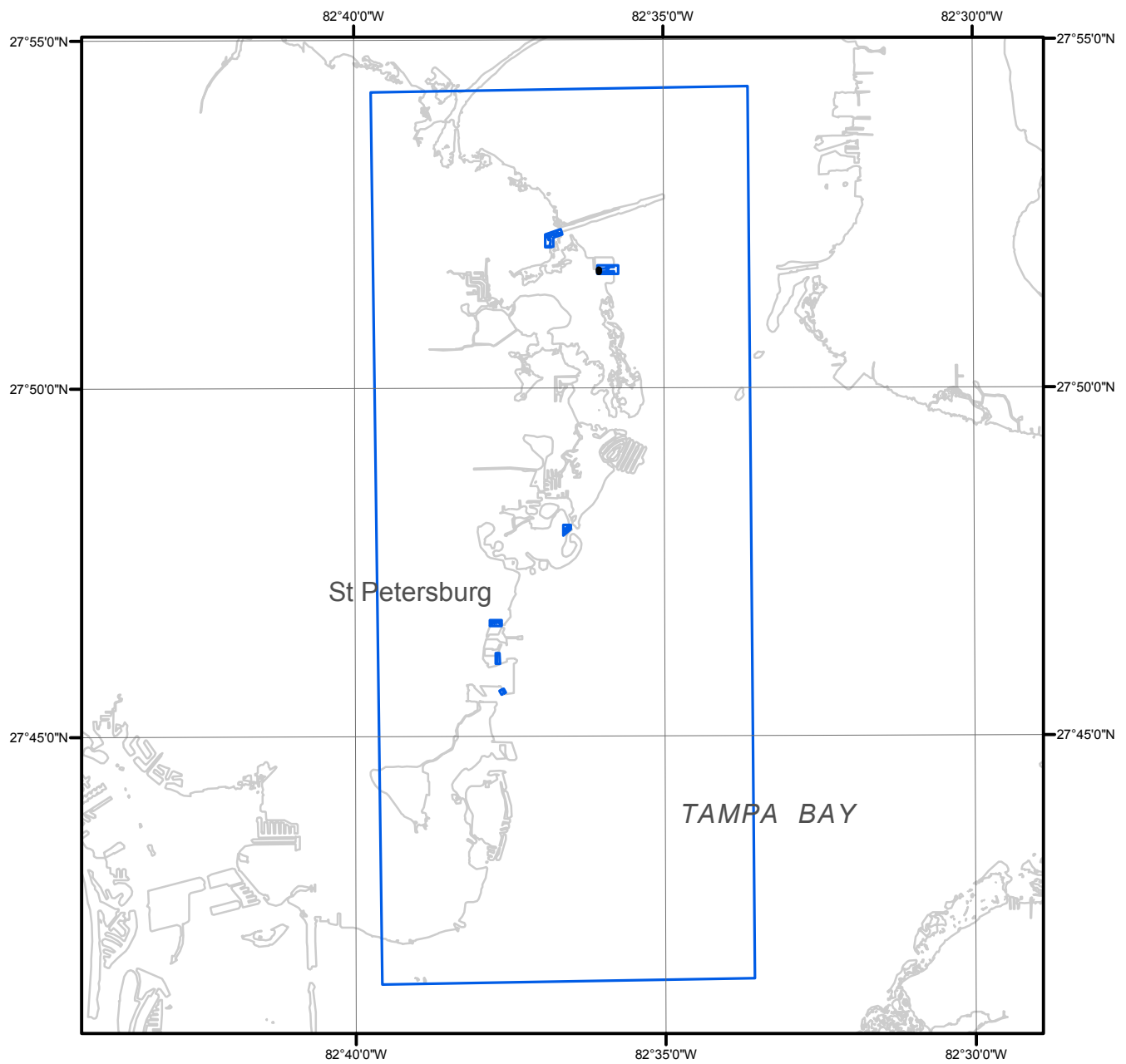
#### **NOAA Shoreline Data Explorer**

- GC11037 in shapefile format
- Metadata file for GC11037
- Digital copy of the PCR in Adobe PDF format

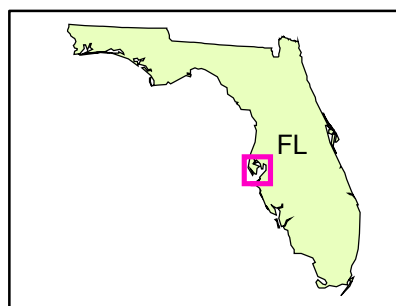
### **End of Report**

# PORT OF ST PETERSBURG / WEEDON ISLAND

## FLORIDA



Overview



FL1102

GC11037