

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

## ***PROJECT FL2203-CM-T***

### ***Broward Boulevard Bridge, Florida***

#### **Introduction**

Coastal Mapping Program (CMP) Project FL2203-CM-T provides accurate digital shoreline data for a small portion of the North Fork New River, including the Broward Boulevard bridge, near Fort Lauderdale, 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**

Project FL2203-CM-T was designed per a request from the Marine Chart Division (MCD) of the Office of Coast Survey, NOAA. Based on an 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 natural color orthomosaic of Leica ADS-100 imagery, obtained through the National Agriculture Imagery Program (NAIP), and one orthorectified pan-sharpened natural color satellite image (downloaded in tiled format) from DigitalGlobe, Inc. Metadata associated with both images is on file with other project data within the RSD Electronic Data Library.

#### **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**

Additional georeferencing tasks were deemed unnecessary since the image providers conducted acceptable accuracy assessments, and the images used for compilation compared favorably spatially with the data sources used to verify their geolocation. Positional data for this project is referenced to the North American Datum of 1983 (NAD 83).

#### **Compilation**

Data compilation was completed by Applications Branch (AB) personnel of the Remote Sensing Division (RSD) in February 2022. Using Esri's ArcGIS desktop GIS software (ver. 10.8.1), digital feature data was compiled in shapefile format. Feature attribution was assigned in compliance with the Coastal Cartographic Object Attribute Source Table (C-COAST) specification file, which provides the definition and attribution scheme for the full range of cartographic features pertinent to the CMP.

Spatial data accuracies of well-defined points measured during feature compilation for FL2203-CM-T were determined according to standard Federal Geographic Data Committee (FGDC) practices. Cartographic features were compiled to meet a horizontal accuracy of 4 meters at the 95% confidence level, based on the reported accuracy of the NAIP imagery.

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

Sensor	Resolution	Source File ID	Acquisition Date/Time	Tide Level
ADS-100	0.6 m	ortho_1-1_hn_s_fl011_2019_1.sid	2019-11-20 / 13:13-13:19 GMT	n/a
WorldView-2	0.5 m	20220203_WV02_ORI_R1C1.jp2	2022-02-03 / 16:15 GMT	n/a

### Quality Control / Final Review

Quality control tasks were conducted upon project completion by senior CMP personnel in March 2022. The review process included an assessment of image georeferencing and 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 (ver. 10.8.1). The entire suite of project products was evaluated for compliance to CMP requirements.

Comparison of the largest scale NOAA nautical chart with the project imagery and compiled feature data resulted in creation of the Chart Evaluation File (CEF). The following nautical chart product was used for comparison:

- RNC 11467\_4, 45th Ed., Dec. 2019, Scale 1:24,000

### 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
- GC11773 in shapefile format
- Project Completion Report (PCR)
- CEF in shapefile format

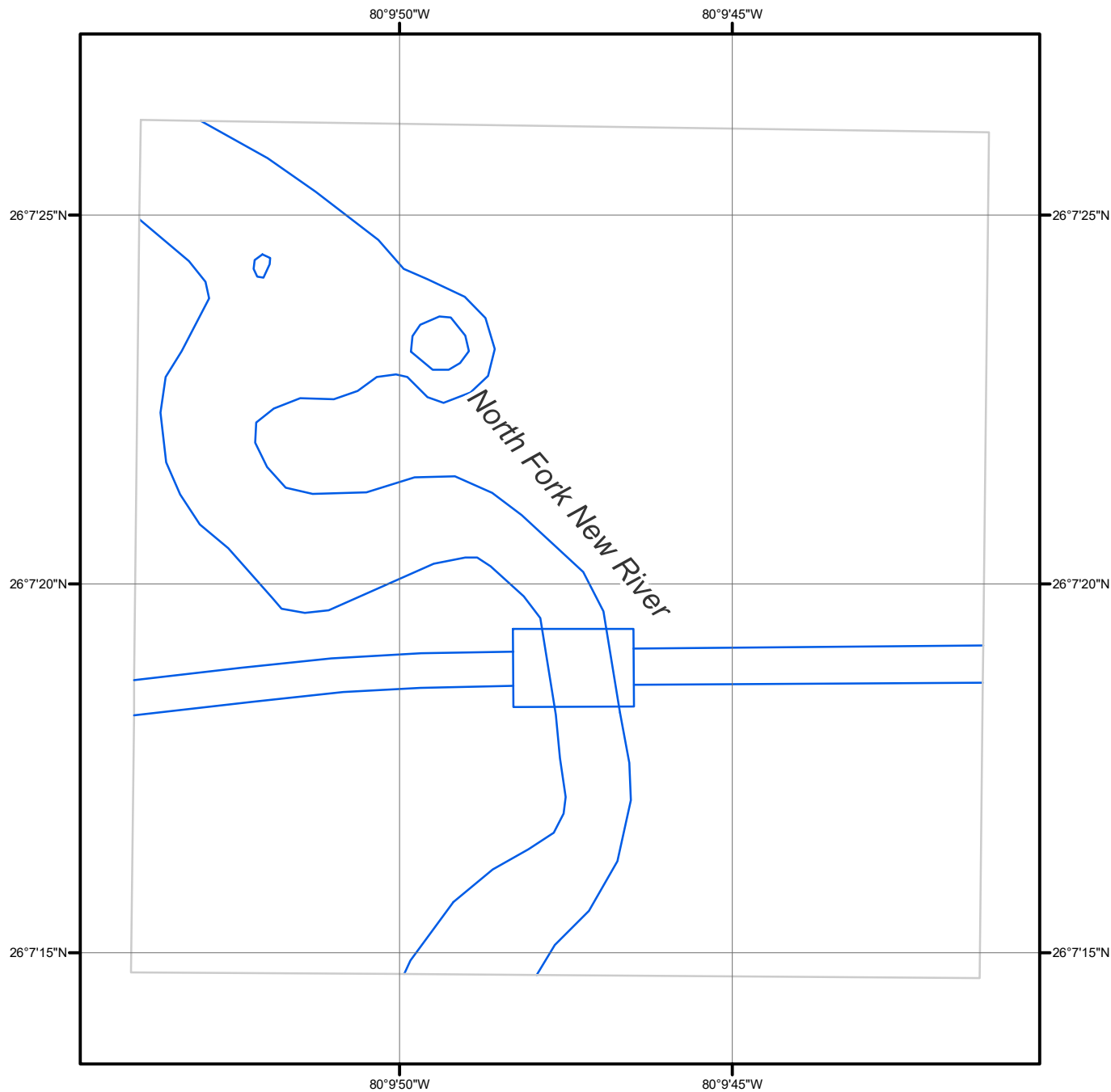
#### NOAA Shoreline Data Explorer

- GC11773 in shapefile format
- Metadata file for GC11773
- PCR in Adobe PDF format

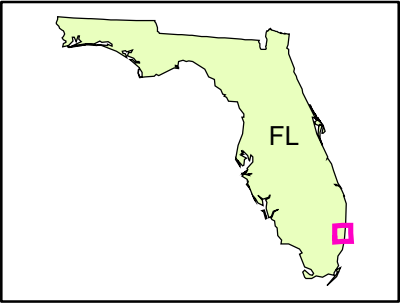
### End of Report

# BROWARD BOULEVARD BRIDGE

## FLORIDA



Overview



FL2203-CM-T

GC11773