

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

## ***PROJECT AK1501***

### ***South Baranof Island, Alaska***

#### **Introduction**

NOAA Coastal Mapping Program (CMP) Project AK1501 provides accurate digital shoreline data for Southern Baranof Island, Alaska. 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 AK1501 was designed in response to a request from the Marine Chart Division (MCD) of the Office of Coast Survey, NOAA for data to support resolution of a reported discrepancy involving a lake on Chart 17330. 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 this project included two panchromatic WorldView-2 commercial satellite images from DigitalGlobe, Inc., obtained through the NextView government contract.

#### **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**

The WorldView imagery was assessed for positional accuracy and determined to be suitable for feature compilation without the need for further image georeferencing tasks. Three (3) photo-identifiable NGS 3<sup>rd</sup> order geodetic control points were used for this assessment. These points were used to calculate a horizontal circular error at the 95% confidence level (CE95) of 10.3 meters. Positional data for this project is referenced to the North American Datum of 1983 (NAD 83).

#### **Compilation**

Data compilation was accomplished by personnel of the Applications Branch (AB) of the Remote Sensing Division (RSD) in December 2014. Feature data was compiled using the Feature Extraction software module within the SOCET SET (ver. 5.6) photogrammetric 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 AK1501 were determined according to standard Federal Geographic Data Committee (FGDC) practices. Cartographic features were compiled to meet a horizontal accuracy of 10.3 meters at the 95% confidence level.

The table below provides further details on the imagery used to complete this project:

Image Source	Resolution	Source ID	Acquisition Date/Time	Tide Level
WorldView-2	0.5 m	11JUN01203551-P1BS-500187285080_01_P007.NTF	2011-06-01 / 20:35 GMT	n/a
WorldView-2	0.5 m	14MAY09204006-P1BS-500186732130_01_P004.NTF	2014-05-09 / 20:40 GMT	n/a

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

Quality control tasks were conducted upon project completion by senior CMP personnel in December 2014. 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 10.1. The entire suite of project products was evaluated for compliance to CMP requirements. A Chart Evaluation File (CEF) was created by comparing project imagery with the following nautical chart:

- 17330, Cape Ommaney to Byron Bay, Alaska, 1:20,000 scale, 9<sup>th</sup> Ed., Nov./07

### **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 Project Completion Report (PCR)
- Page size graphic plot of GC11124 file contents, attached to PCR

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

- Project database
- GC11124 in shapefile format
- Digital copy of the PCR in Adobe PDF format
- CEF in shapefile format

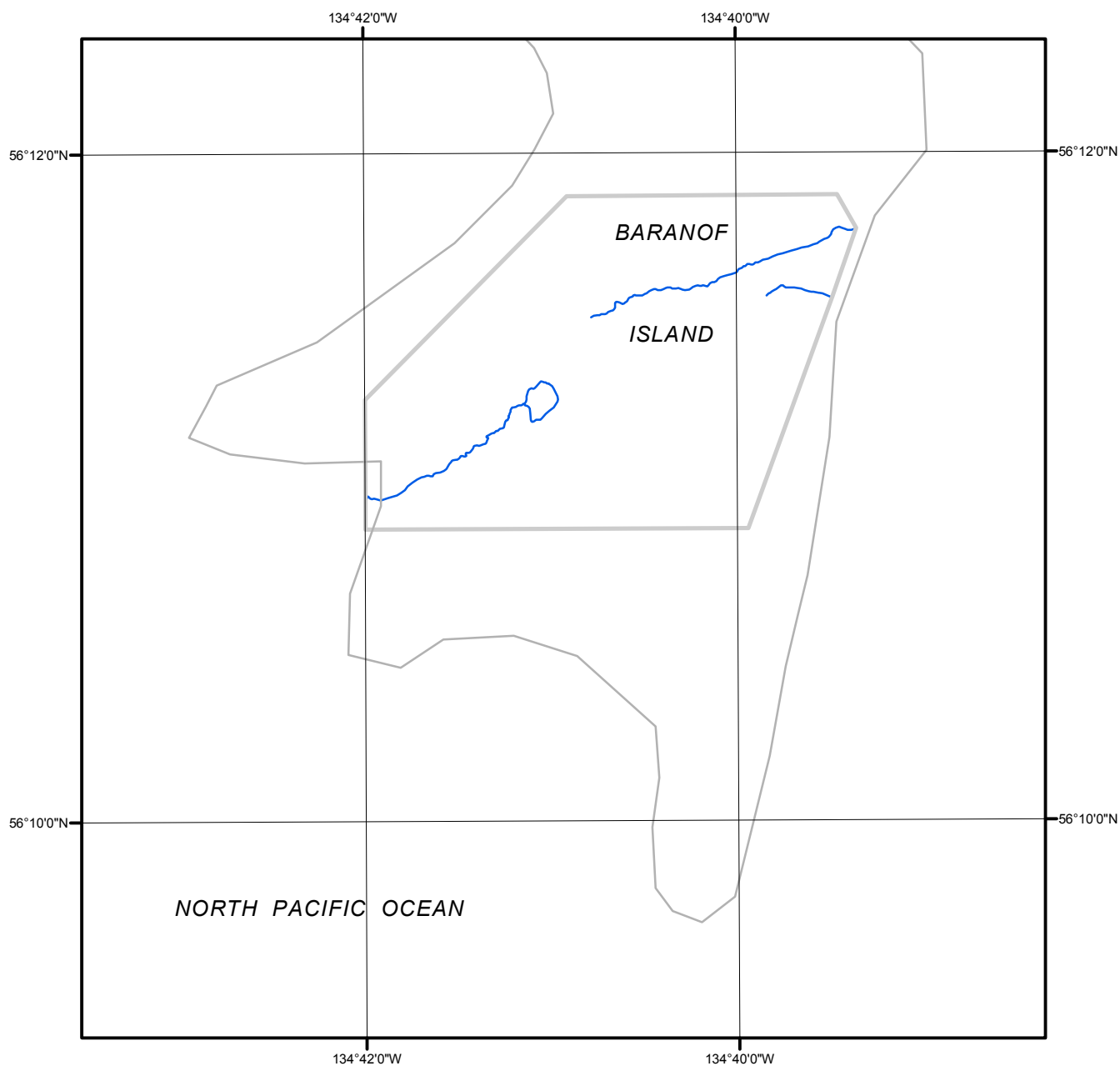
#### **NOAA Shoreline Data Explorer**

- GC11124 in shapefile format
- Metadata file for GC11124
- Digital copy of the PCR in Adobe PDF format

### **End of Report**

# SOUTH BARANOF ISLAND

## ALASKA



Overview



AK1501

GC11124