

Project Summary
Rocky Mountains Cooperative Ecosystem Studies Unit

Project Title: Sea Level Monitoring and Geographic Information Systems Research and Development for the NPS

Discipline: Natural
Type of Project: Technical assistance
Funding Agency: National Park Service
Other Partners/Cooperators: Colorado State University
Effective Dates: 9/2/2014 - 6/30/2015
Funding Amount: \$135,431

Investigators and Agency Representative:

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Project Abstract: The focus of this project is to develop, document, and maintain sea level monitoring protocols to better prepare for increasing sea levels and storm surge. Using geographic information systems (GIS) and other analysis tools, the initial focus of the project, as part of the post-Hurricane Sandy mitigation efforts, will be to install sea level monitoring equipment and associated geodetic monumentation at Fire Island National Seashore (FIIS). FIIS is situated squarely in one of the aforementioned NWLON gaps. After determining the best installation site, installing a temporary tide gauge, and collection water level data, local tidal datums (mean high water, mean low water, etc,) can be calculated. The local tidal datums can be used to establish a relationship with the datums from nearby NWLON stations.

The project will integrate with and tie provide support to several current critical NE regional projects including benthic habitat mapping, coastal elevation and bathymetry data collection, geodetic benchmark recovery and installation, and salt marsh elevation/accretion (SET) research projects.

Outcomes with Completion Dates: June 30, 2015

Keywords: NPS- Resources Information Services Division, Colorado State University, GIS, technical support, sea level monitoring