

Project Completion Report

Rocky Mountains Cooperative Ecosystem Studies Unit (RM-CESU)

Project Title: Southeast Coast Network Database Program

Project Code: P13AC00357

Type of Project (Research, Technical Assistance or Education): Research and Technical Assistance

Funding Agency: National Park Service

Partner University: Colorado State University

NPS Agreement Technical Representative:

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Start Date of Project: September 1, 2013

End Date of Project: December 31, 2015

Funding Amount: \$72,816

Project Summary, including descriptions of products, work accomplished and/or major results. If the information is restricted (e.g. location of endangered species or cultural resources), indicate the title and location of the final report. Also add web sites where project-related information may be found.

This project provided research support for the NPS Inventory and Monitoring Program, Southeast Coast Network (SECN) in the development and implementation of relational databases, following the general design guidelines developed by the National Park Service Inventory and Monitoring program and working within the Network's conceptual object model framework. Two Colorado State University Research Associates and one hourly intern contributed to the project as follows:

Database Programmer:

- Made modifications to the Shorebird Monitoring database to improve data quality and included requested changes made by users
- Made modifications to the Salt Marsh InfoPath forms to allow for Fish & Wildlife Data entry
- Made modifications to Vegetation Database to include changes requested by users
- Made modifications to Fixed Station Water Quality data entry forms to include changes requested by users as well as data modifications
- Began creating InfoPath forms for data collection to be used with the Coastal Assessment protocol
- Moved applications to new server in Fort Collins
- Made modifications to existing databases as requested by users

(Note that the database programmer's activities were also funded under an earlier project, P12AC10428, of the same project title. That larger project included both the database programmer and a remote sensing specialist.)

Database Specialist:

- Organized migration of all historic continuous data from SQL database to Aquarius
- Ensured consistency between data transferred from SQL database and current data imported into Aquarius
- Wrote R code to format reports for data exported from Aquarius to replace old SQL reports
- Updated all current water-quality reports to reflect new database management and QAQC methodology
- Designed hot folders in Aquarius for drag-and-drop import functionality for current and future continuous data
- Reports in publication: Cumberland Island Fixed-Station Data Summary Report, 2005-2009 (in editing), Cape Hatteras Fixed Station Water Quality Data Summary report, 2005-2009 (in editing), Cape Hatteras Fixed Station Water Quality Summary, 2013-2014 (in review), Timucuan Ecological and Historic Preserve Fixed-Station water quality data summary, 2013-2014 (in review), Fort Pulaski Coastal Assessment, 2014 (in editing)

Data Management Intern:

- Completed a comprehensive property and software inventory list for annual FBMS report.
- Entered backlogged data for Estuarine Water Quality Protocol and certified data entered by others.
- Entered data for a technical request for a scent study on CUIS.
- Examined the new Sharepoint site; tested links and found working links for those that were broken.
- Tested the functionality of several tools on the new Sharepoint site and reported issues found and suggested edits.
- Made modifications to the new Sharepoint site, populating the following pages:
<http://share.inside.nps.gov/sites/nrss/div/imd/networks/secn/monitor/Lists/protocols/AllItems.aspx>
<http://share.inside.nps.gov/sites/nrss/div/imd/networks/secn/Pages/Contacts.aspx>
- Suggested additional edits to the Sharepoint site editor for those items requiring permission to edit.
- Reviewed and provided input for Shorebird Monitoring database.

Number of students participating in this project: undergraduates, graduate students, degrees conferred.

No students have participated in the project. Two CSU research associates and one hourly intern participated in the project.

Other RM-CESU agencies or research partners who participated in this project: NA