Project Completion Report Rocky Mountains Cooperative Ecosystem Studies Unit (RM-CESU)

Project Title: Southeast Coast Network Database Program, Continuation of CSURM-51 and CSURM-89, J2114060015

Project Code: CSURM-51 and CSURM-89; J2114060015

Type of Project : Technical Assistance

Funding Agency: National Park Service

Partner University: Colorado State University

NPS Agreement Technical Representative (with complete contact information):

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Start Date of Project: 7/1/2006

End Date of Project: 9/30/2011

Funding Amount: \$471,510

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.

Description of products and major milestones:

• Migration of SECN fixed-station water quality monitoring database from MS Access to SQL Server 2005. Implemented data entry forms, quality assurance routines, data analysis and reporting applications.

- Conducted scoping work, designed and developed SECN Shorebird monitoring database module in SQL Server. Implemented data entry forms, quality assurance routines, data analysis and reporting applications.
- Conducted scoping work, designed and developed SECN Groundwater monitoring database module in SQL Server. Implemented data entry forms, quality assurance routines, data analysis and reporting applications.
- Developed and implemented data transfer and quality assurance routines for migrating SECN Coastal Assessment monitoring data from MS Access and MS Excel into SQL server. Developed data analysis and reporting applications for this database module.
- Conducted scoping work, designed and developed SECN Vegetation monitoring database module in SQL Server. Implemented data entry forms, quality assurance routines, data analysis and reporting applications.
- Implemented data analysis and reporting applications for the Amphibian Communities and Landbirds modules.
- Migrated the SECN database and applications from SQL Server 2005 to SQL Server 2008 and from SharePoint services 3.0 (WSS) to SharePoint Services 2007 (MOSS). Performed quality assurance testing to ensure data, the database and applications migrated properly and accurately.
- Provide technical direction to contracted staff in the areas of database / application development and programming. Served as the point of contact for programming questions and also reviewed database entities and attributes throughout the development process to ensure all new development work builds upon the SECN conceptual object model and fits within current and ongoing internal development activities. This work was done in support of the following database modules: Amphibian Communities, Air Quality, Landbirds, Salt Marsh Elevation, Stream Habitat, and Weather and Climate.
- Developed documentation (e.g. user manuals and technical specifications) in support of SECN database modules.
- Worked with NPS staff in the Resource Information Services Division in support of adding mapping capabilities to the SECN database modules.
- All SECN reports (and ultimately snapshots of the data although they haven't been posted yet) produced using the SECN database and applications may be found at: http://science.nature.nps.gov/im/units/SECN/reports.cfm and http://irma.nps.gov (Both are public websites).

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

There have been 2 participants in this project since its inception. No degrees conferred.

Lessons Learned from this project.

There was a gap of several months between RA's working on this project. This gap created a large backlog of work which made the transition to the new RA more difficult than it would have been otherwise. In addition, there was no overlap between RA's which also increased the amount of time required for the new RA to get up to speed on the work that had already been performed.