

Project Summary

Rocky Mountains Cooperative Ecosystem Studies Unit

Project Title: Developing Education Resources, "Views of the National Parks"

Discipline: Interdisciplinary

Type of Project: Education

Funding Agency: National Park Service

Other Partners/Cooperators: University of Colorado at Denver

Effective Dates: 9/15/2008 - 12/31/2009

Funding Amount: \$64,000

Investigators and Agency Representative:

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Project Abstract: In 2005, faculty and students from the University of Colorado at Denver (UC-D) began to work cooperatively with NPS personnel on the Views project. The modules built for this project use multimedia techniques to present high quality science and cultural resource information to the public and school children. To make these modules more effective, the NPS has partnered with the University of Colorado-Denver so as to utilize their multimedia and graphics capabilities, as well as their education expertise for the preparation of interactive web pages, lesson plans, educational curriculum guides, references to national teaching standards, etc. In order to provide a balanced learning opportunity for their students, UC-D has also drawn on NPS expertise to teach their students how to capture multimedia assets in the field, how to assemble the final modules using computer-based graphics programs, and has taken advantage of NPS expertise in various fields of science and resource management.

This proposal will expand the partnership that was initiated in 2005. UC-D faculty, staff, and/or students will work with NPS staff to provide computer and educational expertise for selected Views modules. Recently, the Views program was completely redesigned, from the underlying architecture to the user interface. All existing modules must be moved into the new format. Much of the proposed work involves migrating existing Views modules, written in HTML, to the new FLASH-based format. This process requires parsing existing text into segments that fit within the new user interface standards, reworking all visual elements, creation of search criteria, and coding of on-screen navigational elements. Finally, multimedia assets must be reformatted to meet the requirements of the new system. For the current proposed work, UC-D staff will work with NPS Views staff to migrate the Florissant Fossil Beds (FLFO) NM and Fort Bowie (FOBO) NHS modules. Time and resources permitting, a third module, to be selected by mutual consent, will be migrated to the Flash format.

As part of an earlier phase of this cooperative effort, staff from the UC-D began working on an educational curriculum guide to complement the Chesapeake Bay module (in preparation). During the current work, this guide will be completed. The guide will contain at least one week's worth of classroom exercises, including one activity that explores the basic concepts needed to understand watershed form and function. Another educational curriculum guide will be initiated, using the existing guides as models. The subject of this guide will be mutually determined by staff from NPS and UC-D and will complement an existing Views module.

This modification is also designed to address the development of educational materials related to storm and coastal processes in NPS oceanic and coastal parks. The proposed work will center around data and imagery collected in June 2008 at Cape Lookout National Seashore (CALO) by Mark Borrelli (Texas A&M University Storm Hazard Analyst) and Dave Krueger (Views team). Audio and video resources, as well as digital photographs from CALO, will be used with multimedia and text assets from other NPS

coastal parks to develop a product for the Views program. This product will be integrated into the existing Views program. Additionally, stand-alone products such as brochures, fact sheets, and podcasts and vodcasts will also be produced as part of this proposed work. The final selection and design of these products will be done in consultation of Dr. Rebecca Beavers (NPS Coastal Geologist) to ensure the products meet the needs of NPS efforts on storm education.

As in all Views modules, work on the Storm and Coastal Processes module will focus on the local resources and issues, but will also contain information applicable to the entire NPS System and will enhance the entire Views program. For the selected modules, the UC-D researcher(s) will work with NPS WASO, park, the Storm Hazard Analyst, and regional staff to (as needed) to develop a module outline and prepare a list of required multimedia assets. The on-screen text, or "script," will be prepared by storm effects experts (GRD staff or experts suggested by GRD). These experts will suggest appropriate graphics and multimedia to compliment the script. The module will be built using the new standard Flash-based Views architecture and user interface. Working with NPS experts, the UC-D staff will select and edit multimedia files and then populate the module with all appropriate text, multimedia assets, and graphics. The UC-D researcher will link all multimedia and text to appropriate locations within the module and ensure seamless integration with the existing Views system. Multimedia assets may include, but are not limited to: taped interviews, 360 degree panoramas, virtual walks, 3-D images, soundscapes, and digital images.

Keywords: National Park Service- Natural Resource Program Center, University of Colorado at Denver, Views program