

Project Summary
Rocky Mountains Cooperative Ecosystem Studies Unit

Project Title: Integration of NPS/USGS Water Resources Science Applicable to Management of Protected Areas, year 3

Discipline: Natural Resources
Type of Project: Education and Technical assistance
Funding Agency: National Park Service
Other Partners/Cooperators: Colorado State University
Effective Dates: 7/1/2009-6/30/2010
Funding Amount: \$142,537

Investigators and Agency Representative:

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Project Abstract: The National Park Service, Water Resources Division (NPS-WRD), will collaborate with the U.S. Geological Survey (USGS) and Colorado State University (CSU) to advance the water-resources science applicable to management of protected areas and to integrate that science into Continuing-Education programs available from the University. To that end, the three entities have agreed to establish a Research Associate position that will enhance collaboration among all three entities in the field of water-resources science. Major tasks will include: 1. Enhance collaboration among the USGS, the NPS-WRD, and CSU related to relevant ongoing and emerging water resources science and management issues, 2. Develop a high-level plan for expanding the scope and funding of the USGS NPS water quality partnership program by discovering common ground between the science mission of the USGS and the resource management mission of the NPS, and work toward implementation of that policy in both Bureaus, 3. Use extensive knowledge of local, state and Federal hydrologic programs to develop an initiative to expand USGS stream gaging in National Parks through collaboration among local, state and other Federal agencies, and direct implementation of this initiative to effectively dedicate resources that augment stream gaging in National Parks. 4. Use extensive knowledge and expertise in fields of hydrology, water quality, and contaminant transport to serve as an advisor to the NPS Task Forces and guide NPS Senior Management and Executives regarding establishment of improved programmatic approaches to park resource inventory and monitoring. 5. Use extensive knowledge and expertise in fields of hydrology, water quality, and contaminant transport to serve as advisor to the NPS Water Quality Vital Signs Monitoring Program regarding USGS activities, and guide the design and implementation of cooperative approaches to NPS water-quality monitoring networks. 6. Serve as principal advisor to NPS senior management to establish a long-term water resources research agenda. 7. Guide the establishment of technical training opportunities from sources such as the USGS and the CSU Continuing Education Division for NPS employees. 8. Serve as an advisor to the NPS and to CSU on complex, extensive emerging water-quality issues and current research in the hydrologic effects of climate. 9. Using extensive knowledge of USGS policy and procedure, serve as advisor to guide the establishment of Interagency Agreements between the two Bureaus. 10. Use broad and extensive knowledge of USGS Water Resources Discipline programs to present USGS capabilities in hydrologic science and monitoring at National and regional meetings of NPS staff. 11. Work with experts in the NPS, USGS, and CSU to develop new courses and materials for the CSU Continuing Education Division that highlight water-resources science for managing protected lands, and for meeting the water-related continuing education needs of professional groups such as educators, elected officials, physicians, and others.

Outcomes with Completion Dates: Final report due by June 30, 2010.

Keywords: NPS-Water Resources Division, Colorado State University, USGS, education, water sciences, hydrology, contaminant transfer, stream gaging.

