



Subject: AD-NRSS Monthly Report - February 2006

**Associate Director
National Resource Stewardship and Science
Monthly Report – February 2006**

New Developments

Wind Cave Fourth Longest Cave in the World - In February, cave explorers surveyed over 3,500 feet of newly discovered passages at Wind Cave in Wind Cave National Park, South Dakota. The new passages brought the total distance surveyed in Wind Cave to 119.6 miles and moved the cave to fourth on the list of longest caves of the world. Exploration of the cave began in 1890, but experiments conducted in the 1960s suggest that less than 10% of the cave is explored.

Review of Comments on NPS Management Policies - The Environmental Quality Division (EQD) has been assigned to process the internal and public comments on the proposed revision of the NPS Management Policies and has procured the services of an experienced contractor to assist in organizing for NPS response on all the substantive comments using the NPS Planning, Environment and Public Comment (PEPC) on-line system. By the end of February about 40,000 comments had been received.

Interagency Review of Permit Guidance Document - The Assistant Secretary's Office has formed an interdepartmental (DOI, DOA) team (led by Deputy Assistant Secretary Paul Hoffman) to review and improve the Federal Land Managers' Air Quality Related Values Workgroup (FLAG) document. The goals of FLAG are to achieve greater consistency in the way the federal land managing agencies (NPS, FWS, and Forest Service) identify air quality related values and evaluate air pollution impacts on such values. Air Resource Division (ARD) staff participated in the first meeting of this team and reviewed ongoing internal discussions that have taken place regarding possible changes to the FLAG document (e.g., better screening criteria, new assessment methodology, additional decision-making factors, etc.). The Review Team liked the progress made to date and encouraged the agencies to continue their discussions and report back to the group periodically.

National Volcano Early Warning System to improve public safety near park volcanoes - Monitoring specialists, land managers, and public safety officials discussed ways to facilitate improved volcano monitoring at a February 22-23 workshop. The proposed USGS National Volcano Early Warning System (NVEWS) would enhance existing monitoring and focus additional attention on volcanoes that are most likely to erupt. One-third of the nation's 54

volcanoes classified as very high or high threat by the USGS are on NPS lands. Hazards include eruption clouds, hot avalanches, lava flows, mudflows, and glacial outburst floods, and could impact park visitors, staff, infrastructure, and neighbors. Aircraft are especially vulnerable to ash clouds; two jumbo jets with hundreds of passengers were nearly downed in separate incidents when they flew through ash clouds, one from a volcano in an NPS site. Workshop participants proposed a joint effort by monitoring specialists and land managers, including one or more park superintendents, to support selection of appropriate monitoring sites and help resolve permitting issues.

Geologic Resources Division works with Missouri National Recreational River on oil pipeline project – TransCanada is proposing to construct a 30-inch diameter pipeline to transport crude oil from northern Alberta to markets in Illinois and Oklahoma. The “Keystone Pipeline” project would cross the Missouri National Recreational River near Yankton, South Dakota. Division staff have been helping park managers identify potential operational and regulatory issues. Assistance included attending a meeting on February 23rd with park staff and TransCanada contractors to review preliminary construction considerations for crossing the Missouri River. The company expects to submit a Presidential Permit application and environmental analysis to the U.S. State Department near the end of March. TransCanada plans a Washington briefing for all involved federal agencies in mid-March. Lee Dickenson is the Washington contact.

Tomales Bay Marine Station Opens At Point Reyes National Seashore (PORE) - The Pacific Coast Science and Learning Center at PORE has facilitated a partnership between the National Park Service, the Point Reyes National Seashore Association, the National Marine Sanctuary Program (NOAA), and several San Francisco Bay Area Universities to open the only marine research station on Tomales Bay. The first phase of the project involved rehabilitating an unused park structure to accommodate visiting researchers working on the Tomales Bay and throughout the park. Over 60 visiting researchers including marine scientists, wildlife ecologists, geologists, archaeologists and others have used the facility for short-term housing, office space and access to ocean resources over the past several months. The second phase will focus on rehabilitating a decaying boat pier to accommodate two NPS visitor protection vessels and two research vessels for ongoing studies on the Bay and the nearby Pacific Ocean. The final phase, anticipated by 2010, will bring additional bunk space for researchers, laboratory, and conference space. The station will be a hub for research, collaboration, conservation planning and educational programs focused on the bay and the entire Tomales Bay Watershed. Contact Ben Becker 415-464-5247

Accomplishments

Donation for geologic work in parks - The National Association of Geoscience Teachers (NAGT) has donated \$3,000 to the NPS Geoscientists-in-the-Parks (GIP) program, managed by the Geologic Resources Division, to help fund 2 or more GIP participants. NAGT is interested in helping professors, earth science teachers, and students who want to teach earth science, and believes that they would benefit from experiences in NPS areas. NAGT hopes to increase its donation to \$6,000 in 2007.

Applications for NPS geoscientist intern positions reach record high – The geoscientific

community has worked generously to help meet the needs of the NPS geology program, including recruitment of high-quality candidates for park-based geology internships. On February 15-16, Geologic Resources Division staff helped the Geological Society of America (GSA) review applications for 2006 park placements through the joint Geoscientists-in-the-Parks and Geocorps partnership. In previous years, GSA has usually received many applications from highly qualified candidates, but some specialists have been difficult to find, such as paleontologists and coastal geomorphologists. This year, GSA augmented its recruiting by strengthening its ties with universities and utilizing the EarthWorks website. The number of qualified applicants more than doubled, to over 500 for the 21 initially funded GIP positions. Applicants included students from universities with strong geology departments, professors, and professionals. Parks are expected to make their selections in the next few weeks.

Pilot partnership provides a springboard into the geologic community – The Geologic Resources Division hosted the second in a series of partnership meetings February 18 with the Rocky Mountain Association of Geologists (RMAG) and staff at Great Sand Dunes National Park (GRSA). Since the partnership began in July 2005, it has helped GRSA to convey new understanding of the park's geology and groundwater issues. Building on an article published in the RMAG journal, the park geologist has made 3 presentations to more than 80 geologists in the Denver metropolitan area, and to business leaders and residents of the San Luis Valley. Three more articles are being written on geoscience education in the park, and two others on resource management. Future partnership projects will focus on a science symposium, guest lectures, a training manual, and geologic tourism. This partnership concept could potentially be expanded to link 138 local geological societies with parks servicewide. If the average local geological society has 50 members, a system of partnerships could provide parks with access to 7,000 geologists.

Coal mines inspected to assess need for bat-protection closures at New River Gorge – Geologic Resources Division staff joined representatives of USFWS, OSMRE, and state environmental agencies on February 22 to perform a detailed site inspection for an NRPP project to close 4 portals of the Ames Mine. Underground surveys identified portals that merit bat gate protection and others that can be closed permanently by backfill or other means. Division and park staff discovered a major bat hibernaculum at Stone Creek Mine while examining a number of other abandoned mine sites and areas for proposed development. The newly discovered hibernaculum will receive appropriate protection.

Acoustic Monitoring Data Software Completed by Natural Sounds Program - Version 5 of attending logging software for the T5 Palm Handheld PDA and Access database has been completed. New features include a revised hierarchical classification of over 140 sound sources, a tab sheet interface to display up to 66 sound sources on the Palm, improved reporting features, and the ability to import data to Access from a memory card or previous database. Attended logging provides a very economical means to collect quantitative data about park soundscapes and provide information for metrics of source audibility and noise free interval.

Workshop Assessing Impacts on Visitor Use and Enjoyment from Sound Sources: In partnership with the Colorado State University Department of Natural Resources, Recreation and Tourism, the Natural Sounds Program hosted a two day workshop in Ft. Collins, CO, bringing together

experts from the private and public sectors and academia to brainstorm about the feasibility and practicality of developing a tool or set of tools that will help the National Park Service better assess impacts to visitor use and enjoyment from various sound sources. Collaboration will continue in an effort to incorporate the best available acoustic modeling and monitoring technology into existing or perhaps new social science models that deal with visitor use and enjoyment.

Southern-Southwest Regional Airspace / Range Council Meeting - The meeting provided the Air Force and federal and state land management agencies the opportunity to resolve airspace and natural and cultural resources management issues. A separate breakout session was held with Air Force (USAF) and Natural Sounds Program (NSP) staff to establish USAF and NPS contacts for overflight issues at Gulf Islands National Seashore, and provide updates for overflight issues at San Antonio Missions National Historical Park, and Big Bend National Park. The NSP staff has been assisting the parks with these issues.

Acoustic Monitoring - Winter acoustic monitoring is currently under way at Yosemite National Park, Devil's Postpile National Monument, and Sequoia and Kings Canyon National Parks. Monitoring at Yosemite and Devil's Postpile required skiing in many miles and setting up equipment on several feet of snow pack.

New Water Resources Foundation Report - A Water Resources Foundation Report has been completed for Golden Gate National Recreation Area (GOGA) designed to support information needs for GOGA's Foundation Document and extending as a reference during development of the park's General Management Plan. This is the first water resources report produced in this new format, following guidance from the 2004 Park Planning Program Standards. The NPS Water Resources Division staff worked closely with GOGA and NPS Denver Service Center staff on this effort. For a copy of this report, contact Don Weeks (NPS Water Resources Division) at 303.987.6640.

Missouri River Bank Stabilization Environmental Impact Statement - The U.S. Army Corps of Engineers(the Corps), working with HDR Engineering, Inc., has completed a draft Engineering Report (Appendix C) which supports the Missouri River Bank Stabilization EIS. This report was reviewed by the Water Resources Division with respect to the three park units on the Missouri River (FOUS, KNRI, and MNRR) and the NPS agreement with the Corps as a Cooperating Agency. Significant discussion and comments were provided at a follow up workshop held in Pierre, SD, hosted by the Corps. The bank stabilization program potentially would have a tremendous impact on the river resources of these parks as well as serious repercussions on the reaches designated under the Wild and Scenic Rivers Act.

Invasive Species Workshop - The Great Lakes Research and Education Center cosponsored an Invasive Species Workshop with Indiana Dunes National Lakeshore, the Save the Dunes Council, and the Northwest Indiana Regional Planning Commission on February 22. The workshop targeted regional educators, and relayed the invasive species research findings of Dr. Noel Pavlovic of the USGS Lake Michigan Ecological Research Station. The session was presented in a "train the trainer" format and shared presentations that formal and non-formal

educators can utilize with their respective publics including The Nature Conservancy's "New Invader Watch Program: An Early Detection Rapid Response Network to Limit the Spread of New Exotic Invasive Species."

Progress

Hudson River Case – The Environmental Response, Damage Assessment and Restoration Branch (ERDAR) worked with Saratoga National Historic Park & Roosevelt/Vanderbilt Mansion National Historic Sites in negotiations with the Environmental Protection Agency (EPA) to identify possible funding to survey cultural and historic resources prior to the final design documents for the remedial dredging work on the Hudson River (NY) to remove PCB contamination. Preliminary investigations by the responsible party's contractor have revealed some archeological/historical "areas of interest" on the bottom around Fort Edward. ERDAR has been involved with this case from a natural resources lost use point of view, but cultural lost services may also come into play given the levels of contamination of the sediments and the prohibition they may impose on recovery of artifacts to the trustees.

Palmerton Case – ERDAR met with the trustees, EPA, and the responsible party's contractors to discuss a number of issues, including comments on the EPA remedial documents, the study plan for a lost use valuation of hiking/hunting along the Appalachian Trail, and phytotoxicity studies.

Professional Meeting Attendance/Papers

Fifth "Meeting of the I&M Networks" - More than 180 managers and scientists met in San Diego, California, the week of February 6-10, 2006 to review and discuss the latest guidance, strategies, and accountability procedures for designing and implementing natural resource inventories and monitoring throughout the National Park System. This fifth "Meeting of the I&M Networks" included presentations, panel discussions, posters, and breakout-group sessions to review the status, methods, and preliminary results of planning and design efforts by the earliest funded monitoring networks, with emphasis on integration among natural resource program areas such as air, water, geological and biological resources and fire ecology. Numerous examples were provided for how networks will provide park managers, planners, interpreters, and the general public with information on the status and trends of selected park natural resources. The keynote speakers were Regional Director Jon Jarvis and Associate Director Mike Soukup. Presentations and handouts from the meeting are available on the meeting website: http://science.nature.nps.gov/im/monitor/meetings/SanDiego_06/SanDiego.cfm

Hawaii's First Multi-Park, Interagency Cave Resources and Stewardship Workshop - The Feb. 14-17 workshop in Hawaii Volcanoes National Park focused on Federal and State cave protection laws, cave resource interpretation, evaluation of biological, hydrological, mineralogical, and cultural resources, cave safety, search & rescue, cave conservation and protection, resource restoration, and geocaching. A field trip included partial resurvey of Thurston Lava Tube, assisted by CAVE speleological resources specialist Dale Pate. The 30 attendees were from HAVO, KALA, PUHO, NPS contractors, USFWS, USGS, the U.S. Army, and the State of Hawaii. Presenters included staff from HAVO, the Bishop Museum, University

of Hawaii, CAVE, USGS and the BLM. The workshop was coordinated by the Geologic Resources Division, assisted by HAVO integrated resources staff, Carlsbad Caverns National Park, BLM's Carlsbad office, Hawaii Volcano Observatory staff, the Bishop Museum, and the University of Hawaii.

DOI-NOAA Restoration Coordination Meeting – On February 16, ERDAR attended another in a series of meetings between the Department of Interior (DOI) and the National Oceanic and Atmospheric Administration (NOAA) on restoration coordination. Other participants included representatives from DOI Restoration, the US Fish and Wildlife Service (FWS), NOAA's Restoration Center and a NOAA attorney. The meeting continued the DOI-NOAA dialogue aimed at strengthening relationships, making processes more consistent, and enhancing coordination, especially on joint restoration projects. A member from each office gave a brief overview of their organization's structure and functions, and described recent accomplishments and issues. ERDAR submitted to the group for review a new guidance document entitled, "Restoration Planning and Environmental Compliance for Damage Assessment Settlement."

International Ocean Stewardship Workshop - The ADNRS Ocean Program hosted a tri-national workshop on marine protected area monitoring at Channel Islands National Park in Ventura, CA, for the Commission for Environmental Cooperation (CEC), February 21-23, 2006. Forty protected area managers and scientists from Canada, Mexico, and the U.S. shared experiences and defined a potential shared monitoring program with goals, objectives, and specific indicators of bio-physical, socioeconomic, and governance factors of marine protected areas along the west coast of North America from the Bering Sea to the Baja peninsula. They also described values added by sharing monitoring activities among sites in all three countries, outlined the next steps needed to undertake the program, and identified potential pilot sites. Gary Davis, NPS Ocean Programs, facilitated the workshop for CEC. CEC has committed \$110,000 CDN to initiate the program.

Annual Conference of Nevada Water Resources Association - Water Resources Division and Pacific West Regional water resources staff participated in the annual conference of the Nevada Water Resources Association February 22 and 23, 2006. The conference was attended by a diverse group of professionals and others with an interest in Nevada water resource management issues. NPS staff made presentations on ongoing studies that are important to the protection of water resources at Lake Mead National Recreation Area, Great Basin National Park, and Death Valley National Park. Additionally, two of the conference's technical sessions served as partial fulfillment of previous water rights settlements. The intent of these sessions was to bring together scientists from the NPS, Fish and Wildlife Service, US Geological Survey and water development interests to improve communication and advance the science associated with forecasting the effects of developing ground water.

Staff News

Madelyn Carpenter has returned to EQD's Washington office after having completed two rotations through the Presidential Management Fellowship program. She worked on the environmental assessment for Mesa Verde National Park's fire management plan. She also spent

a few weeks with the Forest Service at the San Juan Public Lands Center in Durango, Colorado, working on their wilderness evaluation.

Other Information

The Environmental Response, Damage Assessment and Restoration Branch (ERDAR) Report Published - ERDAR has had published the 2005 Progress Report, entitled Honoring the Trust: Restoring Damaged Park Facilities. The document is the first published synopsis of the program. It summarizes the program's functions and activities and offers an overview of funding and casework for FY 2004. The .pdf is available for viewing/download on the web at: <http://www.nature.nps.gov/protectingrestoring/damageassessmentandrestoration/>.

Results of Rocky Mountains CESU Small Grants Competition - The Rocky Mountains CESU announced results of the small grants competition for FY06 at the annual meeting of the Rocky Mountain cluster parks on February 27-28, 2006 in Lakewood, CO. Thirteen of the Rocky Mountain cluster parks received at least one project, with a total of 5 Research, 6 Technical Assistance and 5 Education projects, including a Tehabi internship for the Greater Yellowstone Network. See <http://im.den.nps.gov/resources.cfm> under "Tools and Reference Documents" for the results.

Upcoming Events

Rocky Mountain and Great Plains CESU Managers' Meeting - The RM-CESU and the Great Plains CESU will hold a joint managers' meeting on April 18, 2006 on the campus of Colorado State University, Fort Collins, CO. The three topics for discussion will be wildlife disease, tourism, and drought/drought mitigation. NPS managers are invited to attend. For information on the agenda and registration, see <http://www.forestry.umn.edu/research/cesu/NEWCESU/WhatsNew/default.htm> or contact Christine Whitacre, RM-CESU cultural specialist, at christine_whitacre@nps.gov.

Natural Areas Conference - The 33rd Natural Areas Conference will be held during September 20-23, 2006, in Flagstaff, Arizona. The conference will be co-hosted by the Natural Areas Association and the National Park Service. The Director's Natural Resource Awards presentations will be made at the conference. For further information, please contact Conference Chair Dr. Ron Hiebert at ron_hiebert@nps.gov or visit the conference web site. (www.cpsesu.nau.edu/naturalareas2006/)

Soundscape Planning Workshops and Meetings - The Natural Sounds Program (NSP) of the ARD will be hosting several workshops in March:

- Soundscape Stewardship Planning Workshop for western parks at Point Reyes National Seashore.
- Soundscape Management/Air Tour Management Plan planning workshop for six Hawaii parks.
- Soundscape Management workshop for Minute Man National Historical Park.

The NSP will also be attending in March the annual Air Tour Management Plan planning meeting at the Department of Transportation Volpe Center in Cambridge, MA, and the Grand Canyon Alternative Dispute Resolution meeting in Las Vegas where decisions regarding air tour management alternatives for the NEPA process will be negotiated.

Western Great Lakes Research Conference - The Great Lakes Research Education Center is co-hosting the Western Great Lakes Research Conference being held from March 22-23, 2006 in Ashland, Wisconsin. The major partners hosting the conference include the Great Lakes Northern Forest CESU and Apostle Islands National Lakeshore. Scientists conducting research in the Great Lakes National Parks and National Forests will present results of their work in the network parks. Topics include contaminant effects on fauna, paleolimnology of lakes, molecular methods applied to animal and plant population dynamics, and others. For more information about the conference go to the web site, **<http://www.cnr.umn.edu/cesu/conferences/wglc>**