

Associate Director, Natural Resource Stewardship and Science
Monthly Report for November 2000

ACCOMPLISHMENTS/NEW DEVELOPMENTS

NRIntranet Fact Sheet Series. One fact sheet about the Natural Resources Intranet (NRIntranet) and another about the Synthesis Information Management System are the first in the brand-new NRIntranet Fact Sheet Series at <http://www.nature.nps.gov/intranet/NRFacts/nrindex.htm>. NPS staff, notably park staff, is invited to use the series to share information with coworkers. Such information may cover brief news items that relate to natural resources or to the NRIntranet, descriptions of new techniques useful to coworkers in other parks, protocols for monitoring natural resources, and so on. The length of sheets may vary from less than one page to several pages. Contact the editor by cc:Mail (Rockwell, Elizabeth) or telephone (970-225-3541) if you wish to submit a fact sheet.

Inventories of Vertebrates and Vascular Plants. A review panel of 13 scientists from NPS and the USGS Biological Resources met in Fort Collins in mid-October to review study plans from 18 networks of parks for conducting inventories of vertebrates and vascular plants. The panel identified four particularly good plans with good examples for other networks of how to plan for and conduct biological inventories. The four plans were from the Northern Colorado Plateau, Southern Colorado Plateau, Heartland, and Pacific Islands. The remainder of the 32 networks will submit study plans by 1 December 2000, and the same panel will review them. All 270 parks with significant natural resources will receive funding this year to continue work on the biological inventories.

NPS Wetlands Conservation Information Included in National Report. NPS data on FY 2000 "Wetland Conservation Activities" was included in a Federal Geographic Data Committee report to the White House Wetland Working Group. The report shows that NPS conducted restoration and protection on more than 64,000 acres of wetland habitat. These activities included prescribed burning, hydrologic restoration, fill removal, exotic plant removal, land acquisition, and other types of restoration and protection. Information for the report was obtained from regional water resources coordinators and targeted park resource managers. The report represents a good sampling of NPS wetland conservation but is not comprehensive of those activities service wide.

Director's Order 78. The draft of Director's Order #78 about social science activities in the directorate of Natural Resource Stewardship and Science is available for public review and comment. It has been broadly distributed to the social science community. For further information please contact Dr. Gary Machlis, Visiting Chief Social Scientist at <Gary_Machlis@nps.gov>.

Gravel Pit at Nez Perce National Historic Site Reclaimed. The Idaho Army National Guard reclaimed the site of a gravel pit in the White Bird battlefield, location of the first

battle of the Nez Perce war in 1877. Dan Foster, Resource Management Specialist, NEPE, coordinated the project and Geologic Resources Division staff designed the plan. The pit is in an area with valuable cultural resources that receives a relatively large number of visitors. The reclamation, which reduced the gradient of the pit to blend into the surrounding landscape, was necessary because the pit was unsightly and incompatible with NPS policy and values.

Geologic Issues at Petersburg National Battlefield Evaluated. Tunneling by Union troops at the crater site of Petersburg NB was difficult because of dense clay in an abandoned channel, revealed by drilling. Dr. Rick Bergquist of the College of William and Mary and the Virginia Geological Survey directed the investigation. Geologic Resources Division staff visited the site to understand the geology, to evaluate erosion at City Point, and to initiate geologic mapping. Division staff recommended protecting the cultural resources of City Point rather than continuing to stabilize the bluff. This information was used to support the Synthesis presentation at the Discovery 2000 conference.

Road Survey in Shenandoah National Park. Shenandoah National Park requested technical assistance for surveying secondary roads in the park. Geologic Resources Division staff surveyed the roads during a site visit on 29-31 August to evaluate the need to reclaim, maintain, or upgrade various types of roads. The result was the development of site-specific options of road closure and reclamation and/or road maintenance and upgrade. The findings of the survey and a draft procedure for analyzing the priorities were transmitted to the park.

HEADS UP!

Scientific Research and Collecting Permit System. The Paperwork Reduction Act review package for the new Scientific Research and Collecting Permit System is nearing completion. When completed, it will be submitted to the department for review. When the department clears it, it will be submitted to the Office of Management and Budget for review and a decision. The OMB review process takes about 60 days. The first version of the software to operate the combined permit application and Investigator's Annual Report processes through the Web is nearing completion. Software implementation is expected by 3 January 2001.

Exotic Plant Management Team. Because of the success of addressing invasive species on NPS lands by four current EMPTs, six new teams will be proposed for funding and operation in FY 2002; they are dependent upon an FY 2002 increase. Project proposals for the new EMPTs are due on 20 December 2000. The EMPT Proposal Evaluation Panel will meet at the WASO office in Fort Collins during 17-19 January 2001. Each region has been requested to submit an evaluator for the panel by 4 December 2000. For more information contact Linda Drees or Terry Cacek at 970-225-3595

PROGRESS

Water Rights Hearings to be Held in Nevada. On 25 October 2000, the Nevada State Engineer announced he would hold hearings in July and August 2001 to resolve protests on water right applications of the Las Vegas Valley Water District (LVVWD) and Coyote Springs Investment (CSI) respectively. The applications propose to withdraw groundwater upgradient from the Muddy River and Lake Mead NRA. This involves the re-activation of a few LVVWD claims originally filed in 1989 and subsequently put on hold. CSI, successor to Aerojet Nevada, proposes to use the water for golf courses and houses in Coyote Spring Valley about 50 mi north of Las Vegas. NPS, FWS, BLM, BIA, and the Moapa Band of the Paiutes are protesting these water right applications.

Effects by Snowmobiles on Water Quality. Twenty percent fee demo funding has been approved for a study of possible effects by snowmobiles on water quality in parks. A technical committee headed up by WRD will develop the study design and the protocols for sampling and data analysis. The study will involve several but not all parks that currently permit the use of snowmobiles.

OTHER INFORMATION

Update on DM&E Railroad Project. On 2 November, representatives of Badlands, Wind Cave, ARD, and Sioux tribes and 300 area citizens attended a public meeting in Rapid City, South Dakota. The DM&E Railroad Corporation wants to construct a new rail line to haul coal from the Powder River Basin (northeastern Wyoming and southwestern South Dakota). About one-third of the speakers favored the DM&E project because it may improve rail service to the area, and two-thirds of the speakers opposed the project because of adverse effects on ranching, farming, and the environment (including air quality in Badlands) and because of violations of sovereign treaty rights. The deadline for comments on the project is 1/5/01.

PROFESSIONAL MEETINGS

Air Quality and Alternative Fuels. On 1 November, NPS, DOE, and DOI held a workshop on alternative fuels and vehicles in Gettysburg, Penn. Presentations included the importance of alternative fuels to NPS, an overview of air quality effects in parks, and cleaner vehicles as part of the solution to mitigate air quality problems in parks. Various speakers demonstrated the performance characteristics of different alternative fuels and alternative fuel vehicles, discussed refueling options, and explored maintenance, repair, and safety options. The turnout was a great success and included representatives from several mid-Atlantic and northeastern parks.

Environmental Performance Summit. Natural resource goal coordinators participated in the second Environmental Performance Summit in Denver. The meeting addressed challenges of performance management in the public or non-profit sectors in natural resources management. Staff from federal, state, and local agencies and from non-profit groups shared perspectives, successes, and failures in making performance management a positive tool for reaching environmental goals. Natural Resource Program Center staff

from the divisions of Air Resources, Biologic Resource Management, Geologic Resources, and Water Resources, responsible for service-wide strategic plan goals, gained information that may be useful for defining goals and guidance during the revision of the NPS Strategic Plan.

Federally Recognized Collections. The Third Conference on Partnership Opportunities for Federally Recognized Collections was held in Austin, Texas, during 12-15 November. Resource Managers Jonathan Bayless, Pacific West Region, and Norm Henderson, Glen Canyon NRA, attended a one-day workshop *Permit Me* on federal permits. Both were members of the NPS Permit Task Force 1997-1999 that helped develop the new draft *Research and Collecting Permit*. Watch for an article by Bayless in *Park Science* about the insight the managers gained into permit initiatives of other agencies and about the information they shared with other attendants on upcoming changes in NPS procedures.

Man and the Biosphere Program. NPS participated in two Man and the Biosphere (MAB) international meetings. One assessed the worldwide implementation of the 5-year-old Seville Strategy for biosphere reserves and presented recommendations to the second - the MAB International Coordinating Council (ICC). ICC approved 21 new biosphere reserves, bringing the total to 391 in 94 countries. The U.S. delegation to ICC advocated MAB as a place-based, interdisciplinary program for natural and social sciences and encouraged using biosphere reserves for applied, interdisciplinary research; science-based education, training, and resource management; biodiversity conservation; reconciliation of conservation with development; and harmonization of sustainable human actions with the environment.

Meeting of NPS Water/Aquatic Resources Professionals. About 75 NPS water and aquatic resources professionals met in Fort Collins, Colorado, on November 13-17. The purpose of the meeting was to foster communication and cooperation between individuals involved in various technical and programmatic aspects of water/aquatic resources management. The meeting, which was convened by the Water Resources Division, emphasized the restoration of aquatic resources in parks. Speakers included park specialists and managers, and representatives of academia, non-profit organizations, and other federal agencies.

STAFF NEWS

Groundwater Specialist Joins the Water Resources Division. Peter Penoyer was selected for the groundwater contaminants position in the Water Resources Division. Pete was formerly with the U.S. Army Corps of Engineers. He has a strong background in groundwater hydrology and in the monitoring and remediation of contaminated groundwater. Pete is available to assist parks in groundwater management issues. Contact the Water Operations Branch in the Natural Resource Program Center at 970-225-3504.

Natural Resource Advisory Group Meeting Notes, October 30-November 1

Soukup Remarks Mike Soukup informed NRAG about the subgroup meeting of the National Park Service Advisory Board. The subgroup includes Gary Nabhan and Silvia Earle. Peter Raven (Missouri Botanical Garden), Deb Jensen (The Nature Conservancy), and John Turner (Conservation Fund) were also to join the subgroup at a meeting Thursday, November 2. This working subgroup will be putting together a strategy about the makeup of the National Park System twenty-five years from now. Mike spoke about the keynote addresses of Peter Raven and E.O. Wilson at Discovery 2000 and how the Advisory Board effort will respond to the kind of call that Raven and Wilson made for the use of parks as a cornerstone for preservation of biodiversity—both in terms of preserving this country's biodiversity and setting an example and leading other countries in this endeavor. There was discussion with the NRAG about working with neighbors acknowledging the missions of our partners. Some NRAG members feel that it is important that we not be seen as concerned only about the NPS agenda, but as also interested in our neighbors'/partners' interests. There was general agreement about the need to develop a sense of a shared agenda that incorporates our concerns.

Challenge Doug Morris spoke about the Natural Resource Challenge. He characterized the effort as three-fold at this stage—or as being made up of three rails. One is the budget, another is the internal efforts and excitement of NPS managers to move the Challenge agenda forward, and the third is the engagement of external partners. He let Abby Miller update the group on the budget. Abby indicated that of the \$18.45 million request, which includes 13 separate (and individually justified) proposals, \$15.25 million was appropriated. This excluded any funding for the section 19(jj)/Resource Protection Act restoration effort, the California Desert, Alaska project funding as part of the Tundra to Tropics initiative, and Resource Assessments that were proposed as part of the GMP process and appropriation. All of the other proposals were fully funded, except the proposed \$1.25 million natural resource data proposal, which was cut by \$150,000. Abby pointed out that although only about \$30 million of a planned \$40 million had been appropriated, natural resource funding generally is making forward progress, starting at under 8 percent of the operating budget before the Challenge and hitting 10 percent in FY 2001. She indicated that there is no formal budget proposal for FY 2002 pending the election, but that preliminary planning is looking at the planned FY 2002 Challenge budget, plus the deficit from FY 2000 and FY 2001.

Doug said he believed that the internal level of activity and excitement among NPS managers was fairly high, but there is room for improvement; the level of activity is not consistent across parks and regions. He told NRAG about a June meeting being planned by Peter Brinkley, who is on the George Wright Society board, with Brinkley and the Chicago Academy of Sciences to try to engage outside scientists with the Park Service. Doug expressed concern that efforts to engage external partners must be highly targeted and carefully planned, so we don't "go to the well" too often.

NCKI Dave Shaver gave the group an update on the National Cave and Karst Research Institute, which was mandated by 1998 legislation that authorizes funding, provided

there is a 50 percent non-Federal match. This presents difficulty, because some effort (funded) is required to get the match. The institute is to be managed jointly by NPS and another entity and located in the vicinity of Carlsbad Cavern NP. New Mexico Tech and the city of Carlsbad plan to request substantial funding from the New Mexico State legislature for a new building. There is no dedicated NPS funding to date to share in the operation of any such institute. However, the NM delegation strongly supports the institute. The institute would facilitate research on cave and karst resources nationwide and could become a thematic Learning Center and/or CESU or part of a CESU. Zelda Bailey has accepted a 2-year term appointment from USGS to act as interim director during the development phase. Dave solicited NPS regional representatives to work on development of the institute. Zelda is convening an interagency work group meeting in December to discuss next steps.

Resource Protection Tom Blount and Ken Johnson from Shenandoah NP, and John Garrison from Blue Ridge Parkway came to present information to NRAAG about resource protection efforts related to plant poaching. They have conducted training and prepared a funding proposal for a national effort, but to date, their efforts are directed at the Southern Appalachians. Ken pointed out that there are some general categories of plants that are poached—rare and showy plants, medicinal plants and herbs, and plants involved in the floral trade. He provided information and statistics about extensive, organized poaching activity on public lands, and described how little standard patrolling alone can affect this. Basically, poaching for plants, insects, and wildlife is increasing dramatically as the economic value of these organisms increases and they are eliminated from other land bases. Also, there is no nationwide database to identify where these activities are occurring or to identify species for which there is a market or a market is developing. As a result, personnel in each park are required to hunt out this information themselves. Considerable information is available from sellers on the web. Ken and John are looking for assistance and a broader effort to identify, quantify, and prioritize exploitative risks. There are a number of things that are necessary, the first being for resource managers and enforcement officials to learn to work together and understand each other. He and Tom Blount described the difficulty they had at first in understanding and appreciating how the other worked. He talked about the importance of just raising awareness. They have organized a panel for the George Wright Society meeting as one means of doing that—and have also talked to regional meetings, as well as conducting training. The group discussed the possibility of using NPSpecies as a means to collect and organize information on what is being poached or has the potential for being poached, based on information on the market for wild plants (and other natural resources). The Inventory and Monitoring Program is actively exploring this possibility.

RAMS Gary Mason updated the group about the RAMS database that is proposed to replace the Resource Management Plan database. To the user, the new RAMS will routinely function as a stand alone system, except when queries are being made of the Servicewide database. This will free users from connectivity and speed issues associated with being on-line with a distant central server. It will provide user- independent upload and download capabilities that permit identical versions of each park's database to reside

both on PCs at a park and within a Servicewide database. It will provide authorized users a means to create new proposals in PMIS and OFS from the information within RAMS without rekeying any of the primary data (the development is also being coordinated with Maximo). For functions identified as needed by field resource managers, RAMS will have capabilities that equal and exceed those formerly available through the RMP database. These include robust sorting, searching, reporting, archiving and documentation of existing funded and unfunded resource management programs. Cultural Resources has already agreed to share in half the cost of completing the database (\$340,000). The NRAG recommended that Natural Resources go ahead with funding its share of RAMS' completion (\$170,000). It will be funded either by NRPP or from the FY 2001 Natural Resource Information Division increase, or a combination of the two. The tentative target for Servicewide delivery of RAMS is November 2001.

NRPP Several recommendations about changes to NRPP were discussed, as was the need to further address criteria in the future. The NRPP call for FY 2002—as well as the call for other Natural Resource project funding, will be part of a call for all Servicewide funding sources from all programs, due out December 1. For this year, it was recommended that additional weight be given to regional priorities. Also, weight given to fee funding should be reexamined to see if it is too punitive for parks that only receive a small amount of fee funding. The NRAG also requested that the T&E criteria be broadened to include “sensitive” species. Since the latter issue was only briefly discussed and had no prior analysis, it will be discussed further at the next NRAG meeting before being put into place. Another issue that should be addressed at the next meeting is whether applied biological research should be funded through NPS NRPP as well as USGS/BRD NRPP. We agreed to form a sub-committee to examine the 8 criteria and determine if further tweaking would be of benefit. Members of this committee are Jerry O’Neal, Dave Shaver, Dan Steensen, Joel Wagner, and Julie Van Stappen. Results of the committee's findings are to be presented at the next NRAG meeting.

Resource Planning Kathy Jope and Gary Mason addressed the resource management planning process. Kathy explained that one of the recommendations of the Challenge is to revise DO-2 to integrate resource planning more fully into the Servicewide planning process. Nat Kuykendall provided valuable insight into the new planning process. He described a “corral” of mission, mandates and policies that often leave little discretion for planning alternatives except those that involve visitor service options. He said a real difference in the new style plans is that they are intended to address the required resource stewardship actions more fully. The absence of a place in the planning process for the long-range strategies intended to be included in the introductory section of resource management plans was addressed. While DO-2 considers RMPs to be “implementation plans,” implementation plans are typically intended to fit into a shorter timeframe, i.e., 5 years. Although RMP’s were updated regularly, the introductory section was intended to take a longer-range, more strategic view. All agreed that the current planning process lacks the ability to assess the difference between current conditions and desired conditions and to translate that into comprehensive technical strategies. There also continues to be a lack of well articulated desired future conditions, as well as a limited

number of parks that possess GMPs containing management prescriptions (desired future conditions).

After much discussion, the NRAG recommended that:

- Resource planning be integrated into DO-2 and not a separate DO;
- In-depth resource assessments, as called for in the Challenge, be required by DO-2 and guidance for their preparation developed and included in the Planners Handbook;
- DO-2 explicitly call for identification, in the GMP, of desired future conditions (DFCs) for resources, within management prescriptions, based on the Organic Act and other mandates, and clarify the expected attributes of resource DFCs;
- Guidelines for developing desired future conditions—with lots of examples—be provided.
- A new section of DO-2 provide for long-range comprehensive strategies for resource stewardship—the strategies for achieving DFCs—be formulated and documented. (Since long-range strategies amplify the application of policies to resources and don't authorize actions, they normally would not require an EA.);
- For parks that have inadequate (or no) DFCs for resources, the revised DO-2 require identification of interim DFCs as part of the long-range resource strategy;
- A process to periodically assess the departure of current conditions from the DFCs be formalized.

Each region was requested to provide the names of two persons to serve on a working group to develop guidance for the vice-RMP documents. WASO will chose among them to develop a working group representing different perspectives (with Cultural representatives as well) to develop new guidance.

Impairment Chris Shaver updated NRAG about the impairment language in Chapter 1 of the Management Policies—which is addressed also in DO-55, and the relationship of an impairment analysis to new environmental compliance guidance. Concerns were expressed about the relationship of DO-55 to current activities, i.e., is a new analysis of ongoing activities required? The need to consider the irreversibility of decisions when determining impairment was also raised. The model provided by section 7 consultation (under the Endangered Species Act) was recommended for consideration, i.e., a reasonable and prudent alternative is used and is reevaluated in light of new information. Chris raised the issue of how specialists are engaged in the process since the decision on impairment is part science and part policy. NRAG recommends more guidance with lots of examples and also recommends that NEPA guidance be revised to be clear on the impairment analysis. Given litigation potential, we need to give managers all the help possible. Also, NRAG believes that Cultural Resources should be much more involved and Abby promised to see that that happens. Each region is to send Chris Shaver two names of superintendents, compliance personnel or resource managers by November 16, who may be selected for a workgroup to help with guidance. Chris also asked NRAG members to identify scientists or ecologists (within or outside the NPS) who could help develop a scientifically-sound yet practical approach to assessing effects on indicators of ecosystem health .

Awards The NRAG recommended adoption of a new Director's Award for assistance provided by technical experts. The natural resource management award normally is awarded to persons who lead natural resource management programs. Given some of the nominees last year, the need for a means to recognize those with a more narrow but deep programmatic impact was identified. The NRAG also suggested looking at broadening the maintenance award to all of operations.

Issues for next meeting—NRPP/research issue previously listed, RMP interim requirements, Challenge—esp. education, and partnership.