

GEOLOGIC RESOURCES DIVISION  
NATURAL RESOURCES PROGRAM CENTER  
Monthly Report – September 1999

GEOLOGIC RESOURCES – GENERAL

NPS INCREASES COMMITMENT TO REPORT TO CONGRESS ON FEDERAL PALEONTOLOGICAL RESOURCE MANAGEMENT – Staff from several parks, the Division, Ranger Activities, and Museum Management are increasingly shaping the content and format of the interagency report to Congress required by the FY99 Interior Appropriations Act. The purpose of the report is to evaluate current Federal management of fossil resources and to assess the need for a unified Federal policy on collection, preservation, and storage. Viewing the report as an appropriate vehicle for presenting the need for and requesting comprehensive protective legislation, the NPS has sought input from the Smithsonian, USGS, and U.S. Attorneys, and has recently submitted four documents to the interagency team. These documents include a list of potential recommendations for legislative and administrative actions that would unify Federal policies, two rough drafts of the report, and extensive comments and edits of BLM's subsequent rough draft. The chairman of the interagency team agrees with the NPS's emphasis on analysis, evaluation, and recommendations, and has now asked the NPS to take the lead on the report's executive summary and conclusion. A draft of the report will be available for public review in early October. The final report is due to Congress on February 1, 2000. (Brunner)

MINERALS MANAGEMENT – GENERAL

STAFF ATTENDS ANNUAL CONFERENCE OF THE NATIONAL ASSOCIATION OF ABANDONED MINE LAND PROGRAMS IN PENNSYLVANIA – John Burghardt attended the 1999 NAAML P Conference in Seven Springs, Pennsylvania August 23-24. The NAAML P is composed of 26 states and 3 Native American Tribes that are supported through the Office of Surface Mine Reclamation and Enforcement (OSM) by a tax on coal mined in these states and tribal lands. As such, the conference largely focuses on coal mine reclamation, but also includes some emphasis on hard-rock mine reclamation issues. Most of the mine reclamation partnerships (Interagency Agreements and Memorandums of Understanding) that have served GRD so well through the years have resulted from contacts made at this conference. John interacted with a number of old and new contacts to let them know that the NPS still has an active program and is interested in coordinating with state programs as needs arise. (Burghardt)

ALASKA REGION

INTERMOUNTAIN REGION

EROSION BETTER-UNDERSTOOD AT CAPULIN VOLCANO – A site visit to Capulin Volcano National Monument illustrated variable watershed response to the effects of road building. The “Volcano Road” spirals up the volcanic cinder cone and causes unnatural patterns of runoff. The unnatural runoff causes locally severe erosion. Preliminary estimates suggest that “erosional evolution” of the cone has been accelerated, in specific locations, by ten to twenty thousand years; the cone is just 60,000 years old. Through field investigations, an understanding of why some areas of the cone behave differently than other areas, even with similar human alterations, is found within the context of the volcanic eruptive history. For example, some areas of the cone are better welded (fused together during eruption) than other areas, which affects the rate of stormwater infiltration, runoff, and erosion. How natural conditions interact with the road corridor is important to developing and justifying appropriate treatments to remedy accelerated erosion. The park has now entered discussions with road-engineers in the Intermountain Region and the Federal Highways Administration to begin the process of correcting road-related erosion. (Steensen)

## MIDWEST REGION

### NATIONAL CAPITAL REGION

### NORTHEAST REGION

ABANDONED ROADS AND HOG CAMPS AT SHENANDOAH – Park staff requested assistance from the Division to evaluate an abandoned logging road and identify alternatives for rehabilitation or restoration. The catalyst for the request of the park stems from the rain event associated with Hurricane Fran in 1996 when runoff caused extensive damage to downslope roads outside the park. Although several counties in the region also suffered heavy damage in ‘96, some thought that old logging/mining roads within the park could be a contributing factor. It is often true that roads alter natural patterns of runoff and, in turn, affect natural rates of erosion. However, field evidence shows that the abandoned road in this particular case does not significantly affect runoff patterns or erosion and sedimentation rates, particularly where the drainage exits the park. In addition to road evaluation, Division staff assisted the Water Resources Division in layout and staking of an erosion control project on Hog Camp Branch, near the popular Big Meadows area and Skyline Drive. Hog Camp Branch is actively downcutting as result of previous “improvements” (i.e., channel straightening) and if left unchecked, could dewater a wetland unique to the higher elevations in Shenandoah. (Steensen)

### PACIFIC WEST REGION

ASSISTANCE PROVIDED MOJAVE IN REVIEWING CONTRACTOR PROPOSALS FOR UNDERTAKING ADDITIONAL MINERAL EXAMS AT MOJAVE – John Burghardt assisted Ted Weasma, Geologist and Lead Mineral Examiner for Mojave, in

reviewing and rating site-specific proposals under the validity exam contract that was initiated by GRD in 1998. Approximately \$195,000 of FY 1999 funds have been set aside for these six mineral examinations involving both lode and placer claims. As work on the four examinations contracted in the fall of 1998 nears completion it appears that the contracting mechanism is an effective and efficient means of meeting the park's statutory mandate to address the validity of all claims in the park through time. (Burghardt)

## SOUTHEAST REGION

STAFF ASSISTS KINGS MOUNTAIN NATIONAL MILITARY PARK IN ASSESSING AML NEEDS – John Burghardt visited KIMO (South Carolina) August 25-26 to assess the park's AML needs, particularly with respect to a vertical shaft near the park's boundary near a residential community. This shaft is 82 feet deep and is currently fenced. Its history is unknown, but the shaft appears to have been exploring lower projections of a steeply-dipping quartz vein that was trenched nearby at the surface, presumably for precious metals. John and park staff rigged and lowered a video down the shaft to check for historic debris and to check a lateral working for bat habitat. This and bat detector surveys conducted by Student Conservation Association volunteers revealed no summer bat activity in the shaft. The park may inspect the lateral working by videography this winter to determine if the site provides hibernation potential for bats, although this is unlikely. Pending proper compliance, a polyurethane foam plug with earthen backfill will most likely be used to close the site permanently, perhaps with GRD funding assistance from the FY2001 AML budget or NRPP grant monies. One quarry site for building stone, and another site of shallow prospects following quartz vein outcrops were also inspected, but these do not present safety issues worthy of mitigation. (Burghardt)

## DIVISION NEWS