I&M Inventory and Monitoring Fact Sheet

U.S. Department of the Interior
National Park Service
Natural Resource Information Division

Soil Mapping

July 1996

The Natural Resource Inventory and Monitoring (I&M) Program was established to gather information and develop techniques for maintaining the integrity of the ecological communities in the approximately 250 National Park System units with significant natural resources. The details of the program are outlined in *Natural Resource Inventory and Monitoring in National Parks*, available from the address listed below.

Since its inception in 1992, the I&M Program has funded mapping of vegetation, soils, and geologic features; collection of base cartographic data; and compilation of automated park-based bibliographic databases; initiation of several prototype monitoring programs; and development of data management standards and protocols. The series of fact sheets provides updated information on the progress in each of these areas.

Soil Mapping

Maps of selected geophysical features such as soils are being produced for each natural resource park. The National Park Service is working with the Natural Resource Conservation Service to complete Order 3 soil surveys in all parks, except where more detailed surveys are required for park management.

In addition to the baseline soil survey data, a primary product of the soil mapping program is a digital layer for specific park units. The soils data will be automated to provide flexibility in map design and production and to facilitate data management.

Partnerships

The Inventory and Monitoring Program is completing soil maps through national agreements with other federal agencies such as the Natural Resources Conservation Service and with private contractors. In 1995, I&M Program staff assisted parks with identifying soil mapping needs so that park objectives could be met through appropriate data collection and scale of maps. For example, special strategies are being developed in cooperation with the Natural Resources Conservation Service to handle the large-area mapping for parks in Alaska, beginning with the Denali National Park.

Program Status

The Natural Resources Conservation Service is conducting soil surveys in 18 parks and will continue to support soil mapping until the project is completed. Soil map digitization in the Bighorn Canyon National Recreation Area was completed by the conservation service in 1995 at no cost to the National Park Service. Additional mapping is being conducted by contractors at the Pecos National Historical Park.

Fieldwork was completed at the Dinosaur National Monument, Hagerman Fossil Beds National Monument, Theodore Roosevelt National Park, in Pecos National Historical Park, Yellowstone National Park, and in the Southern Arizona Group (including the Chiricahua National Monument, Coronado National Memorial, Fort Bowie National Historic Site, Montezuma Castle National Monument, and Tuzigoot National Monument), and the delivery of the maps is expected in 1996. Field mapping will continue in the 1996 field season in the Bighorn Canyon National Recreation Area, Glacier National Park, Hawaii Volcanoes National Park, Lake Mead National Recreation Area, Rocky Mountain National Park, and Yosemite National Park.

In addition in 1996, fieldwork will be conducted at the Craters of the Moon National Monument and in the Gateway National Recreation Area, Great Smoky Mountains National Park, and Saint Croix National Scenic Riverway. Soil mapping at the Bandelier National Monument is planned under a contractual arrangement similar to that in Pecos National Historical Park.

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You may also consult our worldwide web page on soils maps at:
http://www.aqd.nps.gov/nrid/im/bgeol.htm