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

FACT SHEET:

Soil Inventory and Mapping

By Pete Biggam, Soil Scientist Background

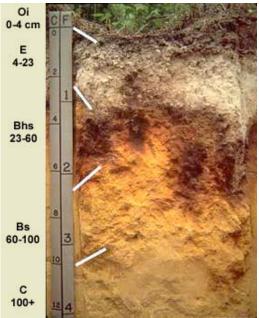
Soil is defined as the unconsolidated portion of the earth's crust modified through physical, chemical, and biotic processes into a medium capable of supporting plant growth. Soil properties influence natural and cultural resources and the physical infrastructure in parks. Soil surveys provide an orderly, on-the-ground, scientific inventory of soil resources. The inventories include maps of the locations and extent of soils, data about physical and chemical properties of those soils, and information derived from those data about potentialities and problems of use on each kind of soil. The information is in sufficient detail for application by park managers, planners, engineers, and scientists to specific areas of concern. This systematic inventory of soil resources facilitates effective management in each park. The I&M Program supports soils mapping and inventories based on standard terminology and techniques of the National Cooperative Soil Survey.

Partnerships

The I&M Program is completing soil surveys through agreements with other federal agencies such as the Natural Resources Conservation Service and with private contractors. In 1999, I&M Program staff continued to assist parks with identifying needs for soil mapping, so that park objectives could be met through appropriate data collection and scale of mapping. Special strategies are being developed in cooperation with the Natural Resources Conservation Service and private contractors to handle the large-area mapping for parks in Alaska, Arizona, California, Florida, and Montana.

Program Status

Products of the I&M Soils Inventory and Mapping Program are a digital soils layer, a corresponding set of soil attributes and interpretations in a National Soil Survey Information System (NASIS) format, a soil survey manuscript in both hardcopy and digital format, and a metadata file.



Volcanic ash influenced soil, northwest Washington

The Natural Resources Conservation Service completed mapping in 147 soil survey areas with National Park System units. Mapping is in progress in an additional 35 units. Digitization of soil surveys is complete in 29 units and either currently underway or planned in an additional 78 units. The Natural Resources Conservation Service will continue to support soil mapping and digitizing until the project is completed.

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