



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



## Geologic Mapping

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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.

### Geologic Mapping

Maps of selected geophysical features, including bedrock and surficial geology, are produced for the baseline inventory of natural resources in each park. Ultimately, geology maps will be generated for all natural resource park units.



### Partnerships

The I&M Program is completing geology maps by national agreements with other federal agencies, most notably the U.S. Geological Survey. In 1995, scientists of the survey assisted park managers with defining types of geologic mapping and scales for park management. Regional teams of the survey acquainted park personnel with the quality and availability of geologic mapping.

In a partnership with the Association of American State Geologists, information will be gathered from the files of state agencies and compiled into an automated ProCite database of geologic maps, documents, specimen collections, and other related information.

### Program Status

Initially, an inventory of geologic information was made and standards for parks with general management plans were developed. Because field mapping of bedrock and surficial geology data theme layers is extremely costly, data must first be obtained from other sources. Database searches are completed in all three regions of the U.S. Geological Survey. Data files were downloaded from GEOINDEX and GEOREF databases and converted into a format that can be uploaded into park-specific ProCite files. Data entry and data conversion are proceeding on schedule under an arrangement with the Cooperative Park Studies Unit at the Colorado State University.

Pilot mapping of surficial geology in the southern portion of Zion National Park will begin in 1996 in a cost-sharing arrangement with the Utah Geological Survey.

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You may also consult our worldwide web page at:  
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