



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



Baseline Water Quality Status and Trends

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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 and water-resource-related databases; initiation of several prototype monitoring programs; and development of data management standards and protocols. The fact sheet series of the Natural Resource Information Division provides updated information on the progress in each of these areas.

Baseline Water Quality Status and Trends

Baseline Water Quality Data Inventory and Analysis Reports are being prepared for all units of the National Park System with significant water resources. The reports provide parks with complete inventories of all water quality data collected in and near the parks and stored in the STORET national water quality database of the U. S. Environmental Protection Agency (EPA). Each report features descriptive statistics and graphics of central tendencies and trends in annual, seasonal, and period-of-record water quality. Also provided are results from comparisons of water quality in parks

with relevant national water quality criteria by EPA and Level I water quality parameters of the NPS-75 Guideline. The entire report (text, tables, graphics) and all databases (water quality parameter data; hydrography; water quality station; water gage; National Pollutant Discharge Elimination System permit; drinking water intake; and water impoundment locations) are provided in analog and digital format to encourage additional analysis and incorporation into park geographic information systems. Copies of Baseline Water Quality Data Inventory and Analysis Reports are available from the National Technical Information Service of the Department of Commerce and from the NPS Technical Information Center.



Background

Good water quality in the parks is imperative to the persistence of natural aquatic communities and to the consumptive and recreational use of water by visitors. Ensuring the integrity of water quality in parks, therefore, is fundamental to the mission of the National Park Service. However, a recent report by the General Accounting Office identified water quality impairment as one of the greatest threats to park resources. As a consequence, parks frequently collect water quality data. Sound science and public policy, however, require an assessment of previously collected data before the collection of new data. The assessment

can improve the design of further collections, avoid duplication, and facilitate comparisons with baseline data. To assist parks with evaluating water quality, the Inventory and Monitoring Program in concert with the NPS Water Resources Division initiated the *Baseline Water Quality Status and Trends Project* in 1993.

Partnerships

Implementation of the Baseline Water Quality Status and Trends Project is a joint public-private sector initiative involving Horizon Systems Inc.; the Colorado State University; the NPS Inventory and Monitoring Program and Water Resources Division; the EPA; and numerous other federal, state, and local government agencies that store water quality data in the EPA STORET database.

Program Status

As of September 1996, 60 Baseline Water Quality Data Inventory and Analysis Reports were completed and sent to parks. Reports for all parks should be completed by late 1998.

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