Baseline Water Quality Data

Background
Preserving and protecting water resources and water-dependent environments in parks is fundamental to the National Park Service (NPS) mission. Parks need to ensure that the physical, chemical, and biological characteristics of their waters sustain healthy aquatic ecosystems, support the purposes of the park, and attain all state-designated beneficial uses. Consequently, baseline water quality data for key park water bodies were identified as one of the 12 core NPS natural resource inventories.

Many different public, private, and non-profit organizations across the country collect physical, chemical, and biological water quality data for a variety of purposes. The first step in this NPS Water Quality Data Inventory was to document and summarize all of the existing, readily-available, digital water quality data collected in the vicinity of parks.

To accomplish this task, data retrievals were made from the primary national water quality databases: the Environmental Protection Agency’s (EPA) STORET Data Warehouse and the U.S. Geological Survey’s (USGS) National Water Information System. Hard-copy water quality data found in parks or in the NPS Water Resources Division (WRD) files were digitized and entered into STORET for inclusion in the report. When a park’s Baseline Water Quality Data Inventory and Analysis Report revealed an absence or paucity of data or only very old data for key park water bodies, the park was provided funding to collect the primary and secondary water quality characteristics necessary to construct an initial baseline, which is called a Level I Inventory.

Status
Baseline water quality data for key park waterbodies exist in the EPA’s STORET Data Warehouse or the USGS’s National Water Information System. Baseline Water Quality Data Inventory and Analysis Reports exist for all but 40 parks. WRD continues to digitize and upload water quality data to STORET for those parks and others as resources allow. Results from the remaining Level I inventories are still being obtained for upload to STORET.

Products
A range of products have resulted from the Baseline Water Quality Data Inventory, including:

1. Baseline Water Quality Data Inventory and Analysis Reports. These reports summarize publicly-available physical, chemical, and biological water quality data contained in EPA’s STORET Data Warehouse, EPA’s Legacy Data Center, and the USGS National Water Information System.

2. Numerous physical, chemical, and biological water quality data digitized or archived in EPA’s STORET Data Warehouse, including over 5.7 million results at more than 45 thousand sample sites for 1,160 projects.

3. Level I Inventories conducted for more than 70 national park units.

More Information
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