

# Restoring America's Parks *The Natural Resource Challenge*

#### (February 2003)

## FACT SHEET

- The Natural Resource Challenge is a multi-year action plan to provide parks with the tools and skills for natural resource management success in the 21<sup>st</sup> century by doubling the annual funding for key activities. The focus is on obtaining basic resource information, addressing the most critical problems, and attracting outside scientists to help parks.
- Launched in 2000, the Natural Resource Challenge is the first National Park Service initiative to focus on the importance of making sound management decisions based on science. The Natural Resource Challenge is enabling the Service to inventory and monitor park vital signs, including water quality, expand aquatic resource protection and restoration, participate in cooperative ecosystem studies units at universities, assess watershed conditions, and strengthen native and exotic species management system-wide.
- The vast array of resources protected by the Service includes: 84.5 million acres, 785 populations of threatened or endangered species, 3 million acres of marine areas, 66 parks with coastal resources, over 18,000 acres of natural ponds and lakes, nearly 100,000 miles of permanent surface streams, 3,600 known caves with significant cave and karst features, and 157 park units with fossil resources.
- The Challenge design includes new and efficient approaches to managing natural resources. Parks have been grouped into networks sharing similar geographic and natural resource characteristics. Parks within networks share and coordinate fieldwork, staff and equipment, and business practices to obtain biotic inventories and monitor key vital signs and water quality. As another example, new Exotic Plant Management Teams are mobile strike forces trained in identifying and controlling exotic plants, serving multiple parks. In new partnering arrangements, the National Park Service has joined with other federal agencies, academic institutions and others to obtain research and share results at learning centers and through its participation in Cooperative Ecosystem Studies Units.
- Initiated in FY 2000, the Challenge funding was significantly boosted by the Bush Administration. The FY 2002 and FY 2003 Challenge increases of \$20 million and \$18 million respectively were nearly 30 percent higher than those in FY 2000 and FY 2001, \$14.3 million and \$15.2 million respectively.
- The 2004 budget request includes a total of \$76 million for the Natural Resource Challenge, including \$8.5 million in increased funding.
- FY 2004 Funding Highlights:
  - \* The \$8.524 million will fund an additional eight networks of parks for park vital signs and water quality monitoring, bringing the total of parks funded to 215 and total networks funded to 25 of 32, assuming proposed FY 2003 funding is appropriated.
  - \* The networks, the number of parks included, and a reference park for each are: Gulf Coast Network, eight parks, Padre Island National Seashore; Rocky Mountain Network, six parks, Glacier National Park; Sierra Network, three parks, Yosemite National Park; Eastern Rivers and Mountains Network, nine parks, Delaware Water Gap National Recreation Area; Arctic Alaska Network, five parks, Gates of the Arctic National Park and Preserve; Klamath Network, six parks, Crater Lake National Park; Southeast Coast Network, 17 parks,

Cape Hatteras National Seashore; and Northern Semi-arid Network, eight parks, Craters of the Moon National Monument.

\* The monitoring of park vital signs—which are significant indicators of ecological condition and often include the natural resources of greatest concern in a park—can be used to provide managers with the broad-based, scientifically sound information needed to effectively manage parks and natural resources and measure stewardship performance.

#### • FY 2003 Funding Highlights Include:

- \* The FY 2003 budget would accelerate U.S. Geological Survey assisted natural resource inventories and assessments, including vegetation mapping, geologic mapping, digital water resource information, and watershed assessments (\$7.35 million).
- \* With \$6.9 million for five additional networks of parks, half of the 32 networks will be funded for park vital signs and water quality monitoring.
- \* Seven additional Exotic Plant Management Teams will be funded with \$2.145 million, as will participation in two additional Cooperative Park Ecosystem Units for \$400,000.

### • FY 2002 Funding Highlights Include:

- \* \$6.8 million was included to continue to expand the Park Service's ability to measure its performance as steward of natural resources through monitoring resource conditions.
- \* Based on the success of the first four Exotic Plant Management Teams, the FY 2002 budget provided \$2.4 million for four new teams and expanded the South Florida team.
- \* For \$1.2 million, eight new learning centers were launched, providing an innovative means to attract and host outside scientists in parks, in partnership with others, and allowing citizen scientists and the public to interface with scientists and learn about research results.
- \* An additional \$9 million provided funding for projects, park bases and other programs that directly address the most critical natural resource problems in parks.

### • Natural Resource Challenge Highlights:

- \* Five rare bat species new to Devils Postpile National Monument (CA) were identified, over 30 plant and animal species previously unknown at Saguaro National Park (AZ) were found, and at least six undocumented species of fish have been found in the Great Lakes parks. New fossil horizons have been identified at Fossil Butte National Monument (WY), and a complete fossil bird is undergoing identification. Challenge-funded fieldwork at Fossil Butte also yielded several species of fossils new to the park.
- \* Minnesota is using information from inventories at Mississippi National River and Recreation Area MN) to relocate threatened and endangered mussels to stretches that can serve as refuges. Dinosaur National Monument (CO) is studying exotic brown and rainbow trout to help recover four endangered Green River fish species. Great Smoky Mountains National Park (TN, NC) is restoring brook trout, and through removal of exotic lake trout, Yellowstone National Park (ID, WY, MT) is helping to preserve Yellowstone cutthroat trout in Yellowstone Lake.
- \* Great Smoky Mountains National Park (TN, NC) has completed surveys that identified Fraser firs, apparently resistant to the damaging insect, adelgid. This information has the potential to aid in restoration of firs. Coronado National Monument (AZ) is using inventory data and its new funding to protect sensitive barking frogs and other native species. Monitoring of eastern spadefoot toads in Cape Cod National Seashore (MA) is helping develop measures to protect them from road kills, which have killed large numbers of the most significant population of these toads in the state.
- \* Geologic mapping at Theodore Roosevelt National Park (ND), which is underlain by lignite, a low-grade coal, is helping to identify areas of historic fires and areas susceptible to new fires, as well as to large-scale subsidence or collapse.

- \* Nine Exotic Plant Management teams are assisting 95 parks with exotic species control. The teams treated over 85,000 acres and inventoried over 15,000 acres to determine the presence of species in FY 2002. The EPMTs had some extra benefits—the Florida Partnership EPMT discovered a new cultural site and artifacts in the course of its work, and the Pacific Island EPMT hosted additional workers left unemployed by the tourism slowdown following September 11 terrorist attacks.
- \* In FY 2002, the NPS implemented a three-phase planning and design process of peer review and approval for monitoring. This will ensure that monitoring addresses the most critical information needs of each park, produces scientifically credible data accessible to managers and researchers in a timely manner, builds on existing information and understanding of park ecosystems, and makes maximum use of leveraging and partnerships with other agencies and academia. In FY 2002, 12 networks completed phase one.
- \* Of the 12 inventory data sets planned for 270 parks with natural resources, 80 percent or 2,582 were completed or underway at the end of FY 2002.
- \* Ten established Cooperative Ecosystem Studies Units (CESUs) involving 11 agencies and over 100 colleges, universities and other partner institutions initiated 370 projects for parks in FY 2002 using university faculty and students, and leveraging federal dollars with university funds.
- \* A streamlined research permit process brings more science to parks—often for free. In FY 2002, the system received and processed over 3,553 electronic permit applications and documented over 2,098 accomplishment reports pertaining to study activities conducted in calendar year 2001. The new numbers have been added.