



# The Natural Resource Challenge

The National Park Service's action plan for natural resources

*The National Park Service (NPS) is undertaking a major endeavor to advance the management and protection of natural resources in the national park system. Called the Natural Resource Challenge (or simply the Challenge), this enterprise is focusing energy, commitment, and resources on the NPS mission to preserve and protect our natural heritage for the American people.*





A bird inventory at National Park of American Samoa resulted in the discovery of nesting Tahiti petrels on the summit of Mt. Lata, on Ta'u, in the national park. This seabird was not previously known to breed in American Samoa.

### What

Articulated in 1999, the Challenge is an action plan that outlines numerous improvements needed in natural resource stewardship. Several upgrades are being made within current capability while others are possible with a proposed doubling of the funding available for natural resource management. With the help of the Challenge, the National Park Service is becoming more effective in preserving park natural resources for the future.

### Why

National parks will fulfill an increasing number of roles for society in the future. Not only will they continue to be loved for their recreational opportunities, but parks also will become libraries, laboratories, and classrooms of tremendous importance for their extraordinary biological and physical diversity and rare vitality. But this will only be true if they are healthy and retain the natural heritage and diversity that we now treasure and enjoy. The challenge that lies ahead will be to learn how to preserve parks for future generations. In a fast changing world, what will keep these parks natural and healthy?

The answer to this question lies substantially in making an investment now in scientific information and management of these treasures. Few people have understood this need, assuming the natural resources would take care of themselves, if left alone. If this were ever true, it certainly is no longer. The National Park Service believes that applying good science to resource management is our best hope to maintain and restore the rich natural heritage found in the national parks, and the Natural Resource Challenge is helping to realize this goal.

### Strategy

To meet this challenge, the National Park Service designed and is implementing a multiyear plan of action. This plan will require a \$100 million increase over the previous base funding level for natural resources in the National Park Service. The actions funded and undertaken to date share certain objectives:

1. Active, scientifically sound management of parks
2. Involvement of the scientific community at large in providing scientific information and in using the parks as scientific laboratories
3. Engaging the public as partners in resource preservation through education

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(Top) Challenge-initiated park networks are promoting efficient and coordinated inventory and monitoring. The collaboration of Cabrillo National Monument, Santa Monica Mountains National Recreation Area, and Channel Islands National Park (all California) in the Mediterranean Coast Network is also promoting collaboration among partnering researchers, which will be enhanced by the establishment of proposed learning centers.

(Middle) At Blue Ridge Parkway, resource monitoring is important for protecting endangered species.



Through the Natural Resource Preservation Program, which received a funding increase as a result of the Challenge, a vulnerable population of nesting loggerhead sea turtles is being monitored at Gulf Islands National Seashore (Florida and Mississippi). Results will be used to design measures to protect the species.

**Actions**

The Natural Resource Challenge includes 12 strategic thrusts (combined in the list below), each linked closely with the Service's five-year strategic plan and Government Performance and Results Act goals.

- Accelerate natural resource inventories (performance goal 1b1)
- Expand resource monitoring, including air and water quality monitoring (goals Ia3, Ia4, and Ib3)
- Increase collaboration with scientists and others to protect resources and serve visitors (goal IIIaX and IV bX)
- Facilitate broad scientific research in parks for the betterment of parks and society (goal IIIaX and IV bX)
- Protect native and endangered species and their habitats (goals IA2 and IA2X)
- Aggressively control nonnative species (goal IA1a)
- Expand opportunities for public learning about park natural resources, their significance, and their preservation (goal IIb1)
- Apply high environmental standards to park operations and facilities (goal IVa9)
- Develop technically proficient, professional staffs (goal IVa3)
- Improve resource planning (essential for many performance goals)

Examples of actions implemented without awaiting new funding are:

- Streamlining the scientific research and collecting permit application and reporting process
- Improving the career ladder for natural resource professionals
- Increasing the amount and quality of information about natural and cultural resources available on park Web pages
- Facilitating research and technical assistance in parks by university personnel on sabbatical, volunteers, and interns
- Better integrating resource planning into the NPS planning process

**Funding**

Passage of the FY 2000 and FY 2001 budgets resulted in nearly \$30 million for new and expanded natural resource management actions developed through the Challenge. The first-year focus was inventories and biological resource protection, in particular exotic species eradication. The FY 2001 budget initiated monitoring, learning centers, and NPS participation in cooperative ecosystem studies units. The President's FY 2002 budget requests an additional \$20 million to continue the activities already begun. These include monitoring in seven additional networks, additional learning centers, and additional exotic plant management teams. FY 2002 funds would also provide for water quality monitoring and expansion of air quality monitoring. To implement monitoring in all 32 networks would require additional future increases. Program areas and capabilities addressed in the budgets are:

- The joint Vegetation Mapping Program of the U.S. Geological Survey (USGS)/National Park Service and other basic resource inventories in partnership with USGS and other federal bureaus—they constitute about 20 percent of all funding proposed for the first three years of the Challenge
- Park vital signs, including water quality monitoring—responsible for tracking critical indicators of ecosystem health, the first 12 of 32 park vital signs networks will have been funded through FY 2002
- Broadening the purview of the air quality monitoring network and expanding its support activities, with a focus on parks most threatened by air pollution or most vulnerable to air quality degradation
- A focused native species protection program, including establishment of four multipark exotic plant management teams
- Park-specific exotic species management and endangered species restoration
- Natural Resource Preservation Program (NRPP) projects, particularly for endangered species and disturbed land restoration
- Experts to help parks preserve fossils, caves, and other geologic resources
- Park Service participation with other agencies in cooperative ecosystem studies units on college campuses



Fort Dupont and other parks in the National Capital Region, preserve significant biological diversity in an urban setting. An exotic plant management team, stationed at Rock Creek Park in Washington, D.C., has been established through the Challenge to control nonnative plants in capital-area parks.

- Participation, with partners, in learning centers to host outside researchers who will help educate the public about park resources—the first 13 of 32 planned learning centers will have been funded through FY 2002
- Additional funds for air emissions inventories, data synthesis and management tools, and water resource protection and restoration projects

#### Future

The National Park Service plans additional actions that will require funding, including:

- Monitoring—planned funding through FY 2002 will leave 20 of 32 networks of parks without core vital signs or water quality monitoring programs; expanded air quality monitoring is also needed
- More learning centers in additional networks
- Additional project capability to respond quickly to the backlog of natural resource projects

Investment in the scientific management of park natural resources is already beginning to pay dividends. For example, the Challenge is helping the National Park Service develop scientific information mechanisms to alert park staffs to declines in the eco-

logical health of parks. Mechanisms such as inventory and monitoring trigger intervention and restoration before species or natural processes are lost. Parks as laboratories and places of lifelong learning are also being enhanced by the Challenge. Additional scientific resource management capability—to be addressed through the remaining portion of the \$100 million, multiyear Challenge—will increase the returns on investment by helping the American people realize a sustainable future for the national parks.

#### Leading the Natural Resource Challenge

- *Fran Mainella*, Director
- *Denis Galvin*, Deputy Director
- *Michael Soukup*, Associate Director, Natural Resource Stewardship and Science
- *Abigail Miller*, Deputy Associate Director, Natural Resource Stewardship and Science

#### Natural Resource Challenge Council

- *Doug Morris*, Co-chair, Shenandoah National Park
- *Don Neubacher*, Co-chair, Point Reyes National Seashore
- *Rob Arnberger*, Alaska Region
- *Martha Bogle*, Congaree Swamp National Monument
- *Audrey Calhoun*, George Washington Memorial Parkway
- *Terry Carlstrom*, National Capital Region
- *Adrienne Coleman*, Rock Creek Park
- *James Morris*, Craters of the Moon National Monument
- *Rick Harris*, Office of Strategic Planning
- *Randy Jones*, Rocky Mountain National Park
- *Marc Koenings*, Gateway National Recreation Area
- *Tomie Lee*, Glacier Bay National Park and Preserve
- *Suzanne Lewis*, Glacier National Park
- *Steve Martin*, Denali National Park
- *Valerie Naylor*, Scotts Bluff National Monument
- *Noel Poe*, Theodore Roosevelt National Park
- *Patrick Reed*, Chickamauga and Chattanooga National Military Park
- *John Reynolds*, Pacific West Region
- *Dennis Vásquez*, Bandelier National Monument
- *Karen Wade*, Intermountain Region

#### For more information

See [www.nature.nps.gov/challenge/nrc.htm](http://www.nature.nps.gov/challenge/nrc.htm).

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