



*Treat the earth well:  
it was not given to  
you by your parents,  
it was loaned to you  
by your children.*

OGLALA SIOUX PROVERB

More than 60 years of dirt and lichens were cleaned from Mount Rushmore National Memorial in 1995. Only hot water (without any chemical additives) was applied to the granite surfaces using gas-powered high-pressure sprayers.  
PHOTO ©KÄRCHER COMPANY

## Environmental Sense

Green cleaning methods help protect national park resources by reducing or eliminating the release of harmful chemical pollutants into the environment. Traditional cleaning products may contain chemicals that negatively affect organisms, natural habitats, historic structures, and artifacts. Cleaning chemicals may also include hazardous or flammable materials that threaten health and safety.

Environmentally responsible cleaning in the parks requires using safer cleaners, reducing use of janitorial supplies, and using energy-efficient maintenance equipment. Such environmental leadership works to ensure successful stewardship of the nation's most important natural and cultural resources for future generations.



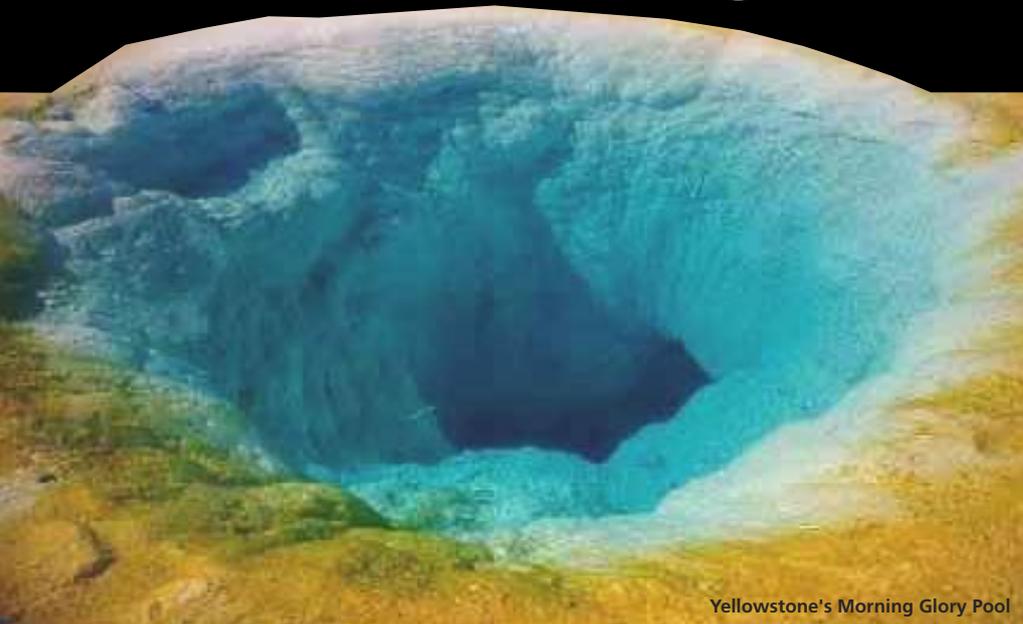
NPS staff prepare for a White House event.

# Green Cleaning

National Park Service  
U.S. Department of the Interior



Environmental Leadership Program



Yellowstone's Morning Glory Pool

## Yellowstone National Park

In 1999 Yellowstone National Park employees initiated an eco-friendly janitorial program to provide greater protection to park resources. Park staff implemented a variety of green maintenance activities, including the use of environmentally preferable cleaning products.

The original goals of the project were met or exceeded, including the reduction or elimination of toxic or environmentally harmful cleaning chemicals that were potential threats to human health. Park staff consolidated and standardized purchases to reduce the quantity and variety of cleaning products, choosing the safest and greenest products with proven commercial records. Front line custodial staff, supervisors, and top management participated throughout the process. Yellowstone's successes were complemented by similar efforts at neighboring Grand Teton National Park and have inspired green cleaning programs at 40 other parks.



Green cleaning helps improve indoor air quality.

## Building Awareness

Park cleaning programs must include careful consideration of people as well as resources. National parks include many different types of buildings and facilities—visitor centers, offices, restrooms, lodging, and gift shops—which must be cleaned regularly. A wide variety of cleaning products are necessary to accomplish this task; however, common cleaning products contain chemicals that, depending on concentration and exposure, may be harmful to staff and visitors.

### Just the Facts



Each year routine cleaning and maintenance of institutional and commercial properties in the United States (excluding homes and industrial plants) uses approximately the following:

- 6 billion pounds of cleaning chemicals most of which are derived from valuable, but limited, natural resources such as petroleum.
- 4.5 billion pounds of janitorial paper products including toilet paper, paper hand towels, and napkins, requiring the cutting of approximately 35 million trees.
- 500 million pounds of janitorial equipment including vacuum cleaners and floor machines that consume natural resources during their manufacture and fill approximately 10,000 truck loads of garbage deposited in landfills.

The Resources Recovery and Conservation Act requires federal agencies to purchase recycled-content products such as paper towels, tissue, and trash bags. Working with park concessioners and the public, the National Park Service commitment to green cleaning practices further reduces consumption of limited natural resources and decreases the burden on landfills nationwide.

### Find Out More

Visit these websites for further information:

- Green Seal: [www.greenseal.org](http://www.greenseal.org)
- Janitorial Products Pollution Prevention Project: [www.wrppn.org/Janitorial/jp4.cfm](http://www.wrppn.org/Janitorial/jp4.cfm)
- National Institutes of Health and National Library of Medicine, Household Products Database : <http://householdproducts.nlm.nih.gov/>
- U.S. Environmental Protection Agency Design for the Environment: [www.epa.gov/dfe/](http://www.epa.gov/dfe/)
- U.S. Environmental Protection Agency Environmentally Preferable Purchasing: [www.epa.gov/epp/](http://www.epa.gov/epp/)

### Green Paths to Healthier Environments

Everyone can make simple changes—both at home and at work—to eliminate or reduce cleaning practices that are harmful to the environment and human health.

**Actions for National Park Service Staff**  
To reduce or eliminate the release of toxic substances into the environment, park personnel can purchase and use environmentally preferable and biobased products. Suggestions for sustainable alternatives are available through the U.S. Environmental Protection Agency's Design for the Environment Program or Green Seal, an environmental certification organization.

Unnecessary injury of custodial staff may be eliminated by purchasing janitorial equipment that is durable and ergonomically designed to minimize injuries. Equipment should be maintained to the manufacturer's specifications to ensure results.

Eliminating the occasional build-up of dust and dirt within interior building environments may reduce respiratory and other illnesses among occupants. Park staff can develop effective cleaning plans and strategies to improve the capture of contaminants (i.e., use entry mats, micro-fiber dust cloths, and high filtration vacuums).

National parks can help reduce the unnecessary consumption of natural resources, especially in the manufacture of cleaning and sanitary products, by reducing waste and purchasing environmentally preferable products. Park staff can participate with these simple steps:

- Use janitorial paper products with post-consumer recycled content.
- Install paper dispensers that minimize waste.
- Turn off lights when rooms are unoccupied to conserve energy.
- Report or repair water leaks and leaking faucets to conserve water.
- Encourage recycling.

Interior and exterior building pollution can result from incorrectly dispensed products and the absence of simple, low-cost practices that reduce dirt. Park staff can practice pollution prevention and source control using these methods:

- Use appropriate dispensing equipment to accurately dilute concentrated cleaners.
- Install mats at building entrances to capture soils before they enter a building.
- Correctly dispose of all waste.



#### Park Visitors Can Make a Difference

National park visitors can help reduce water consumption by notifying park personnel immediately when they notice spills, water leaks, and insufficient restroom supplies.

Recycling, along with proper disposal of food wastes and trash, can reduce litter and pest problems in the parks. Using appropriate receptacles for waste can reduce garbage sent to landfills while protecting wildlife that may be attracted to food and trash.

#### Park Lessons Apply at Home

Park visitors can extend their concern for the environment by examining household cleaning products. Internet research can provide information about harmful chemicals present in some common cleaners that contaminate the environment and endanger human health.

Green cleaning at home or at work is just as important as it is in the parks. It is not difficult to replace hazardous cleaning products with safe, biodegradable cleaners and degreasers. When purchasing products, consumers should read labels carefully and use products according to manufacturer's directions. Purchasers should buy only what is needed and avoid products using signal words such as "Danger," "Poisonous," "Corrosive," or "Flammable," or whose warning labels identify the product as a respiratory irritant or other health hazard.

#### More Easy Green Cleaning Tips

- Use entrance mats at all exterior doorways and remove shoes. Using mats and taking off shoes inside greatly reduces the amount of dirt, pesticides, and other soils indoors.
- Reduce clutter. Cleaning becomes quicker and there are fewer places for dirt to accumulate.
- Clean frequently, especially if small children or those with sensitivities and health conditions are present.
- Fix water leaks and moisture problems to prevent mold.
- Minimize pesticides. Fight pests by keeping buildings clean, eliminating food and water sources, cleaning up clutter, and sealing torn screens and cracks in foundations. Try traps, adhesives, or the least-toxic pest-specific products.
- Regularly wash linens including blankets and mattress and pillow covers where millions of dust mites may live.
- Teach children to wash hands frequently.