US ERA ARCHIVE DOCUMENT

# Yellowstone National Park Recycling Program



Yellowstone National Park maximizes environmental sustainability in the 2.2 million-acre park and educates up to 2 million visitors annually. The park collects source-separated recyclables at many campsites and employee residences.

- **Headwaters Cooperative** Recycling, Inc. was formed by Yellowstone and neighboring communities and is responsible for all recycling over a 35,000-square mile area.
- From 2001 to 2005, the solid waste diversion rate grew by 60 percent.
- More than 2 million people visit the park each year, and the average stay is 1.9 days.
- All recycling bins are steel to avoid attracting grizzly bears.

We remain committed to environmental stewardship through pollution prevention, waste reduction, alternative fuels, and recycling activities. Partnerships such as those we share with the other EMS [environmental management system] team members help ensure the park's success in preserving and protecting its resources, as well as enhancing visitor experiences.

- Suzanne Lewis, Yellowstone National Park Superintendent



# **Program Overview**

Recycling at Yellowstone is widely available throughout the park and neighboring communities. At the start of its recycling program, Yellowstone collaborated with neighboring communities in Wyoming, Montana, and Idaho to form Headwaters Cooperative Recycling, Inc. This recycling co-op makes recycling economically feasible for small, remote communities within a 35,000-mile area.

Yellowstone's recycling program began as a part of an environmental management system (EMS). Implementing the EMS was a joint effort among park managers; the U.S. Environmental Protection Agency (EPA); the Wyoming and Montana Departments of Environmental Quality; and the park concessionaires, Xanterra Parks and Resorts and Delaware North Park Services. The system grew out of a 1996 initiative, called the "Greening of Yellowstone," aimed at promoting sustainable practices and advancing sound environmental stewardship initiatives.

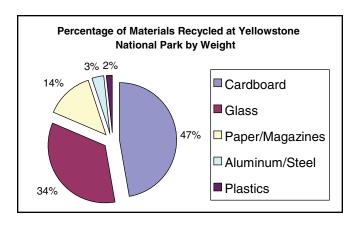


Yellowstone National Park, larger in size than Rhode Island and Delaware combined, has a goal to divert 90 percent of the park's solid waste from landfills by 2008.

## **Nuts and Bolts**

Recyclables are collected at numerous locations within the park. Yellowstone uses 4-yard and 8-yard bins for source separating five types of recyclables: aluminum/steel, mixed paper, cardboard, glass, and plastic. To prevent bears from vandalizing the bins, they are made of steel. A specialized truck empties the bins into larger containers, keeping each type of recyclable separate. In addition, Yellowstone National Park, in cooperation with its

concessionaires, recycles approximately 4,000 used tires annually, saving \$25,000 a year in avoided landfill fees. It also has developed prototype propane canister recycling equipment that is able to process the estimated 8,000 one-pound canisters that campers otherwise would have



#### The Bottom Line

- In 2005, 630.9 tons were recycled, including:
  - 298.9 tons of cardboard
  - 214.7 tons of glass
  - 85.7 tons of paper
  - 21.7 tons of aluminum and steel
  - 10.3 tons of plastics
- The solid waste diversion rate in 2005 was 65 percent.
- There are currently 63 recycling bins and nine roll-off dumpsters collecting source-separated recyclables.

thrown away inside the park in 2006. The recycler is powered by propane that is extracted from the canisters, which are then compacted to be recycled into other steel products.

In 2005, the park collected 631 tons of recyclables in its 63 recycling bins. The initial EMS goal was to divert 90 percent of the park's waste from landfill disposal by 2008; by 2005, the diversion rate was already at 65 percent, having grown by 50 percent since 2001. The recycling program has cut the park's waste disposal costs in half.

# **Challenges and Solutions**

• Challenge: Initially, recyclables were not generated in large enough quantities to be accepted by recycling companies.

**Solution:** The park partnered with neighboring communities to combine collected recyclables to generate larger quantities.

 Challenge: The average stay for each visitor is 1.9 days, so the window for recycling education is small.

Solution: Yellowstone National Park and its concessionaires give visitors brochures about recycling when they enter the park and supply another pamphlet and verbal information when visitors stay at campgrounds or hotels within the park.

### **Reasons for Success**

- Collaboration with surrounding communities made recycling possible in an area that previously had few markets for recyclables. By combining efforts, the program collected more recyclables and made the hauling fees affordable.
- Education encourages visitors to recycle during their brief visit.
- An enthusiastic staff keeps the program strong.
- Widespread availability of bins is a constant reminder to recycle for the duration of the visitor's stay.



Recycling containers within the park require sturdier than average construction to keep out bears.

### **Future Forecast**

Yellowstone remains committed to the ambitious goal of diverting 90 percent of the park's solid waste by 2008. Another goal is to raise the average annual tonnage recycled from about 630 to 1,000 tons and to increase the composting rate from the current 55 percent to 80 percent by 2010. Yellowstone plans to accomplish these goals through required recycling contracts with vendors and concessionaires and aggressive public education, including educational brochures and interpretive programs. In addition, Yellowstone will continue to recycle a variety of materials, including tires and propane canisters; use sustainable building materials; and employ renewable energy

technology. Yellowstone intends to become the recycling model for other parks, especially large, rural parks within the National Park Service.

EPA is partnering with other federal agencies, states, municipalities, and organizations to promote recycling away from home.

www.epa.gov/recycleonthego



United States Environmental Protection Agency

Office of Solid Waste (5306P) EPA 530-F-06-024 December 2006 www.epa.gov/recycleonthego