



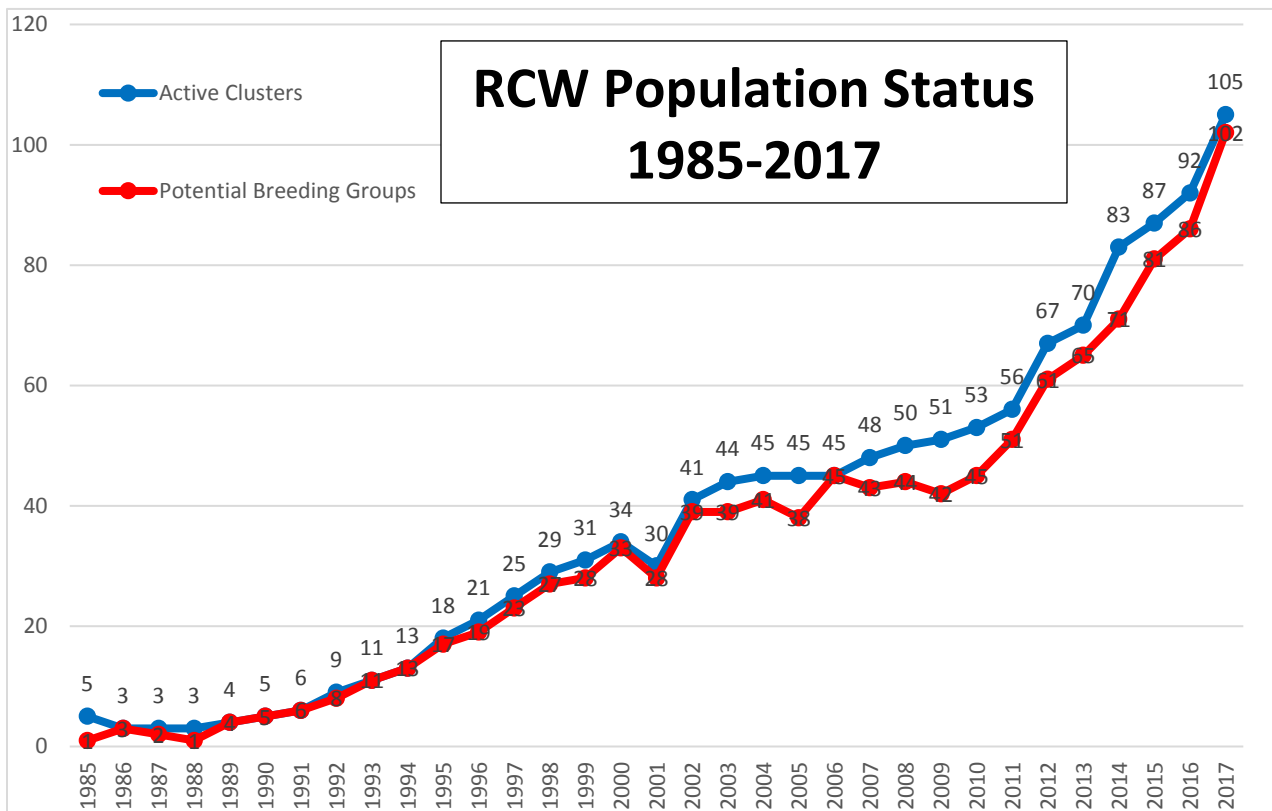
USDA Forest Service-Savannah River Fiscal Year 2017 Savannah River Site Environmental Report

In support of the environmental stewardship mission, the USDA Forest Service – Savannah River (USFS-SR) manages natural resources at the U.S. Department of Energy's Savannah River Site (DOE-SRS). Operating under an Interagency Agreement with the SRS Operations Office, the USFS-SR follows SRS' Strategic Plan goals and objectives to implement the United States Department of Energy's Natural Resources Management Plan for the SRS.

The following initiatives and accomplishments reflect the various ways in which USFS-SR worked to implement the plan in fiscal year 2017.

Maintained and improved habitat to meet recovery population objectives for threatened, endangered and sensitive species

USFS-SR continued to improve habitat conditions for the endangered Red-cockaded Woodpecker (RCW) by thinning over 1800 acres of forest through timber sales and removing brush and small hardwood vegetation from over 185 acres in woodpecker habitat. Prescribed fire also was used extensively to reduce hazardous fuels and to improve habitat on a larger scale. Successful habitat restoration increased the number of active RCW clusters from three in 1985 to 112 in fiscal year 2017. An average expected population growth rate is 5 percent each year. The growth rate over the past five years at Savannah River Site has been an outstanding average growth rate of 9.5 percent.



Additionally, 17 golden eagles were observed scavenging at SRS. This reclusive species was previously thought to come down only to the Appalachian Mountains during its winter migration. The number has increased due to increased monitoring sites.

Managed natural resources and harvested forest products

The USFS-SR sold 74 million cubic feet of forest products through active forest management. Forest products were sold to meet security needs; encourage habitat development for threatened, endangered and sensitive species; promote forest health; and generate revenue. Management activities were and continue to be implemented in support of the Site's nuclear mission and in compliance with best management practices.

Evaluated the effects of management on the environment

Through partnerships and collaborations with a number of universities as well as with the USDA Forest Service Research Stations, the USFS-SR added applied knowledge and understanding in support of the Interagency Agreement, including:

- Field studies were completed on the effects of intensive management for production of pine for bioenergy on water quality. Despite substantial increases in vegetation control and fertilization, no adverse impacts to stream water quality were found suggesting that current forestry Best Management Practice (BMP) guidelines are adequate to protect water quality.
- To determine the best alternative for restoration of remnant native savannas with minimal impact to cover and diversity, a large scale study was installed and treatments applied in 2017. Five alternative methods are being compared to control competing hardwoods. These competing hardwoods limit growth and flowering of native grasses and forbs.
- Projects were initiated to assess relative efficacy of different feral hog removal strategies and the influence of feral hog density on deer habitat use.
- The potential for crown fire ignitions at SRS were modeled using the forest inventory data and empirical crown ignition models. The analysis determined environmental, forest stand and surface fuel levels that represent the greatest potential and alternatives to mitigate ignitions.

Excelled in environmental and occupational safety and health performance

The USFS-SR had one Occupational Safety and Health Administration 300 Log recordable injury and one illness. USFS-SR employees worked over 174,000 hours and had 259,000 vehicle-miles driven with 0 citations written.

USFS-SR began implementation of location specific Bureau of Labor Statistics reporting.

The USFS-SR continued its partnership with other site tenants to ensure effective implementation of environmental safety and health by actively participating in the DOE's Integrated Safety Management System.

Safety engagement sessions were held to address concerns, maintain effective communication between employees and management, and to survey the overall safety posture of the unit. Employee feedback from the engagement sessions was consolidated and sent to the Forest Service Southern Regional Office for analysis.

Continued environmental restoration

The Mixed Waste Management Facility Phytoremediation Project, one of SRS's Area Closure Projects which is operated and maintained by USFS-SR, treated approximately 12 million gallons of tritiated water. This project employs a natural remedy (phytoremediation), using vegetative processes to reduce risk to the environment.

Additionally, USFS-SR managed 4,676 acres of vegetation caps and 7,500 monitoring well sites through mowing; pesticide and herbicide application; prescribed fire; and seeding. This allows SRS personnel to continue the South Carolina Department of Health and Environmental Control (SCDHEC) mandated water and groundwater monitoring.

Safely maintained infrastructure in an environmentally sound state of operational readiness

USFS-SR completed maintenance on 1,263 miles of SRS secondary roads and 74 miles of exterior boundary fence. Normal maintenance activities performed include; blading and calcium chloride application for dust abatement for roads and fence repair and trespass warning sign replacements for the exterior boundary.

USFS-SR constructed 0.70 miles of secondary roads and replaced two culverts in support of site activities and maintained 70 miles of multipurpose trails used primarily by SRS wellness programs. Thirty-one miles of Site boundary along the Savannah River was inspected and maintained, including replacement of 176 trespass warning signs.

Reduced risk of catastrophic wildland fires through systematic and safe application of prescribed fire

USFS-SR, fire management conducted 35 prescribed burns for 11,027 acres of hazardous fuel reduction and suppressed two wildfires totaling .20 acres.

To teach wildland fire prevention, Smokey Bear went to 16 local elementary schools, visiting 1,587 children. Additional contacts were made at the annual Sassafras Festival and at the Horse Creek Academy Event.

Communicated SRS stewardship

USFS-SR outreach included having our annual SRS Ultimate Turkey Hunt and SRS Ultimate Fishing Challenge. Additionally, we participated in the SRS Safety Blitz; the Future City Competition in support of the Savannah River Site Leadership Association; STEM Career Connections at the Kroc Center; and the Science Education Enrichment Day the Ruth Patrick Center. To enhance our STEM and conservation education outreach, we are members of the Central Savannah River Area Environmental Science Education Cooperative as well as the Regional Nuclear Science Week Advisory Team.

Public communication included various reports and presentations showcasing monthly and yearly accomplishments, as well as a presence at community and onsite events, including the SRS Citizens Advisory Board combined meetings; classroom presentations for Savannah River Nuclear Solutions STEP program; the City of Aiken's Earth Day Celebration; and the New Ellenton Christmas parade.

USDA Forest Service—Savannah River (Interagency Agreement No. DE-EM0003622)
P.O. Box 700, New Ellenton, S.C. 29809, 803.725.0298, www.fs.usda.gov/savannahriver

USDA is an equal opportunity provider, employer, and lender.



Savannah River