



Forest Service-Savannah River Fiscal Year 2015 Highlights

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Operating under Interagency Agreement Number DE-A109-00SR22188



Savannah River Site



Purpose

To satisfy a Strategic & Legacy
Management Committee 2015 Work Plan
topic

Highlights

- Natural Resources
- Fire
- Engineering
- Research
- Community Outreach

A woman wearing a green hard hat and a white short-sleeved shirt is standing in a field of tall, dry grass. She is looking to the right. The background shows a line of trees. The text "Natural Resources" is overlaid on the image in a large, bold, black serif font.

Natural Resources

Endangered Species Management

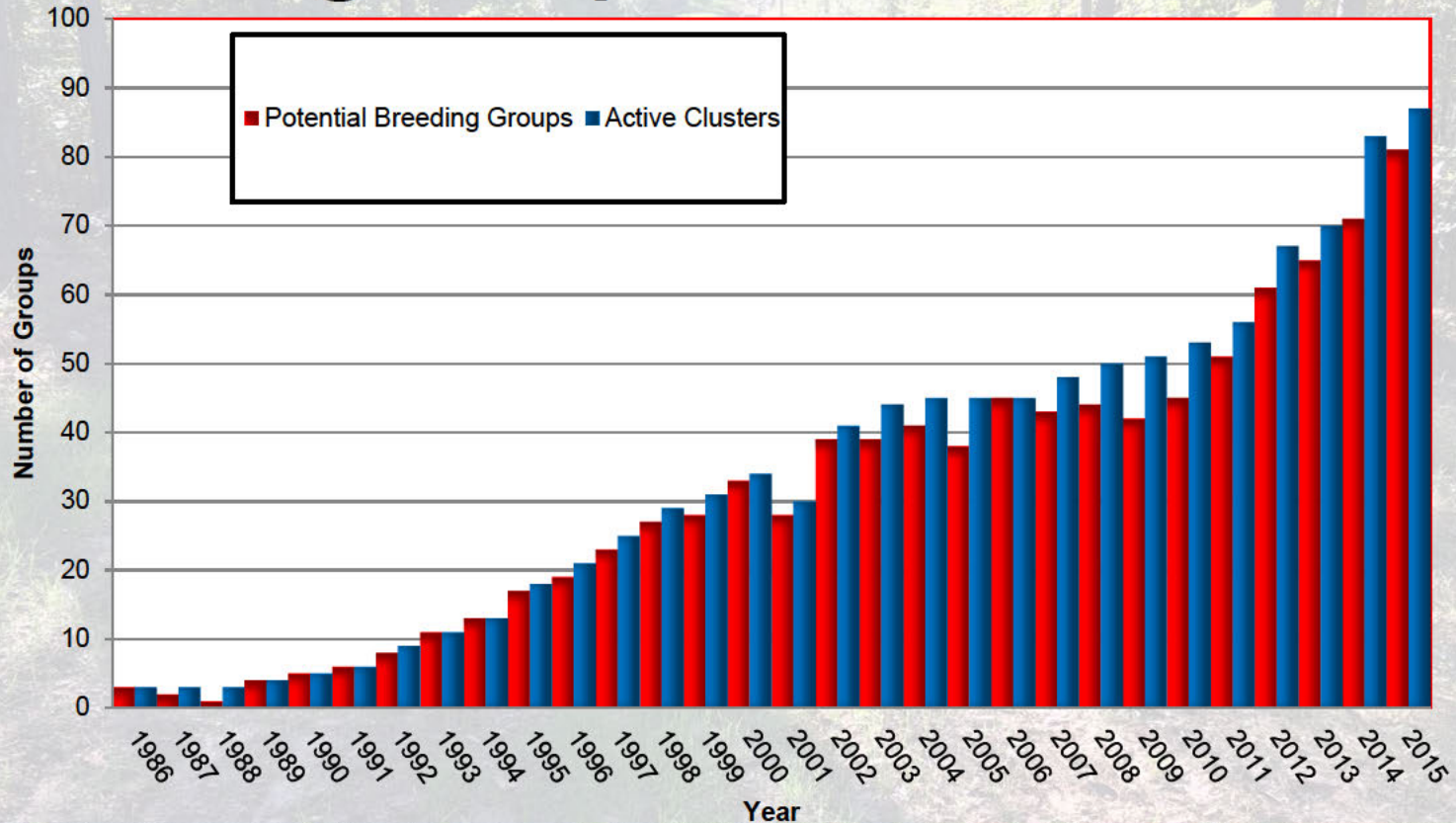


- We presently manage 94 Red-cockaded Woodpecker clusters.
- In 1986, the site had a total population of four birds. In 2015, the population stands at 330.



Red-cockaded Woodpecker nestlings

Red-cockaded Woodpecker Potential Breeding Groups and Active Clusters



Red-cockaded Woodpecker Studies

Research

- Reanalyzed regional Red-cockaded Woodpecker foraging habitat thresholds for comparison with SRS data
- Completed home range mapping of SRS populations (field work) to test foraging relationships to regional standards

Partner: North Carolina State University

Nuisance Species Management



- Since 2005, over 7,700 feral hogs have been removed from the site with aid from nuisance wildlife control contractors.
- We closely work with the USDA Forest Service Southern Research Station and the Savannah River Ecology Lab (SREL) to enable and assist feral hog research.

Nuisance Species Management

Research helped to improve the effectiveness of feral hogs management by:

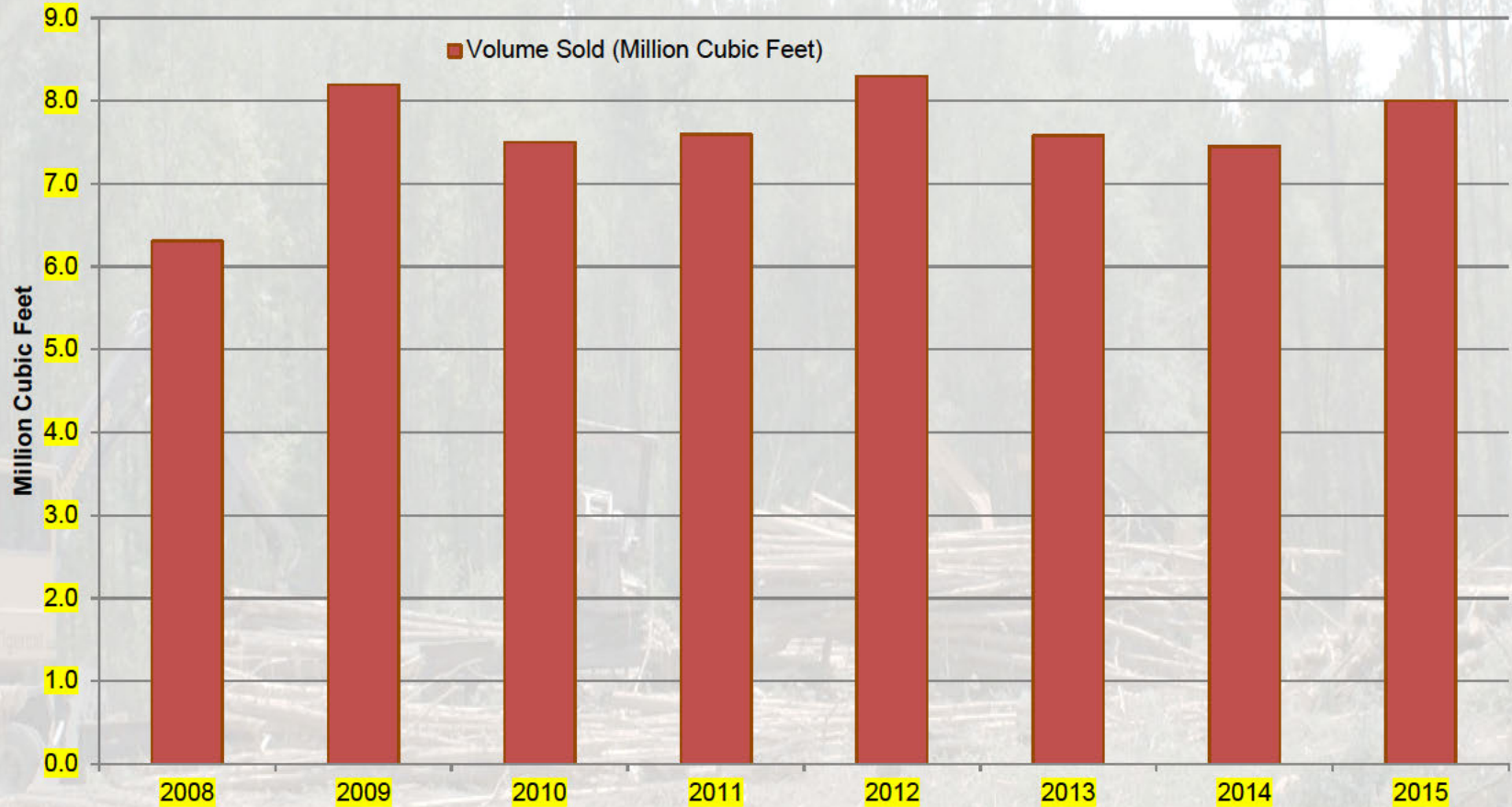
- Completing annual determination of piglet survival/mortality to better estimate pig population size
- Continuing evaluation of whole-sounder (whole social group) trapping as a control technique
- Monitoring sounder dynamics to better inform trapping efforts



Sounder of Pigs (Social Group)



Volume of Forest Products Sold



Pollinator and Native Plant Restoration



- A native wildflower pollinator garden was established utilizing a 10-acre section of a power line right-of-way (ROW) on the SRS. Seventeen different pollinator species were selected to encompass this area.

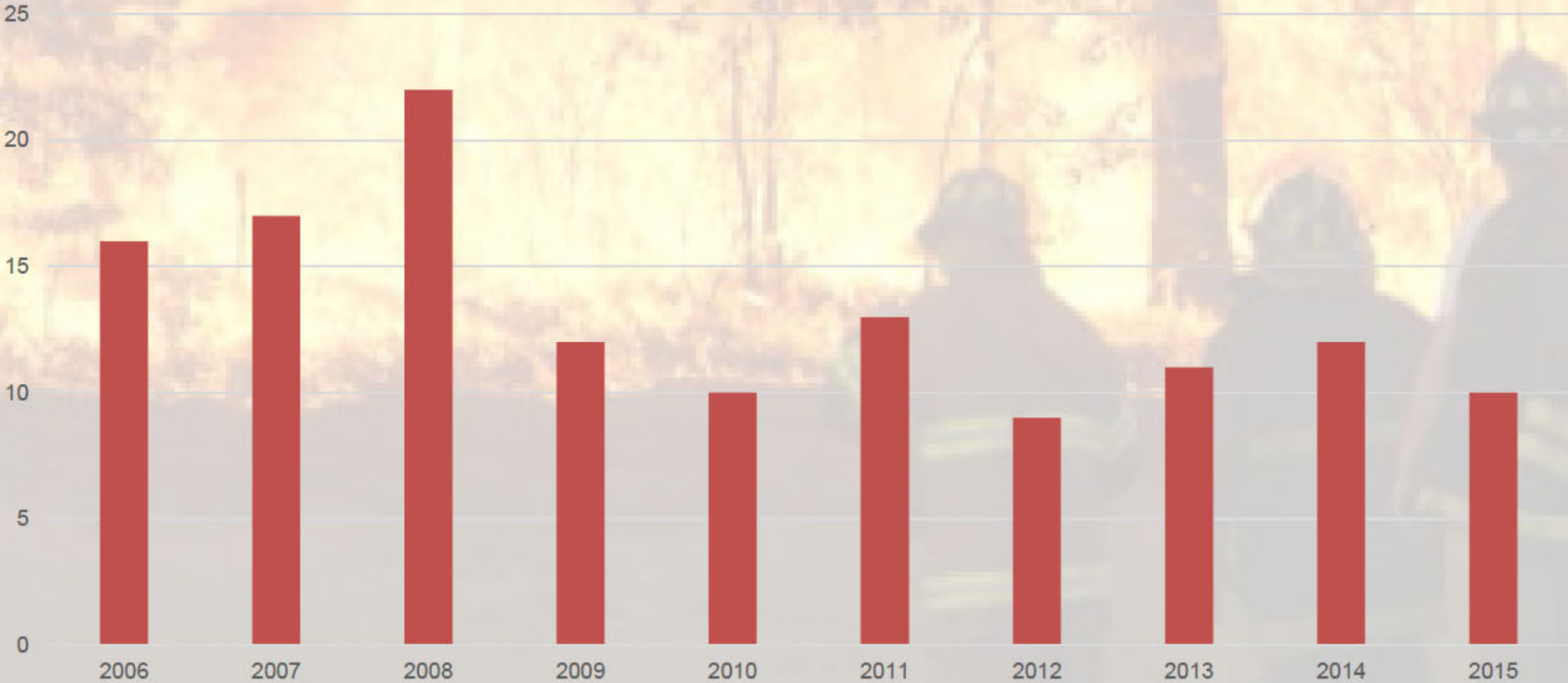


- Since 1994, native grass plugs have been planted annually ranging from 20,000 to 70,000.

Fire

Wildfire History

Number of Fires Started



Wildfire History

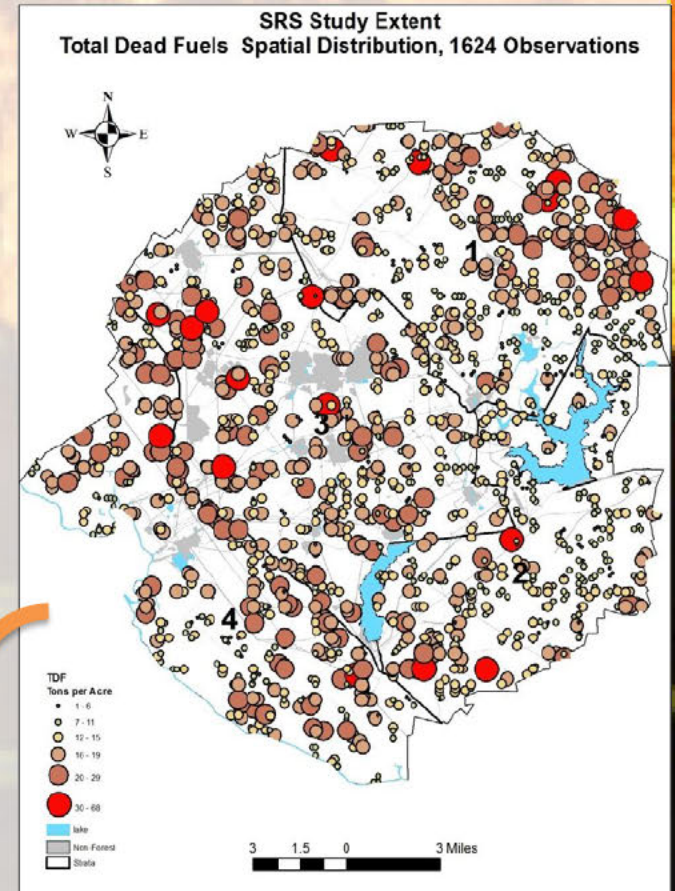
Number of Acres Burned



Savannah River Site Fuels Analysis



Heat energy
release
BTU/sqft/sec at
extreme
conditions



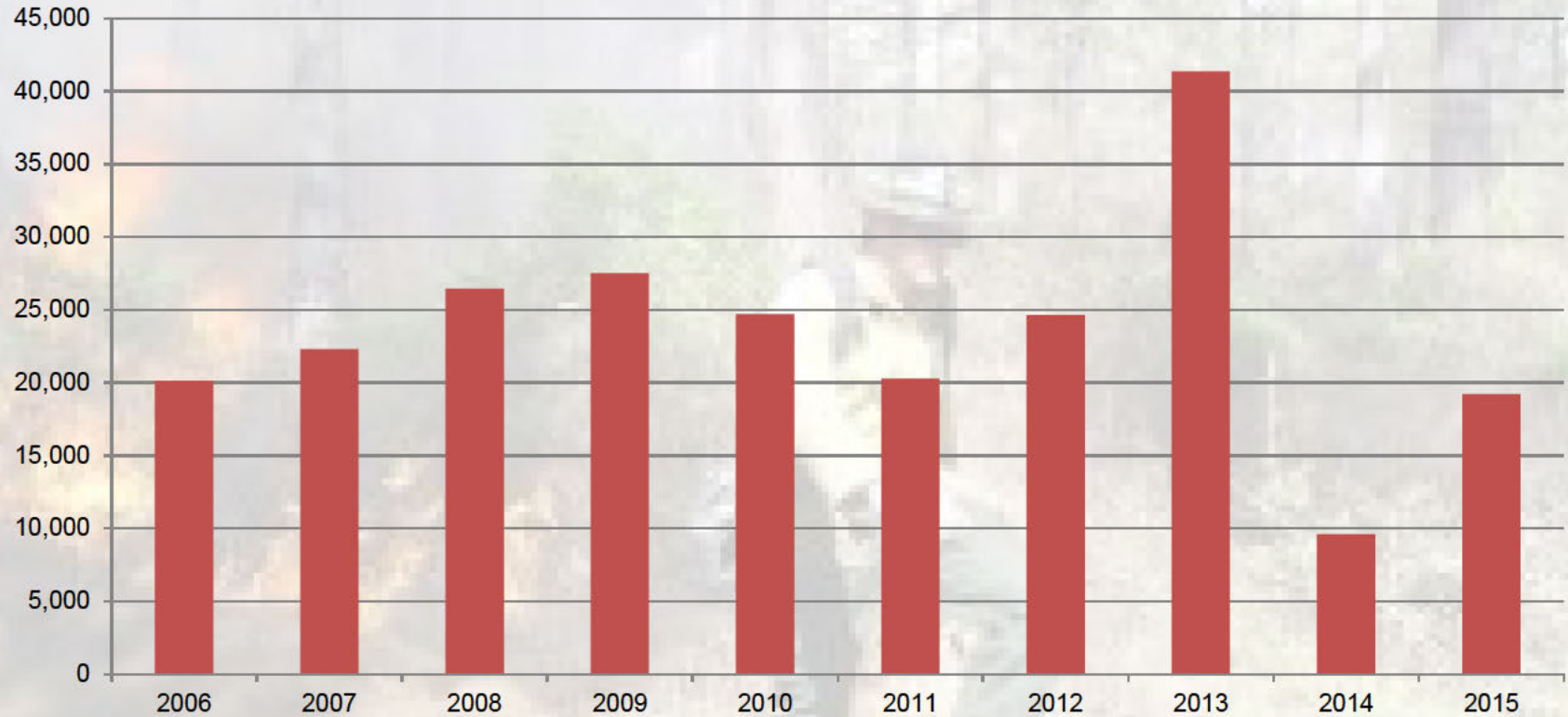
Surface fuel
load in
tons/acre

Prescribed Fire

- Emphasis is on frequency, priorities and objectives.
- The goal is to minimize impacts to on-site and off-site populations.
- In FY15, we initiated collaborations with Savannah River National Laboratory (SRNL) and the USDA Forest Service Pacific Northwest Research Station to become one of five sites nationwide to study emissions and smoke plume development from prescribed fires. The work is externally funded by five agencies.

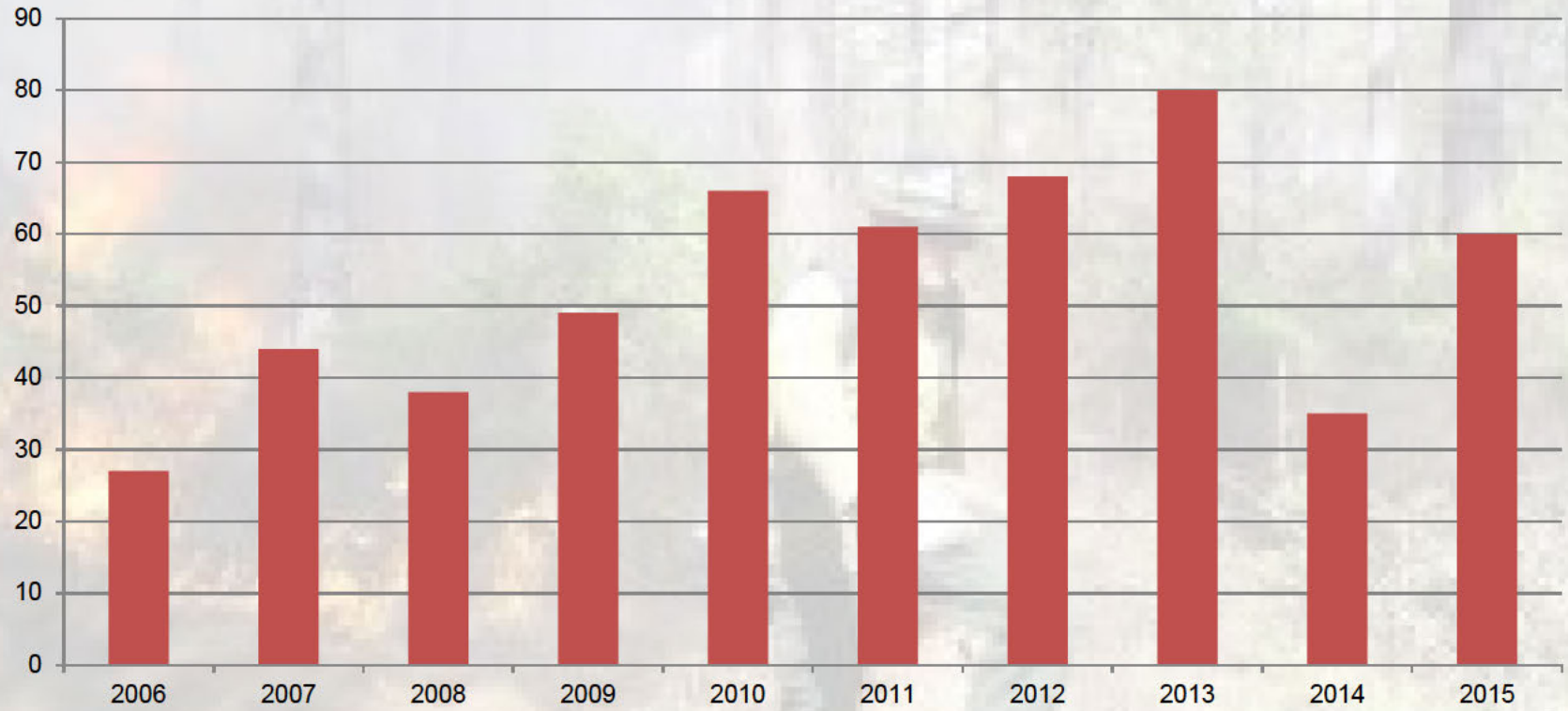
Prescribed Fire

Prescribed Fire Acres



Prescribed Fire

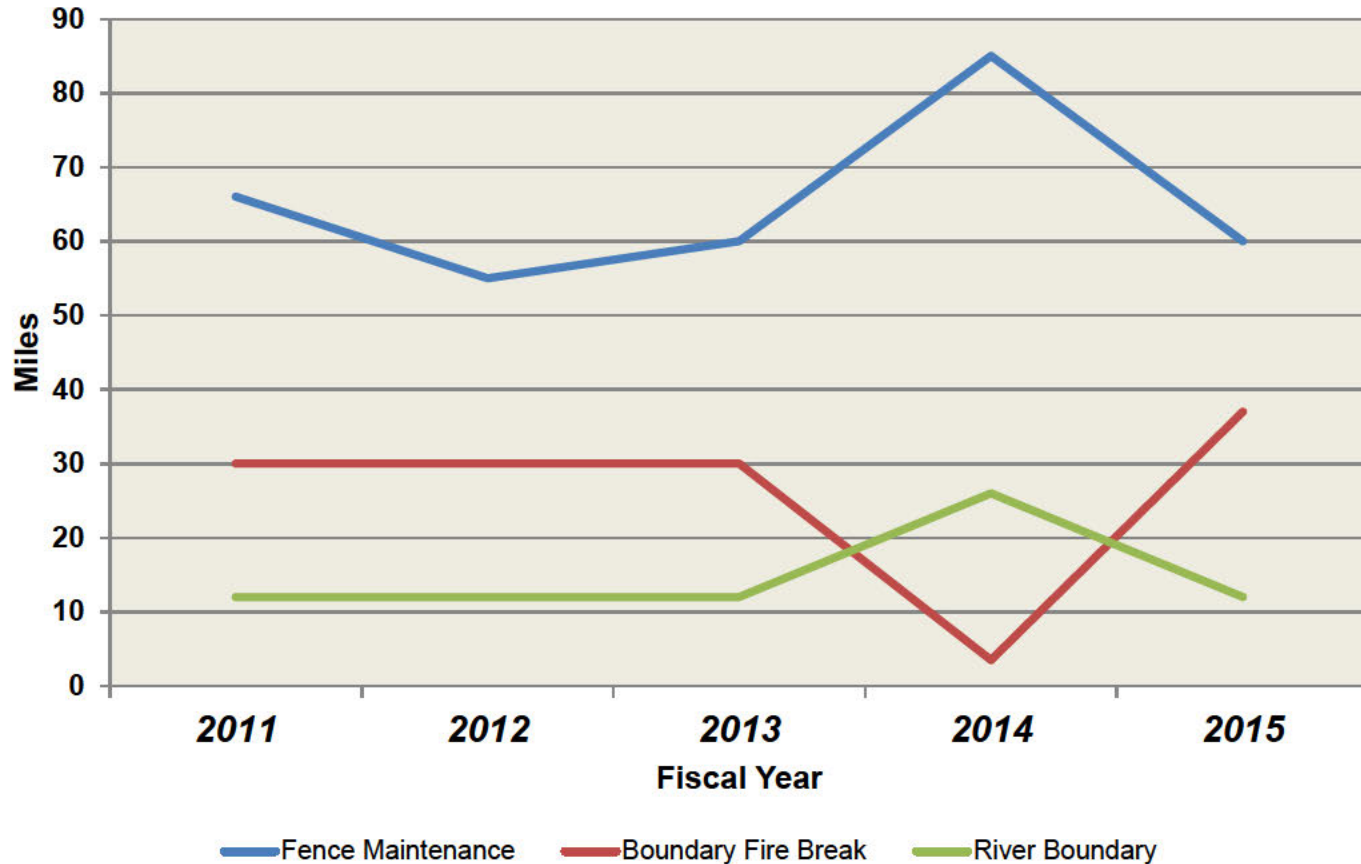
Burn Days



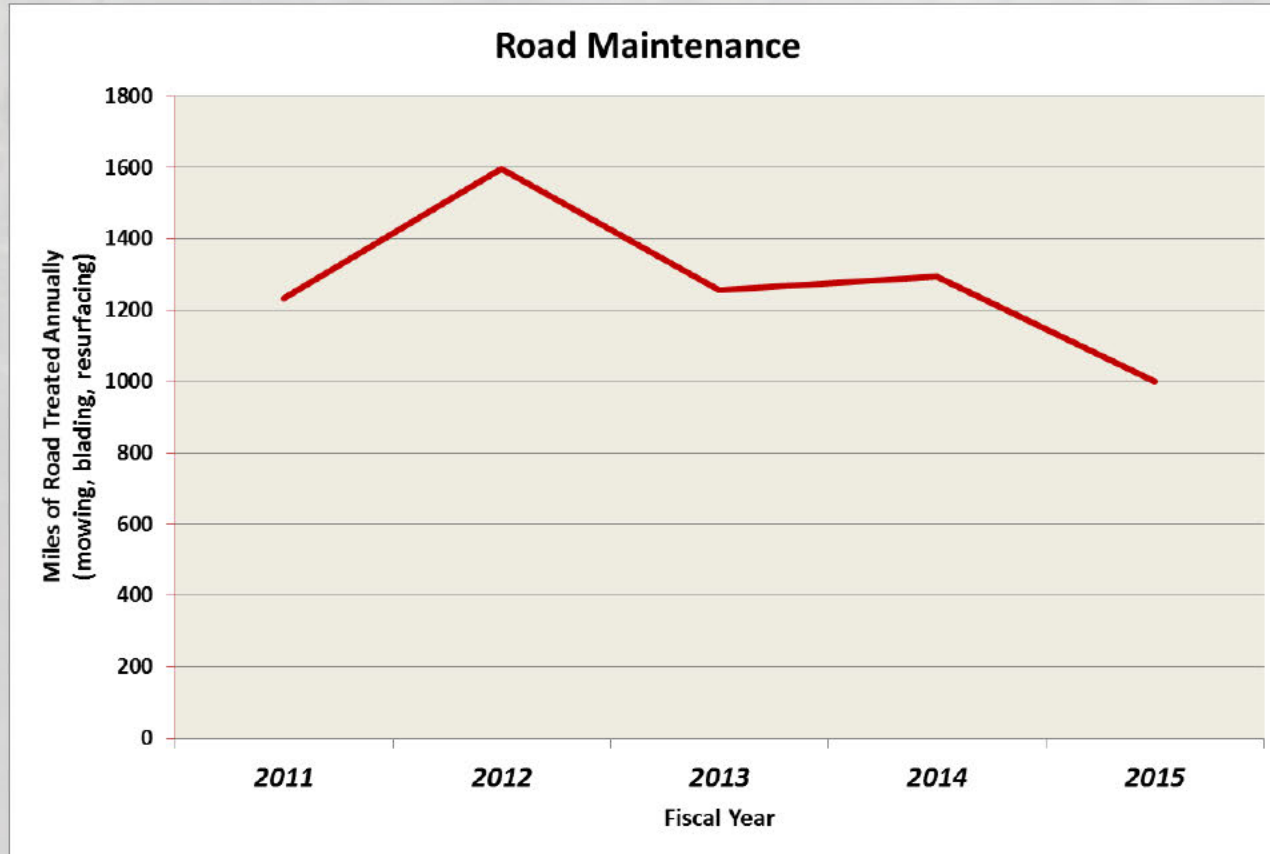
A photograph of two women in a laboratory or industrial setting. The woman on the left, wearing a dark polo shirt and jeans, is pointing at a large screen displaying a technical diagram. The woman on the right, wearing a light-colored polo shirt and dark pants, is looking at the screen. The background shows industrial equipment, including a large tank labeled 'FILTERED WATER'.

Engineering

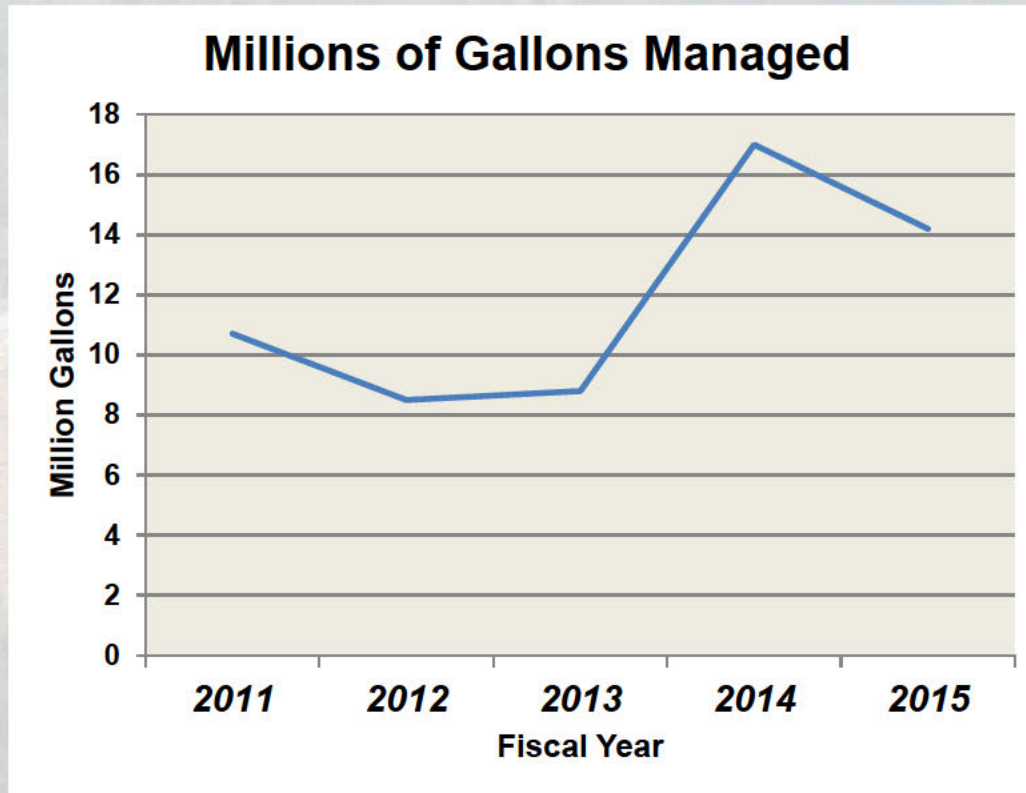
Boundary Maintenance



Road System Management

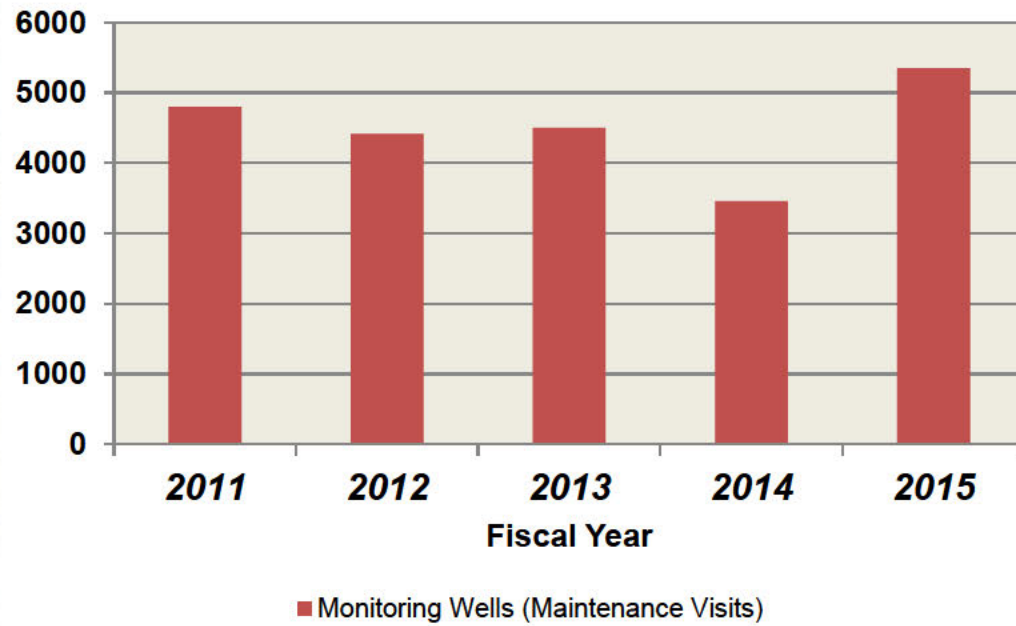


Mixed Waste Management Facility Tritium Phytoremediation



Soil & Groundwater Closure Program Acres of Cap and Well Management

SGCP Vegetation Management



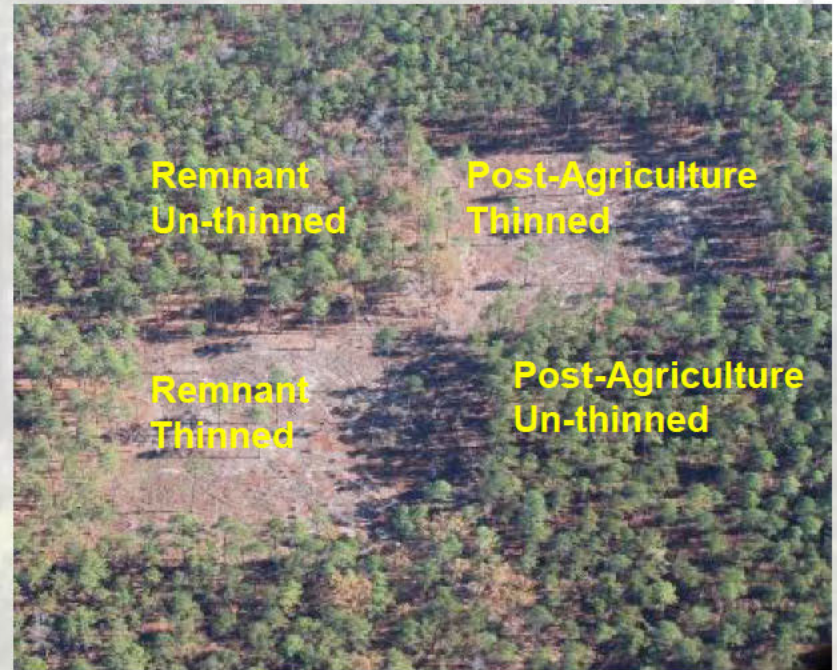
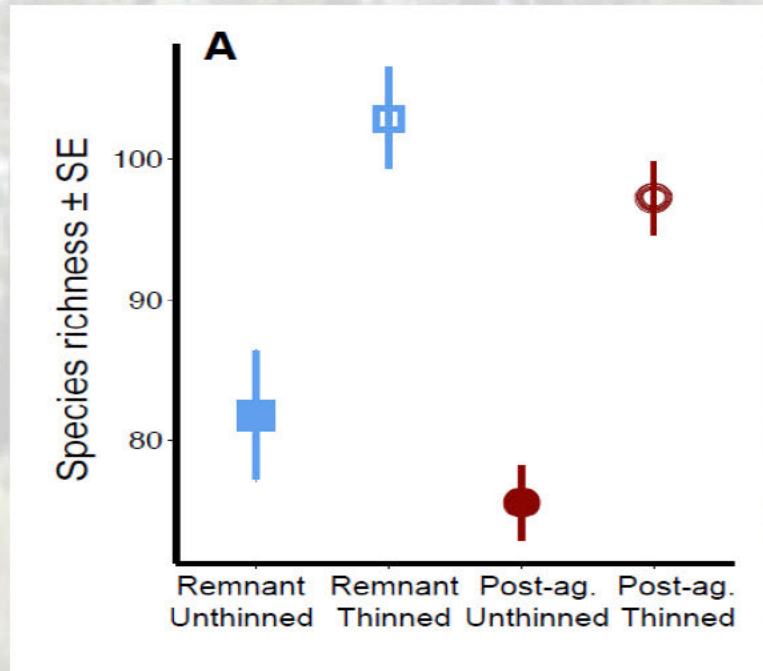
- Annually, we do routine vegetation maintenance, repair erosion and animal control on approximately 586 acres of caps.
- Vegetation maintenance includes mowing, fertilizer and pesticides.

A photograph of two construction workers in hard hats reviewing plans on a construction site. The worker on the left is wearing a yellow hard hat and a red shirt, with his arms crossed. The worker on the right is wearing a white hard hat and a plaid shirt, holding a set of plans. They are standing in front of a background of green pine trees and a white lattice tower. The word "Research" is overlaid in large black text on the image.

Research

Savanna Restoration

Large-scale field studies show native herbaceous and grass species diversity increase in response to harvesting.



Partners: Michigan State University and University of Wisconsin

DOE Energy Efficiency and Renewable Energy Project



Partners: Oak Ridge National Lab, USDA Forest Service Southern Research Station, University of Georgia, University of Alabama, Oregon State University and University of Saskatchewan

Impacts of Bioenergy Crop Production on Water Quality and Use:

- After three years of monitoring, there were no negative impacts to water quality or water use relative to sustainability standards when Forestry Best Management Practices were followed.

A photograph of a community outreach event. In the foreground, a woman with long brown hair wearing sunglasses and a man in a light-colored short-sleeved shirt and khaki pants stand in front of a white utility truck. The truck has various pieces of equipment on its back, including a large cylindrical tank and a control panel with gauges. The text "SC-SRI" is visible on the side of the truck. In the background, several people are gathered around a table with a blue banner that features a logo and the text "Community Outreach". The scene is outdoors on a paved area with a brick building in the background.

Community Outreach

Fire Prevention Education



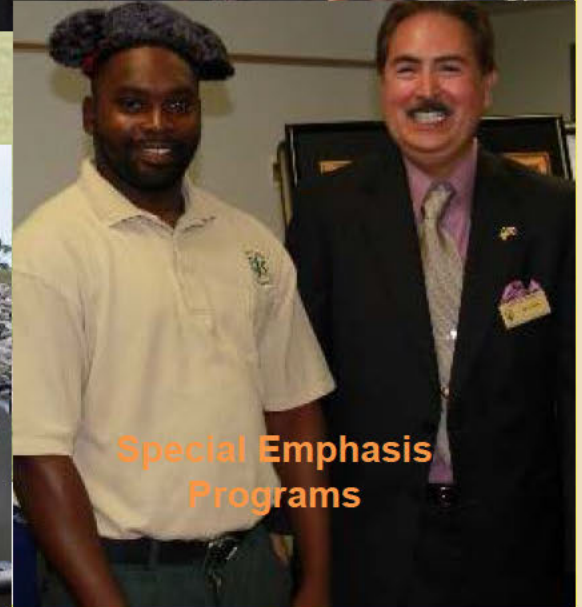
**Conservation Education
and Career Fairs**



**SRS Ultimate Turkey Hunt
and Fishing Challenge for
Wounded Warriors/
mobility impaired**



**Special Emphasis
Programs**



**Savannah River
Environmental Sciences
Field Station**



Questions?

USDA
FOREST SERVICE

Savannah
River



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