USDA

Forest Service-Savannah River Fiscal Year 2016 Highlights

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March 27, 2017

Operating under Interagency Agreement Number DE-EM000362

Savannah River Site

Purpose

To satisfy a Strategic & Legacy Management Committee 2016 Work Plan topic

Highlights

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

Natural Resources

To be discussed:

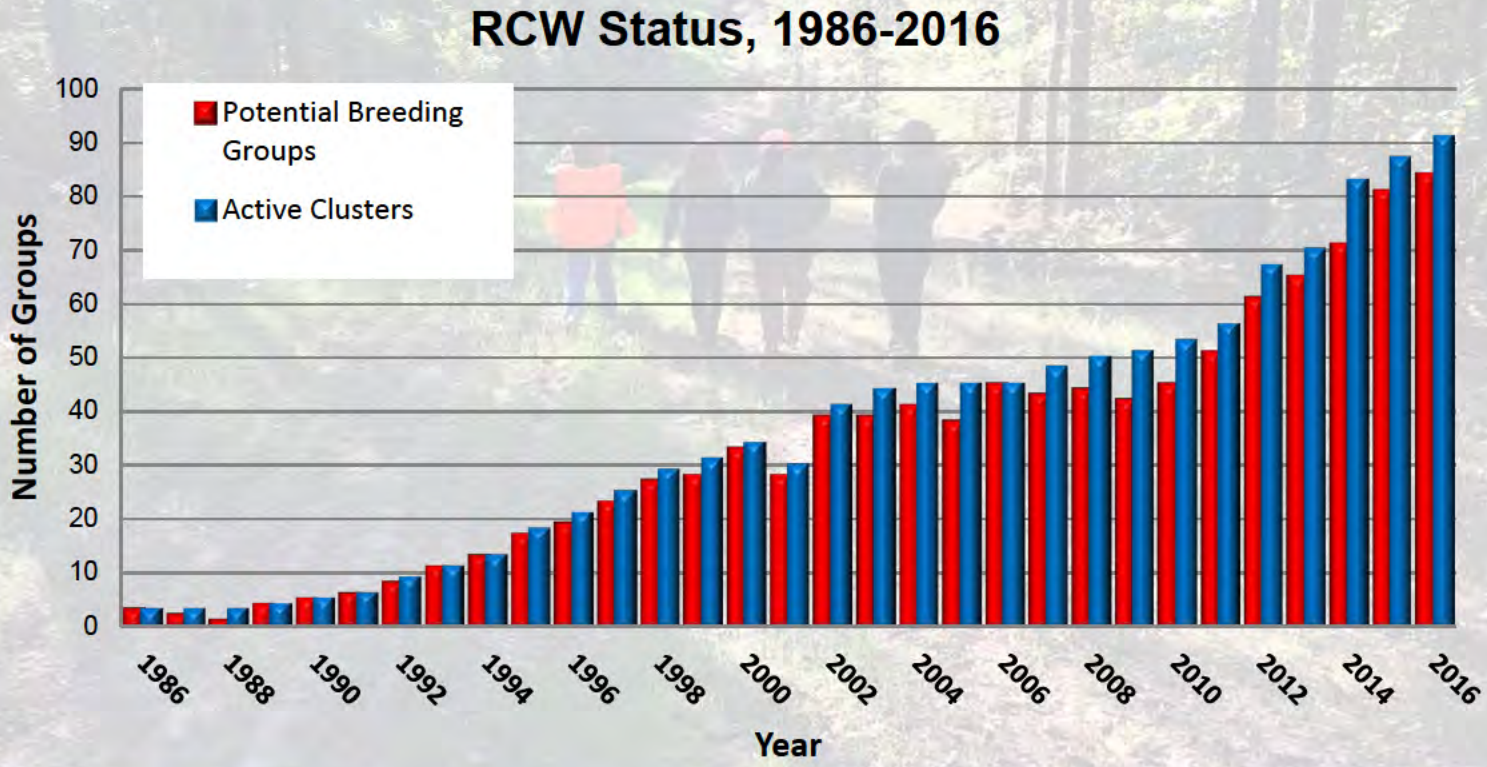
- Endangered Species Management
- Red-cockaded Woodpecker Info and Research
- Pollinator Support and Bee Species Increase
- Restoration of Native Grasses
- Nuisance Species Management
- Volume of Forest Products Sold

Endangered Species Management

- We presently manage 111 Red-cockaded Woodpecker clusters.
- In 1986, the site had a total population of four birds. In 2016, the population stands at 402.

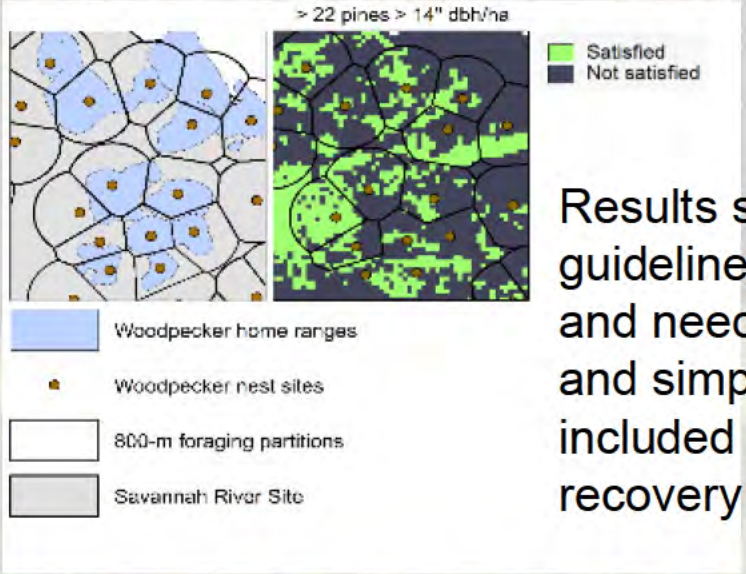
Red-cockaded Woodpecker nestlings

Red-cockaded Woodpecker Potential Breeding Groups and Active Clusters



Applied Research for Red-cockaded Woodpecker (RCW) Recovery with NC State and USFS

We compared U.S. Fish and Wildlife Service (USFWS) RCW recovery guidelines against observed foraging (feeding) by RCW onsite and precision habitat measurement by light detection and ranging (LiDAR).

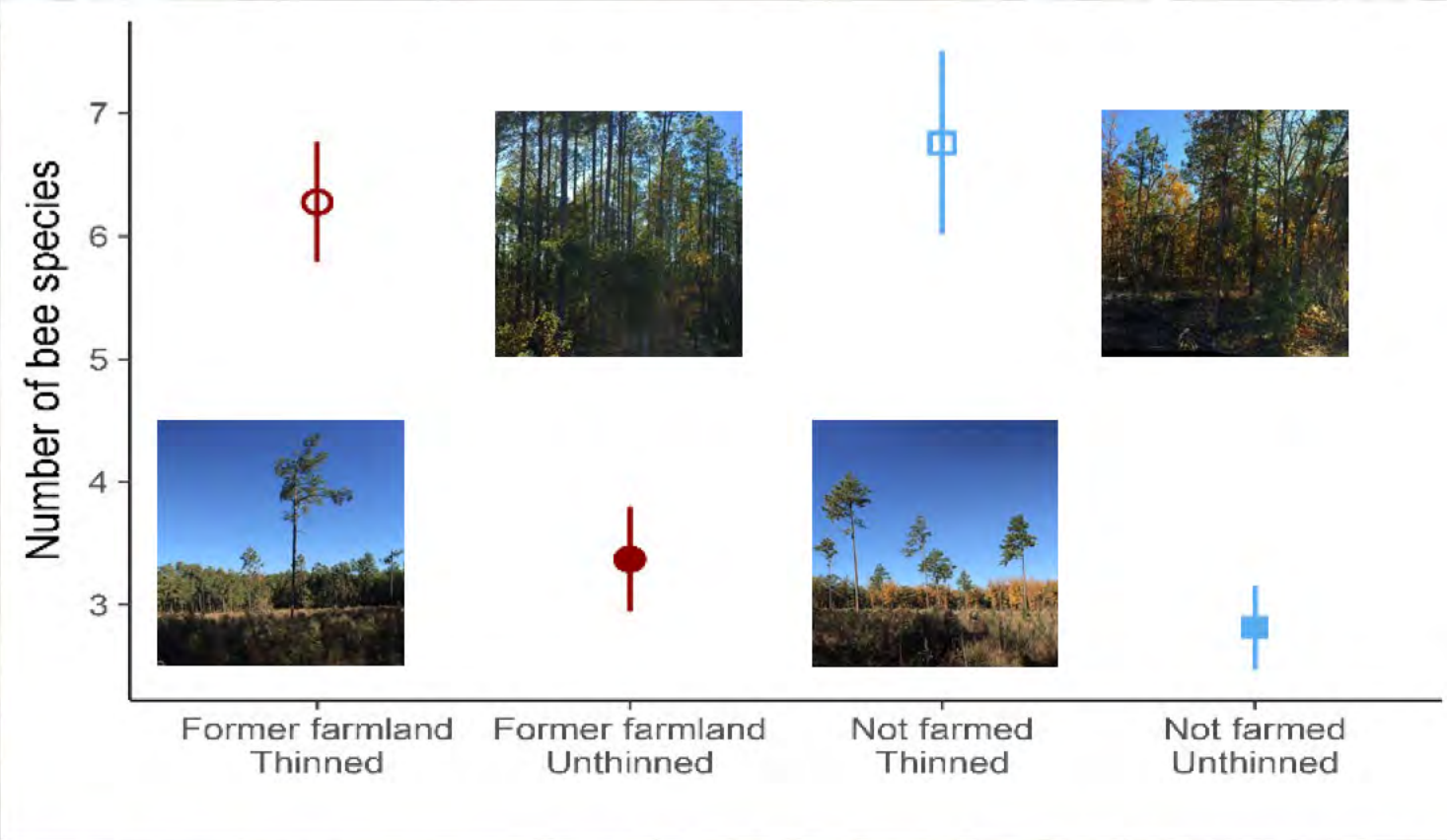


Results show that RCW foraging guidelines are too prescriptive and need to be more flexible and simplified. Results will be included in the next USFWS recovery plan.

Support of Pollinator Habitat

- An average of 3,500 acres of forest are thinned annually. Prescribed fire helps maintain the thinned condition.
- Ten acres of native flowering plants are annually sown in opening to enhance pollinator habitat where it was once lacking diversity.
  - Right-of-ways, logging decks, forest openings
- Planting practices are adjusted to encourage a diverse existing plant population to become more abundant.
- Additionally, since 1994, native grass plugs have been planted annually ranging from 20,000 to 130,000.

Increase of Bee Species

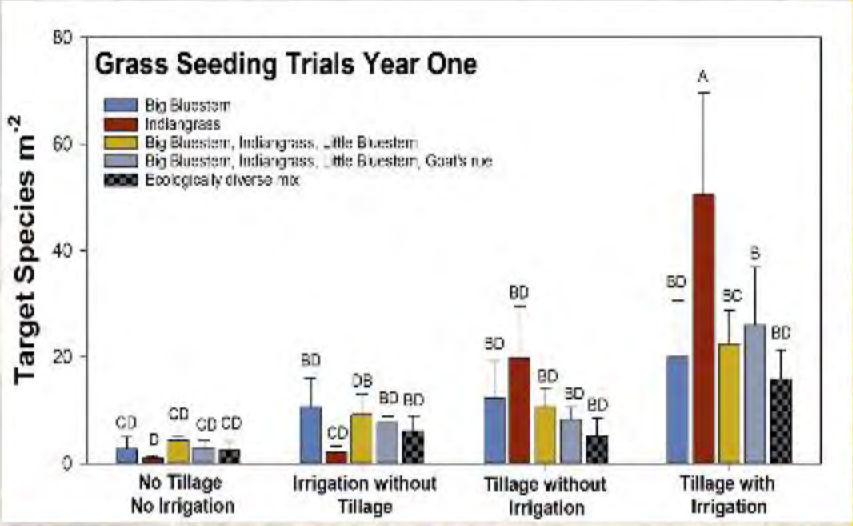


Restoration of Native Grasses in Pine Ecosystems

USDA-NRCS-ESD

- Establishing native perennial grasses is critical to pine savanna restoration.
- We tested combinations of tillage and irrigation on native grass monocultures and diverse mixes.

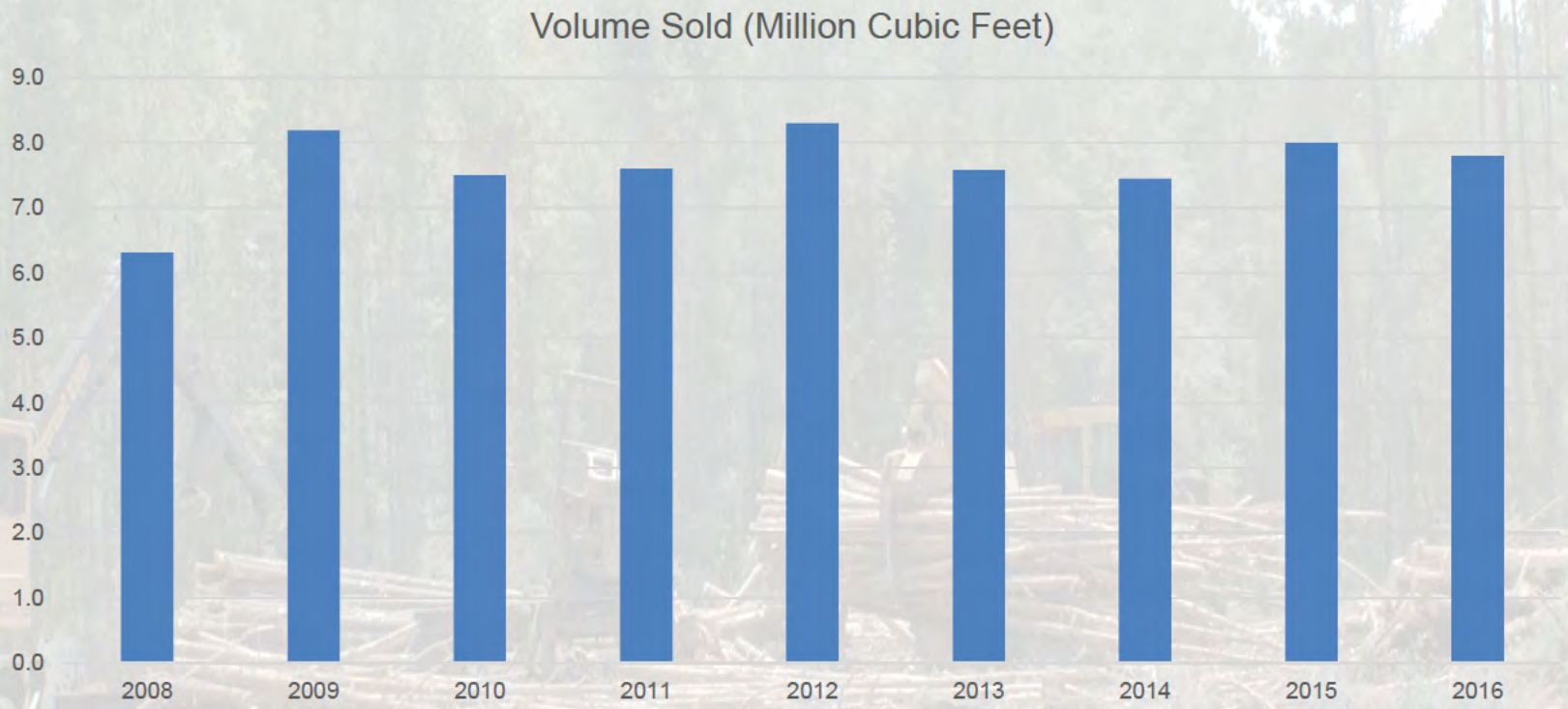
- Indiangrass established best when the soil was tilled and irrigation was applied.
- For Big Bluestem and mixes, tilling and drill seeding proved effective with no additional gains from irrigation.



Nuisance Species Management

- Since 2005, over 9,000 feral hogs have been removed from the site with aid from nuisance wildlife control contractors.
- We continue to closely work with the USDA Forest Service Southern Research Station and the Savannah River Ecology Lab (SREL) to enable and assist feral hog research.

Volume of Forest Products Sold

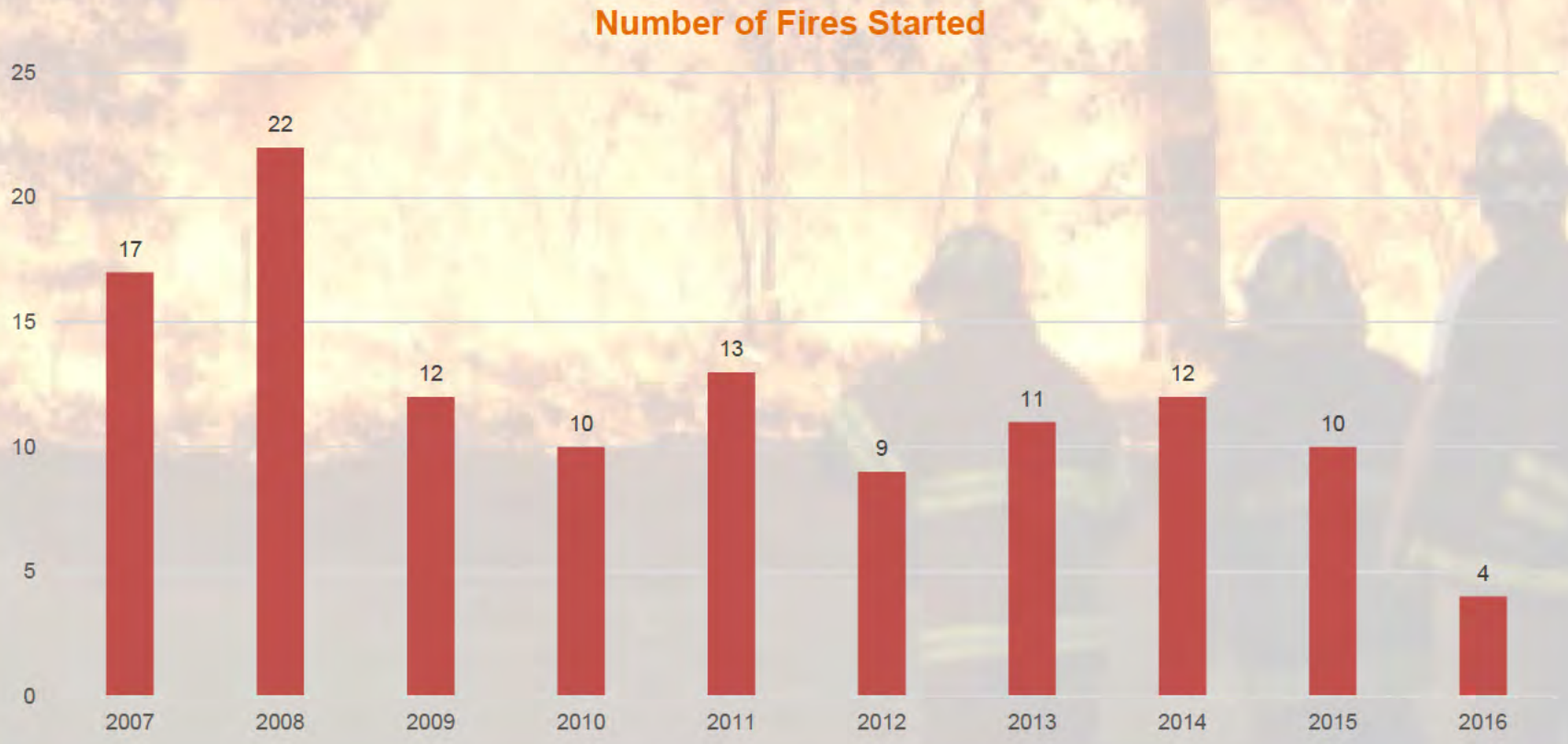


Fire

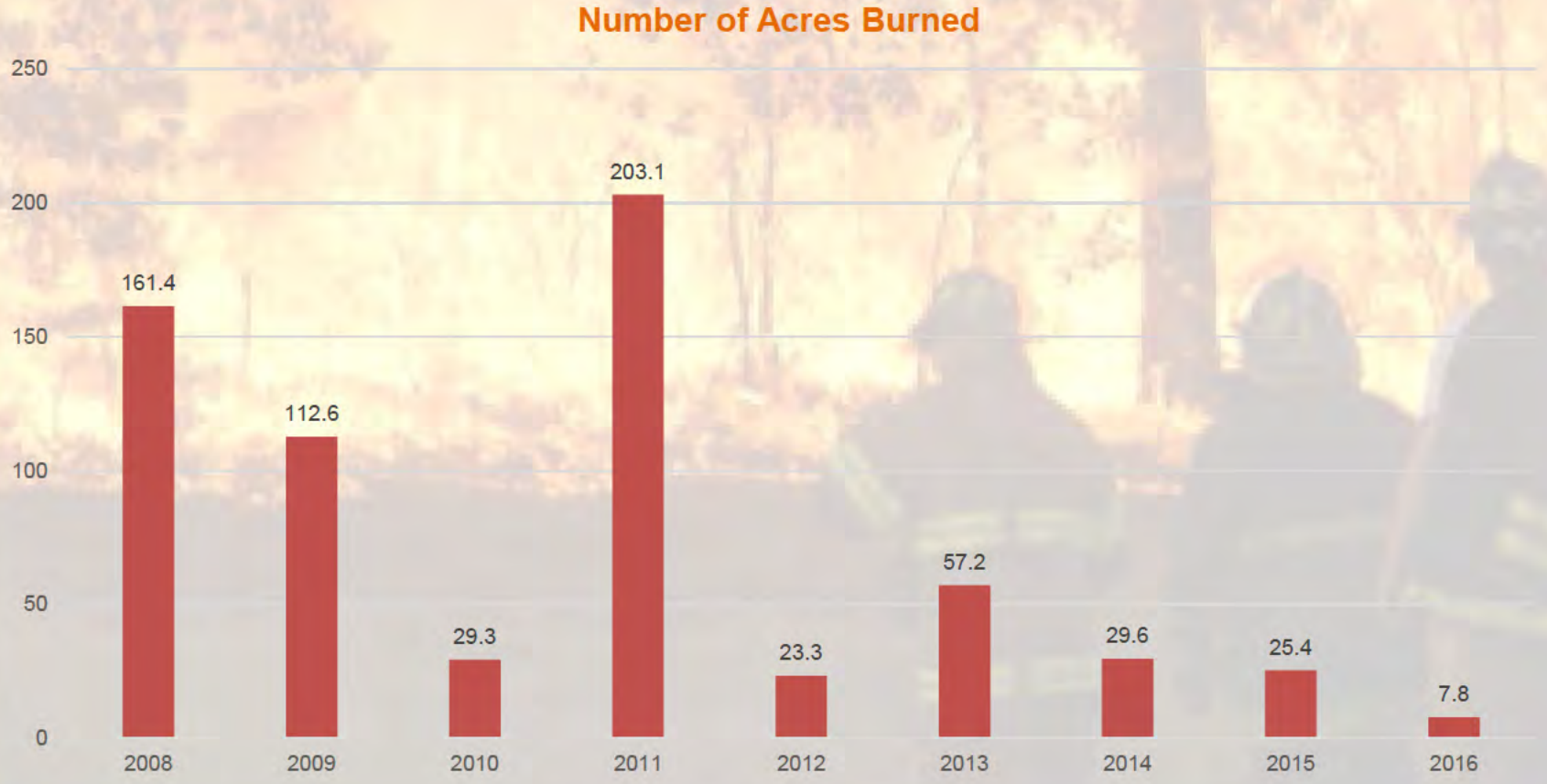
To be discussed:

- Wildfire History
- Prescribed Fire

Wildfire History



Wildfire History

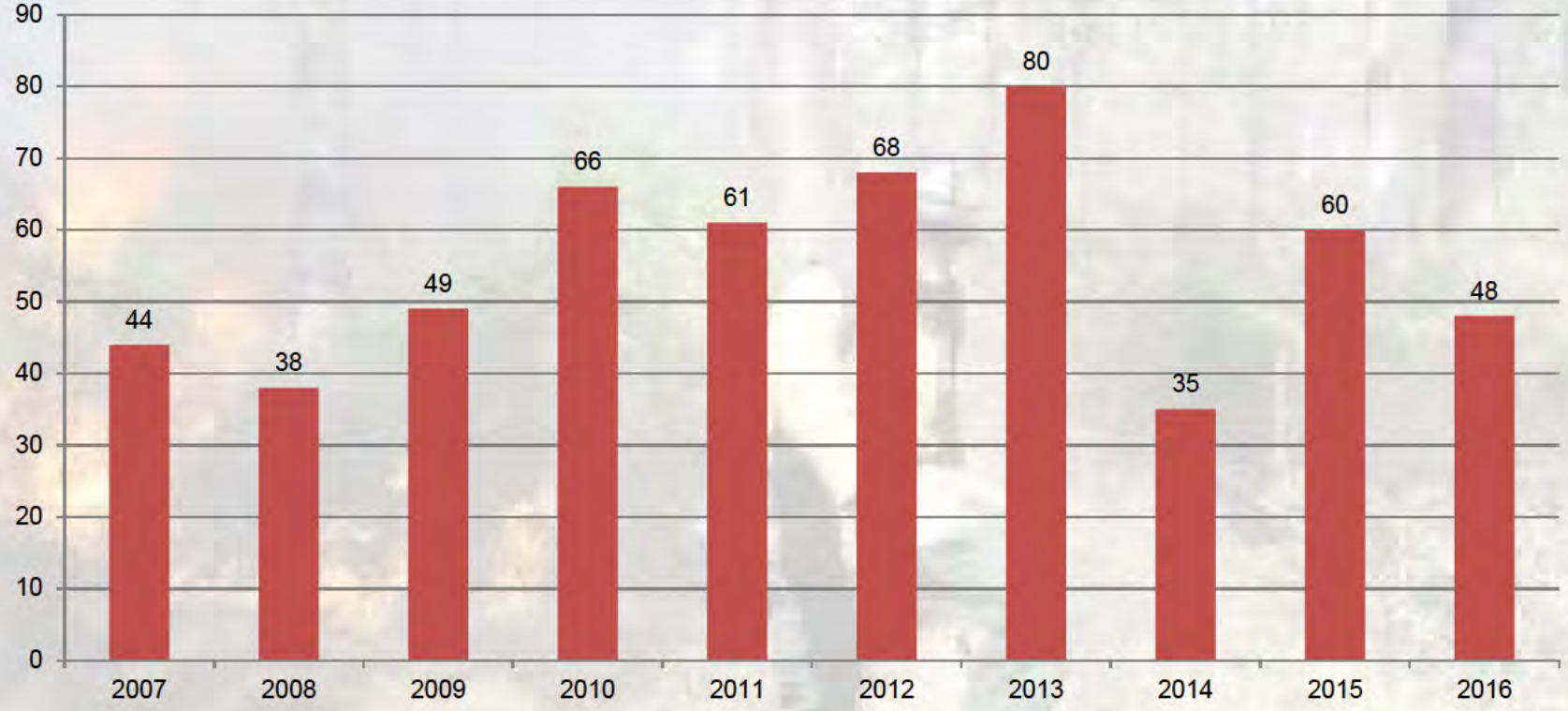


Prescribed Fire

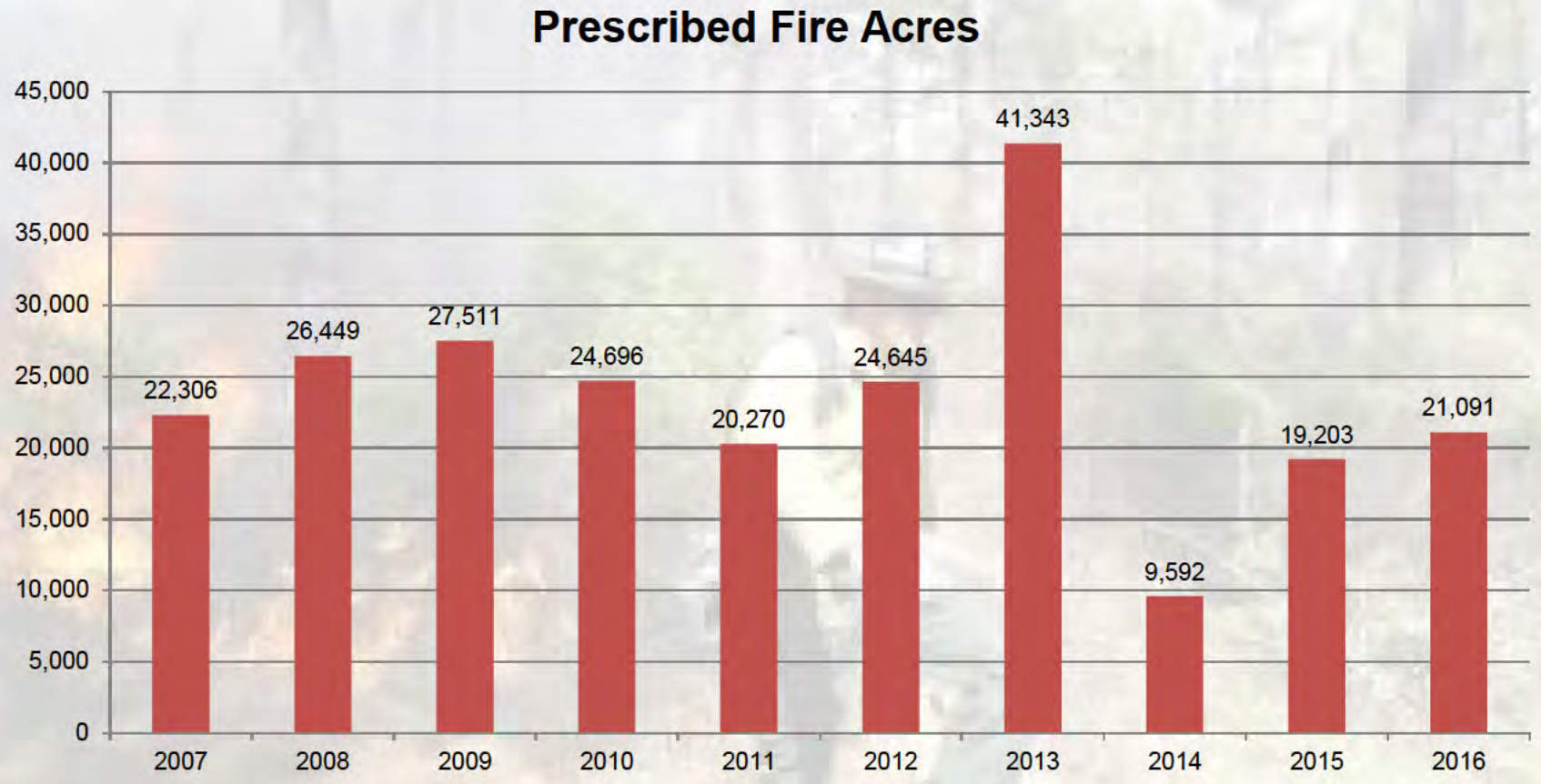
- Emphasis is still on frequency, priorities and objectives.
- We continue to minimize impacts to on-site and off-site populations.
- In FY16, we were selected with Savannah River National Laboratory (SRNL) and the USDA Forest Service Pacific Northwest Research Station to become one of five sites nationwide to study emissions and smoke plume development from prescribed fires. The work is externally funded by five agencies.

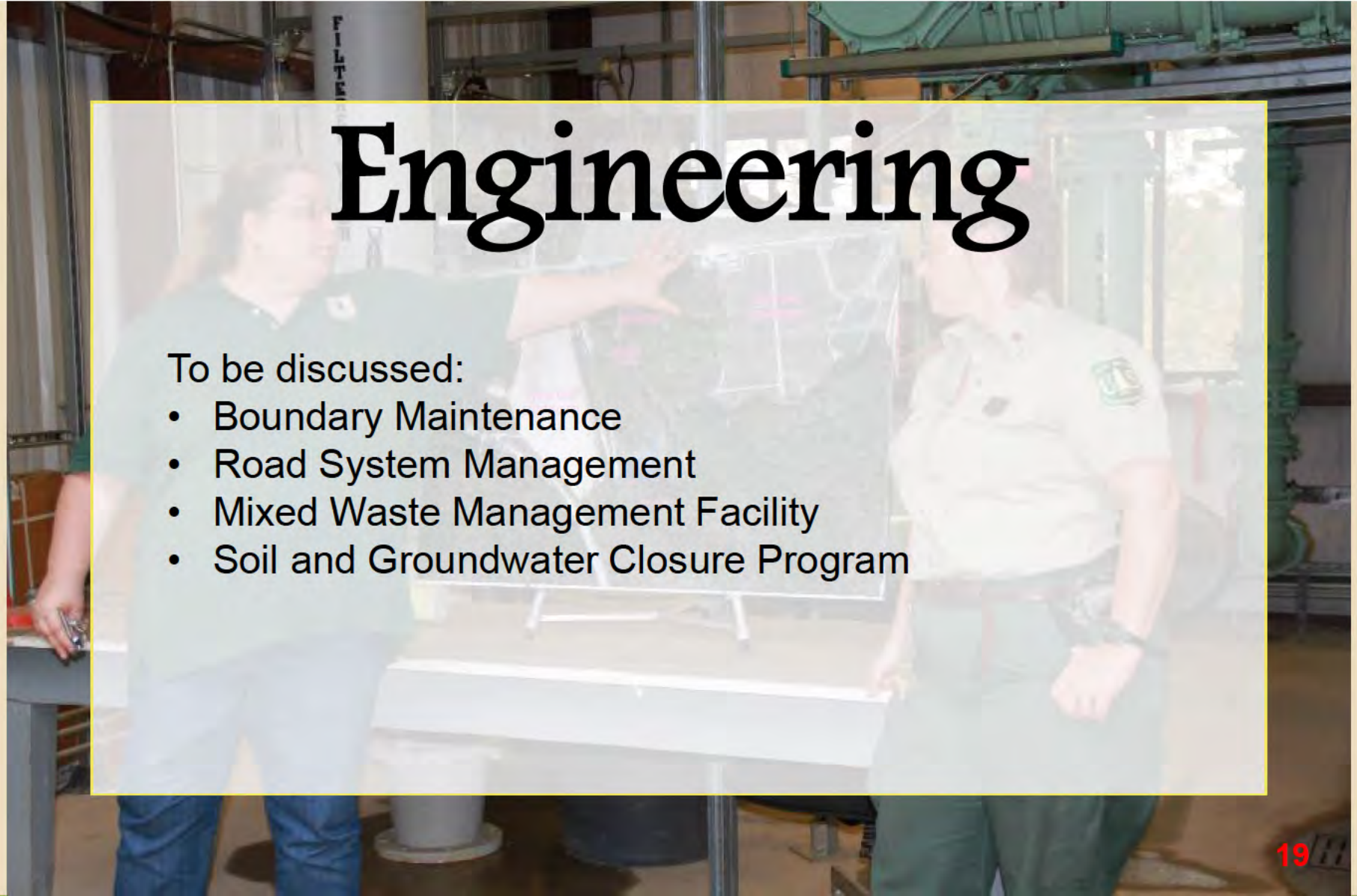
Prescribed Fire

Burn Days



Prescribed Fire



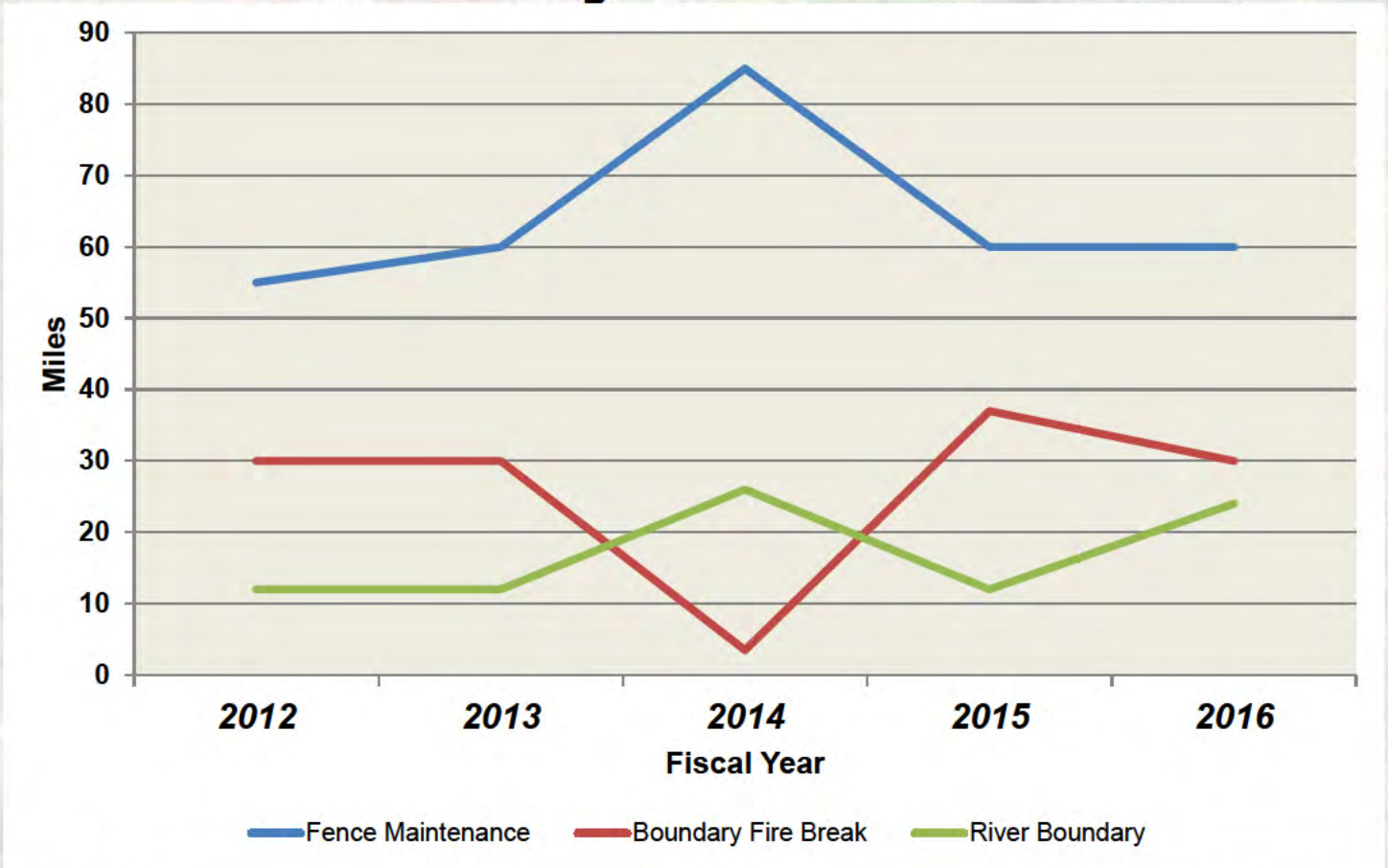


Engineering

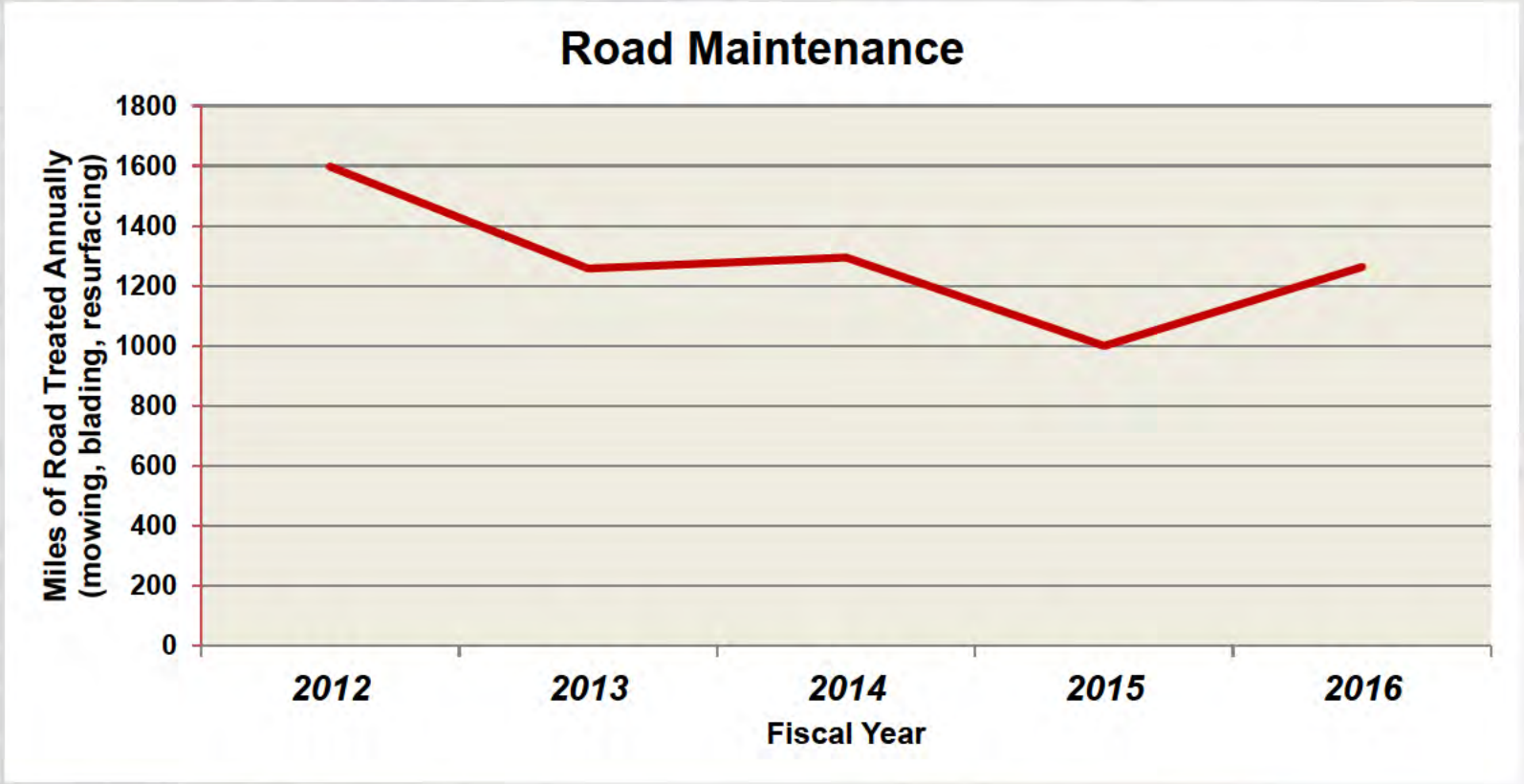
To be discussed:

- Boundary Maintenance
- Road System Management
- Mixed Waste Management Facility
- Soil and Groundwater Closure Program

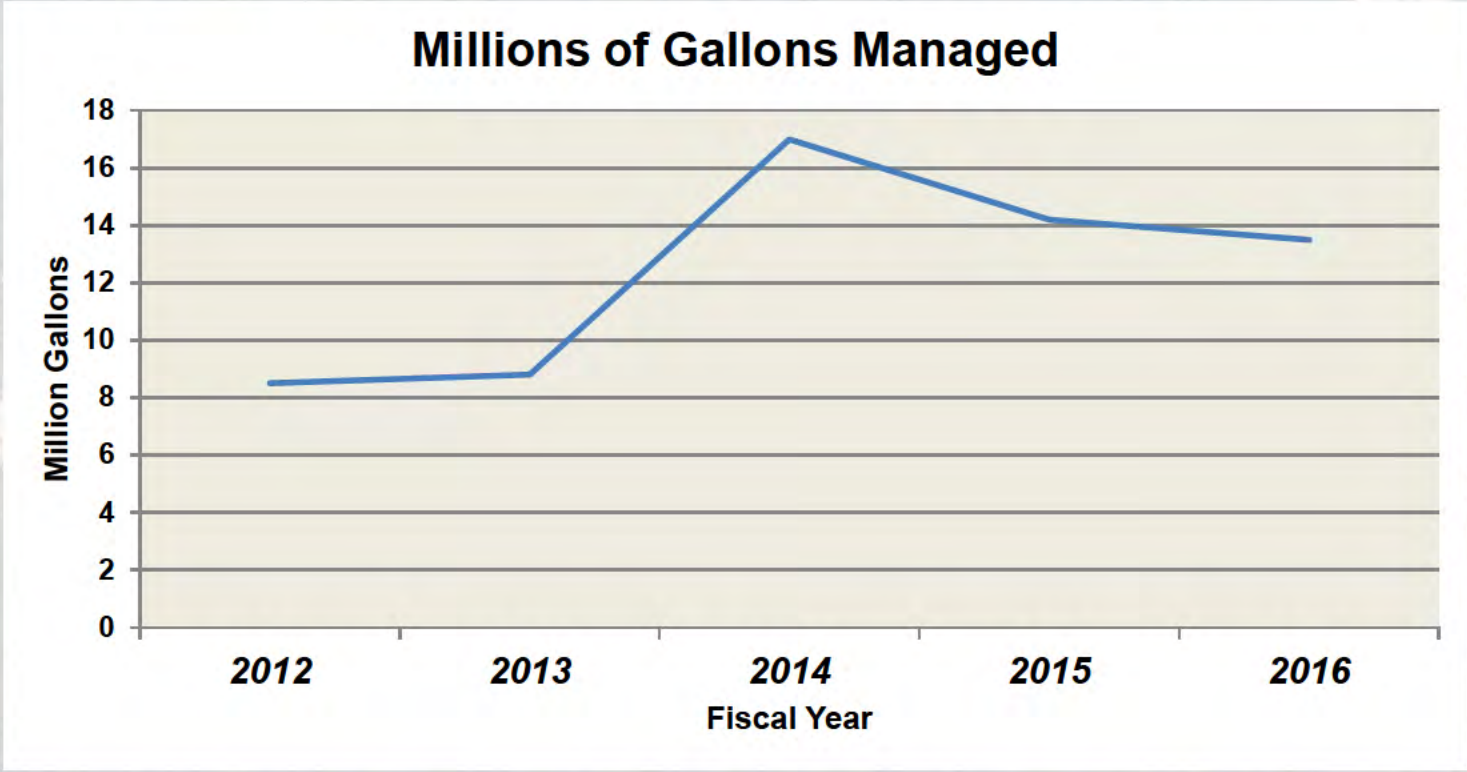
Boundary Maintenance



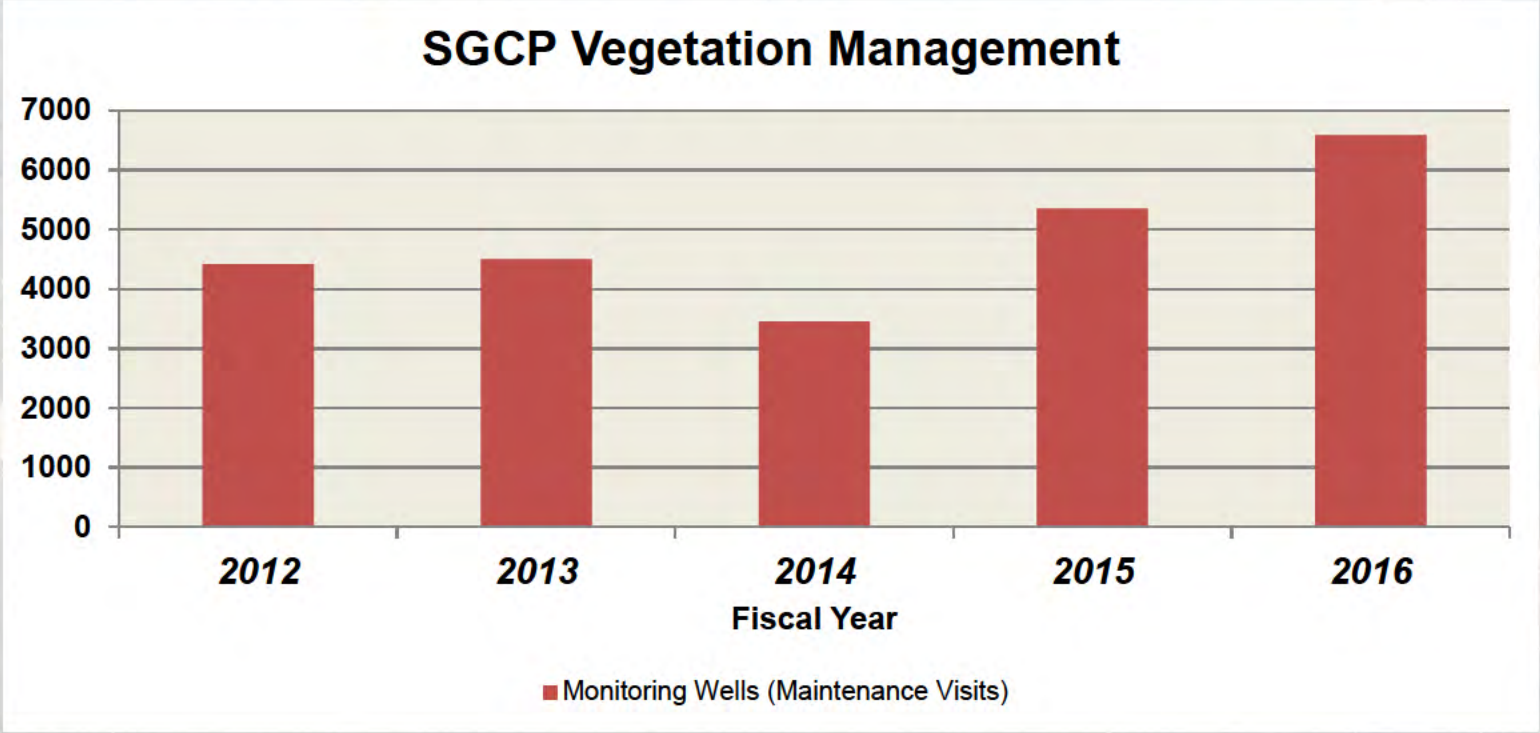
Road System Management



Mixed Waste Management Facility Tritium Phytoremediation



Soil & Groundwater Closure Program
Acres of Cap and Well Management



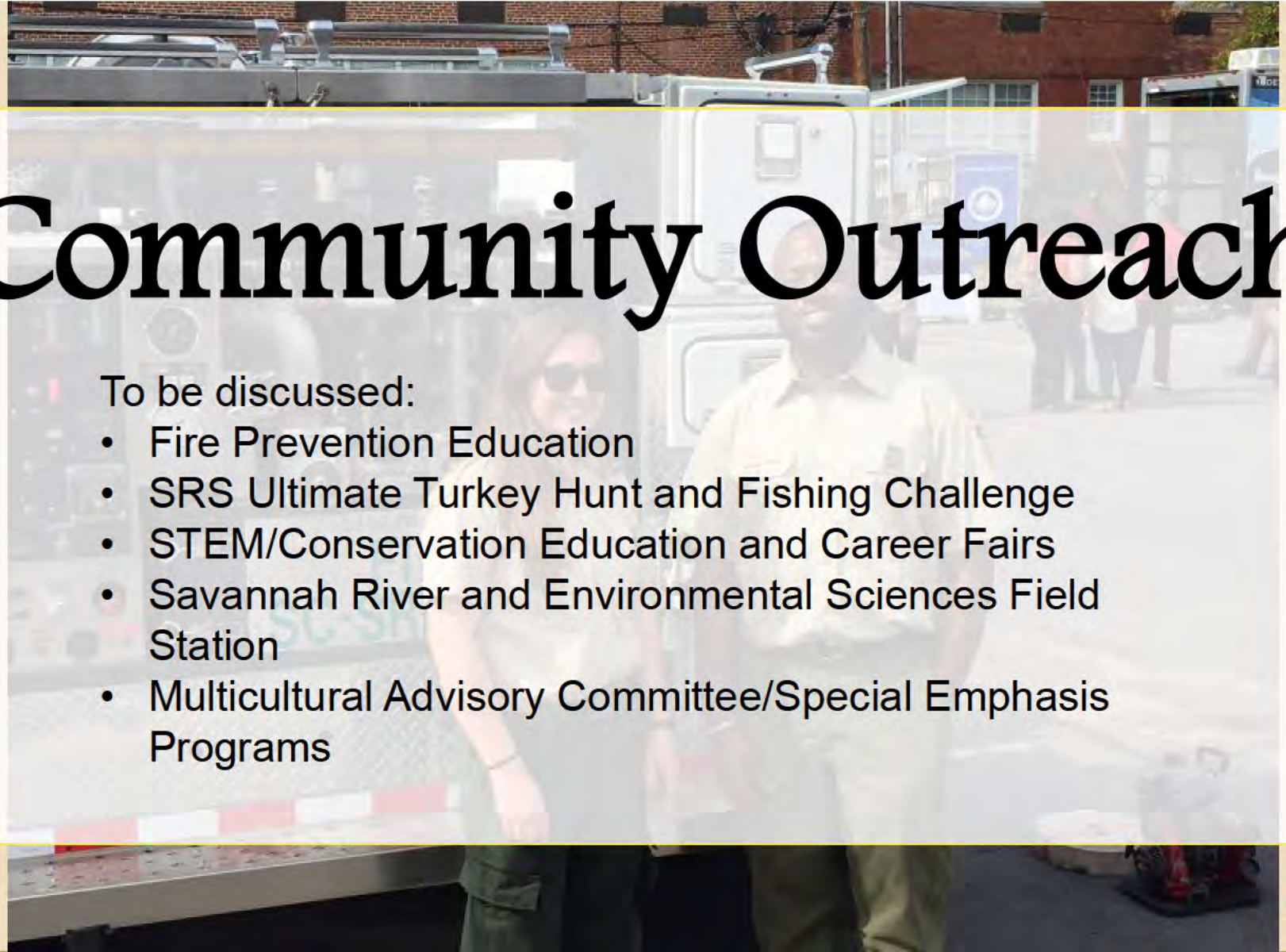
Additional Research

To be discussed:

- Golden Eagle Surveying

Golden Eagle Surveying

- Numerous sightings indicate golden eagles have developed site fidelity, or a bond to the site.
- Results show that golden eagles were primarily drawn to traps located in clearcuts, or open pine forests, managed by prescribed burns, cut down for Red-cockaded Woodpeckers.
- In 2016, nine golden eagles were found visiting the site during their winter migration.
- Currently, in 2017, twelve golden eagles have visited.



Community Outreach

To be discussed:

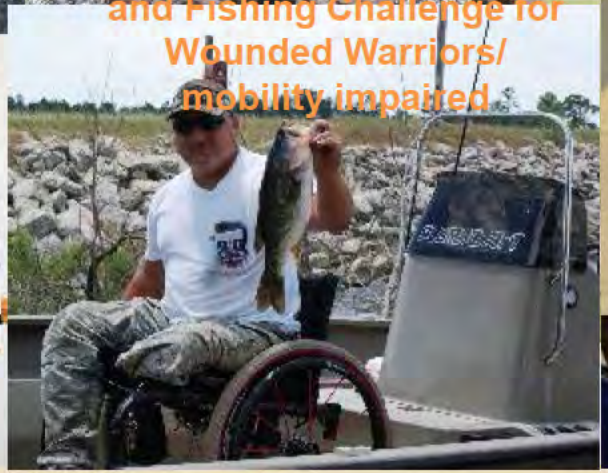
- Fire Prevention Education
- SRS Ultimate Turkey Hunt and Fishing Challenge
- STEM/Conservation Education and Career Fairs
- Savannah River and Environmental Sciences Field Station
- Multicultural Advisory Committee/Special Emphasis Programs

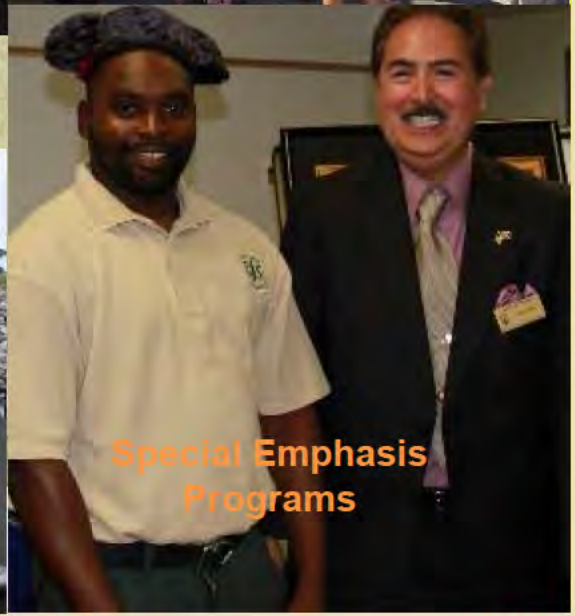
Fire Prevention Education

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

Conservation Education and Career Fairs

Savannah River Environmental Sciences Field Station





Special Emphasis Programs

Recap and What is on the Horizon

We will continue to:

- Excel in environmental and occupational safety and health performance
- Work across units and with partners to accomplish goals
- Outreach to the community about STEM/conversation education and share career opportunities
- Foster environments to increase the RCW population
- Support pollinator habitat
- Minimize, as much as possible, on-site and off-site impacts of prescribed burns

What's on the Horizon

- Inclusiveness team formed
- Work with partners to seek grant opportunities for pollinators/garden creation at schools and afterschool programs

Questions?