### DeVela Clark Forest Manager



Cold all rating 30 Jeans

CAB Presentation May 2024





We were established in 1951 through a contract with the Atomic Energy Commission to reforest the newly acquired land surrounding the Savannah River Plant.

- We planted 10 million trees in two years.
- We have been working on site since that time managing the natural resources on SRS to support the DOE mission.

We collaborate with DOE via an Interagency Agreement that is reviewed (renewed) every five years.



As stewards of the land, we conduct a comprehensive land and natural resource management program on over 170,000 acres of forested land on SRS that includes:

- Planning and Natural Resource Management
- Research
- Fire
- Engineering and Environmental Services
- Safety, Operations and Communications







### **Planning and Natural Resources**

Forest planning is achieved through a science based interdisciplinary team of resource managers that decide what management actions are needed to achieve the resource objectives for specific areas on the site. These actions may include:

- Timber harvesting and future seedling planting
- Application of prescribed fire to remove invasive plants
- Actions needed to protect habitat for TES species
- Removing vegetation to reduce potential fire threats on site
- Plant and promote native plant and pollinator habitats





### **Planning and Natural Resources**

- Plant an average +/- 400,000 trees a year.
- Annually sell +/- 70,000 ccf of forest products. (enough to build 6,000 new homes every year)
- Generate over \$4 million dollars in revenue for the U.S. Treasury.
- Responsible for creating over 300 jobs across 21 counties in SC and 4 counties in GA.
- Within the CSRA, our Timber program has an economic impact of \$37.6 million dollars across 6 main economic sectors. Forestry Products and Services, Logging, Transportation, Eating, Drinking, and Wholesale Trade.





### **Planning and Natural Resources**

Support threatened, endangered, and sensitive (TES) animal and plant species found on the site.

- Red-cockaded Woodpecker (Endangered)
  - population on SRS has grown from 4 in 1985 to over 600 in 2024)
- Purplecone Flower (Sensitive)
- Pondberry Flower (Endangered)
- At-risk species (Tri-colored bat, Gopher Tortoise, Florida pine snake)









### **Planning and Natural Resources**

We partner with the DOE, SRNS, National Wild Turkey Federation and the Outdoor Dream Foundation to hold guided Turkey hunts (19 years) and fishing events (8 years) on SRS.

- Wounded Warriors
- First Reponders
- Disabled or mobility impaired individuals
- Veterans



 Children and their families with life threatening conditions (Outdoor Dream Foundation)





### **Planning and Natural Resources**

### Nuisance Animal program

- We provide 24/7 365-days a year response capabilities on SRS to capture and remove as needed wildlife and other nuisance animals that are adversely impacting operations on SRS.
- We responded to an average of 150 calls per year.
  - Snakes near offices
  - Birds
  - Injured wildlife
  - Alligators
  - Wasps





### **Planning and Natural Resources**

Crackerneck Wildlife Management Area and Ecological Reserve



https://www2.dnr.sc.gov/ManagedLands/ ManagedLand/ManagedLand/69

- 10,600 acres area on SRS that is managed through a cooperative agreement between DOE and SCDNR.
- Limit Public Access for hunting, hiking, mountain biking, nature photography
  - (Typically, Friday and Saturdays throughout the year)
- Comprised of bottomland hardwoods, Carolina bays, upland forests, fields, ponds and more. (USFS provides some resource management)
- SCDNR hosts a required check-in process to comply with DOE access regulations.



### **Research Program**

Savannah River Site is our nation's first National Environmental Research Park.

- Approximately 14,000 acres are set aside for ecological research, studying site operation impacts, biological studies of plant and animals, and other types of natural resource related research.
- Research in the park is facilitated by predominantly three agencies DOE, SREL, and the USFS.
  - Colleges from across the country and various research organizations partner with us to conduct research on the site.





Research projects include:

- Pollinators (Corridor research project has been going on for over 20 years)
- Turkey (ecology impacts on reproduction)
- Coyote (range and food habitat)
- Fire impacts on watershed and water quality
- Use of technology (LiDAR) to accurately map vegetation





### Fire Management



- Provides year-round seven-days per week wildland fire protection of SRS and supports the national wildfire response effort.
- Host fire fighting modules from across the country to train agency FF's.
- Work with program managers to determine the appropriate course of forest management action needed to help achieve desired outcomes for specific areas on the site.
  - Mechanical Treatment (adjacent to infrastructures for defensible space)
  - Application of prescribed fire
    - Only done when pre-ignition weather conditions meet state guidelines, and we have approval from state authorities.
    - Over 37,000 acres treated this year.



### Fire Management (Prescribed Fire)

How do we inform the public of our intended actions?

- Weekly notice in paper
  (Typically, January April each year)
- X (formally Twitter)
  - @SavannahRiverFS
  - https://twitter.com/SavannahRiverFS
- Smoke sensitive call list
  - To get on it call (803) 725-3891
  - Or they can call our Public Affairs Specialist at (530) 440-9741



#### **SRS Prescribed Fire Notice**

USDA Forest Service – Savannah River may conduct prescribed fire operations on Savannah River Site this week. Current air quality information for areas surrounding the Savannah River Site is available at <u>https://fire.airnow.gov/</u>. Follow us or visit us on Twitter at <u>https://twitter.com/SavannahRiverFS</u> for real time prescribed fire information. Individuals or families with members that have health conditions aggravated by smoke and who live in communities adjacent to the site that wish to be notified about prescribed fire operations that may impact them, should contact USFS Savannah River Public Affairs Specialist Josef Orosz at <u>iosef.orosz@usda.gov</u> or **(530) 440-9741**.



### Engineering and Environmental Services



Construct, survey, maintain, and repair as needed over 1300 miles of secondary roads (unpaved roads) on SRS.

- Road surface grading over 900 miles
- Roadside mowing 420 miles
- Roadside heavy brushing 42 miles
- Survey damage and tree removal following storms

Conduct annual surveys and maintenance on over 50 miles of SRS boundary fence and signage along Savannah River boundary.



### Engineering and Environmental Services

Collaborates with the DOE and other agencies on SRS to maintain and operate the Phytoremediation facility on SRS.

- Pumps Tritium contaminated groundwater that has been collected in a retention pond up through an irrigation system watering a 60-acre plus Loblolly tree plantation.
- Trees naturally absorb the water via their roots and through the natural process of transpiration, release clean water particles back intro the atmosphere meanwhile retaining the extra hydrogen particle.
- To date, over 10 million gallons of tritium contaminated groundwater has been kept out of the Savannah River.





### Forest Management Challenges

Through the implementation of best management practices in managing forests on Savannah River Site we can –

- Address changing climate impacts on forest health
  - Less opportunities for Prescribed fire due to increasing temps
  - Less or more rainfall in areas can cause ecosystem changes
- Reduce offsite smoke impacts from prescribed fires
  - We utilize smoke modelling programs to anticipate where our smoke will go. These results can affect when and where we burn. We inform local homeowners about our planned actions and their potential impacts. We alert smoke sensitive individuals about planned actions.









### Forest Management Challenges

Through the implementation of best management practices in managing forests on Savannah River Site we can –

- Better protect drinking water originating from SRS
  - Delineating forest management areas by watershed identification
  - Phytoremediation project prevents Tritium from reaching the Savannah River
- Proactively manage habitat to support TES and at-risk species onsite
  - Aside from the three federally listed TES species, we also monitor 15 other at-risk or otherwise sensitive species on the site.





Gopher frog (at-risk)







We are stewards of the land.

- Through collaboration, we develop and implement innovative, science-based forest management. We convene with key stakeholders across all lands to provide clean air, water, and healthy, sustainable forests.
- While supporting the Department of Energy-Savannah River Site Mission, we instill public confidence while being recognized as a national asset in environmental stewardship through innovative technology. We serve the public by providing ecological and economic benefits. We provide excellent customer service while focusing on integration of all activities.
- Our employees are our most valuable resource. We are committed to developing an inclusive and diverse workforce in a safe environment. We provide unique and rewarding opportunities for all our employees.

We are USDA Forest Service - Savannah River.



## Questions?



