



Environmental Surveillance and Oversight Program

Aiken Environmental Affairs Office



MISSION

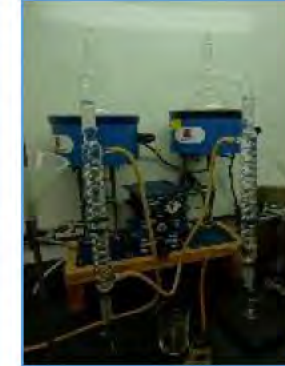


To promote and protect the health of the public
and the environment.

ESOP Overview

- DOE – Funded Grant (Remediation and Environmental Monitoring Grant)
- Monitor the Savannah River Site
- Non-regulatory environmental monitoring
 - Allows DHEC to review SRS sampling program
 - DHEC samples provide a second set of data available to the public
- Look for radiological and non-radiological constituents in air, groundwater, drinking water, surface water, sediment, soil, milk, vegetation, fish, and game.

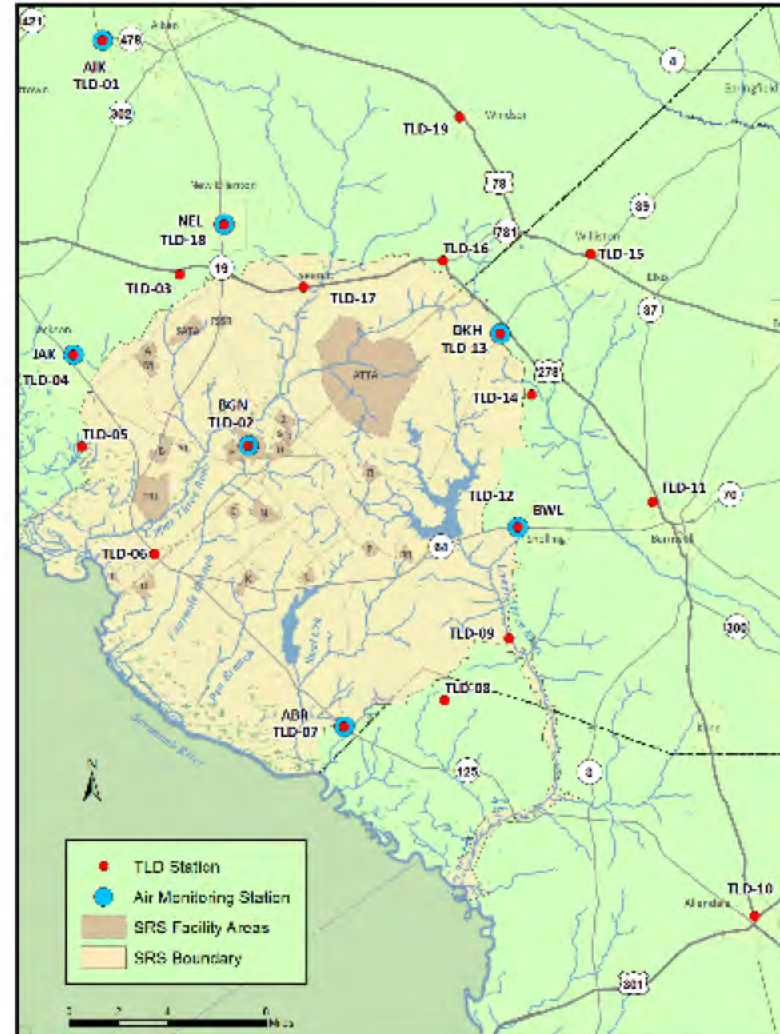
Radiological Atmospheric Monitoring



7 Air Stations

- Particulates
- Precipitation
- Atmospheric Moisture

19 TLD's

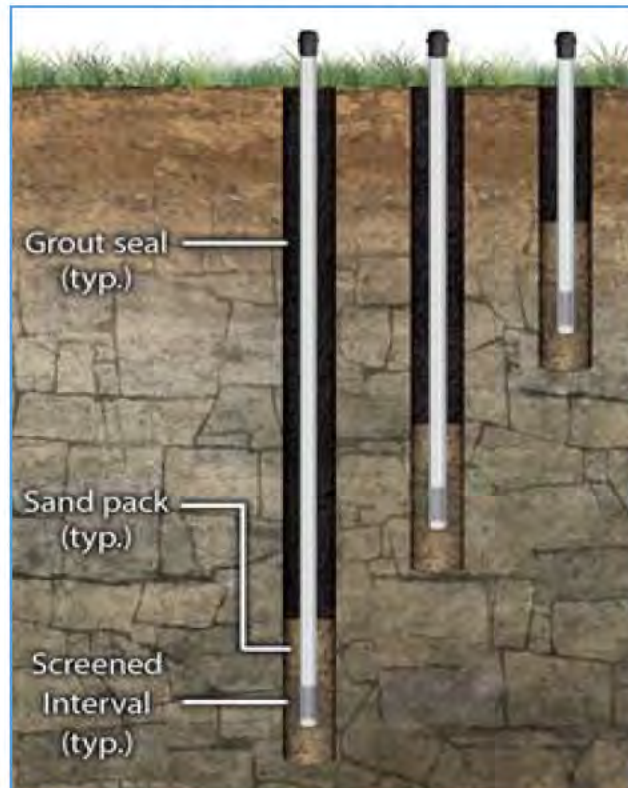


Groundwater Monitoring

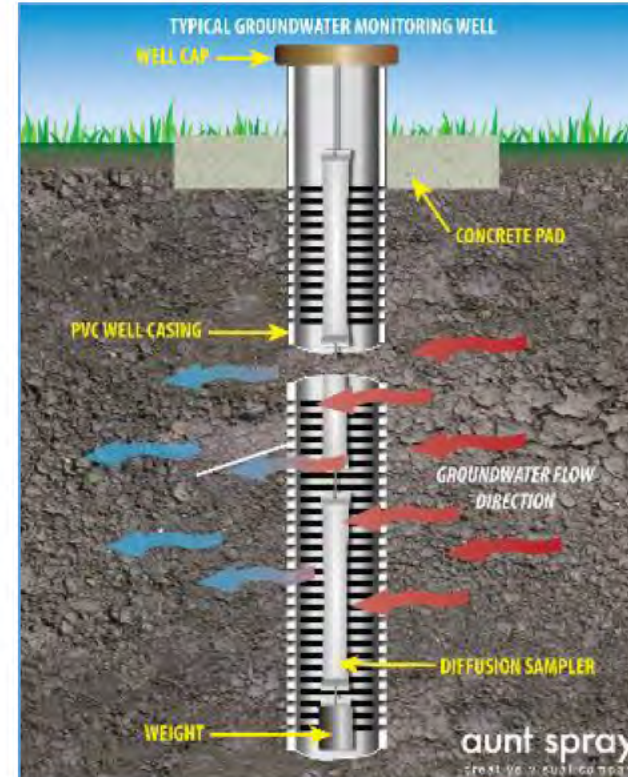


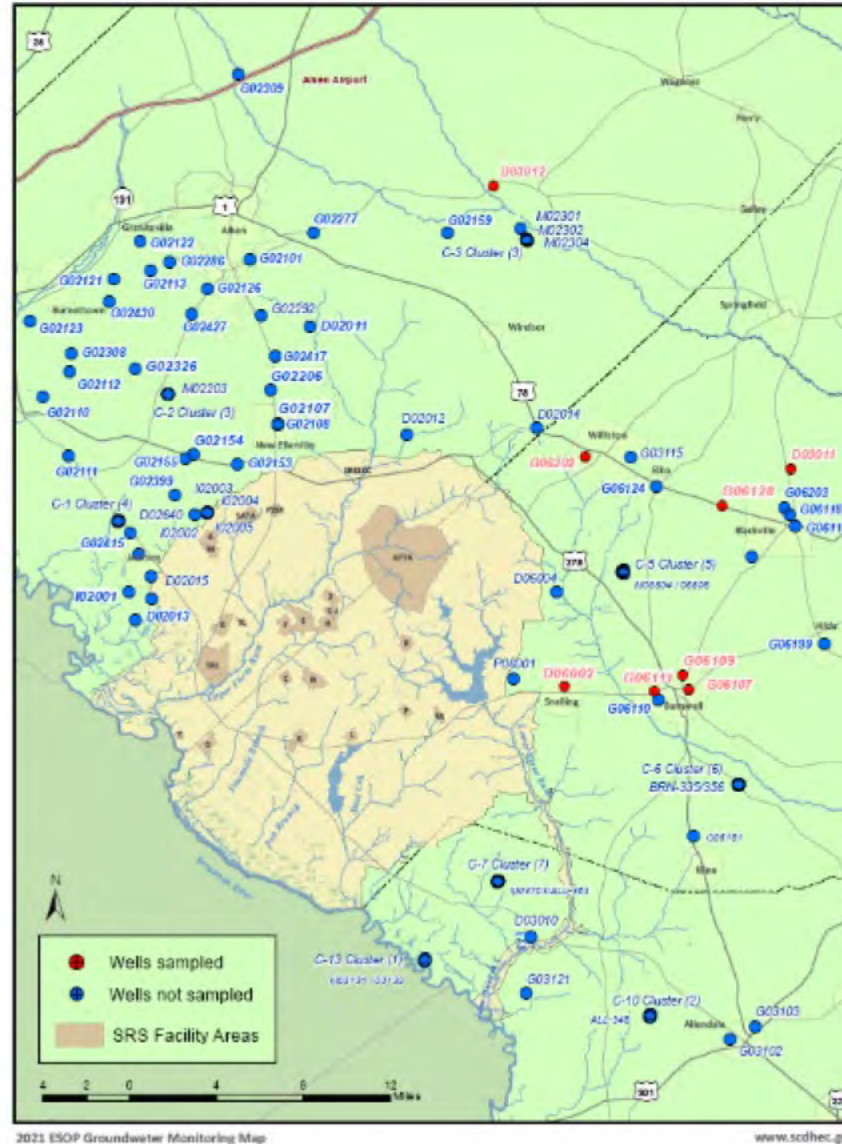
Well Designs

Cluster Wells



Network Wells





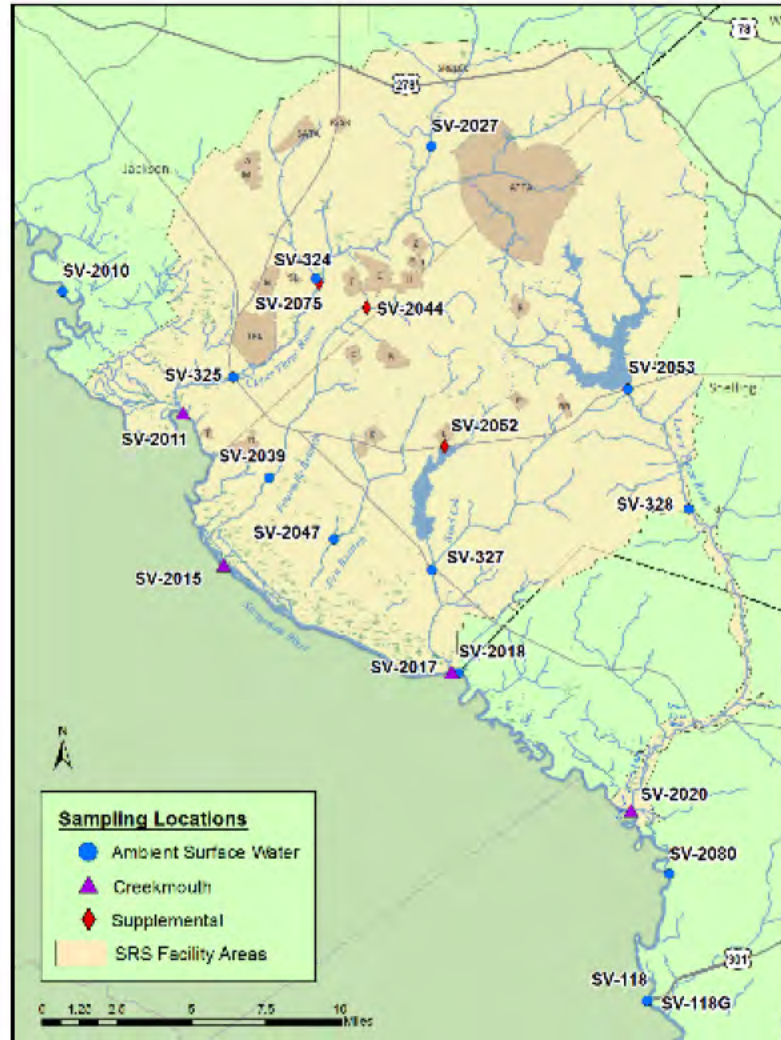
Radiological Monitoring of Drinking Water Adjacent to the SRS



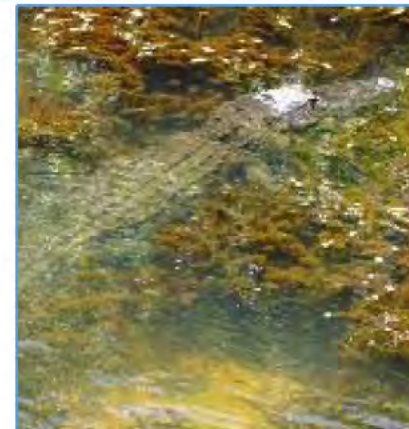


Radiological Surface Water Monitoring





Non-Radiological Monitoring of Surface Water



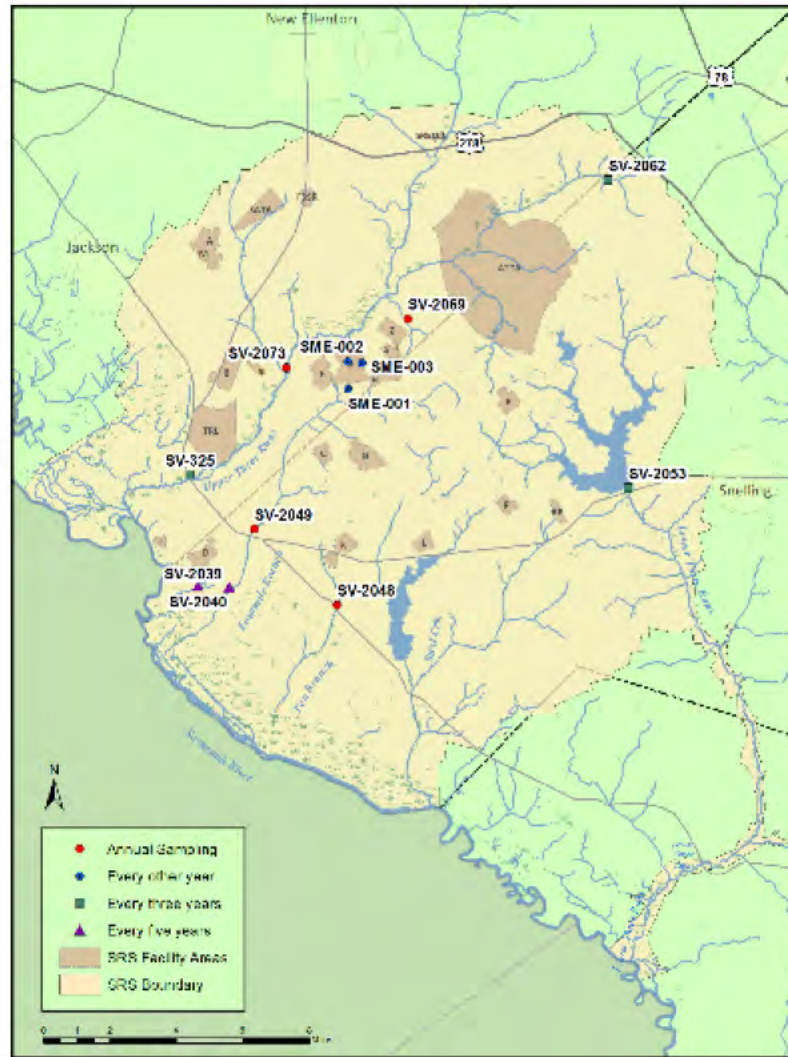


Sample Parameters

- | | |
|-------------------------|--------------|
| 💧 Temperature | 💧 Alkalinity |
| 💧 pH | 💧 Cadmium |
| 💧 Dissolved Oxygen | 💧 Chromium |
| 💧 BOD | 💧 Copper |
| 💧 Total Suspended Solid | 💧 Iron |
| 💧 Turbidity | 💧 Mercury |
| 💧 <i>E. coli</i> | 💧 Manganese |
| 💧 Ammonia | 💧 Nickel |
| 💧 Nitrate/Nitrite | 💧 Lead |
| 💧 Phosphorus | 💧 Zinc |
| 💧 TKN | |

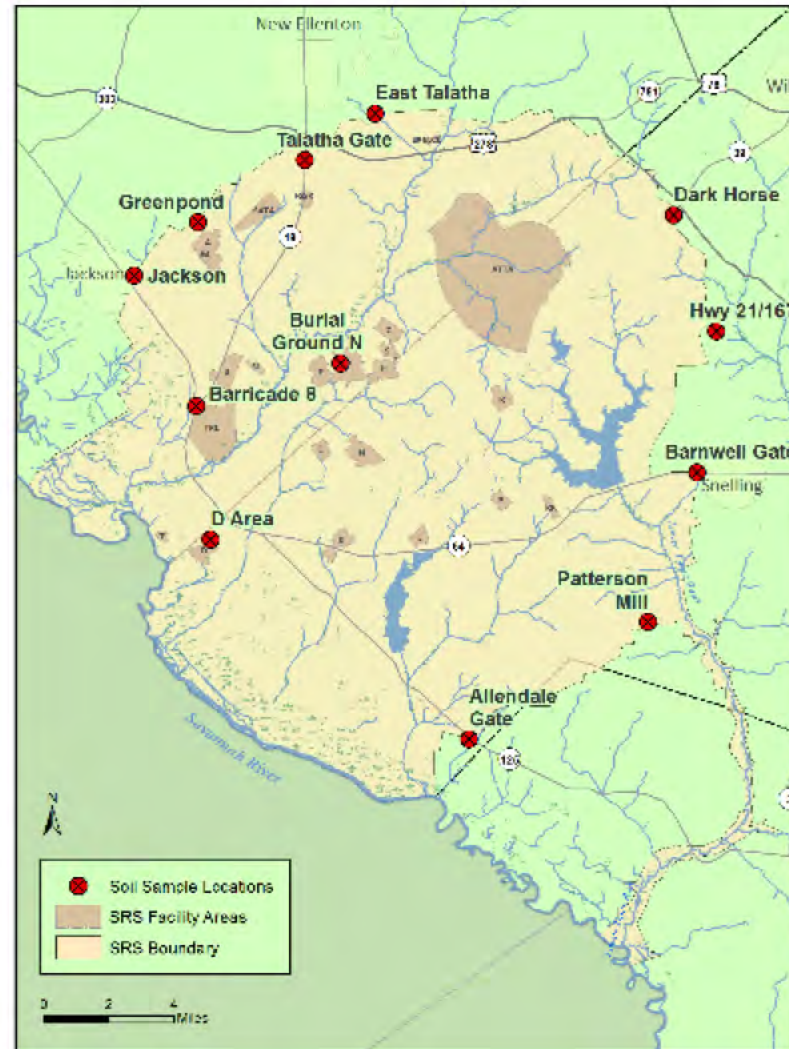
Sediment Monitoring





Soil Monitoring





2022 ESOP Soil Monitoring Map

www.scdhec.gov

Terrestrial Vegetation Monitoring



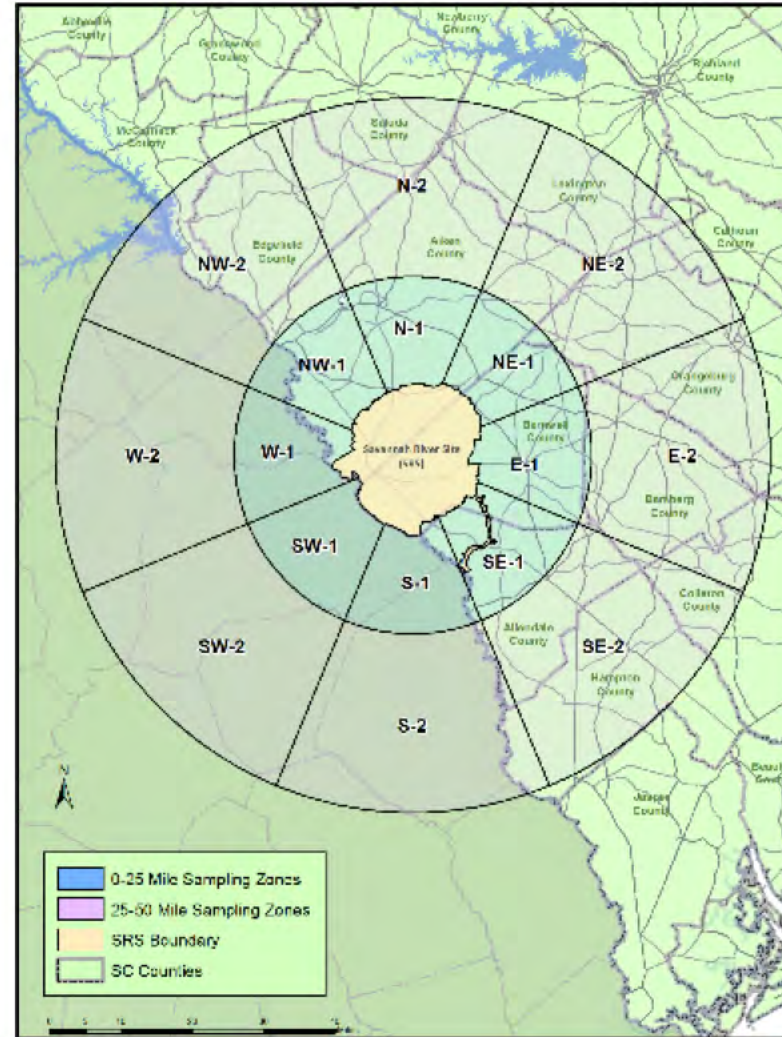
Bermuda Grass



Edible Vegetation Monitoring



Sampling Locations



Milk Monitoring

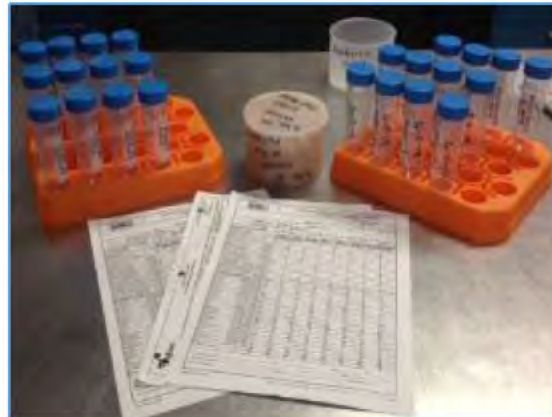




2022 FQIP Dairy Milk Monitoring Map

www.southcarolina.gov

Fish Monitoring



Freshwater Species:

Channel and Flathead Catfish

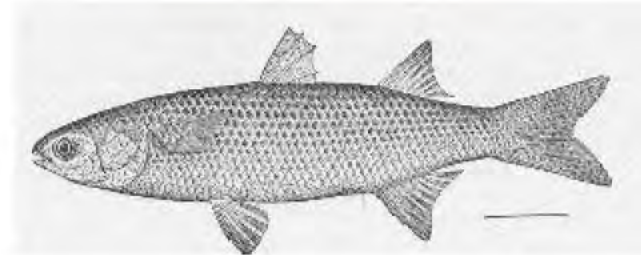


Largemouth Bass



Saltwater Species:

Striped Mullet



Red Drum



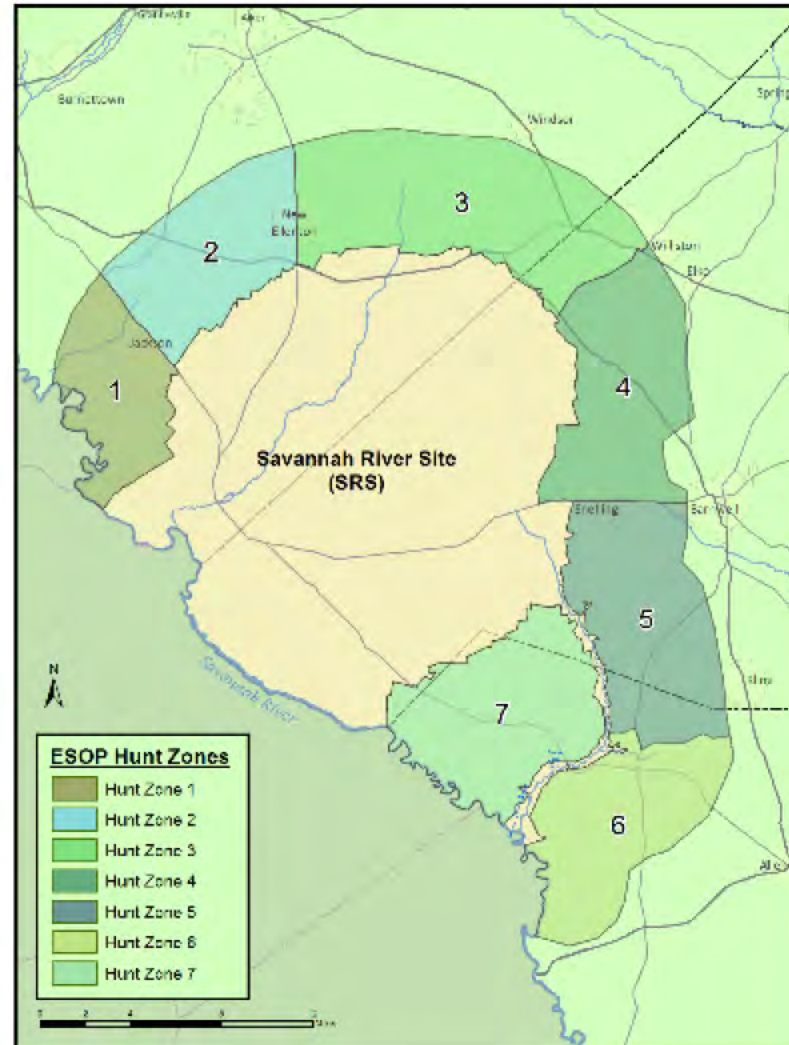
Sampling Locations

Sample ID	Location
SV-2028	New Savannah Bluff Lock and Dam (NSBLD)
SV-2011	Upper Three Runs Creek
SV-2015	Fourmile Branch
SV-2017	Steel Creek
SV-2020	Lower Three Runs Creek
SV-118	Highway 301
SV-2091	Highway 17 (saltwater)
MD-119	Combahee River between Beaufort and Colleton counties



Game Monitoring





Summary

- Historically, DHEC results are comparable to DOE-SR's data
- DHEC will continue to monitor activity at SRS

Public Outreach



ESOP
Environmental Surveillance
and Oversight Program
2021 DATA REPORT
January 2022





Questions?



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