



SC DEPARTMENT of
**ENVIRONMENTAL
SERVICES**

Environmental Surveillance and Oversight Program



ESOP Overview

- DOE - Funded Grant (Remediation and Environmental Monitoring Grant)
- Monitor the Savannah River Site
- Non-regulatory environmental monitoring
 - Allows SCDES to review SRS sampling program
 - SCDES 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.

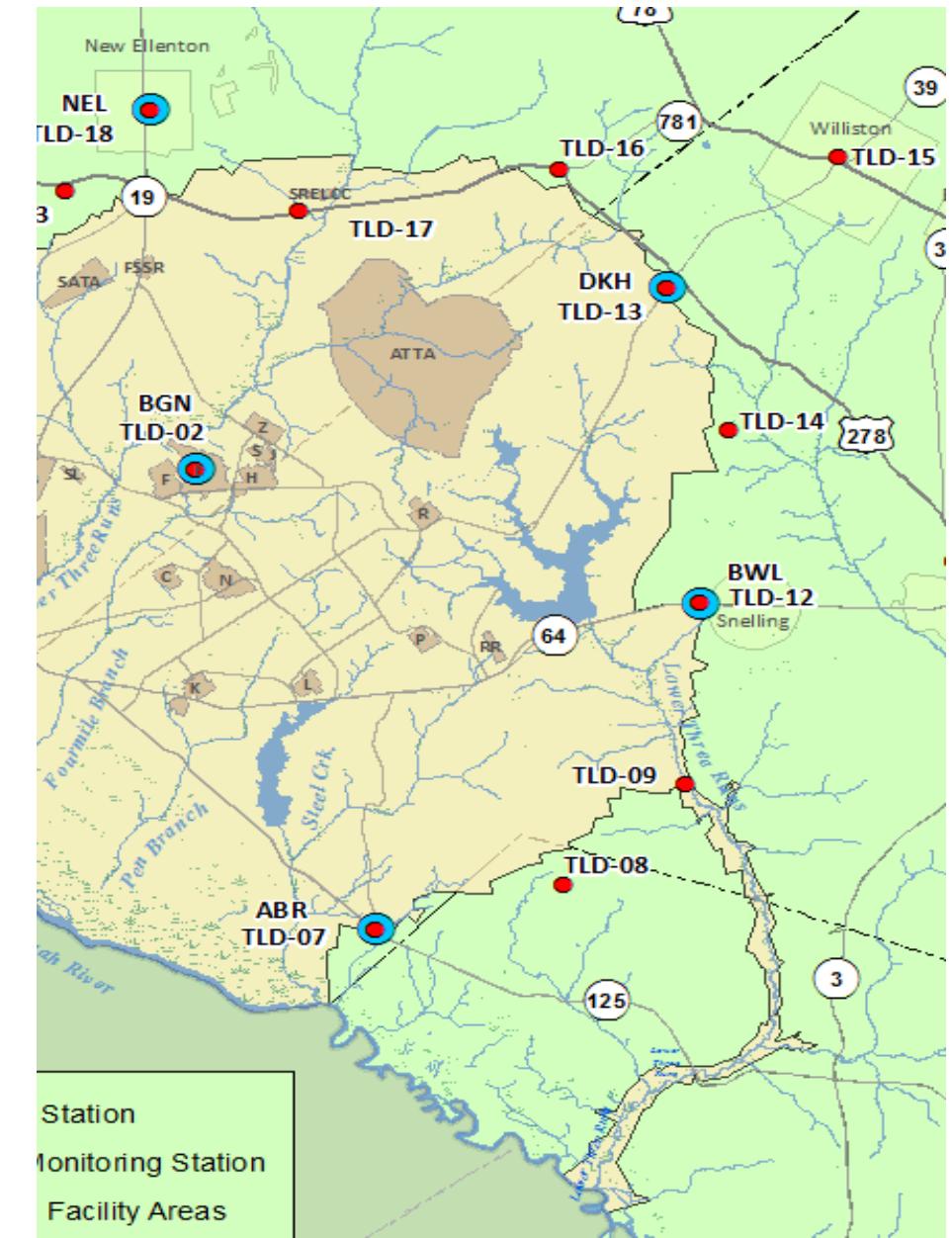
Radiological Atmospheric Monitoring



7 Air Stations

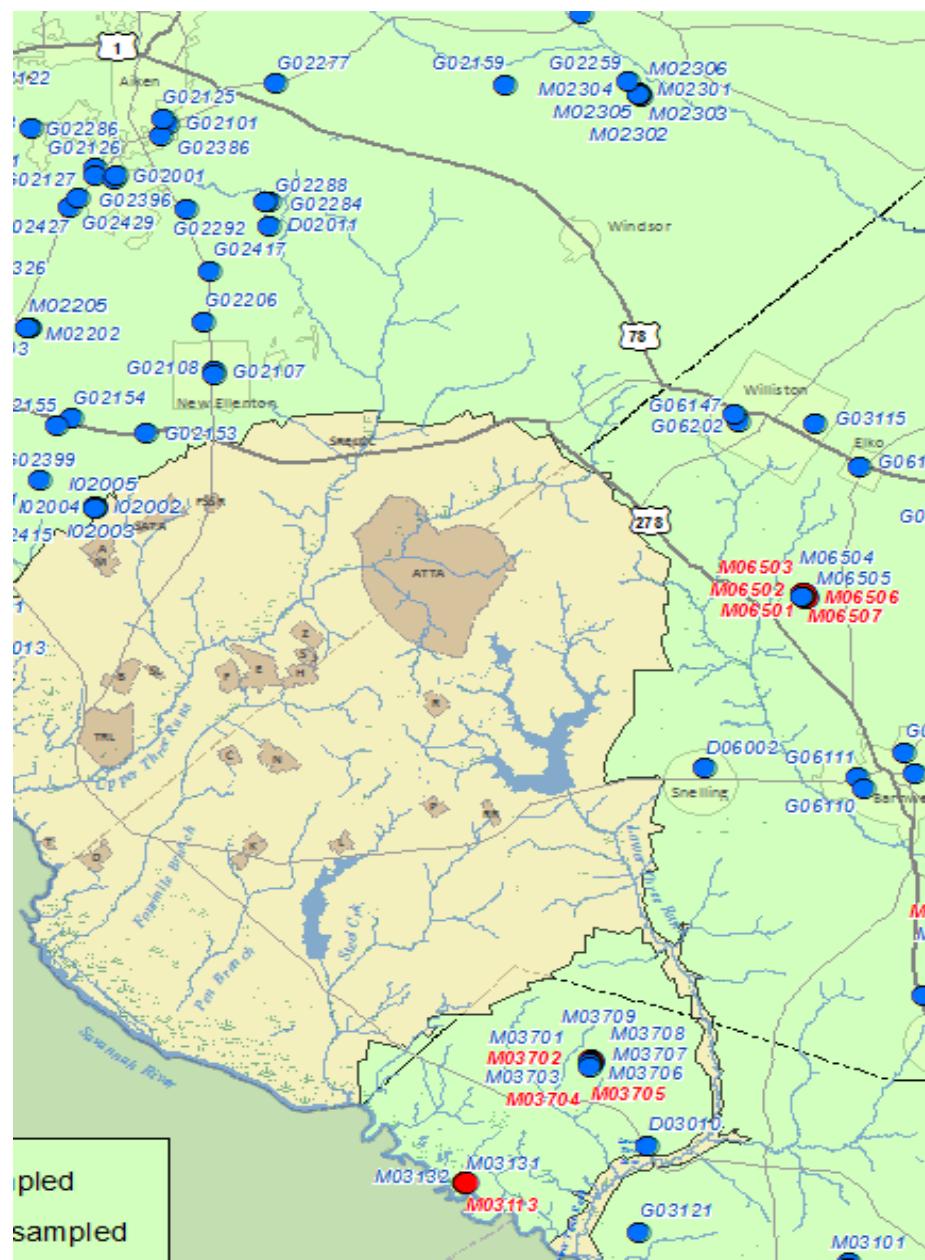
- Particulates
- Precipitation
- Atmospheric Moisture

19 TLD's



Groundwater Monitoring





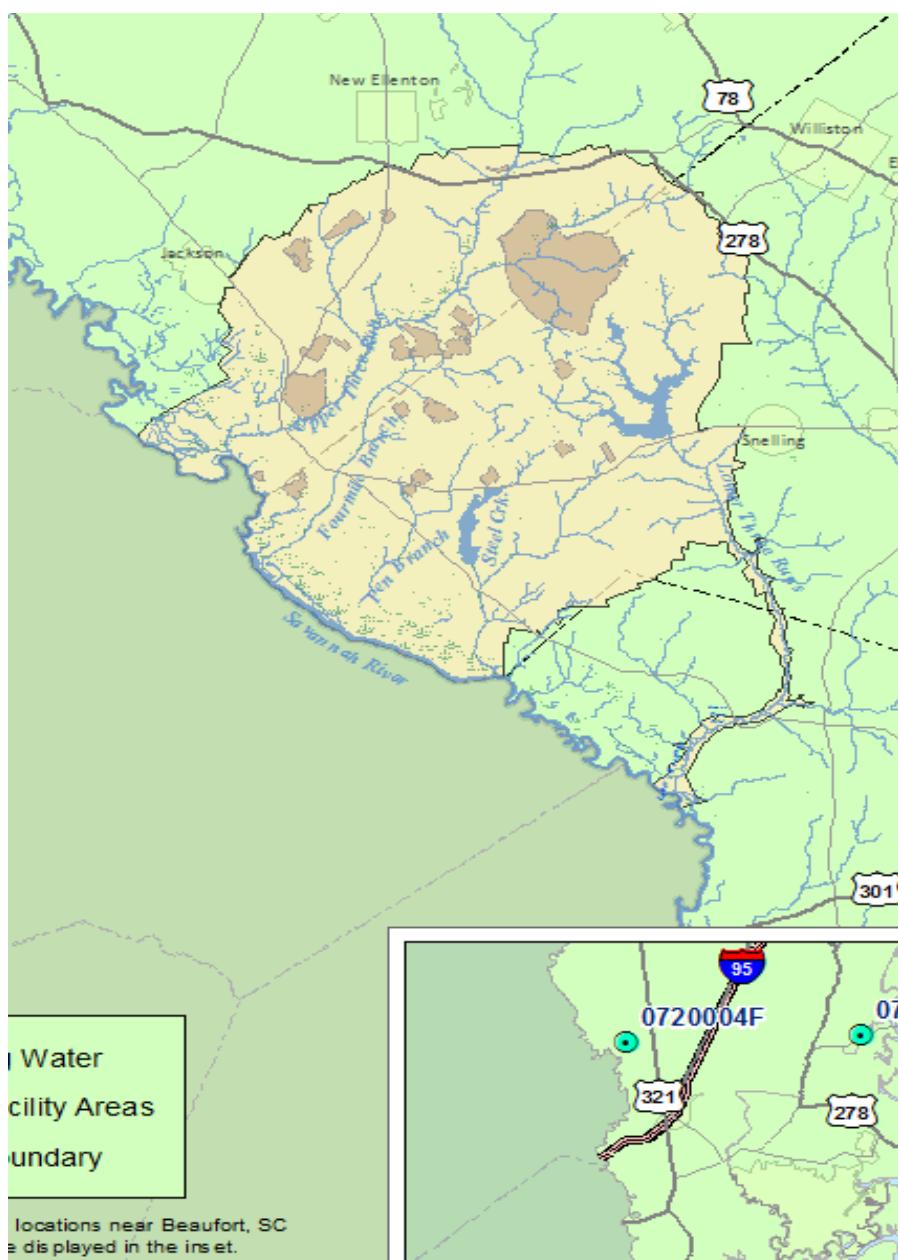
SOUTH CAROLINA DEPARTMENT OF ENVIRONMENTAL SERVICES

Radiological Monitoring of Drinking Water Adjacent to the SRS



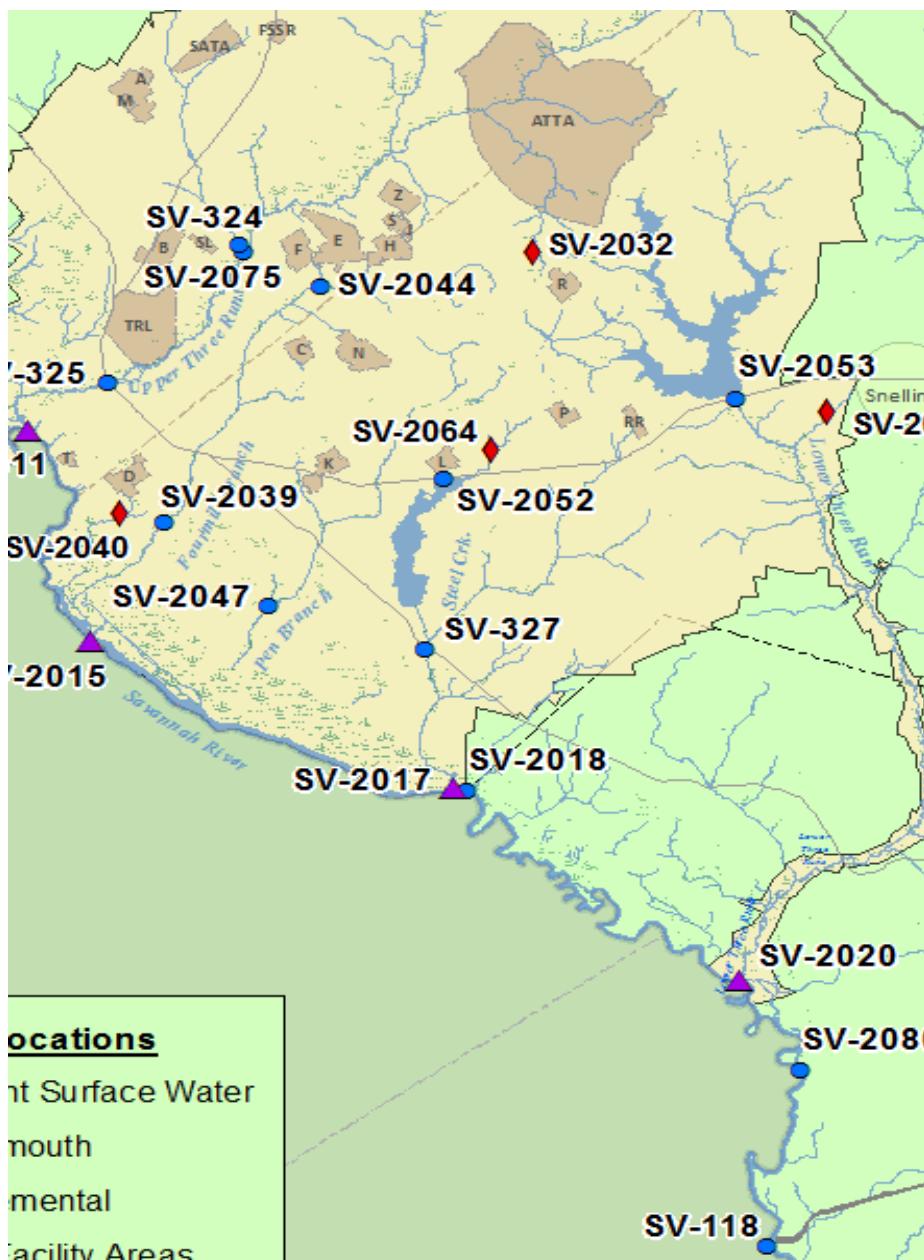
North Augusta, SC
June 25, 2016

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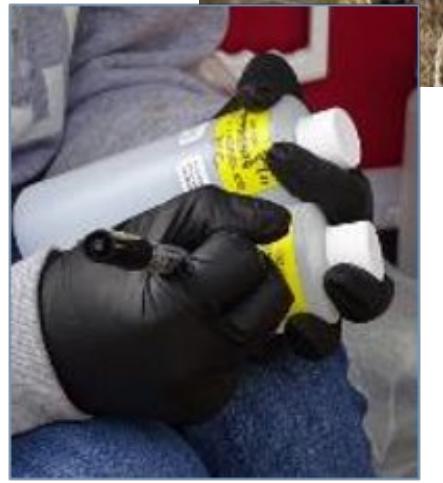


Radiological Surface Water Monitoring



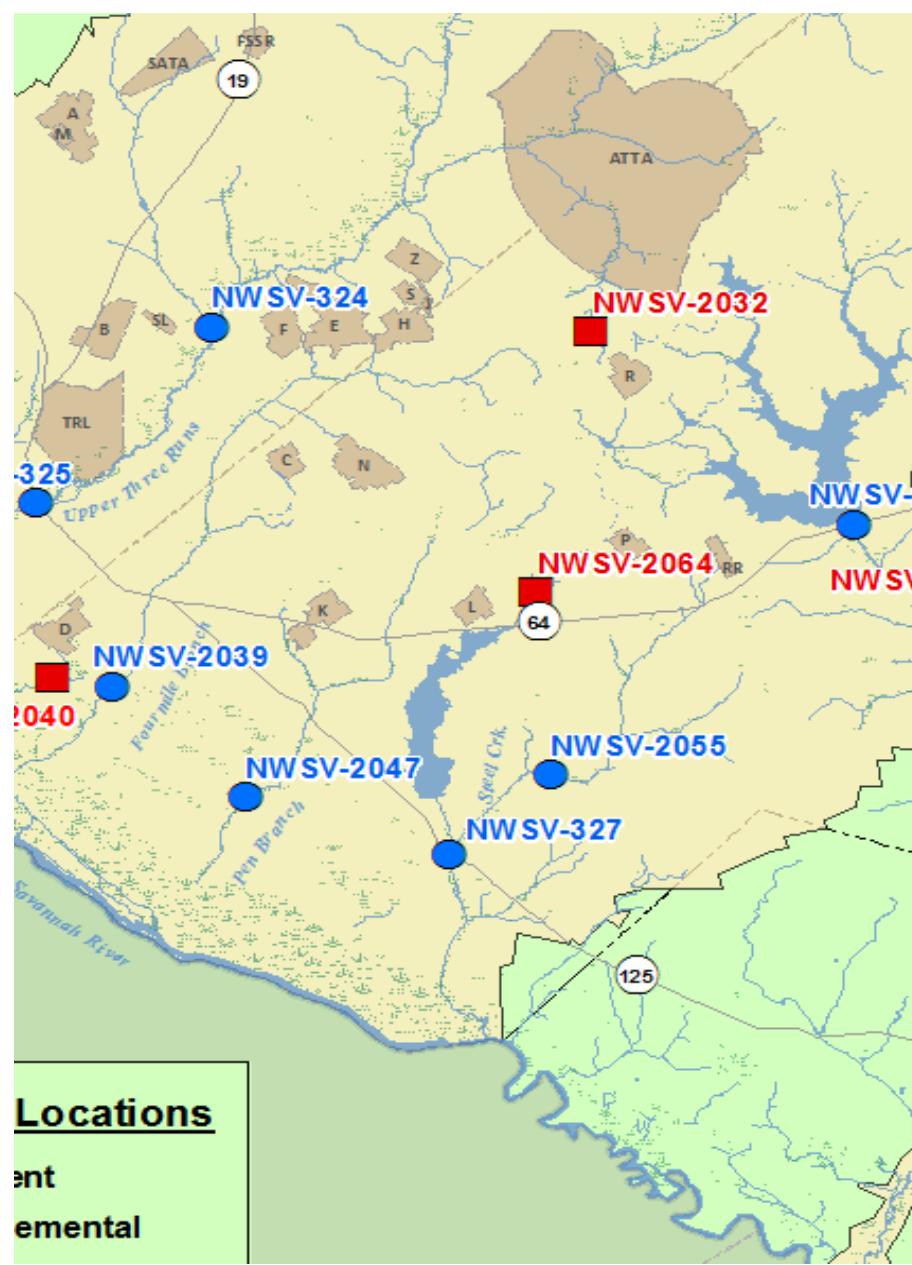


Non-Radiological Monitoring of Surface Water

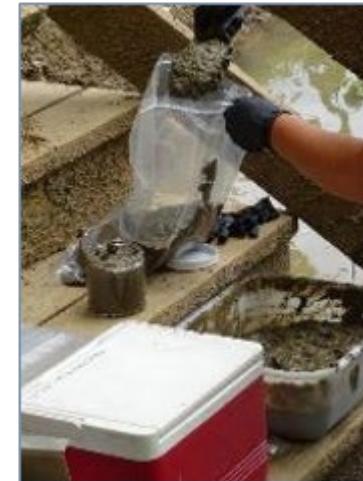


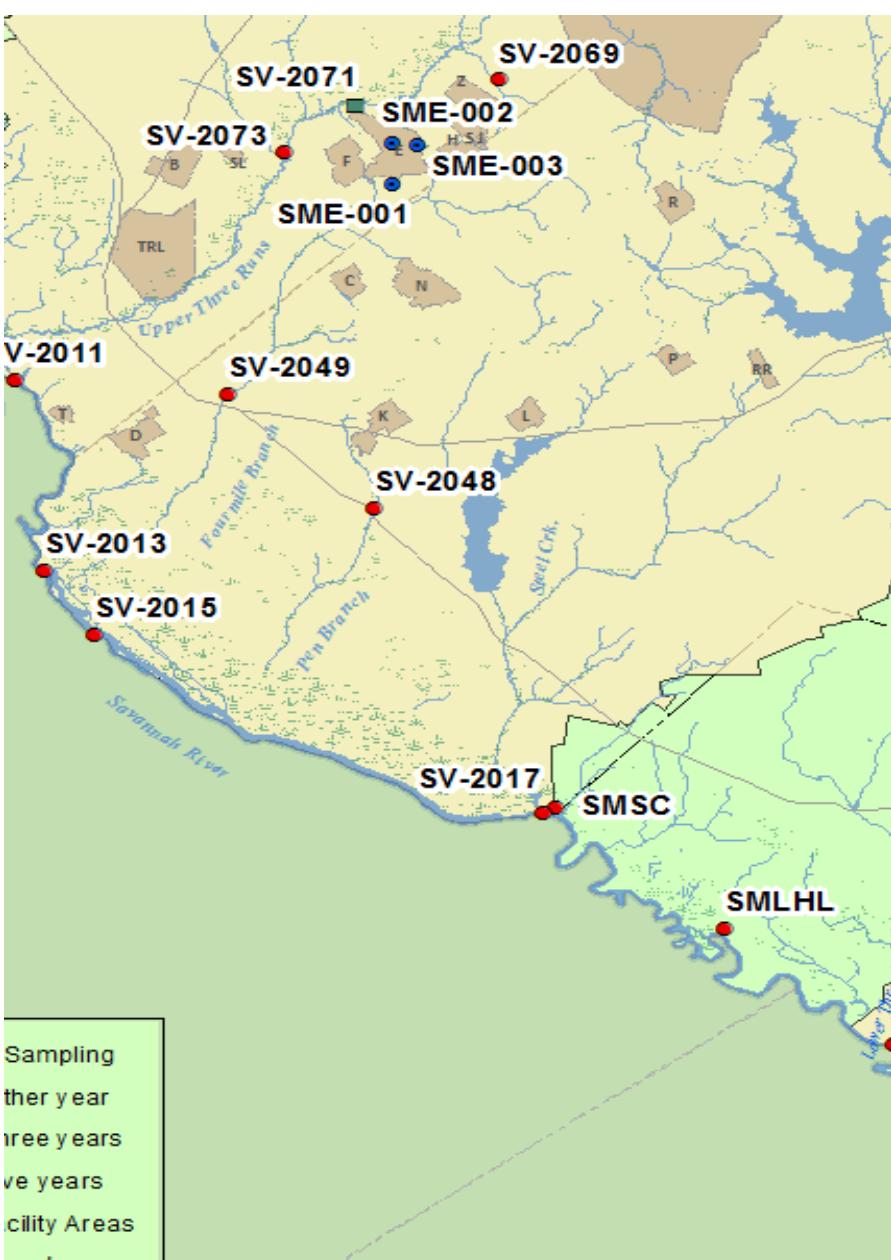
Sample Parameters

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



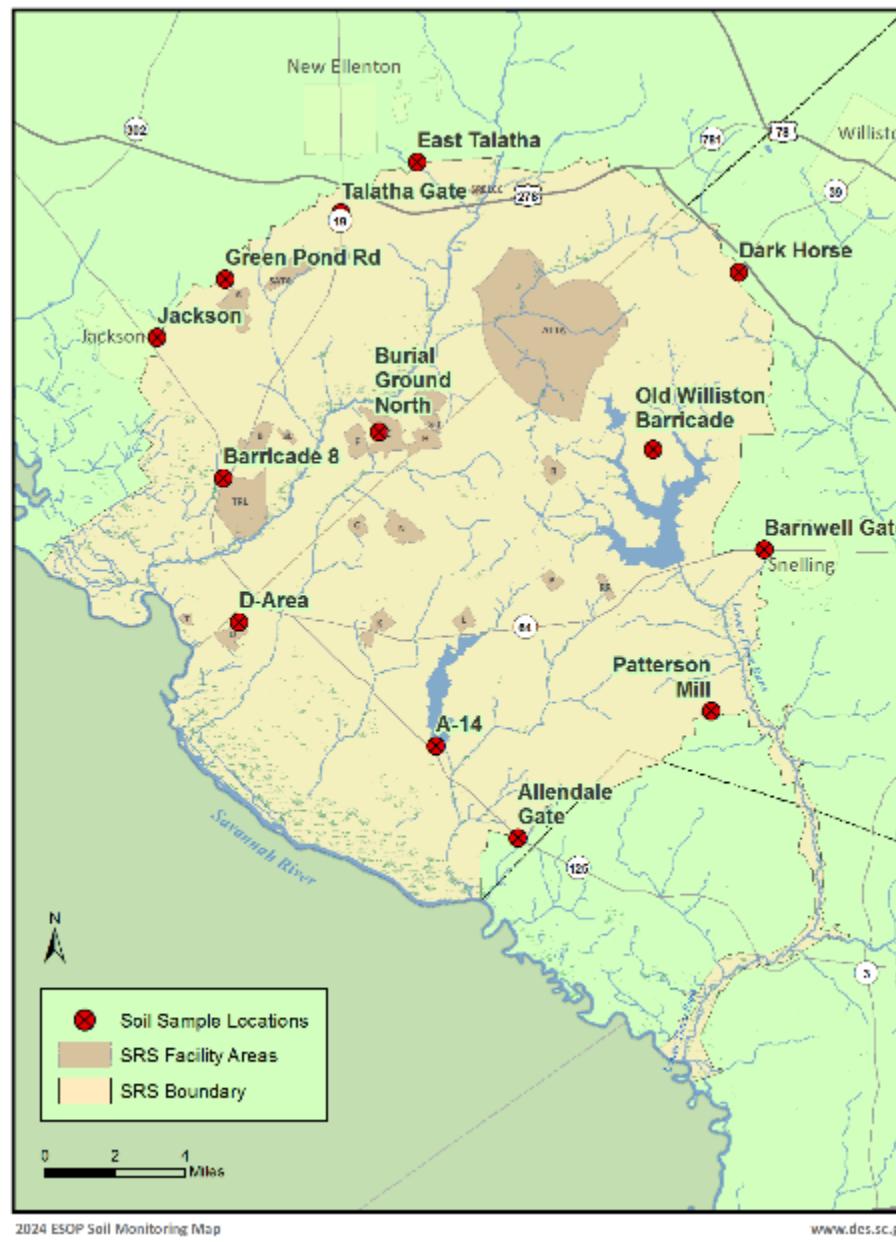
Sediment Monitoring





Soil Monitoring





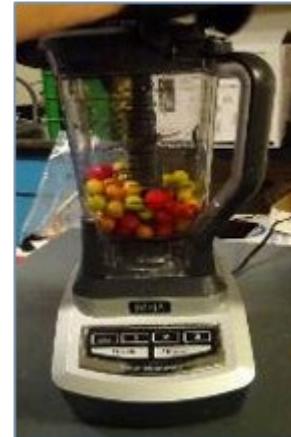
Terrestrial Vegetation Monitoring

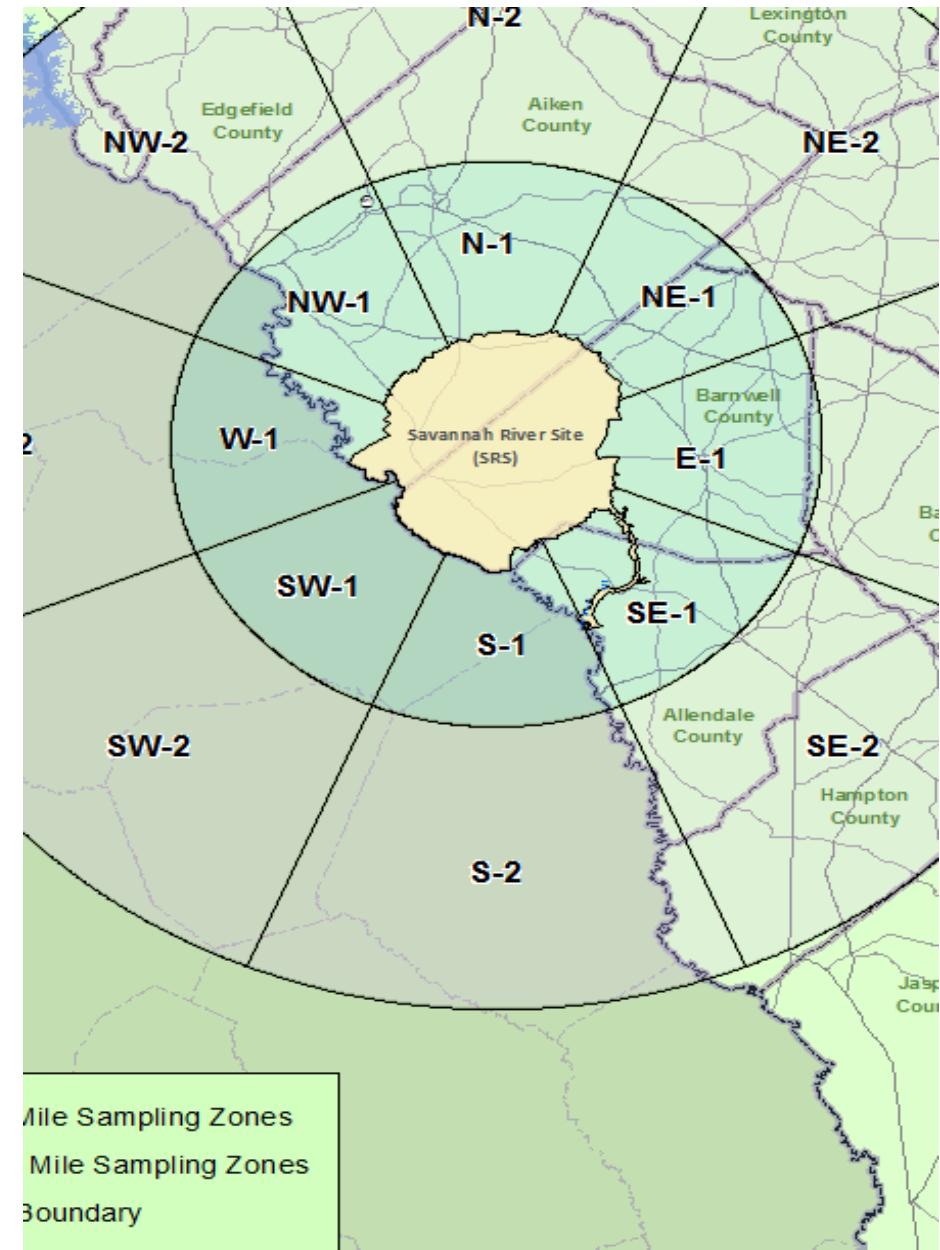


Bermuda Grass



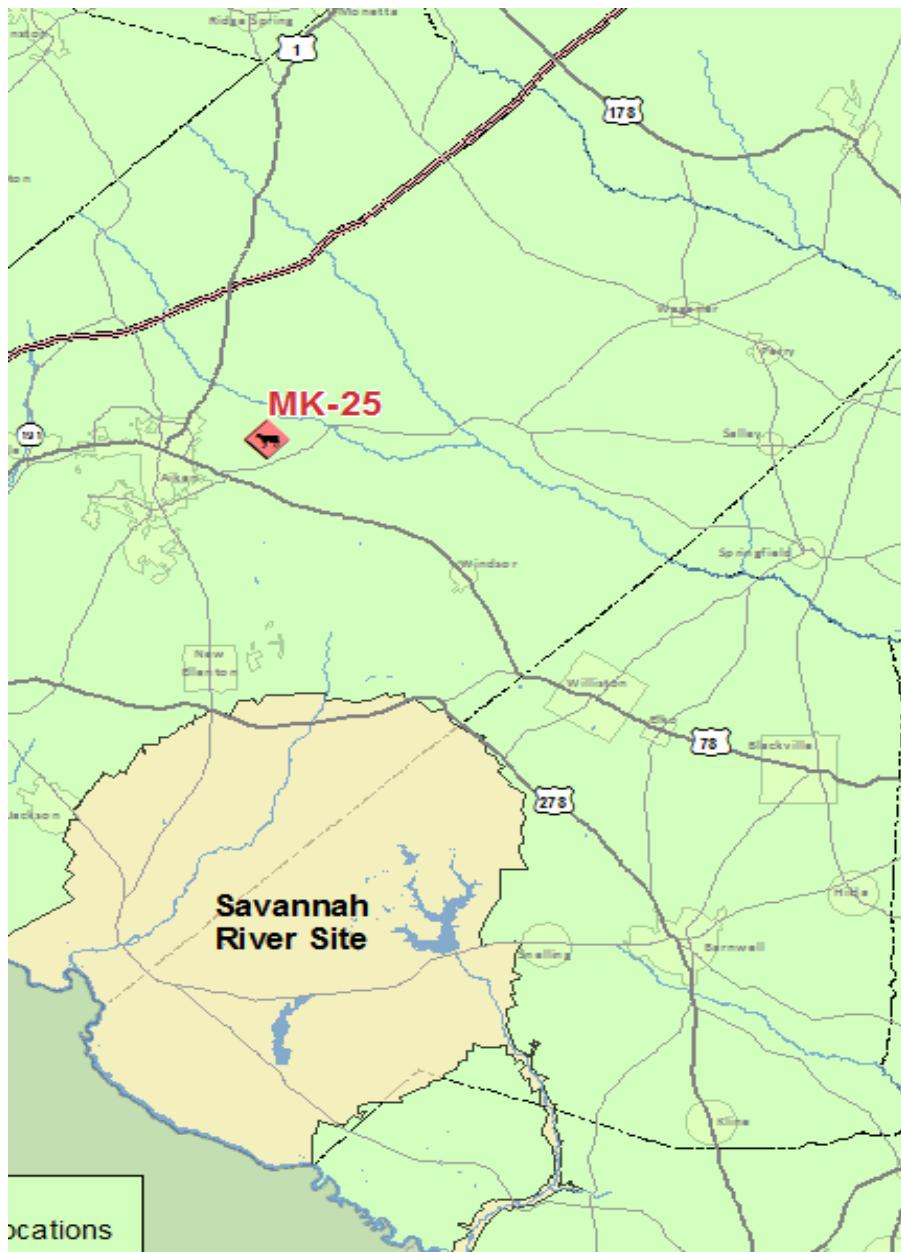
Edible Vegetation Monitoring





Milk Monitoring





Fish Monitoring



Freshwater Species

Channel and Flathead Catfish

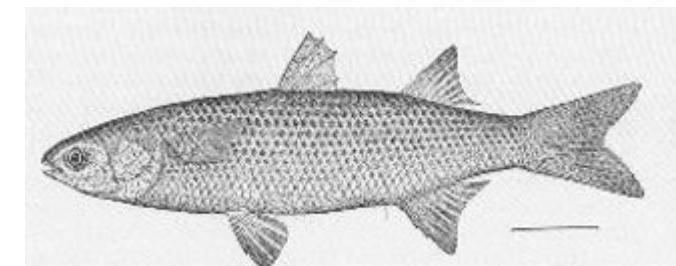


Largemouth Bass

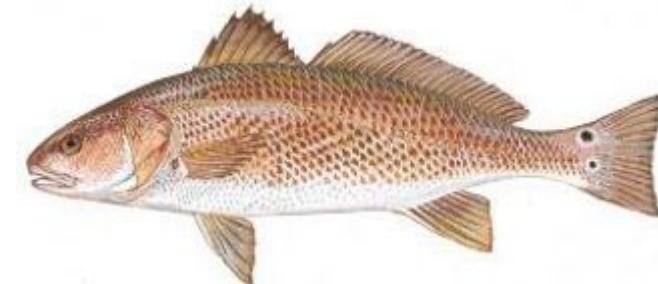


Saltwater Species

Striped Mullet

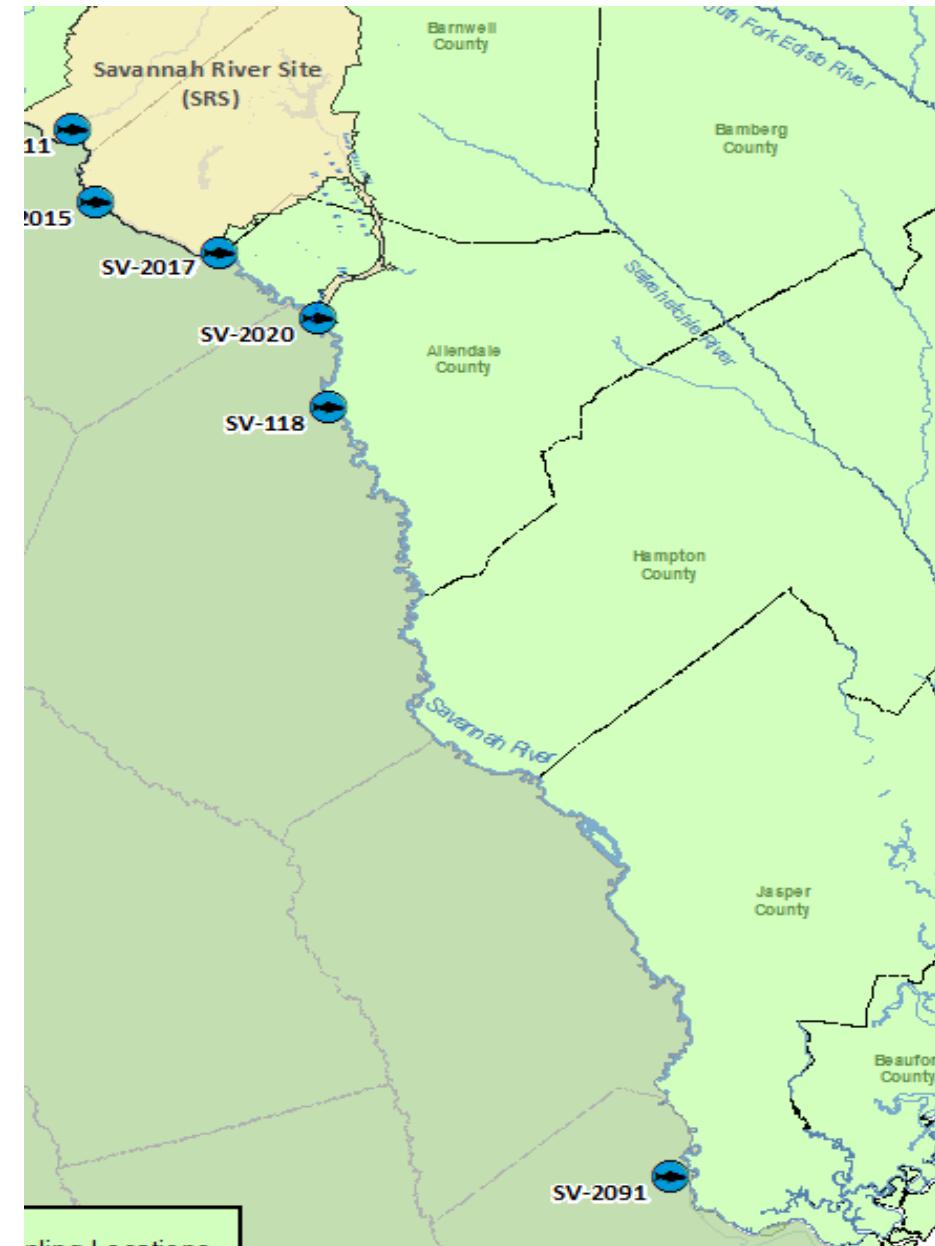


Red Drum

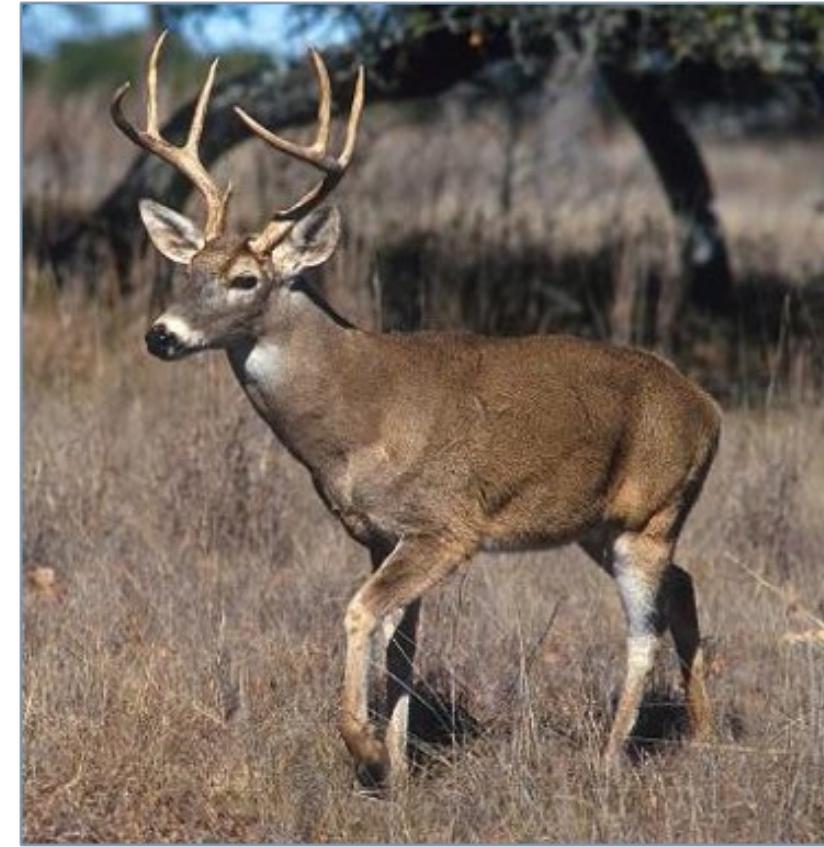


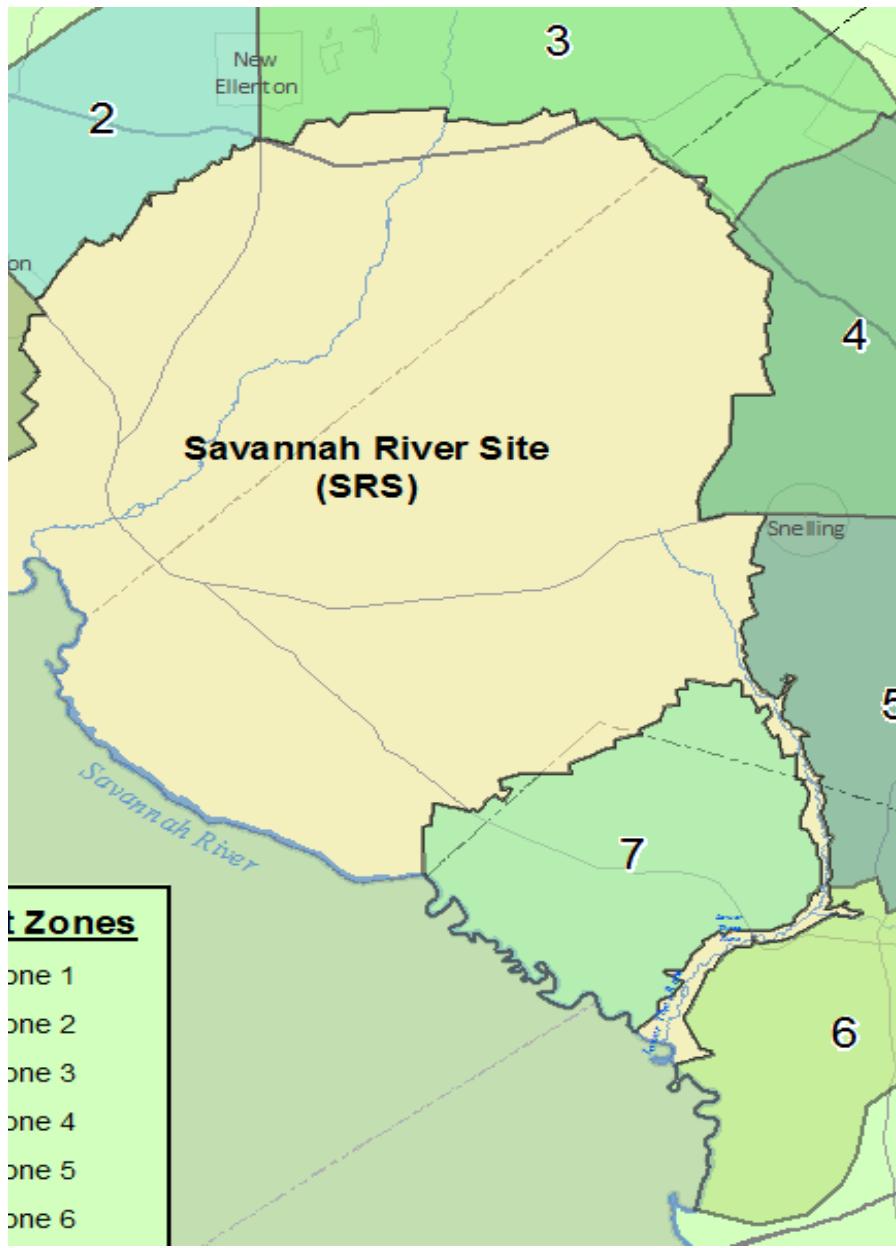
Sampling Locations

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

Public Outreach



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UNIVERSITY OF SOUTH CAROLINA





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