## USGS South Atlantic Water Science Center

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**Staff** 

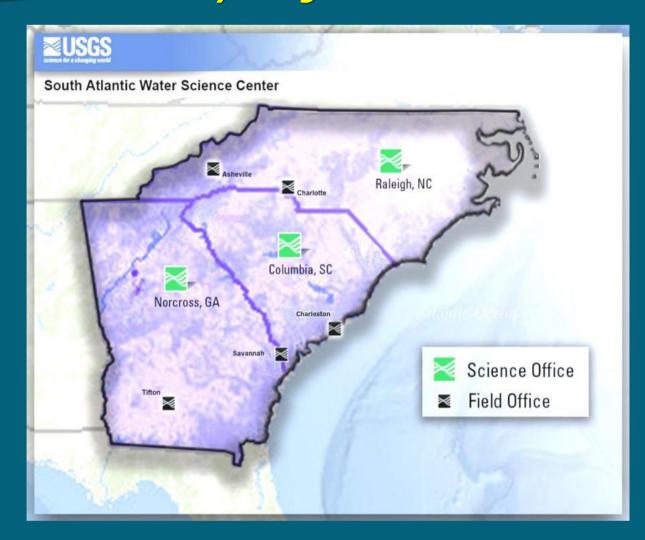
• 175+

#### **Occupational Series**

- Hydrographers
- Hydrologists
- Physical Scientists
- Ecologists
- Geologists
- Geographers
- Computer Scientists

#### **Total Funding**

- ~ \$31 M/yr
- 31% Federal
- 69% State and Local







## SAWSC Networks 863 SW, 230 GW, 210 QW monitoring sites

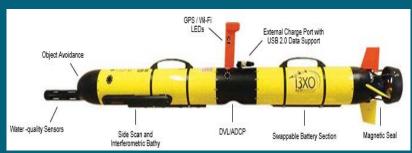
Surge, Wave, and Tide Hydrodynamics - (SWaTH) Network

Flood early warning systems –FINS

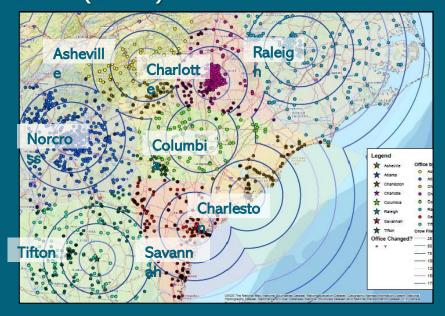
Federal, State and County Ambient Water Quality Networks

Savannah Harbor (SHEP)









# **SAWSC Science Capabilities**

- Groundwater and surface-water budgets & modeling
- Groundwater/surface water interactions
- Geomorphology (e.g., coastal erosion, terrestrial lidar)
- Geospatial and statistical hydrology
- Environmental DNA and Microbial Source Tracking
- Water quality
  - Saltwater intrusion; Coastal Salinity Index (CSI)
  - Emerging contaminants: microplastics, PFAS, pharmaceuticals, etc.
  - Harmful algal blooms and cyanotoxins
- Bridge scour studies
- Data science applications for processing and visualizing large datasets (AUV WaterRat); StreamStats; Machine Learning
- Experimental watersheds and Urban Hydrology



# Interdisciplinary USGS science in coastal settings

## Water

Science Centers across the SER and the US

Natural Hazards
SPCMSC, WHCMSC

**Ecosystems** WARC, CERC

Core Science
Systems
Mapping

**Energy and Minerals** 

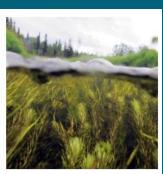












Types of Water

How We Use Water

Measuring and Monitoring Water

Aquatic Biology and Ecosystems







Essential Tools and Products



Advanced Capabilities and Research

# Let us know how we can work together to help solve your management challenges...

Vic Engel, Ph.D.

**Center Director** 

South Atlantic Water Science Center (SAWSC)

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