

Presentation to the Savannah River Site Citizens Advisory Board

Savannah River Ecology Laboratory (SREL) FY26 Overview

September 22, 2026

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Professor, University of Georgia (UGA)**



Objectives

- ◎ **Savannah River Ecology Lab (SREL) Mission**
- ◎ **Staffing**
- ◎ **Funding and Work Scope**
- ◎ **Significant Events**
- ◎ **Advances**
- ◎ **Opportunities For Fiscal Year 2027**
- ◎ **Challenges for Fiscal Year 2027**

Consistent with the Facilities Disposition and Site Remediation Committee's 2026 Work Plan

Acronyms

ACP	Area Closure Project
DOE	Department of Energy
DOE-HQ	Department of Energy – Headquarters
DOE-SR	Department of Energy – Savannah River
ERDA	U.S. Energy Research and Development Administration
HVAC	Heating, Ventilation and Air Conditioning
NNSA	National Nuclear Security Administration
SREL	Savannah River Ecology Laboratory
SRNL	Savannah River National Laboratory
SRMC	Savannah River Mission Completion
SRS	Savannah River Site
UGA	University of Georgia
USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
USFS-SR	U.S. Forest Service – Savannah River

SREL History

1951 - Atomic Energy Commission (AEC) had concerns about environmental impacts resulting from Savannah River Site (SRS) construction and operations.

**1951 to present – Funding from AEC, ERDA,
and Department of Energy (DOE)**

1954 – Established permanent lab on the SRS



Dr. Eugene Odum



1977 – Established current lab facilities



UNIVERSITY OF GEORGIA

Savannah River Ecology Laboratory

The University of Georgia operates SREL on the SRS under a Cooperative Agreement with DOE and is funded by a combination of DOE-EM, DOE-NNSA and other external funding sources, including USDA, DoD, COE, NSF, state agencies, and private NGO's. SREL has been on the SRS for 71 years.



SREL's Mission

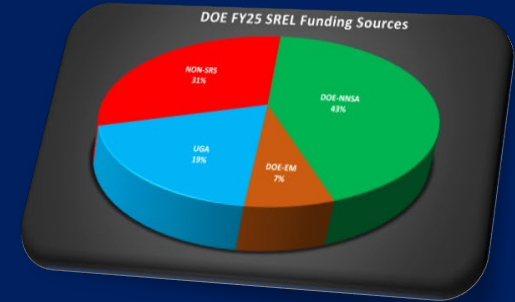
“To provide the public with an independent evaluation of the ecological effects of SRS operations on the environment” through:

- **Education** and research training for undergraduate and graduate students
- **Service** to the community through environmental outreach activities
- An interdisciplinary program of field and laboratory **Research** conducted largely on the SRS and published in the peer-reviewed scientific literature

SREL's Value Proposition to DOE

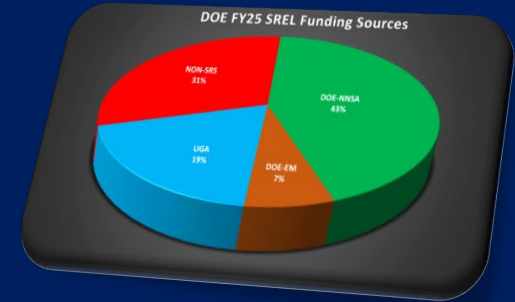
SREL is a tremendously
cost-effective partner to
DOE on the SRS

Only 7 Cents on each
Dollar is Retained by
UGA



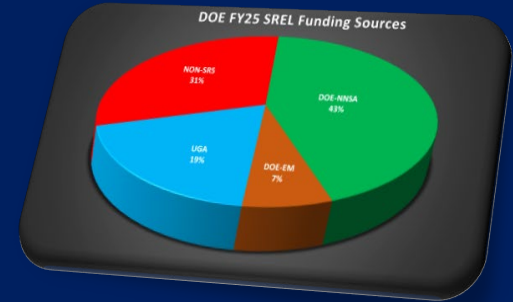
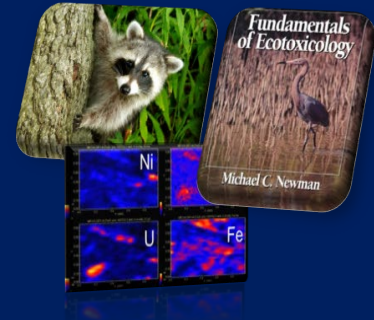
SREL's Value Proposition to DOE

**SREL' education programs
serve as a steady source of
highly-qualified and highly-
trained individuals for
recruitment into the workforce
of DOE and its many
contractors and tenants on the
SRS.**



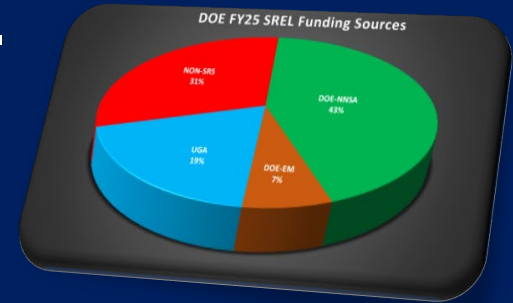
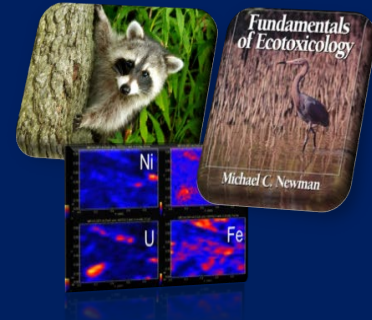
SREL's Value Proposition to DOE

SREL serves as a source of unbiased, independent research activities on the SRS which produce a steady stream of peer-reviewed scientific data products and publications that provide the public with a clear picture of the environmental impacts or lack thereof resulting from DOE's many missions on the SRS.



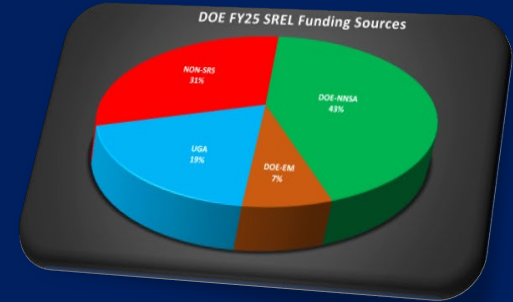
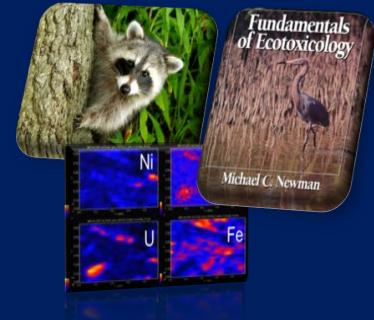
SREL's Value Proposition to DOE

SREL's public outreach and education programs in the local communities that surround the SRS are second to none and reach approximately thirty-thousand children and adults in these communities each year



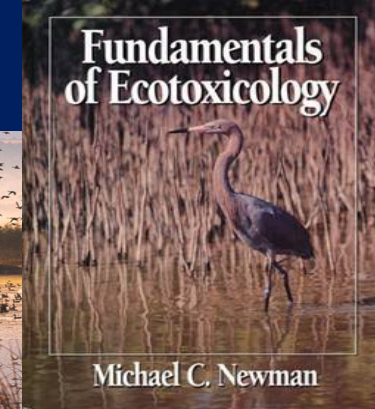
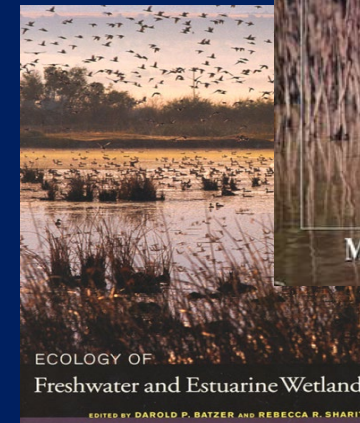
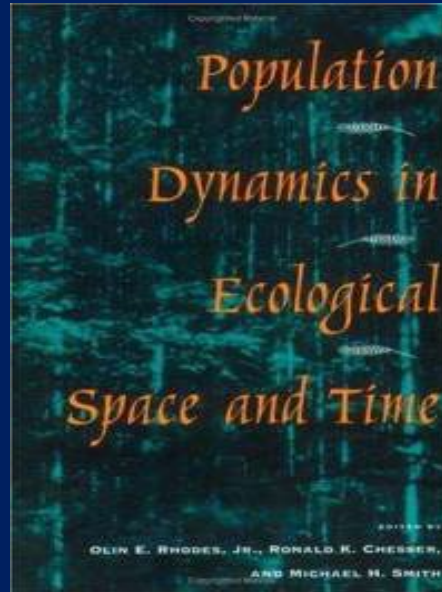
SREL's Value Proposition to DOE

SREL research activities provide DOE with unbiased information on current and emerging environmental issues that may impede or delay critical DOE missions conducted on the SRS due to impacts on people or the environment.



SREL Research Program's

- >**3,884** peer-reviewed scientific publications to date
- **66** books



SREL Education Program

- **>600** Theses and Dissertations
- Over **700** undergraduates representing all **50** states have participated in SREL-sponsored experiential learning programs
- **Thousands** of post –baccalaureate research opportunities for temporary undergraduate technicians



SREL Environmental Outreach Program

- Integrates SREL research into presentations for the general public
- Provides hands-on classroom and field experience for students
- Conducts educator workshops

In FY26, SREL:

- Held **>250** talks reaching >29K people
- **52** public tours
- **16** exhibits at local or regional events
- **21** “Ecologist for a Day” programs for local schools
- Had **~104,000 social media followers** – ~550,000 Social Media Impressions



SREL in 2026

◎ UGA Employees

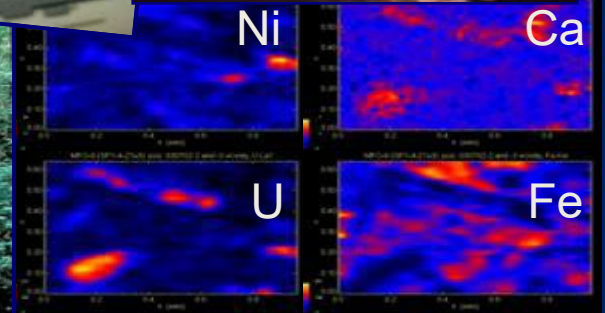
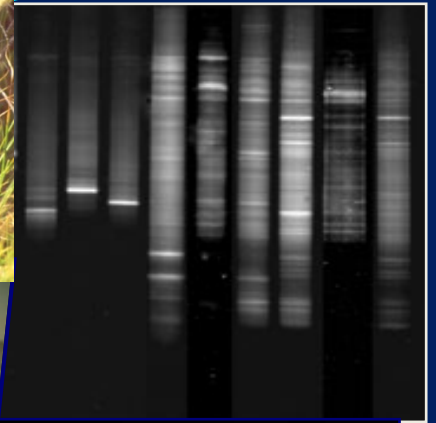
- Research Faculty – 7
- Tenure Track Faculty - 12
- Emeritus Faculty - 4
- Post Docs – 7
- Outreach - 5
- Res. Professional - 36
- Research Support - 32
- Graduate Students - 82
- Admin & Support - 21

210 Staff & Students

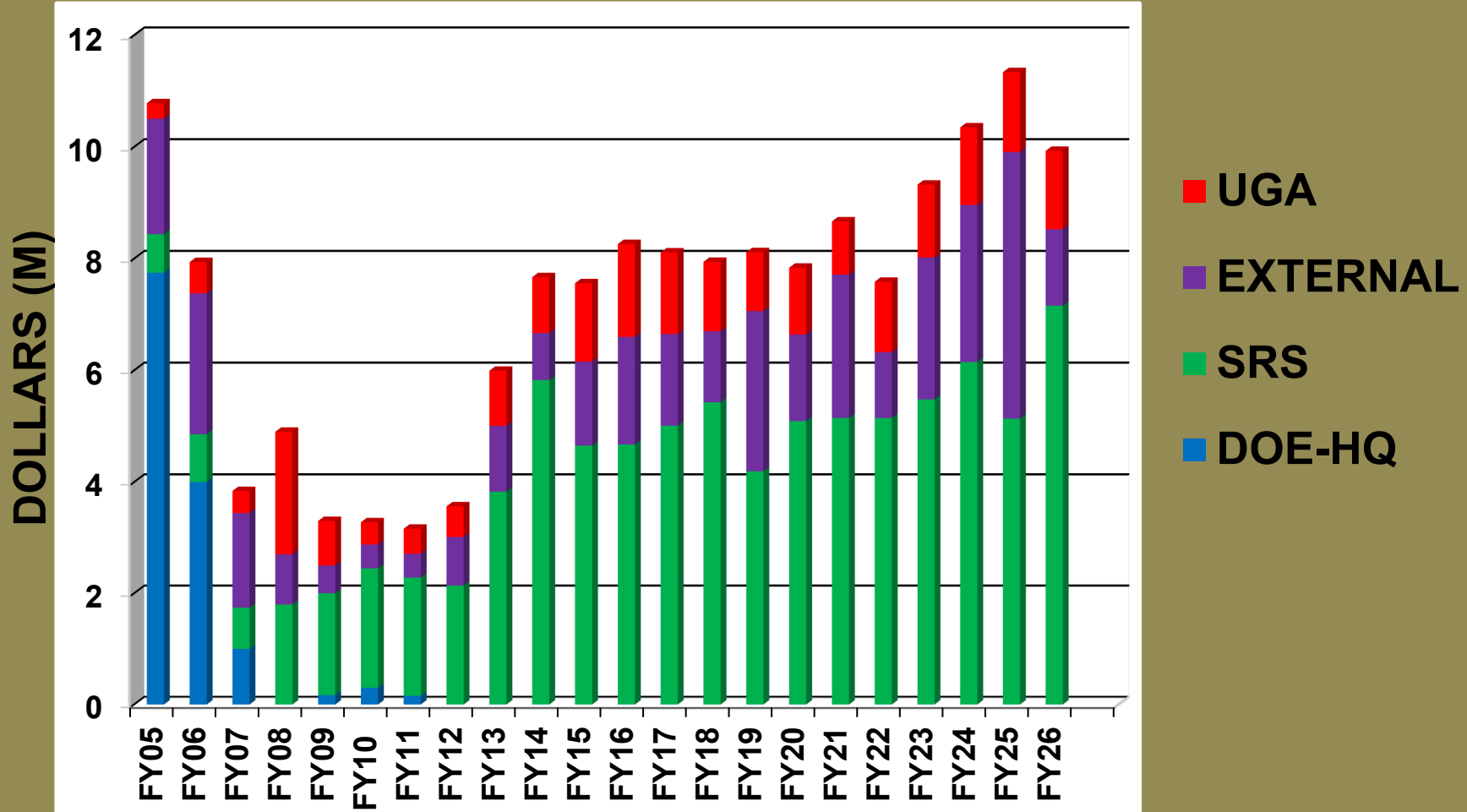


Disciplinary Expertise

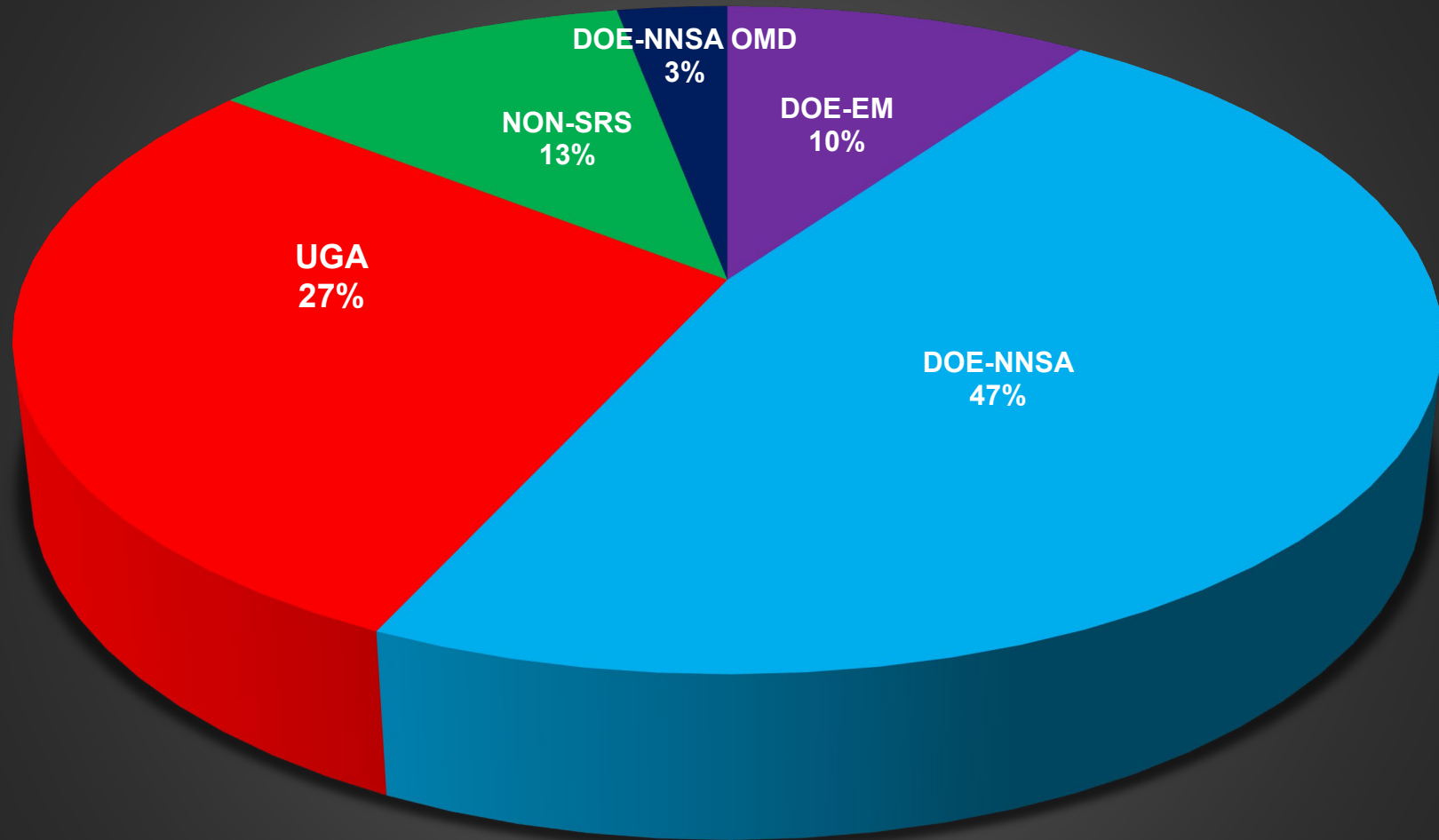
- Aquatic and Terrestrial Ecology
- Geology / Soil Science
- Environmental Microbiology
- Epigenetics
- Molecular Genetics
- Environmental Chemistry
- Radioecology
- Ecotoxicology and Risk Assessment
- Wildlife Ecology
- Disease Ecology
- Plant Physiology
- Proteomics and Glycomics
- AI/ML Modelling and Statistics



Recent Funding History



FY26 SREL Funding Sources



■ DOE-EM ■ DOE-NNSA ■ UGA ■ NON-SRS ■ DOE-NNSA OMD

Significant Events in FY26

◎ UGA

- Allowed majority (75%) of the 35% Indirect Costs to be retained by SREL
- Cost-Shared 11 faculty positions with SREL
- Provided funding for equipment and personnel
- Cost-shared graduate student and postdoctoral positions

◎ DOE / SRS / External

- Building, equipment, utilities, and site access
- Funding provided by Department of Energy – Savannah River (DOE-SR) under 5-year Cooperative Agreement with DOE – EM (Now NNSA)
- Funding provided by DOE – National Nuclear Security Administration (NNSA)
- Continued project funding from Area Closure Project (ACP) and Savannah River Remediation (SRR)

Advancements in FY26

1. Work scope:

Research Set-Asides, Site Use Permitting

Enacted significant land management activities for set asides

Collaborated with USFS to restore habitats for threatened species

Graduate and Undergraduate Education Programs

Advised >60 graduate students

Mentored over 132 graduate students total

Taught 40 courses on main UGA campus including 3 at SREL

Interdisciplinary Research

Continuing collaborative research programs with Savannah River National Laboratory (SRNL), U.S. Forest Service–Savannah River (USFS-SR), Savannah River Mission Completion (SRMC), UGA, U.S. Department of Agriculture (USDA), National Science Foundation (NSF), U.S. Army Corps of Engineers (USACE) & other university, federal, state, and private partners Involving research on radionuclide and metal remediation, feral swine control & radioecology

Advancements in FY26

1. Work scope: Continued

Site-wide Source of Ecological Expertise

Provided ecological research support to Area Closures Project, SRMC, SRNL, etc.

Scientific Expertise

Submitted >45 Proposals as PI or coPIs to External Granting Agencies

Many proposals pending review due to delays in federal agency processes

Scientific Productivity

SREL staff and students published over 90 scientific articles

Analytical Services

SREL staff and students analyzed over 3,924 samples for metal contaminants using ICP-MS or ICP-OES technologies

SREL staff and students analyzed over 460 samples for total or methyl mercury using SREL-based equipment

Opportunities for FY27

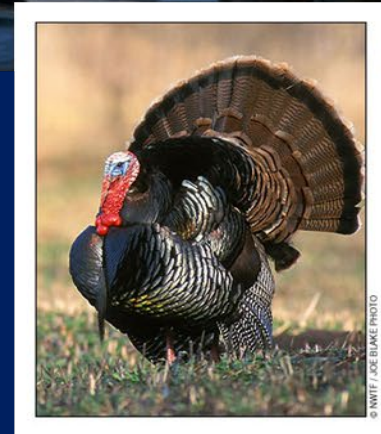
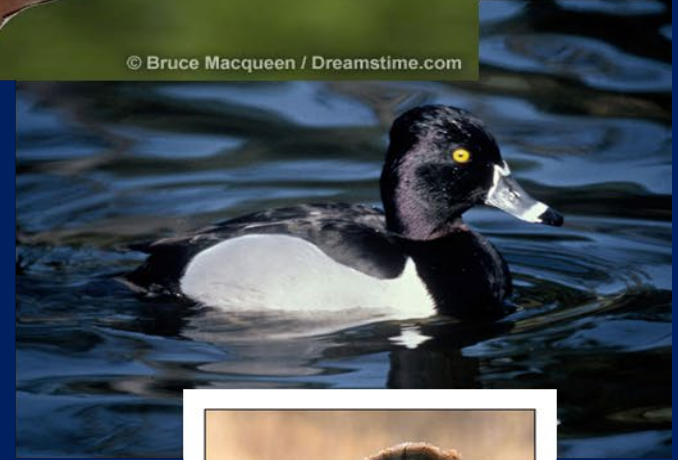
- 1. Increasing Engagement with BSRA Partners**
- 2. Continued Development of Core Missions on the SRS:**
 - a. Radioecology and Low Dose Radiation Effects**
 - b. Metal and Radionuclide Ecotoxicology**
 - c. Radionuclide Fate and Transport Studies**
 - d. Enhanced Biomonitoring Technologies**
 - e. Outreach and Education Programs**

Opportunities for FY27 (cont.)

3. Enhanced Analytical Capabilities

- a) High Resolution Inductively Coupled Plasma Mass Spectroscopy**
- b) High Resolution PFAS Analysis (DOE Certified Lab)**
- b) Establishment of new CryoArchive for Preservation of Biological Samples for Future Analyses of New Contaminants of Interest and to Evaluate Trends Over Time in Recognized Contaminants**

Potential Consumption Risk



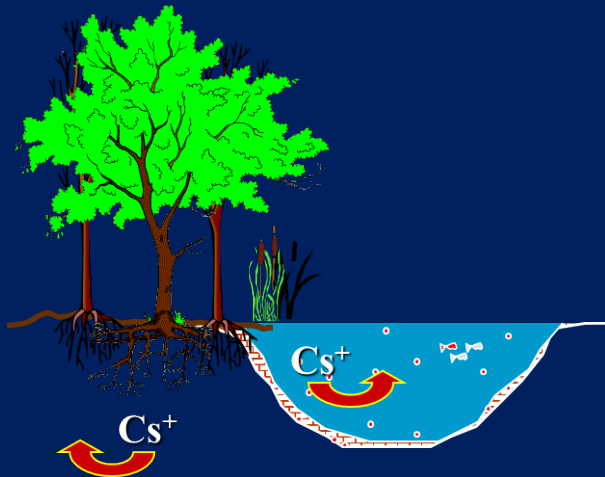
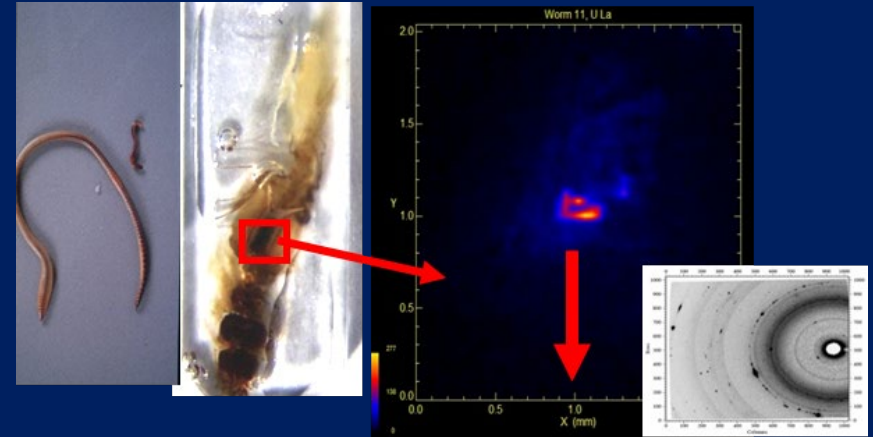
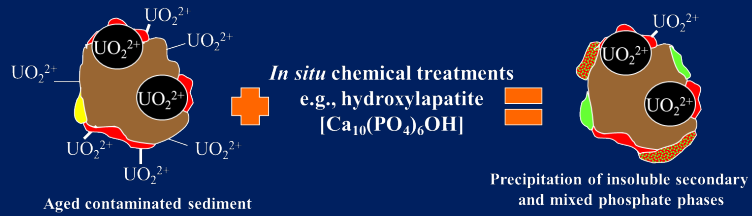
Ecological Receptors and Environmental Risk Assessment



Biomonitoring



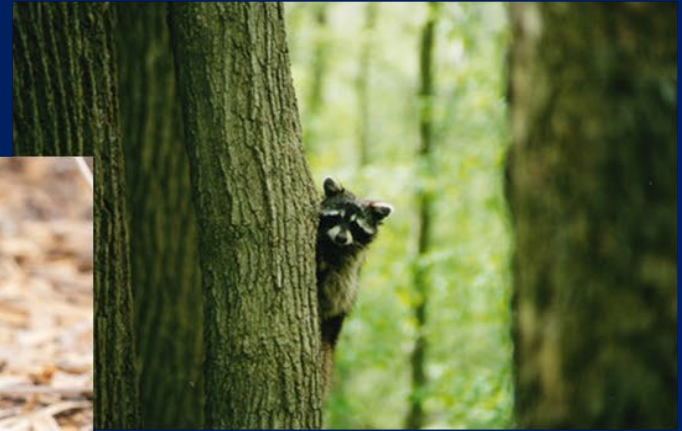
Environmental Remediation



Environmental Stewardship



Human-Wildlife Conflict



May 26, 2020



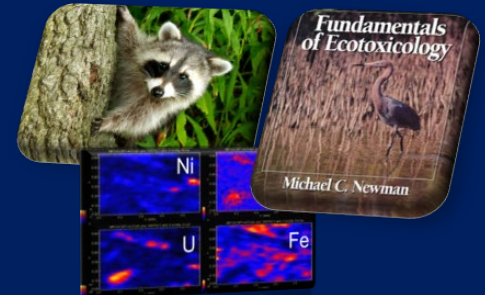
Mechanistic Understanding of Contaminant Effects



New Initiatives

Solutions For a Secure Tomorrow Undergraduate Experiential Learning Program (SoFAST - UELP)

- Talent Development for Future DOE Missions on SRS
- Undergraduate Experiential Learning for Students from Communities Surrounding the SRS
- Path to Graduate School for Undergraduate Interns from Summer Experiential Learning Programs Conducted at SREL
- Recruitment from Local High Schools and Regional Colleges and Universities
- Focus on Developing and Retaining Local Talent for Employment in the SRS Workforce

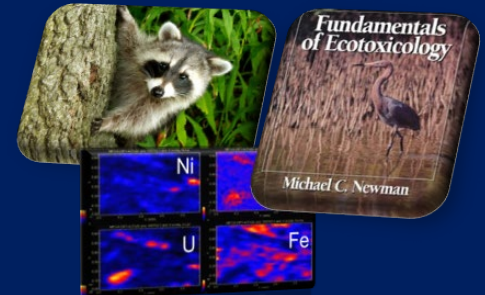


New Initiatives

Solutions For a Secure Tomorrow Graduate

Research and Education Program (SoFAST-GREP)

- Graduate program for students from local SRS communities
- Targeted for students from the SoFAST Undergraduate Experiential Learning Program
- Students contribute to a new Cryoarchive at SREL to help establish trends in contaminant levels at SRS over time
- Students focus on research questions pertinent to DOE missions on the SRS
- Focus on Developing and Retaining Local Talent for Employment in the SRS Workforce



Challenges for FY27

1. **Uncertainty With Current Federal Priorities and Goals**
2. **Status of the new 10-year Cooperative Agreement with DOE NNSA**
3. **Resources to Fulfill SoFAST Vision**
4. **Staff Retirements and Replacements**



THANK YOU