Radiological Education, Monitoring, and Outreach Project (REMOP)

22 January 2019

Savannah River Site Citizen's Advisory Board

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Savannah River Ecology Laboratory
UNIVERSITY OF GEORGIA

Outline

1. Background
2. 2018 Activities
3. Next steps (2019)

Background

What is REMOP?

Radiological

Environmental

Monitoring and

Outreach

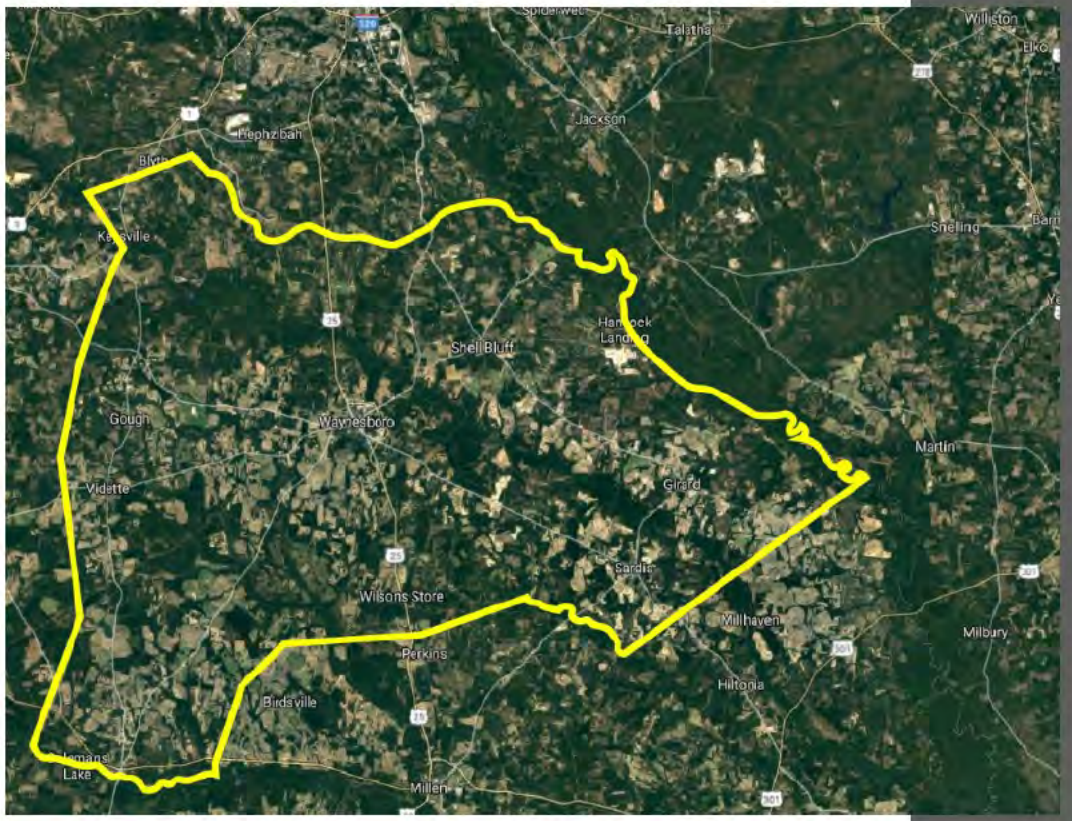
Project

Background

- Outreach project focused on radiological environmental monitoring programs
- Data collection from and with the community as an educational tool
- DOE-funded University of Georgia Savannah River Ecology Lab (UGA SREL) as the independent, third-party
- Working with Georgia WAND to create valuable community connections and networks

Background

- Historic Burke County
- Radiological Environmental Monitoring
  - South Carolina DHEC sampling in Savannah River
  - SRS has 9 water well locations (2016)
    - Historic SRS air monitoring station located within the county
  - Southern Company's Plant Vogtle through the NRC
  - Georgia EPD monitored in the county until 2004
- Community Involvement
  - Engaged in figuring out what is in their environment
  - EPA Technical Assistance Needs Assessment



Background

EPA-sponsored technical assistance programs with independent services provided under contract with Skeo Solutions

- Technical Assistance Needs Assessment (TANA)
  - Determines whether community requires additional support
  - Resulted in a list of needs and recommendations for ways to meet those needs
- Burke County TANA
  - Understand specific needs of Shell Bluff and Burke County residents for REMOP
  - Help facilitate conversations with multiple stakeholders
  - Drafted report and shared with stakeholders

Background

Key Recommendations from TANA

- Communications Outreach
  - Presentations
  - Newsletters
  - Website and social media updates
- Regularly Consider Community Input
  - Check-ins with community leaders and groups
  - Flexible communication outreach styles
- Recommended topics and associated fact sheets
  - Radiation 101
  - Status of SRS and Plant Vogtle, how to learn more about them
  - Local history and connections to SRS and Plant Vogtle

Background

REMOP Goals

- Data-driven understanding of environment
- Educate community about monitoring programs and associated resources
- Collect community samples to illustrate how environmental monitoring programs operate
- Synthesize data from environmental monitoring programs for use in educational talks and resources

2017 (first 8 months)

- Working with GA WAND to connect with community
- Established projects with schools
- Website with all of our materials and resources
- Created and distributed a bi-monthly newsletter

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2018

What did REMOP accomplish?

2018

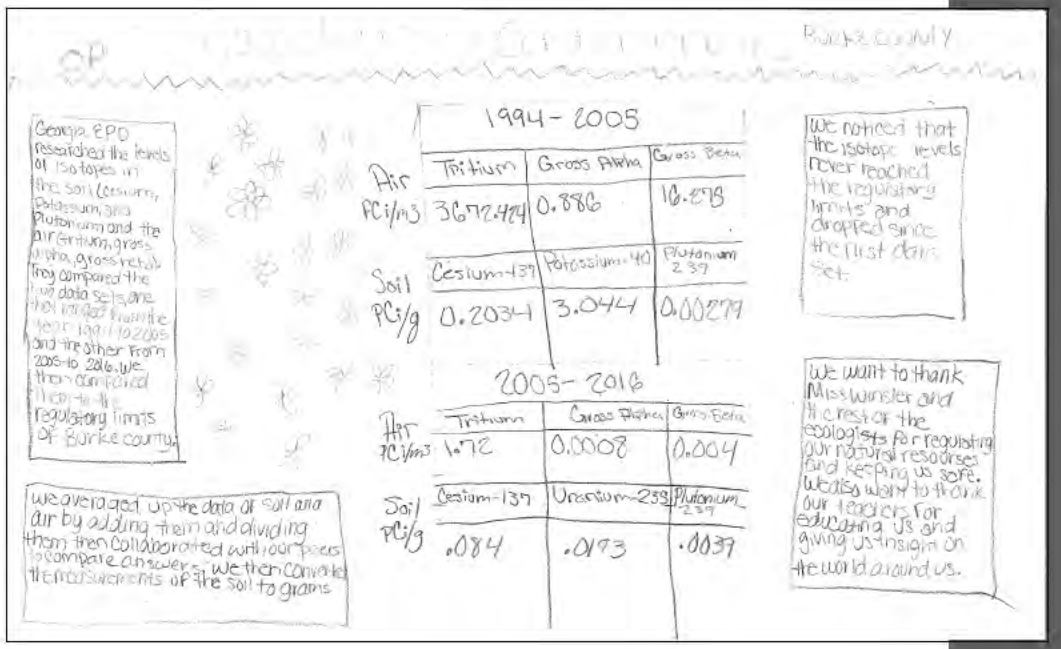
- Strategy change
  - Maintain the community talks but provide additional places to interact with the community
- SREL's Touch An Animal Day
  - Showcase native biodiversity in friendly atmosphere
  - 700-800 people attend each year
- Burke County Ecology Day (BCED)
  - Engaging with environmental data through native species and activities

2018

- Burke County Ecology Day 2018
  - Engaging with environmental data through native species and activities
  - Family friendly atmosphere
  - Integration of environmental monitoring data

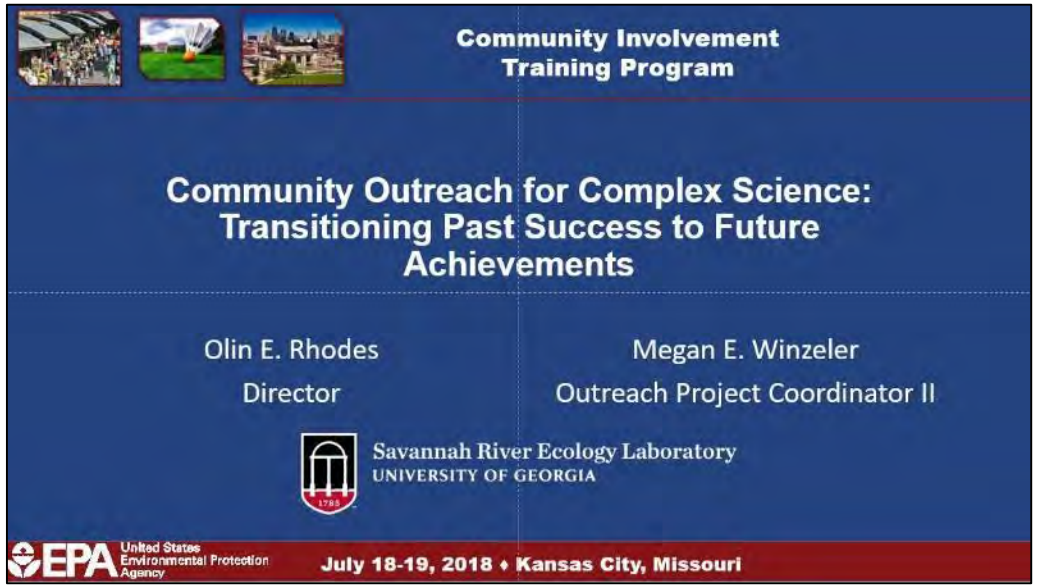
2018

- Exhibits
  - 8 community events
  - Reach 1,469 members of the public
- Community Talks
  - 5 talks
  - 17 attendance (additional 40 from Facebook Live)
- Burke County Middle School
  - Second year of the project going well!
  - Posters get presented at Burke County Ecology Day
- Totals
  - 27 events, 42 presentations, reaching 1,917 members of the public in Burke County



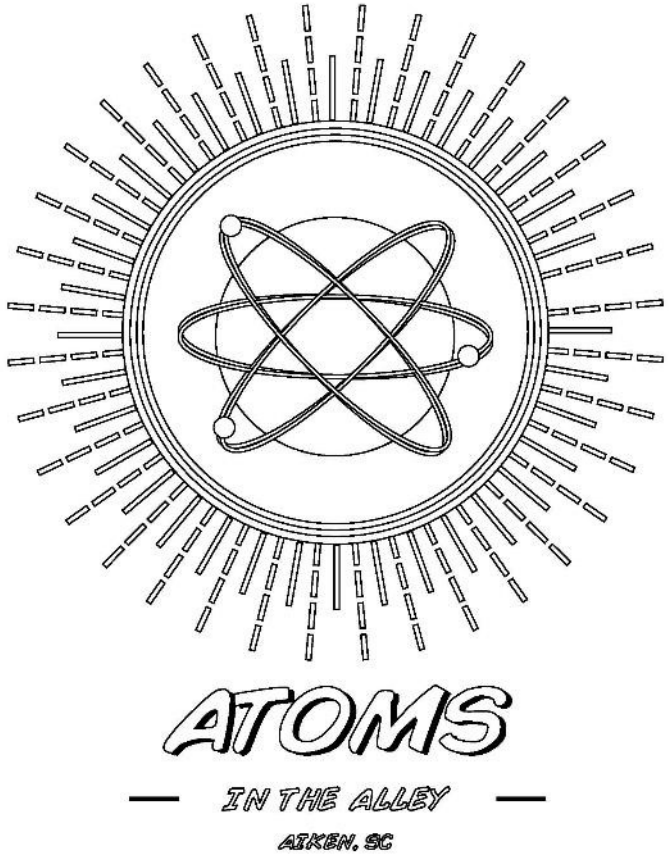
2018

- EPA Community Involvement Training
  - Training session for community outreach coordinators
  - “Community Outreach for Complex Science: Transitioning Past Success to Future Achievements”
  - Discussed how we used Touch An Animal Day to create a template for a successful program in Burke County



2018

- Expanded outside of Burke County at community events
  - Primarily exhibits but 2 talks to high schools
  - Reached an additional 1,285 members of the CSRA with education about environmental monitoring programs in the area



2018

- Sampling
  - Environmental
    - Began our community sampling with members of the Farmer's Market and local landowners
    - Working with Burke County EMA to establish the air monitoring station at the location on River Road
  - Surveys
    - Focused on understanding what people in Burke County currently know about their community and contaminants
    - This survey will help us better tailor our educational efforts and resources to better serve Burke County

2018

Key Recommendations from TANA

- Communications Outreach
  - Community Talks hosted at the Burke County Library
  - Annual Burke County Ecology Day (BCED)
  - Invited talks and booth to local groups and at local events
  - Webpage with all resources available
- Regularly Consider Community Input
  - Community Advisory Council
  - Flexible communication outreach styles – talks, exhibits, schools, social media
- Recommended topics and associated fact sheets
  - Scientific Method, Contaminants Introduction, Radiation Introduction, Radiological Environmental Monitoring Programs Background, What is Tritium?, What is Risk?, What is an Environmental Risk Assessment?
  - Website update coming soon!

Next Steps

Next Steps

- Continue the successes of 2018
  - Burke County Ecology Day 2019
  - Community Talks
  - Exhibits
  - Schools

Next Steps

- Sampling
  - Continue sampling with the community
  - Analyze samples for heavy metals (SREL) and radiological contaminants (3rd party lab)
- Data (2005-2015)
  - Finish synthesizing REMP data from SRS, SCDHEC, Georgia Power, and GA EPD

Next Steps

- Long-term resources
  - Website
    - Community Talks
    - CAC agendas
    - Factsheets
  - Summary publication
  - Teacher's packet
    - Allow other teachers to access the project information and materials to do the project with their own classrooms

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Thank you!

REMOP

- www.srel.uga.edu
  - Labeled "REMOP" under the "Outreach" header
- https://srel.uga.edu/outreach/radionuclide-outreach-education-and-monitoring-program/

Contact information

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Sampling & Data

- Samples
  - Air, Rainwater, surface water, ground water, soil, fruits, vegetables, meat, and milk
  - Analysis:
    - At SREL: 20 metals
    - Sending out: gamma spectrometry, gross alpha/beta, SR-89/90, TC-99, H-3, Am-241, Cm-244, Np-237, PU-238/239, and U-234/235/238
- Current and Historic Data 2005-2015
  - Savannah River Site
  - Southern Company's Plant Vogtle
  - South Carolina Department of Health and Environmental Control (Savannah River data)
  - Georgia Environmental Protection Division