STEM Teacher Roundtable
September 10, 2019

Calvin Jordan
Corrective Action Project Manager
Office of Remediation Programs
Who I Work For

• Virginia Department of Environmental Quality
  – Protects and enhances Virginia’s environment, and promotes the health and well being of the citizens of the Commonwealth

• Land Protection & Revitalization
  – Responsible for carrying out the mandates of the Virginia Waste Management Act, as well as meeting Virginia’s federal obligations under RCRA and CERCLA

• Office of Remediation Programs
  – Administers programs designed to ensure that the cleanup of contaminated sites in Virginia achieve a satisfactory level of human health and environmental protection
    • RCRA, CERCLA, VRP/Brownfields
What I do

Corrective Action Project Manager

• Manage remediation and corrective action projects at RCRA, CERCLA (Superfund), and VRP/Brownfield sites
• Assist/guide facilities through the regulatory process
• Manage budgets/contracts
• Assist other project managers on ecological risk assessments
What I also do

South River Mercury Scientist

• Manage South River Mercury Monitoring Trust Fund
• Coordinate and conduct all aspects of South River mercury monitoring program
• Member of South River Science Team
• Collaborates on South River research
• Served as technical resource during South River/DuPont NRD suit and currently serve on trustee board for river access creation
# How I got here

<table>
<thead>
<tr>
<th>Position</th>
<th>Years</th>
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<tbody>
<tr>
<td>B.A. in Biology from St. Mary’s College of MD</td>
<td>1997</td>
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<tr>
<td>Research Assistant: Philadelphia Academy of Natural Sciences Estuarine Research Center, St. Leonard, MD</td>
<td>1993 – 1997</td>
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<tr>
<td>Research Assistant: University of Maryland Center for Environmental and Estuarine Studies Chesapeake Biological Laboratory, Solomons, MD</td>
<td>1998</td>
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<td>Natural Resources Biologist: Maryland Department of Natural Resources, Annapolis, MD</td>
<td>1998 – 2003</td>
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<tr>
<td>Environmental Scientist: Virginia Department of Environmental Quality (VDEQ), Virginia Beach, VA</td>
<td>2003 – 2006</td>
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<td>South River Mercury Scientist, VDEQ, Harrisonburg, VA</td>
<td>2006 – present</td>
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<tr>
<td>Corrective Action Project Manager, VDEQ, Harrisonburg/Richmond, VA</td>
<td>2017 - present</td>
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A typical day can look like this...
Or it can look like this!
A typical remediation site will involve experts in the following STEM fields:

- Geology
- Chemistry
- Environmental Science
- Biology
- Engineering
- Geographical Information Systems (GIS)
- Toxicology/Risk Assessment
- Hydrology
- Math/Statistics

But don’t forget the Non-STEM fields:

- Law
- Accounting
- Economics
Skills

Typical STEM skills needed/used:
- Computer
- Word processing
- Electronic Document Management
- Spreadsheet
- Data interpretation (Excel, R, SAS)
- GIS

But you also need the following skills:
- Reading
- Writing
- Analytical
- Rhetoric
- Argumentative (systematic reasoning)
- Money management

But most importantly, you need people skills!
- Common Sense
- Leadership
- Negotiation
- Open Mindedness
- Not afraid to make a mistake
- Ability to be decisive/make decisions
- Ability to work with all types of people (different personalities, different backgrounds)
- Work on a team
- Public speaking
- Salesmanship
Future

- Executive Order #6 (EU6)
- Changes at EPA
- Emerging Contaminants
  - PFOA/PFAS
- New science on exposure risk
- Changes in MCL, RSL, etc.
- New remediation technologies
- Ageing remediation infrastructure
- Ability to treat what was once considered impossible
- Everything is becoming more digital, less paper
- Drones
Outreach Opportunities

We had a GREAT time learning from our content experts at our FIRST Econ Day Camp: Environmental Econ day-long institute! Thanks Calvin from @VirginiaDEQ, Cody from @SigoraSolar, Megen from #SVSWCD and Jan from @EJCArboretumJMU for helping our teachers! @VCEE #SVEE @JMUCoE @JMUCoE
Questions?

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South River Science Team Information:

http://southriverscienceteam.org

DuPont/South River NRD Settlement Information: