



## TECHNICAL ADVISORY COMMITTEE (TAC) FOR SALINIZATION MONITORING PROJECT

### Updates for January 8, 2021 WRTC Meeting

- The Technical Advisory Committee had its first meeting back in November

#### Members:

Steve Nelson, WSSC Water  
Niffy Saji, Fairfax Water  
Greg Prelewicz, Fairfax Water  
Bradley Schmitz, Loudoun Water  
Ken Mack, Montgomery County  
Will Isenburg, VADEQ  
Greg Sandi, MDE

- During the meeting, they heard from the 3 project partners
  - Virginia Tech's Occoquan Watershed Monitoring Laboratory (OWML) – Stan Grant
  - U. S. Geological Survey (USGS) – John Jastram and Jimmy Webber
  - University of Maryland's Earth System Science Interdisciplinary Center (U MD) – Sujay Kauschal
- They noted that this is intended to be a long-term Project (10 -15 years) that will be conducted in phases and overseen by the Technical Advisory Committee
- Some of the overall research questions include
  - What are the long-term salinization trends in various bodies of water in the COG region?
  - Can we distinguish the long-term effect of mitigation efforts in the region that are just getting under way?
  - How much of freshwater salinization is due to winter salt application as opposed to other sources (wastewater plants, erosion of the built environment, septic systems)?
- The researchers pointed out that the COG region is ideal for this type of study because it has:
  - A range of land uses, from rural-agricultural to ultra-urban, with a gradient of impervious cover
  - Various types of wastewater systems, from large and small wastewater facilities to septic systems
  - Various types of geology that can affect salinization
  - Lots of water quality data from current and past monitoring sites
- Project Goals are in Phases
  - Phase I (years 1 & 2):
    - Capitalize on existing water quality monitoring investments that would otherwise take years to collect
    - Analyze existing data
    - Identify knowledge gaps

- Phase II (years 3 & 4):
    - Conduct field and lab studies at testbed sites to address knowledge gaps
    - **One of the main action items for the committee is to identify candidate watersheds and/or monitoring sites for the more extensive monitoring efforts (testbed sites) planned under Phase 2**
  - Phase III (years 5 and on): Extrapolate testbed results to the rest of the COG region
- Phase I Deliverables – Year 1
  - Compile existing ion monitoring data
  - Synthesize findings into an annual report
  - **Present results and solicit ideas for next steps at COG workshop in fall of 2021**
  - Meet with technical advisory committee periodically to discuss results and next steps

**Participants:**

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 Greg Sandi, MDE  
 Bradley Schmitz, Loudoun Water  
 Stan Grant, OWML,  
 John Jastram, USGS  
 Jimmy Webber, USGS  
 Andrew Sekellick, USGS  
 Sujay Kaushal, U MD  
 Karl Berger, COG  
 Steve Bieber, COG  
 Christine Howard, COG  
 Lisa Ragain, COG  
 Heidi Bonnaffon, COG

