



# Overview of EPA Workshop Series: “Developing & Evaluating Promising Technology: Pushing the Ball Forwards on I/A Septic Systems”

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## Disclaimer



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## Workshop Purpose



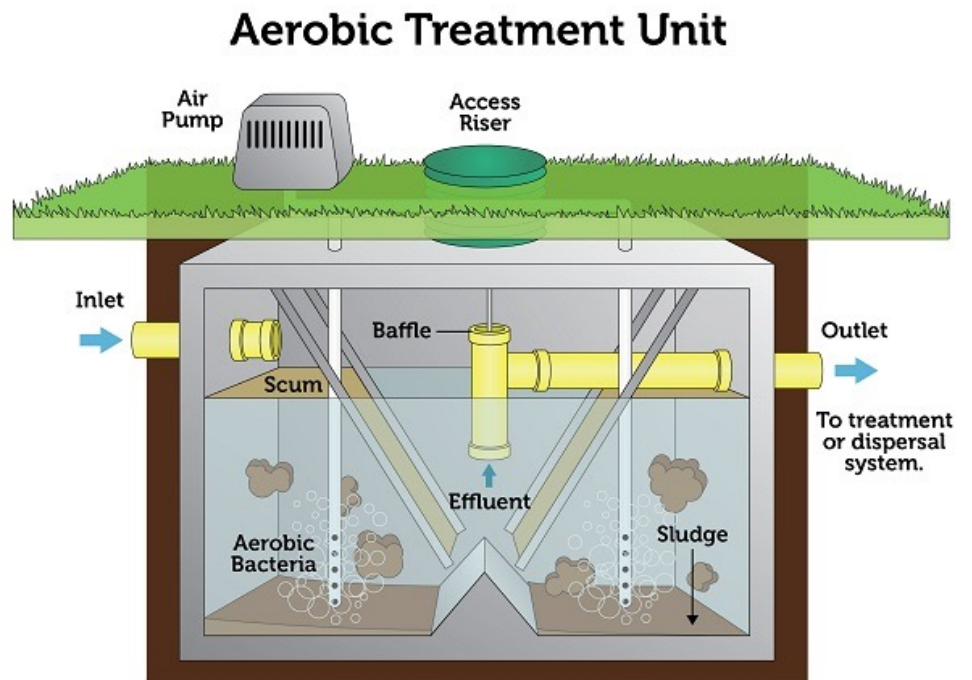
- Our region's waters are impacted by nitrogen from numerous sources, including traditional septic systems
- Innovative/Alternative (I/A) septic systems are designed to stop nitrogen at the source
- I/As are an effective tool but not in widespread use in our region



# Workshop Purpose



- Learn from practitioners
- Increase collaboration and knowledge sharing
- Understand current state of the technology; opportunities and limitations of use
- Explore solutions to key challenges to widespread use



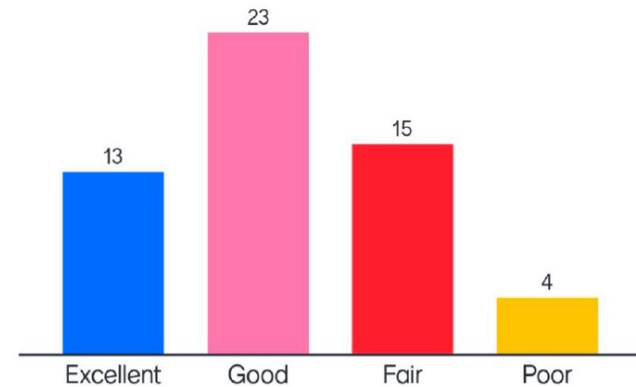
<https://www.epa.gov/snep/developing-evaluating-promising-technologies-pushing-ball-forward-ia-septic-systems>

## Day 1: Dipping Our Toes in the Water: Learning From Pilots



- I/A pilot projects have demonstrated significant nitrogen decreases
- Questions remain about long term performance, O&M
- Multi-tiered, monitoring intensive, approval process deters I/A developers
- Monitoring is expensive and time-intensive
- O&M costs are a concern for municipalities and state agencies, as well as homeowners

I would describe my knowledge of I/A systems to be...

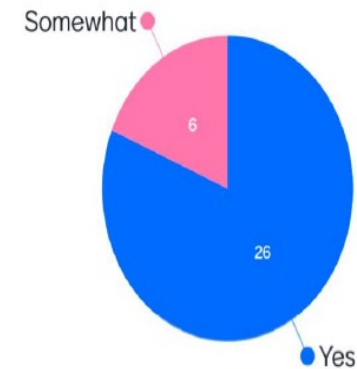


## Day 2: Swimming in our Lanes: Current State of I/A System Performance



- Best available technology can achieve  $<12$  mg/L TN
- Installation and O&M costs remain a concern vs. centralized treatment; however, costs may be comparable or better for I/As in some situations.
- Responsible Management Entities will be key to financial and environmental aspect

Do you believe that I/A systems are a promising technology that should be pursued for nutrient attenuation?



# Day 3: Synchronized Swimming: What is Needed for I/A System Development and General Use



- Financial barriers are most widespread concern
- Burdensome approval process and performance uncertainties
- Reluctance to mandate upgrades
- Long term sustainable funding mechanisms needed
- RMEs needed

What are some of your concerns regarding the implementation of I/A systems?



## Key Take-Away Suggestions



- Support states and municipalities in the creation of Responsible Management Entities, provide guidance
- Assist with incentives and grants for adoption of systems
- Establish and maintain regional data-sharing agreements
- Facilitate stakeholder workshops to identify information gaps
- Elevate the importance of I/A in addressing water quality issues
- Define positive results and benefits of widespread I/A use
- Incentivize I/A technological advancements with technology grants
- Subsidize initial O&M costs until sufficient systems are installed to establish an RME



## Workshop Organizers



- Adam Reilly
- Jeri Weiss
- Marty Chintala
- Alexie Rudman
- Tim Gleason
- Kate Mulvaney
- Laura Erban
- MaryJo Feuerbach
- Ian Dombroski
- Great Lakes Environmental Center
- Eastern Research Group
- E&C Enviroscope