Automation Tools In Support of Assessments: Intro to TADA
TADA Vision (Revisited)

To develop a **Tools for Automated Data Assessment (TADA)** as an **R package** and **user-friendly web-based interface (R Shiny)**

- To save time, improve efficiency and accuracy in water quality assessments
- Using an open-source approach to both requirements gathering and development
- Standardized but flexible
- Community driven requirements
R Package

- Focus on algorithms specific to WQP data
- Data is flagged but not automatically removed or modified
- Can be easily incorporated into existing tools or data processing methods
- Highly customizable
- Companion to dataRetrieval package
R Shiny User Interface

- Makes use of R package
- Developed independently
- Guides user through process
- Interactive
  - data exploring
  - cleaning
  - graphing
  - etc.
- Web based
- EPA Shiny hosting options
Requirements Gathering

- Extensive discussions and follow ups with stakeholders
- Documented requirements
- Will revisit periodically
- Built a community
- User stories
Contractor Support

- Technical expertise
- Guidance through development process
- Mock-ups
GitHub Activities

- New EPA GitHub environment
  - Enterprise license
  - Standards and governance policies
- Brand new EPA/TADA team
  - 2 public repositories*
  - Can serve as community forum/hub
Community Development

- Community can be anyone
- Contract to support subject experts with varying R skills
- EPA/ORISE initial development
- Github: setting stage for community participation
- Personnel changes