

The Water Data Collaborative: Empowering community water science

Adam Griggs, Science Manager, River Network
Representing the Water Data Collaborative

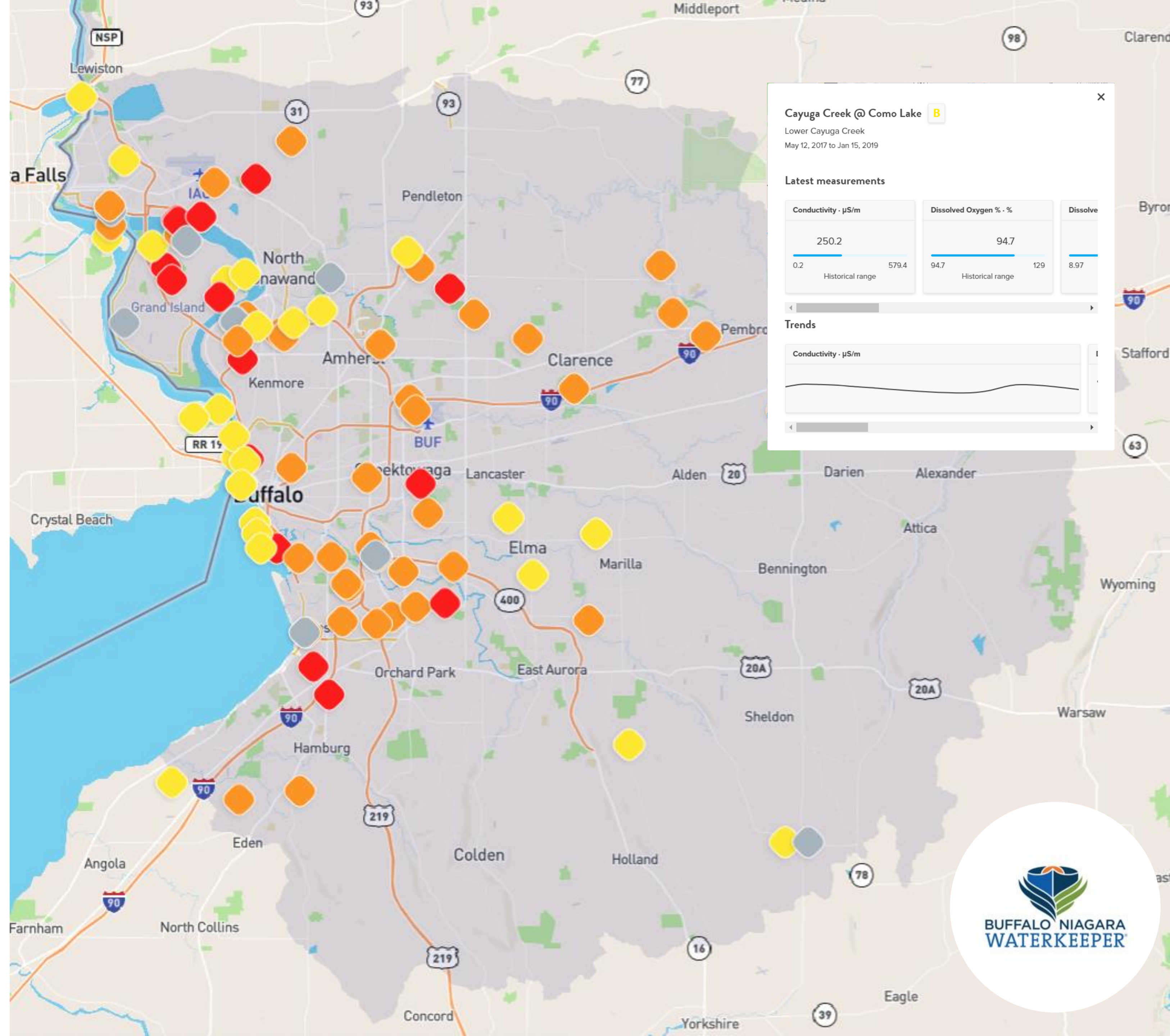


Water Data Collaborative

SUPPORTING COMMUNITY WATER SCIENCE



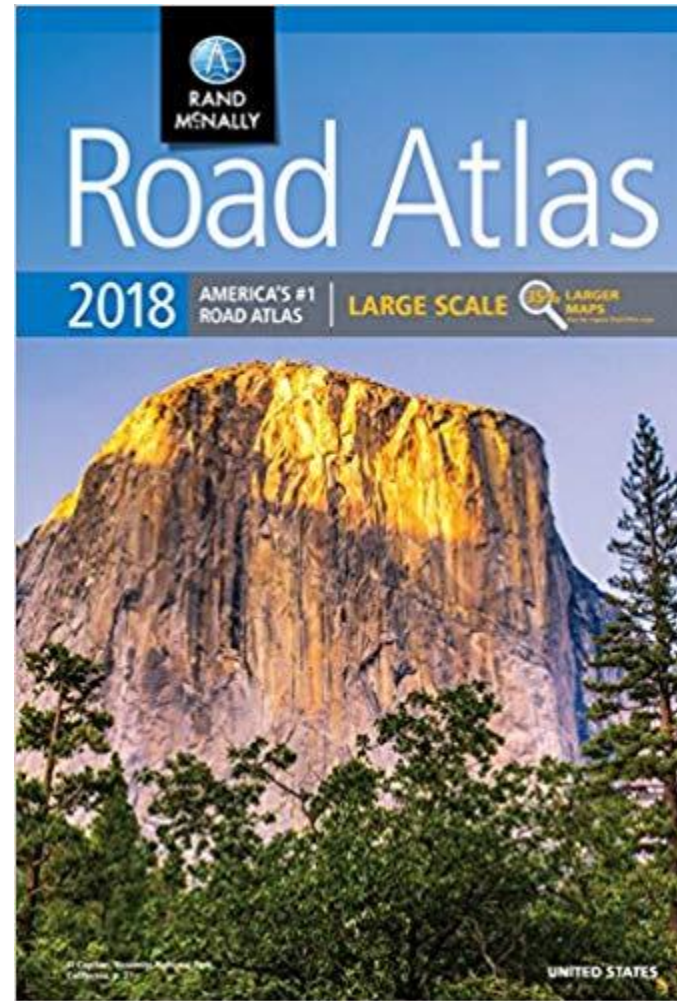
What is our vision for Community Water Science?



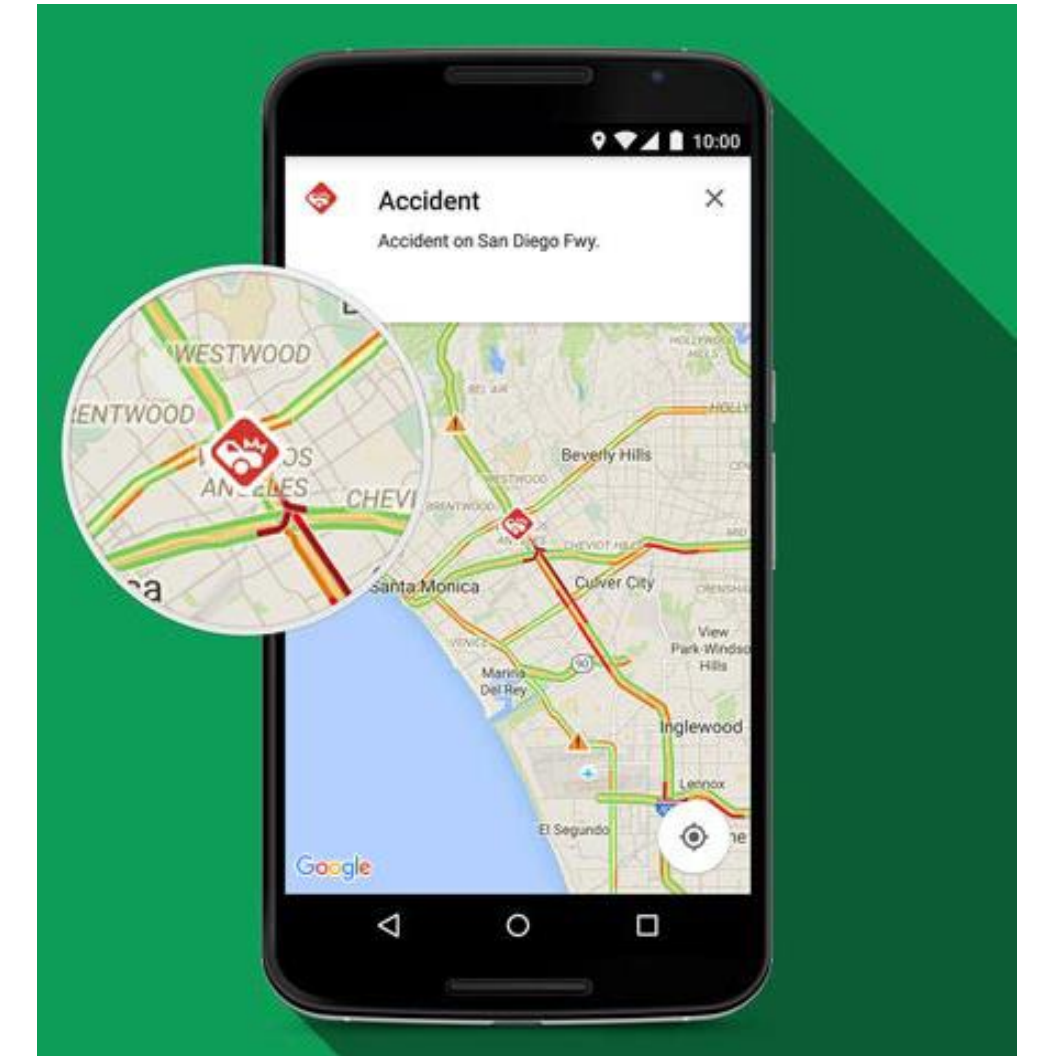


The Internet of Water and the Water Data Collaborative

Technology and Big Data



Data Standards
Data Sharing
Cloud-based Storage
Accessibility
Data to Information Applications

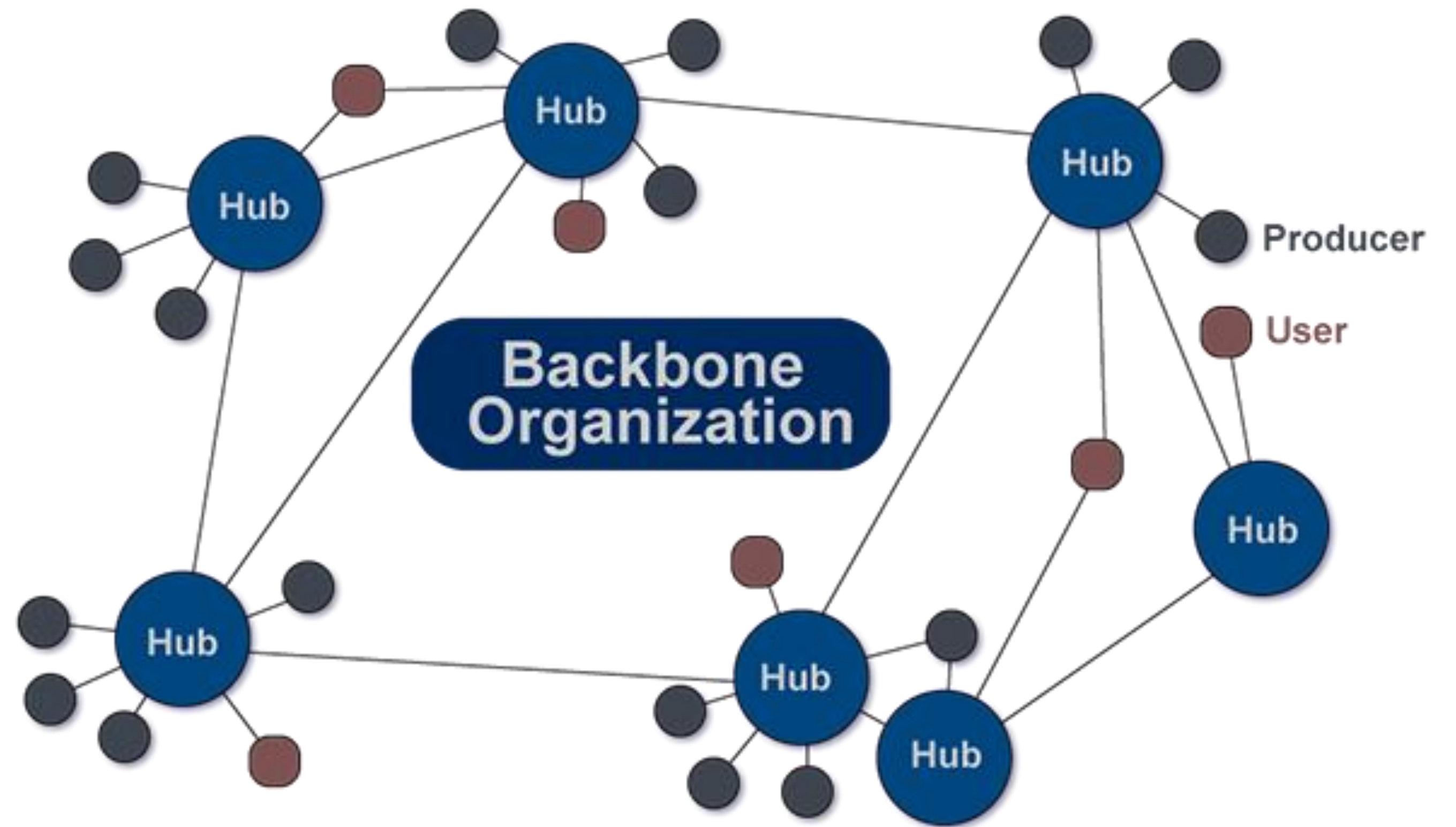


MOST WATER
DATA ISN'T
CONNECTED AND
ACCESSIBLE



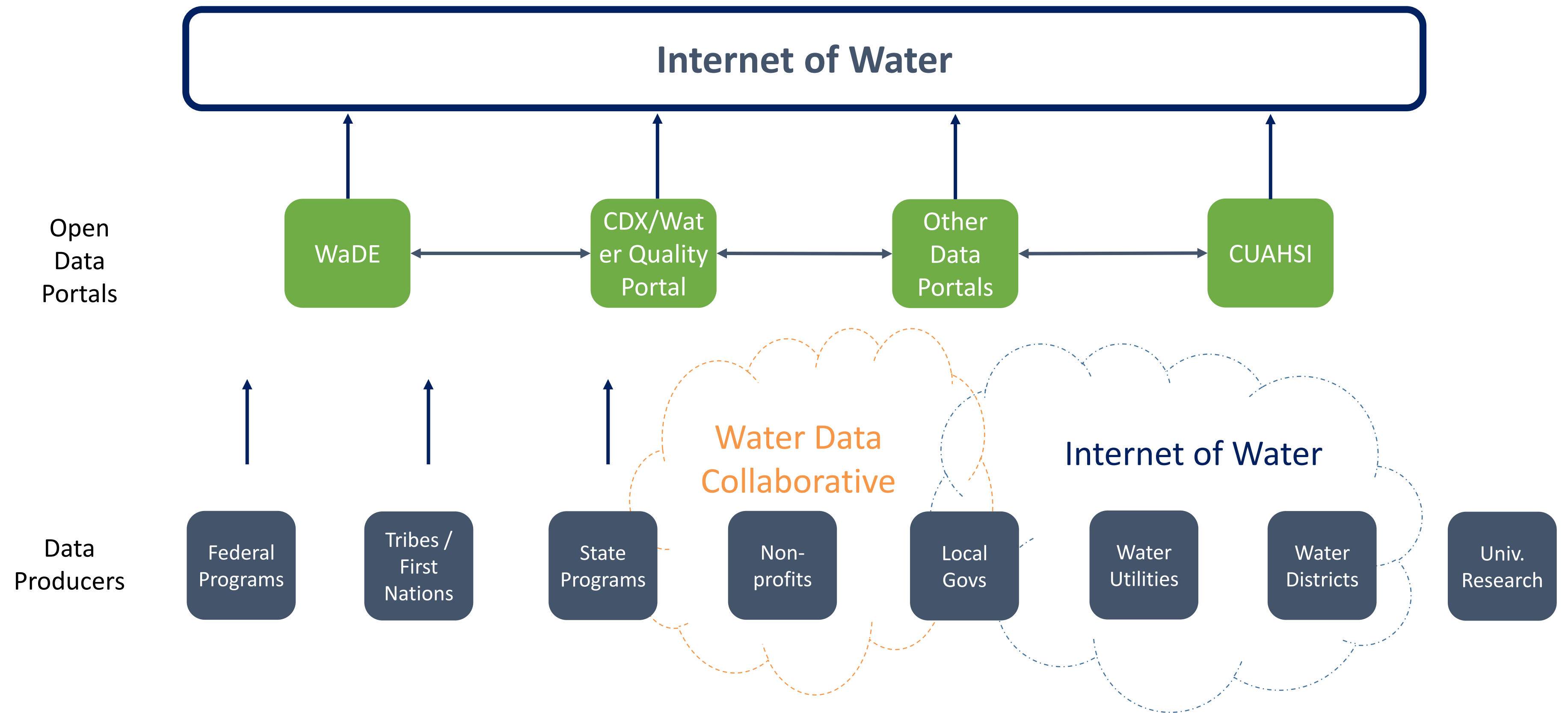


Internet of Water



How the Water Data Collaborative and IoW are working together

1. Participate on each other's advisory boards
2. Shared development of data management resources / data catalogues
3. Coordinate on community water science value demonstration projects

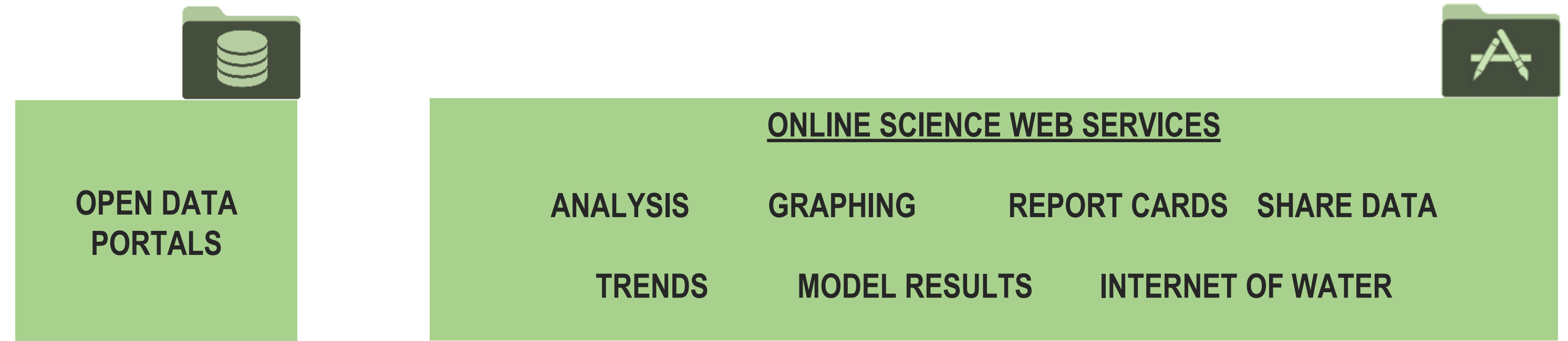




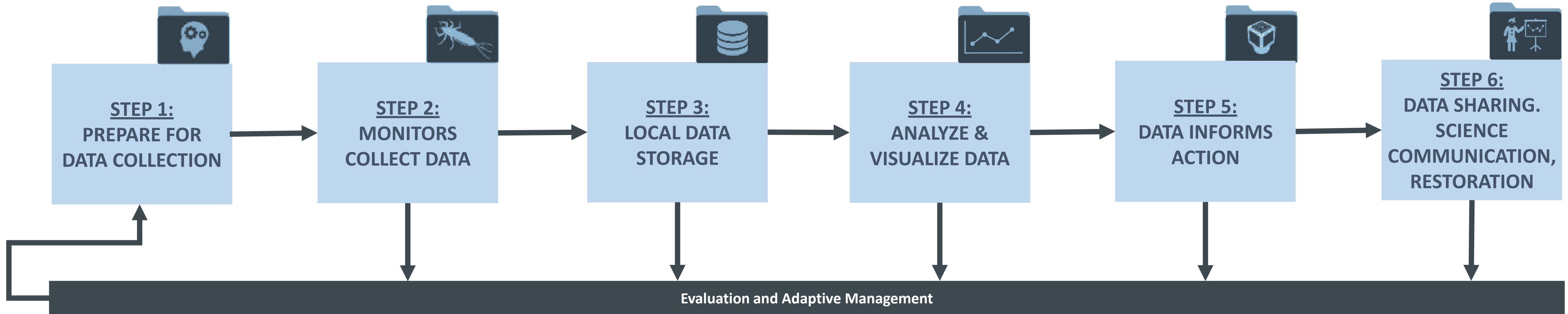
Water Data Collaborative Goals, strategies, and work-to- date

Community Water Science Framework

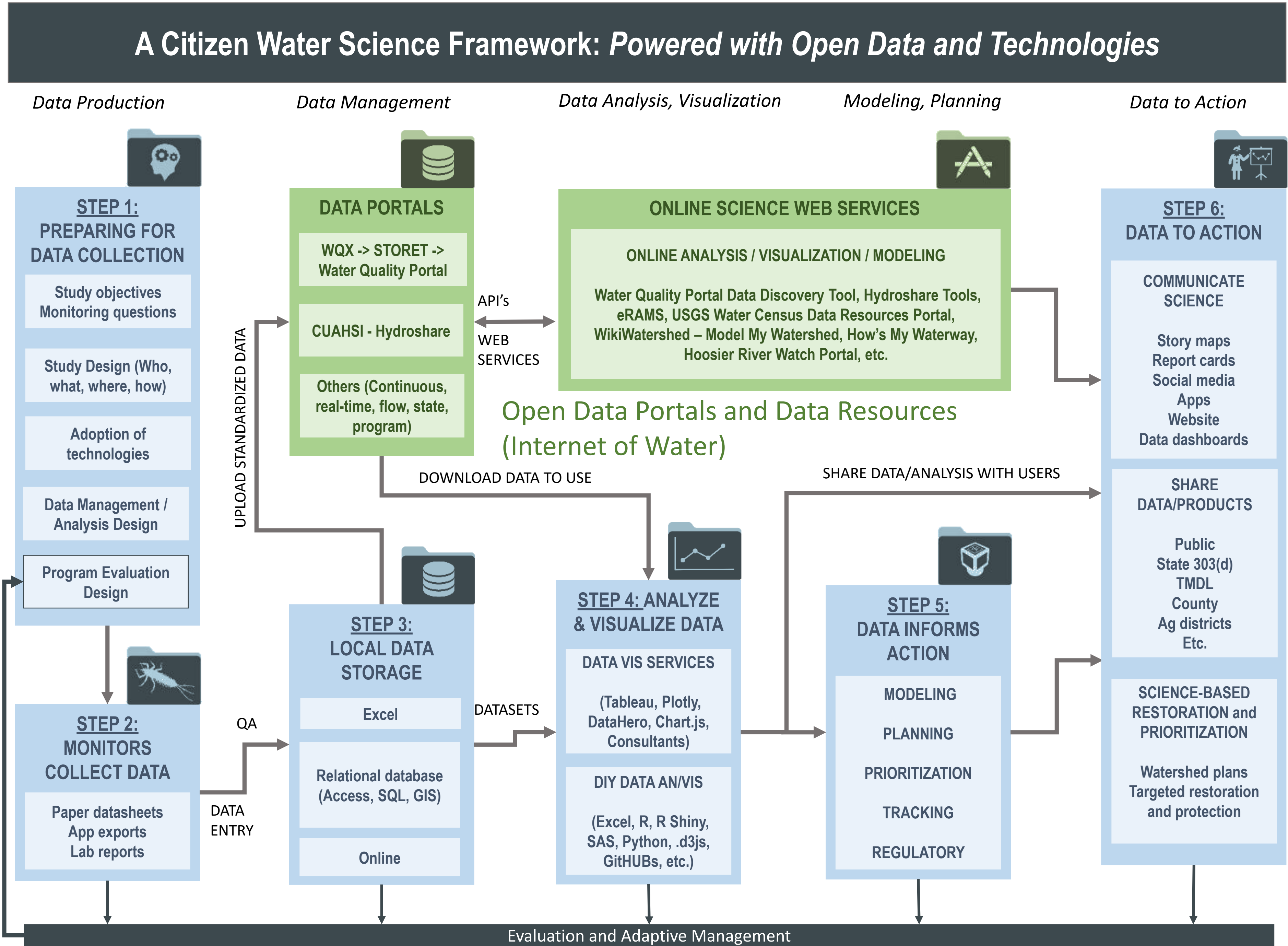
1) Document existing resources and technologies



Open Data Portals and Data Resources



- 1) Organize and guide access to existing resources
- 2) Demonstrate the role of open data resources



Catalogue Water Science Resources

Our Work

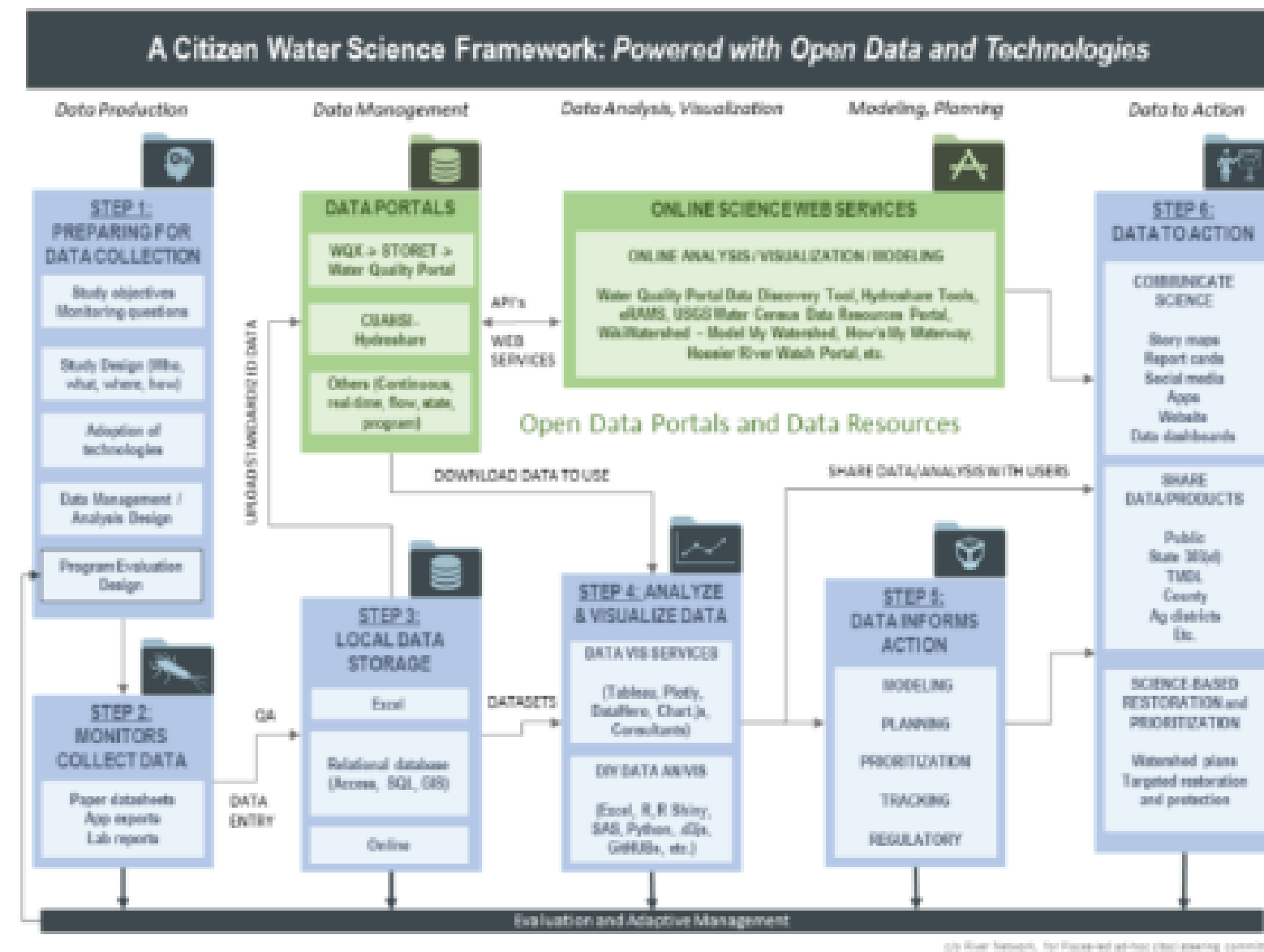
- › Ample Water
- › Strong Champions
- › Clean Water
 - › How We Help
 - › Catalyzing Policy Change
 - › Providing Science Support
 - › **Science and Technical Resources Portal**
 - › Data Visualization
 - › Monitoring and Data Production
 - › Accessing and Sharing Data Online
 - › River Science Connection
 - › Networking & Learning
 - › Best Practices
 - › Impact Stories

DONATE

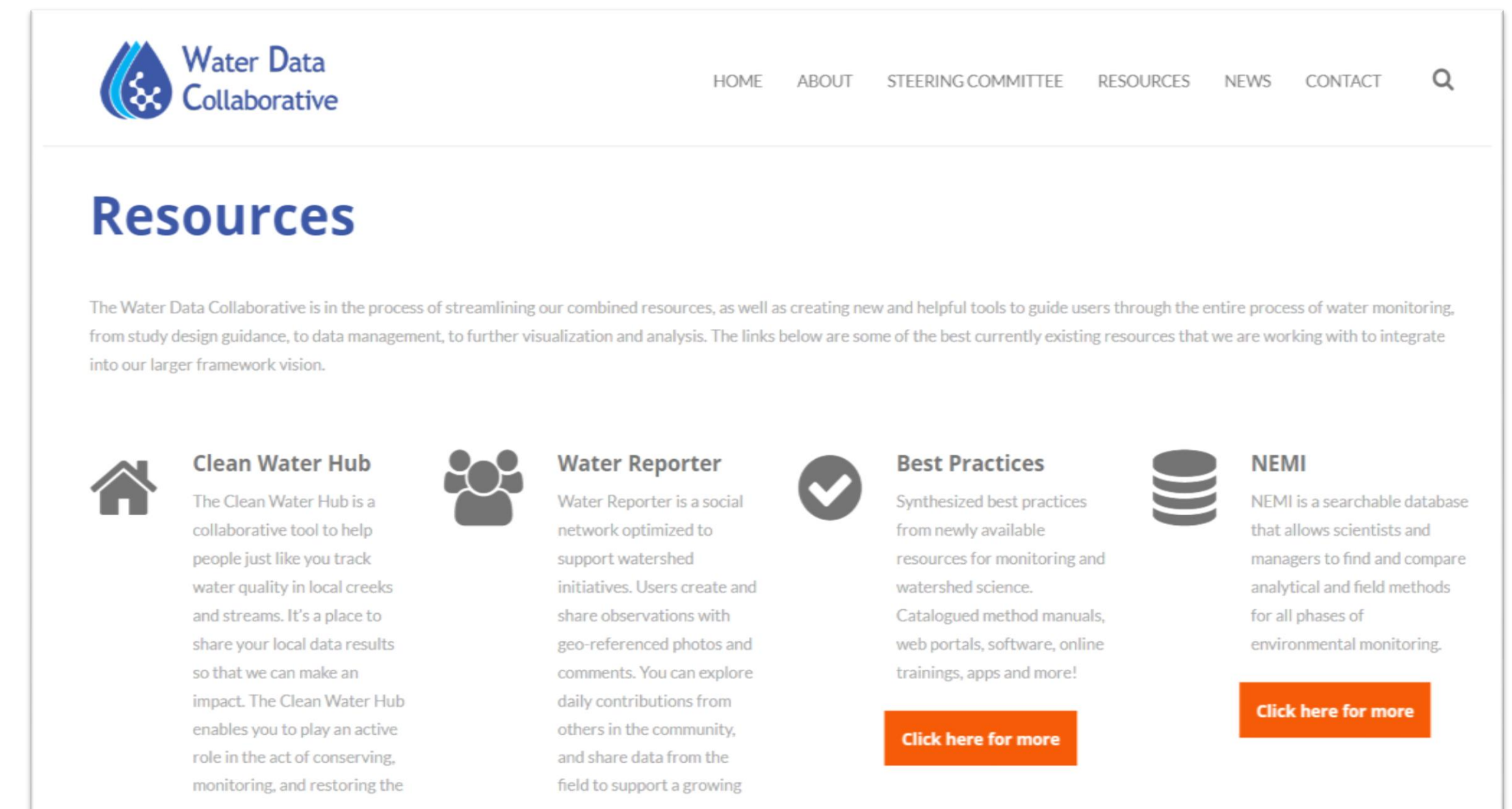
CONTACT US

SEE THE MAP

Science and Technical Resources Portal



www.waterdatacollaborative.org

The screenshot shows the website's navigation menu (HOME, ABOUT, STEERING COMMITTEE, RESOURCES, NEWS, CONTACT) and the Resources section. The Resources section includes a brief introduction and four featured resources:

- Clean Water Hub:** A collaborative tool to help people track water quality in local creeks and streams.
- Water Reporter:** A social network optimized to support watershed initiatives.
- Best Practices:** Synthesized best practices for monitoring and watershed science.
- NEMI:** A searchable database that allows scientists and managers to find and compare analytical and field methods.

Each resource has a "Click here for more" button.

Monitoring and Data Production

- › Find resources and information on monitoring study design, quality assurance, methods and equipment for monitoring, and discover new technologies changing how data is being collected.

Data Management and Storage – Coming Soon!

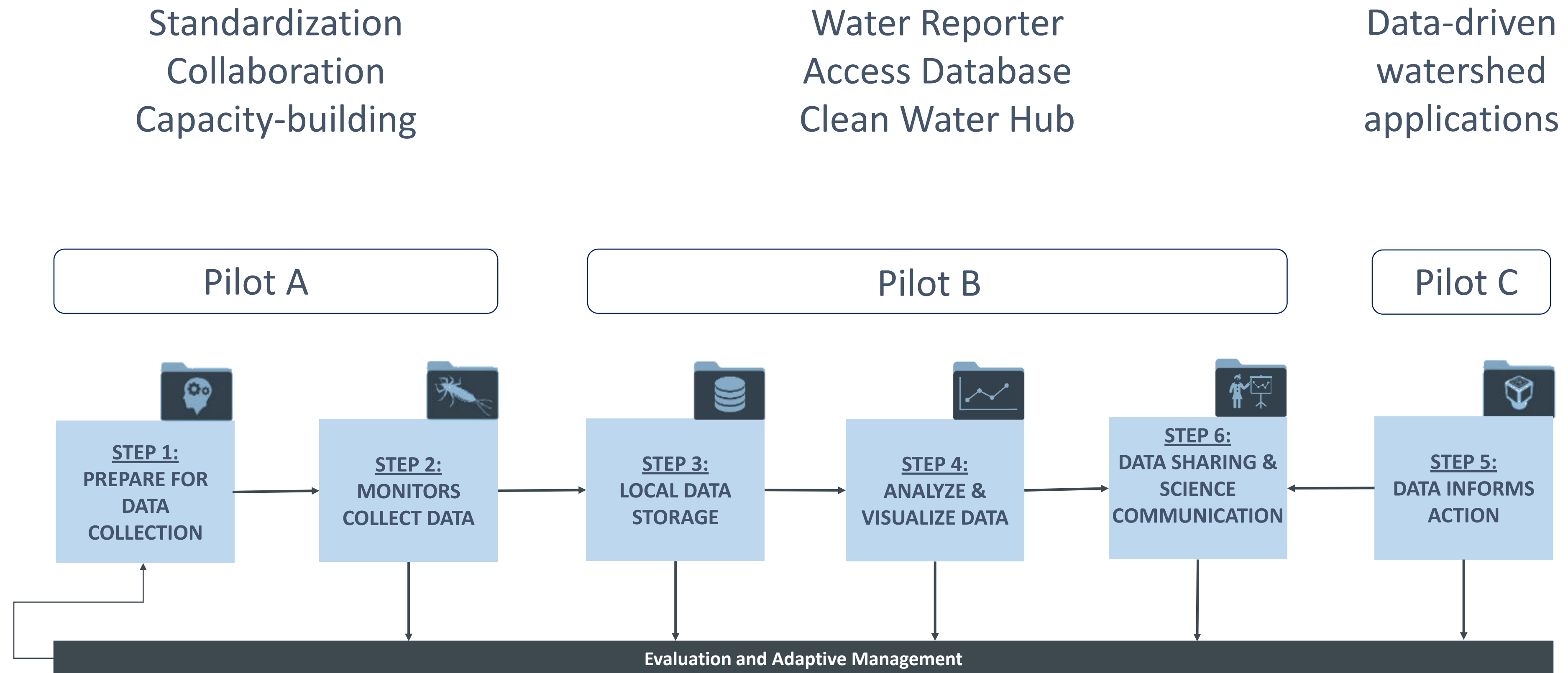
- › Find guidance for developing data management plans.
- › Learn about different database options and research options that fit your data management needs.

Accessing and Sharing Data Online

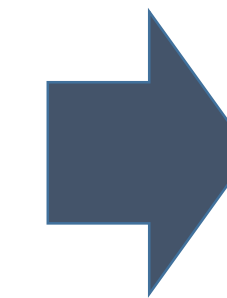
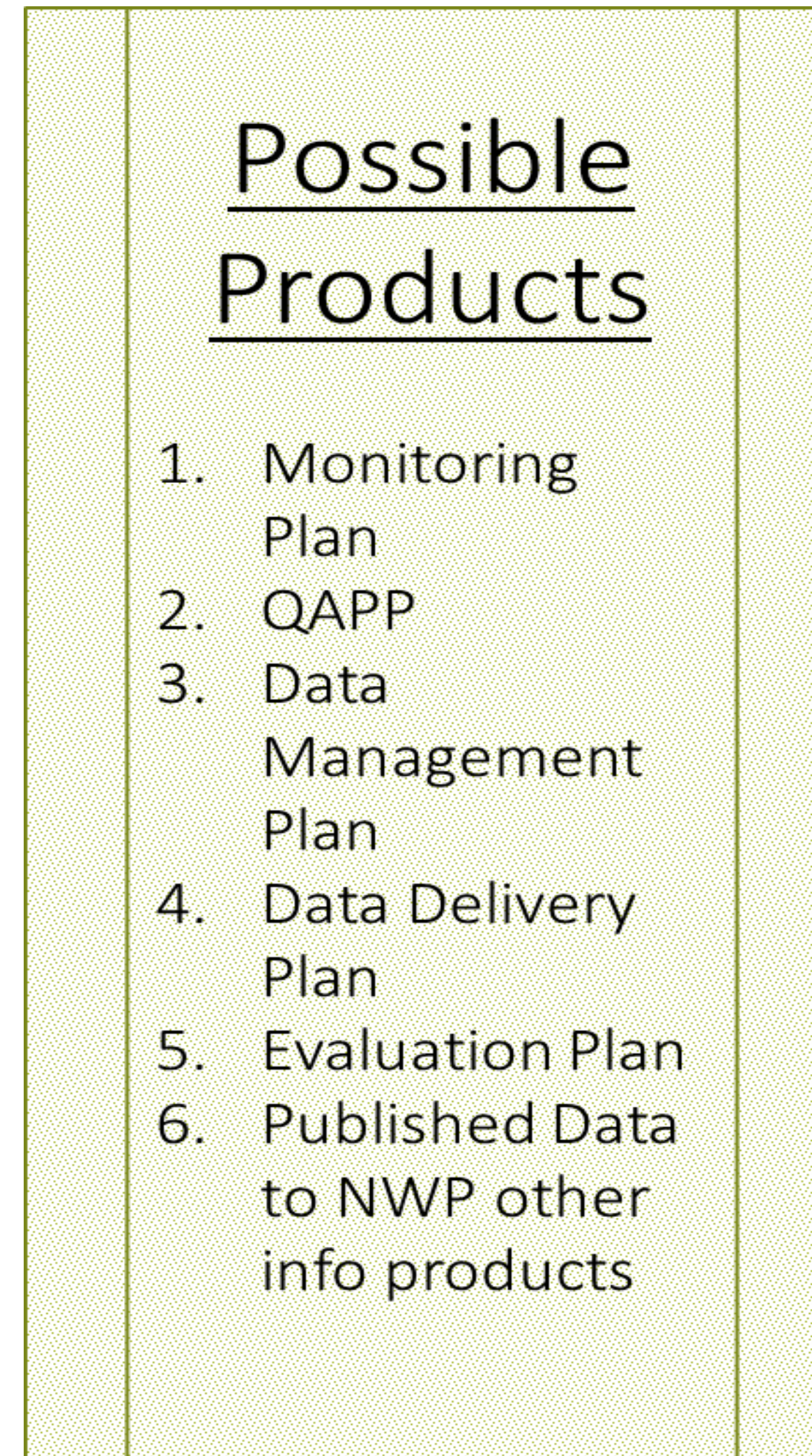
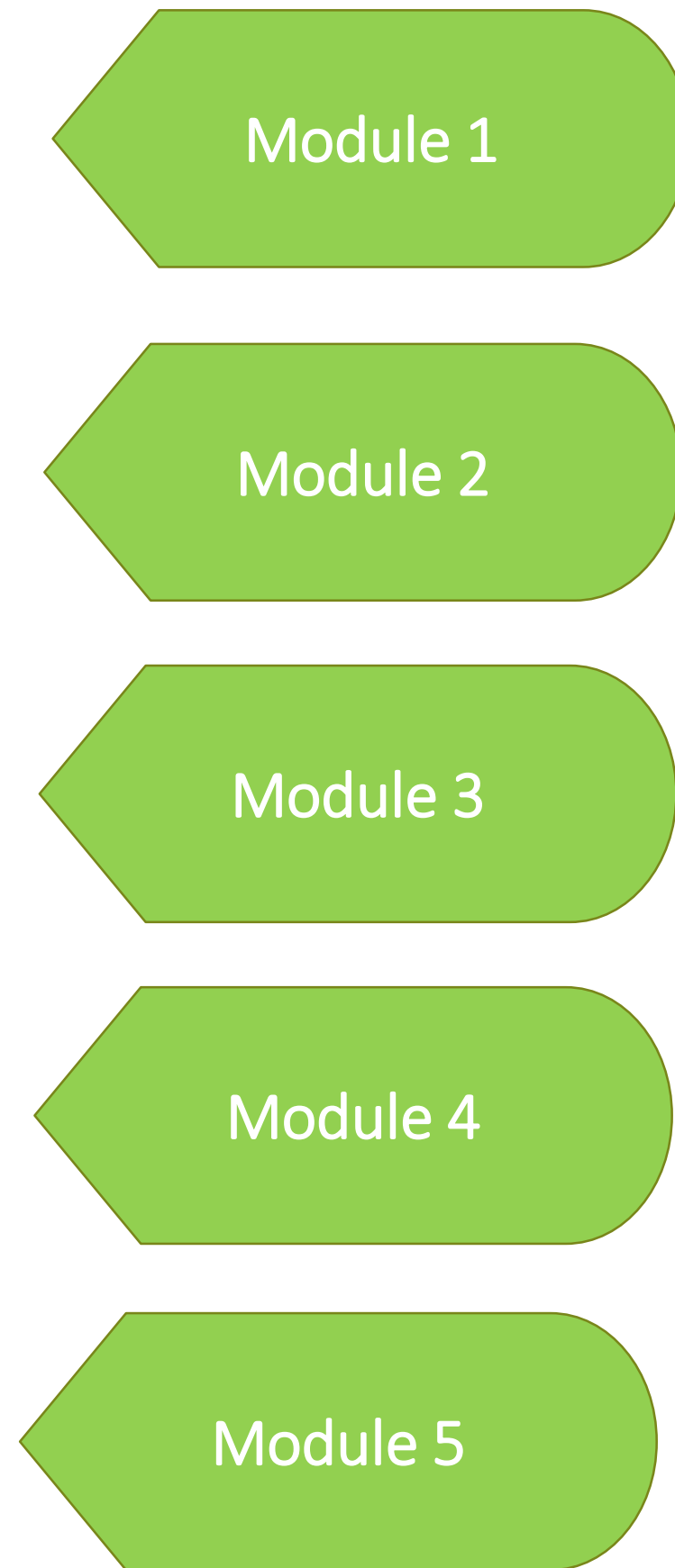
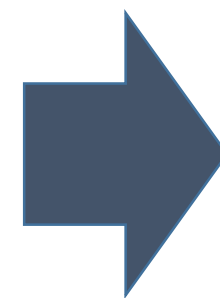
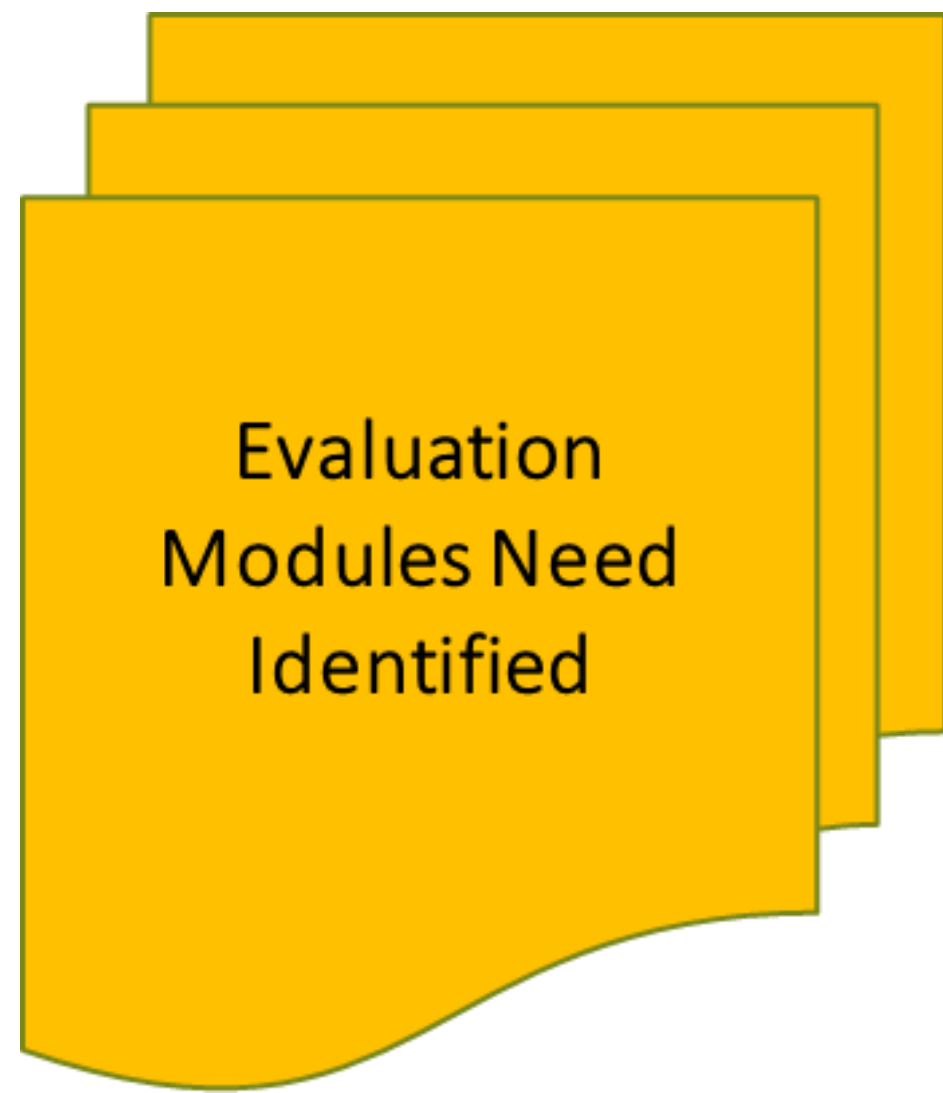
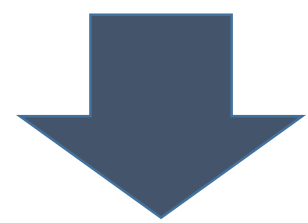
- › Discover and learn how to use data resource portals from federal, state, university, and NGO partners.

Building New Tools

1) Addressing gaps and barriers to adoption



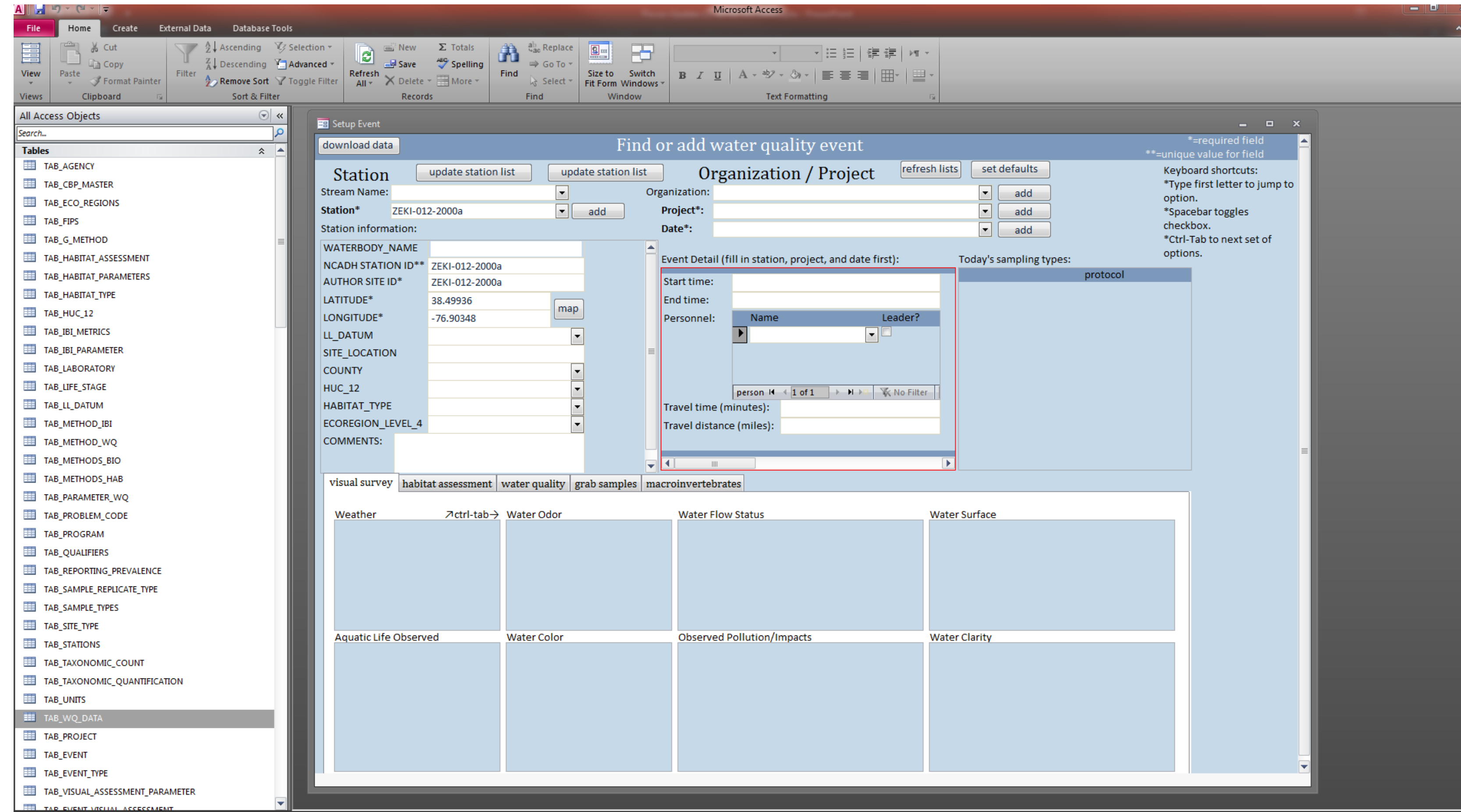
Study Design Guidance Modules

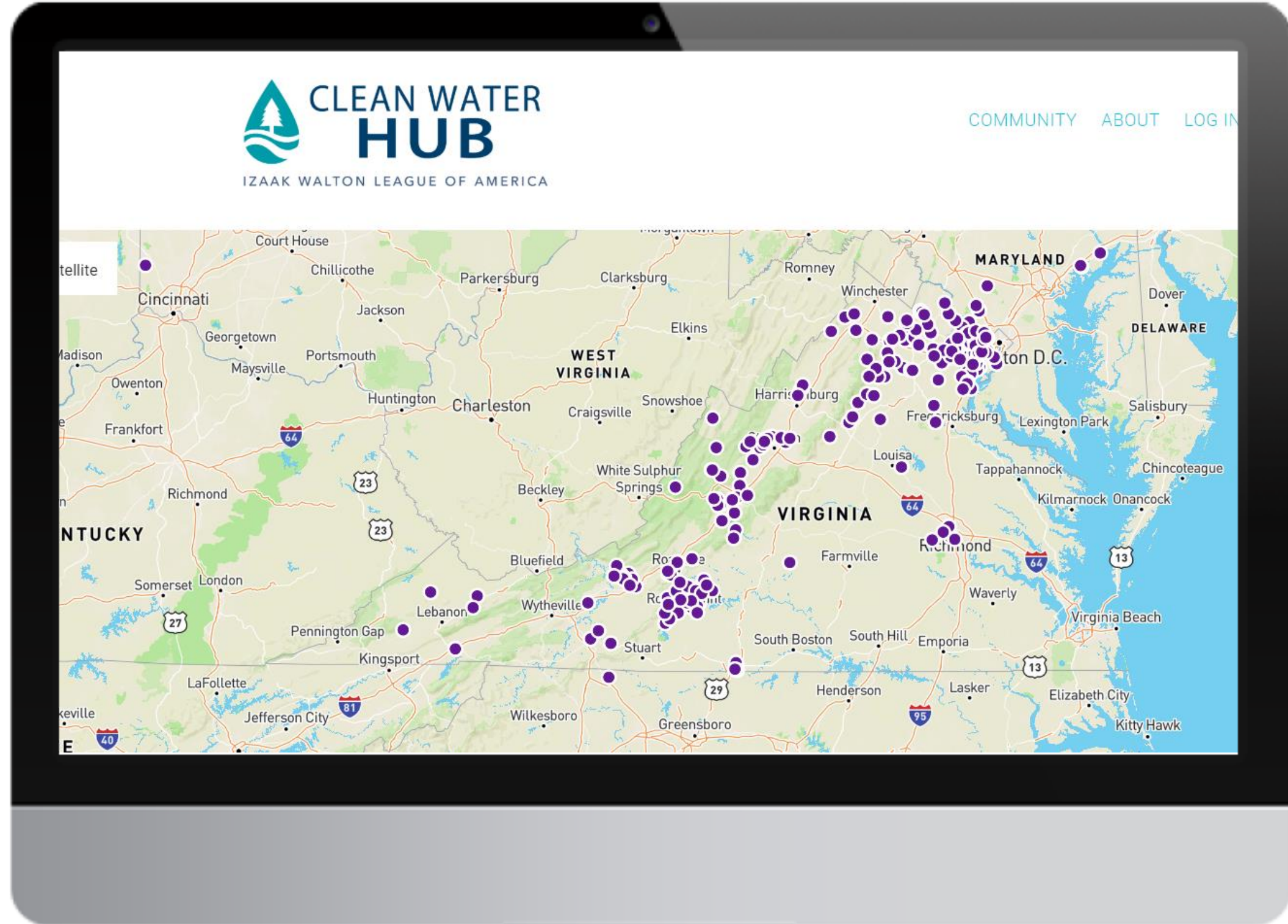


Under development by the North Carolina Aquatic Data Hub

Pilot distributed database system soon to be released to NC groups

For more technical users wanting something they can modify if needed





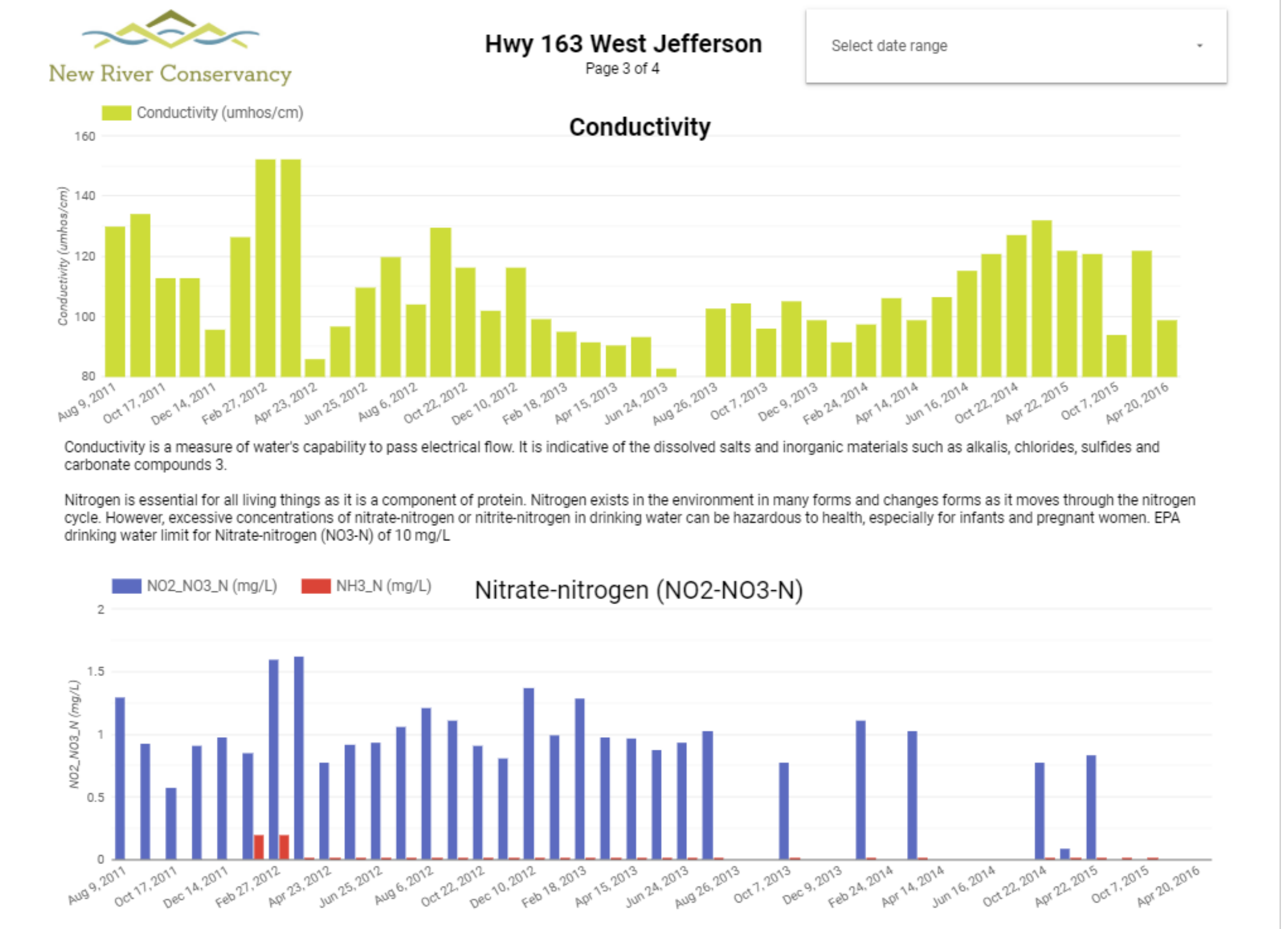
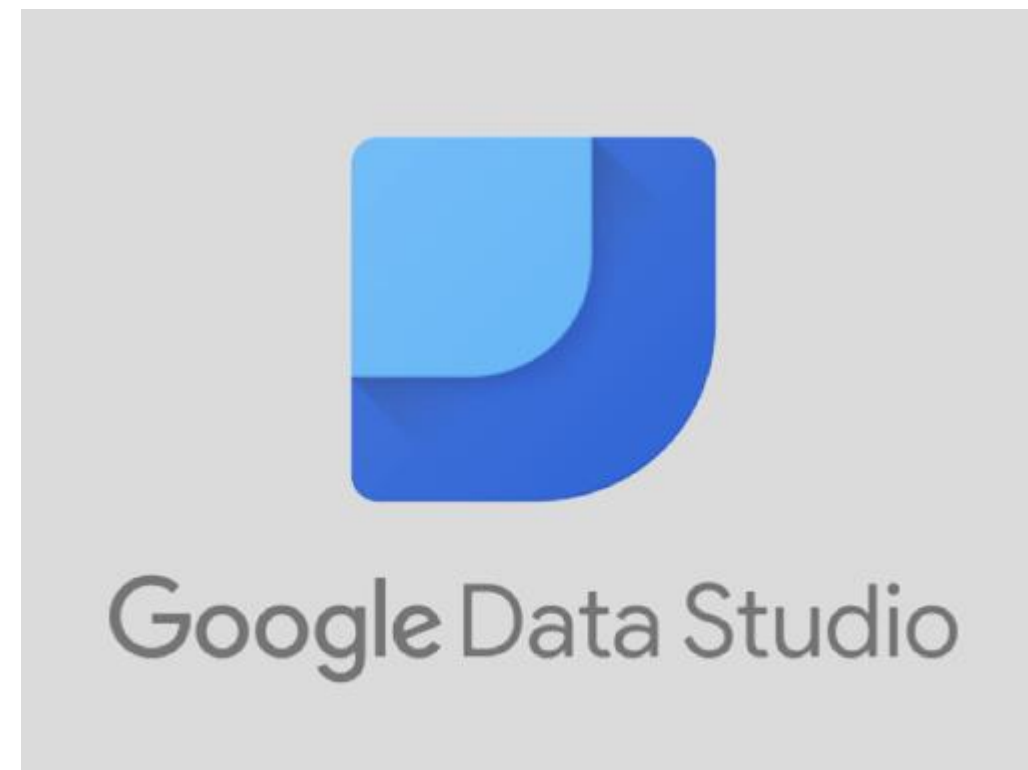
The Clean Water Hub

Coming Soon! An interactive
 mapping tool that will allow you to
 explore the data and see the
 quality of the water in your area.



Analysis, Visualization, Communication

Provide case-study examples in use of free applications





BLACKWATER-RIVERBEND

LOCATED AT 1634 RIVERBEND DRIVE, ROCKY MOUNT

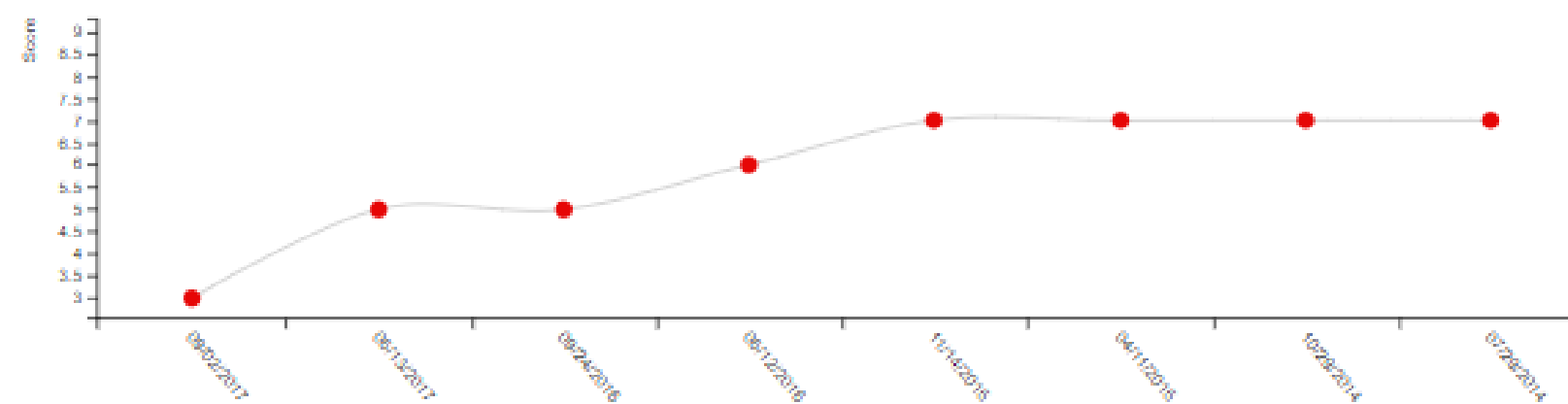
BLACKWATER RIVER

Create a Reading

VA SOS ROCKY BOTTOM

LATEST READING - VASOS ROCKY BOTTOM

Sep 2, 2017

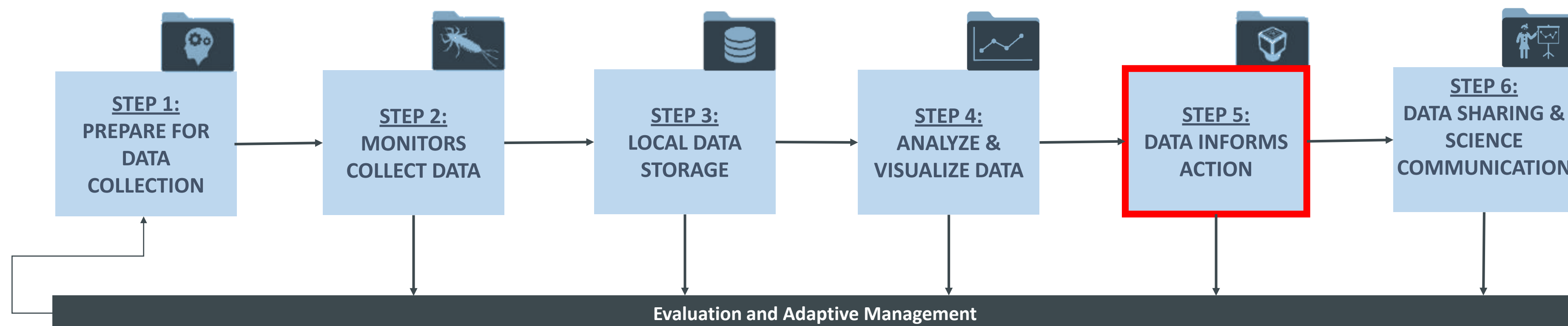
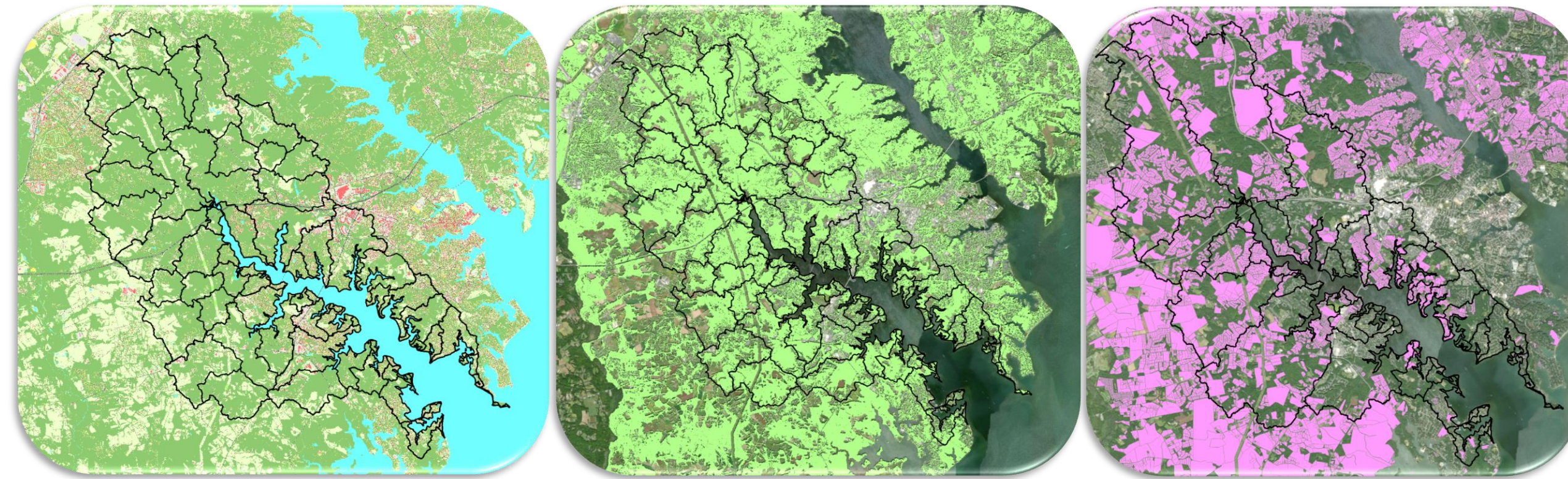


The Clean Water Hub

Display time-series
trend plots of individual
stations and
parameters

Data Informs Action

Demonstrate the power of data-driven river restoration



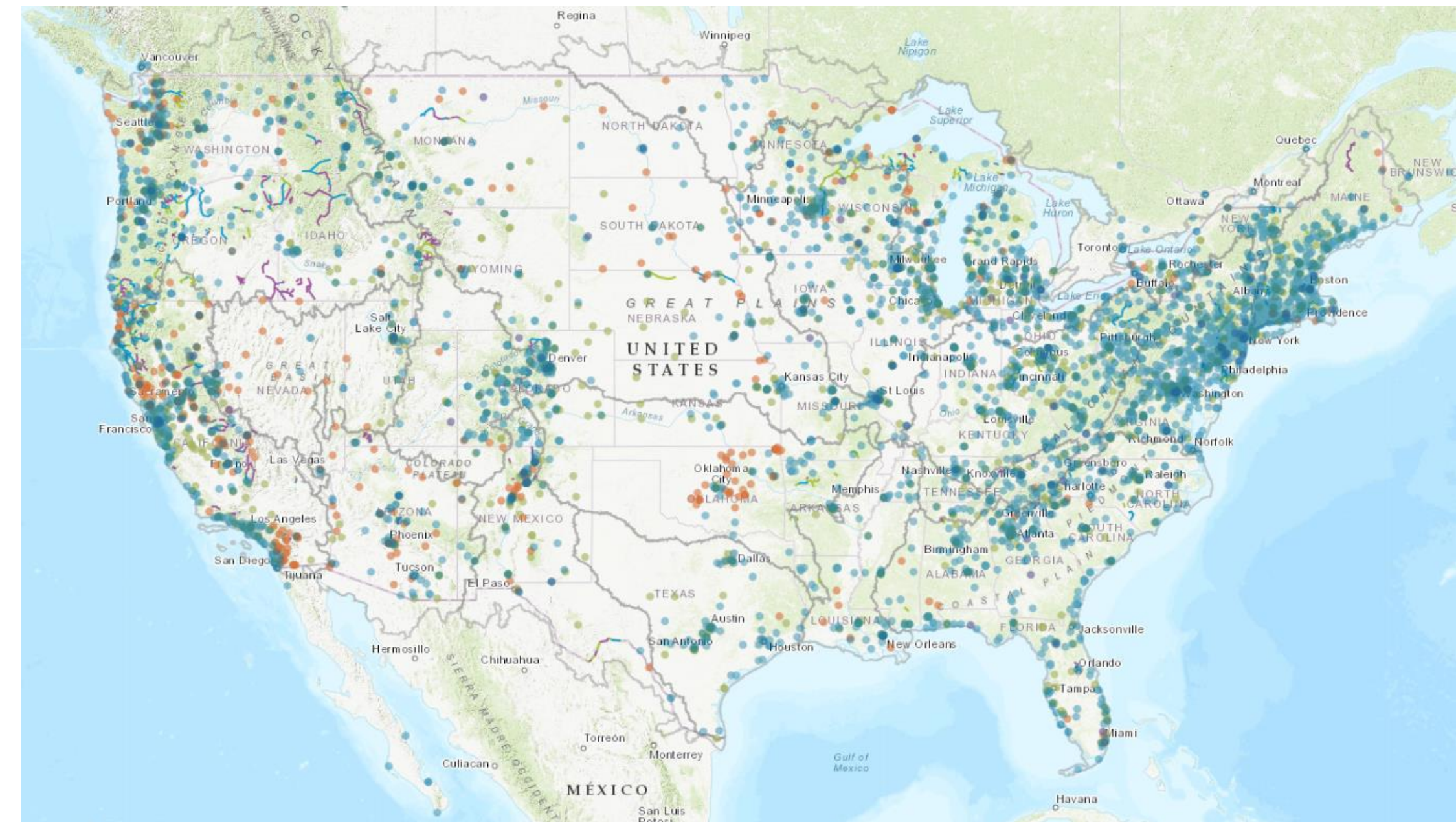
Supporting a Network of Community Water Scientists

Connect to and document community water science support where it currently exists

- Track regions/programs to show where NGO data is or isn't connected and available
- Work with existing on-the-ground efforts to support greater access to and use of NGO data
- Foster network development to fill gaps

Initial survey of EPA regions/states:

- *31 (n=41) States have reported having some type of sponsored citizen science program*





Support Improvements to Data Infrastructures



Internet
of Water

