
CMC
Chesapeake Monitoring
Cooperative

Agenda

- Introduction to the Chesapeake Monitoring Cooperative
- Monitoring Stations
  - ACB
  - ALLARM
  - IWLA
- Database
- Next Steps
- Q&A

Chesapeake Monitoring Cooperative

A partnership that aims to provide **technical, logistical, and outreach support** for the integration of volunteer-based and nontraditional water quality and benthic macroinvertebrate monitoring data into the Chesapeake Bay Program (CBP) partnership.

Cooperative Agreement

ALLIANCE for the Chesapeake Bay

Chesapeake Bay Program
Science. Restoration. Partnership.

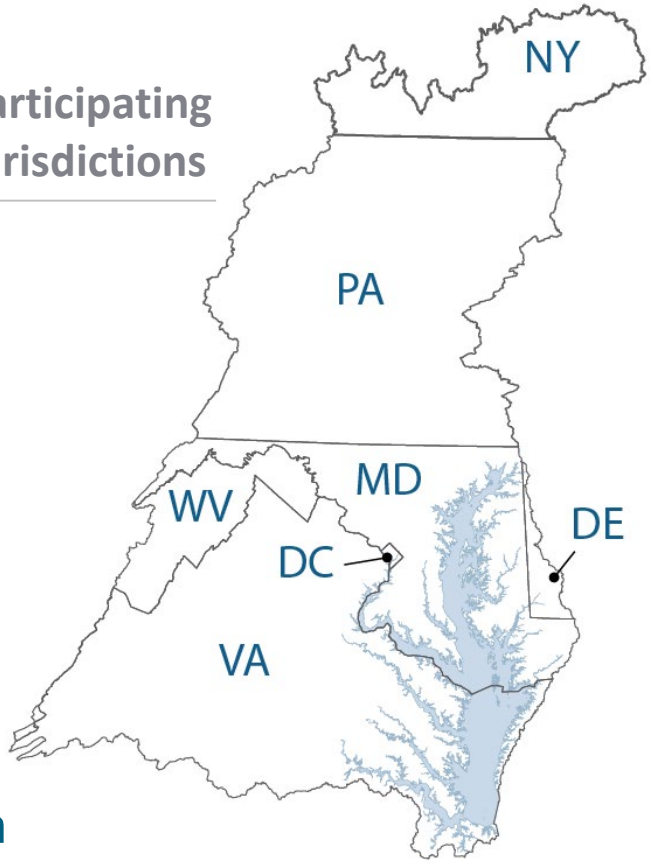
CMC development team partners & service providers

The Izaak Walton League of America — Defenders of Soil, Air, Woods, Waters and Wildlife

ALLARM — Alliance for Aquatic Resource Monitoring — est. 1986

University of Maryland
Center for Environmental Science

Participating Jurisdictions



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Meet the CMC Team

Liz Chudoba (ACB)
Project Manager

Emily Bialowas (IWLA)
Project Coordinator

Danielle Donkersloot
(IWLA)

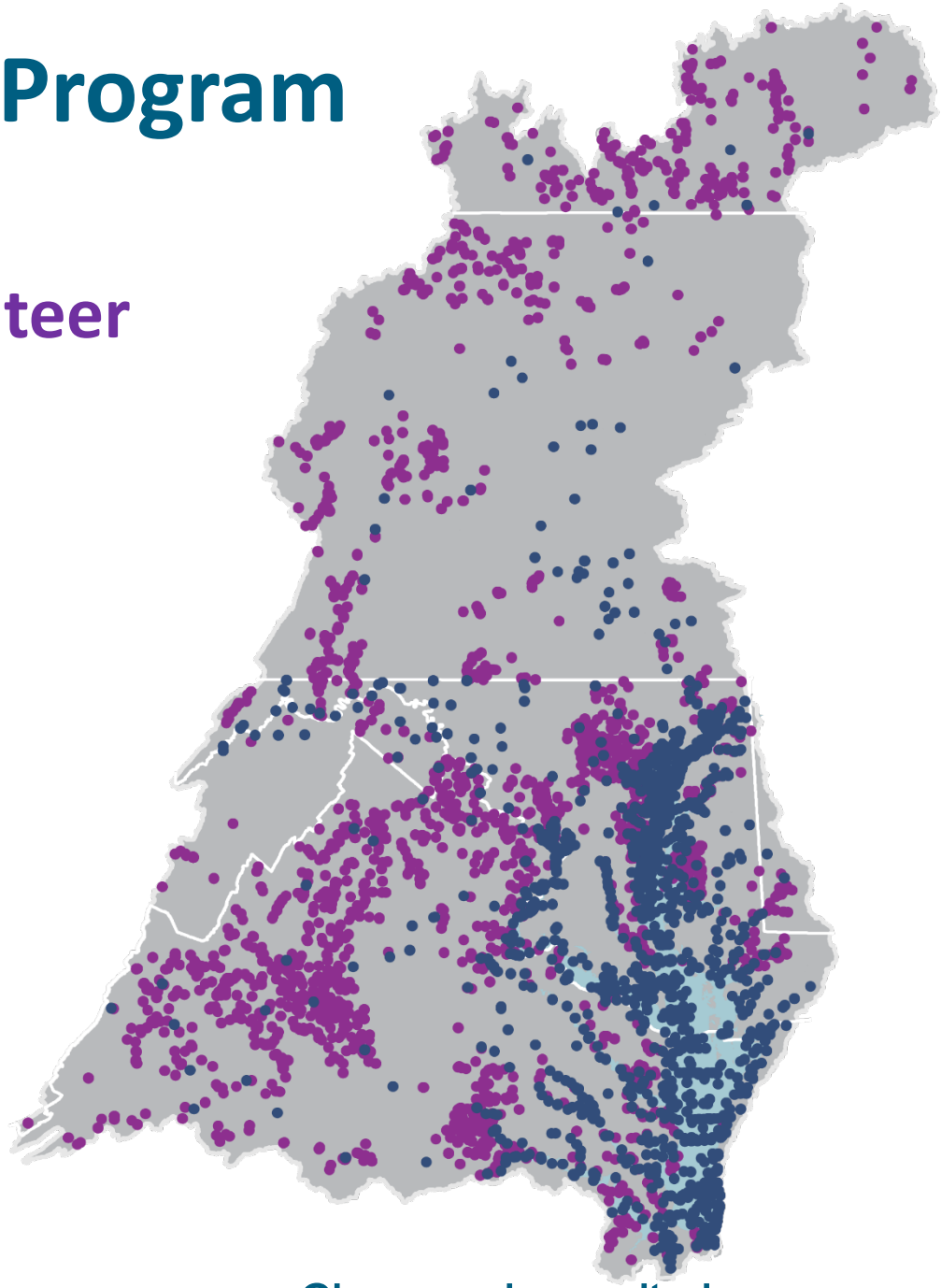
Julie Vastine
(ALLARM)

Helen Schlimm
(ALLARM)

Caroline Donovan
(UMCES)

Chesapeake Bay Program Monitoring Sites

Chesapeake Bay Volunteer and Nontraditional Monitoring Sites



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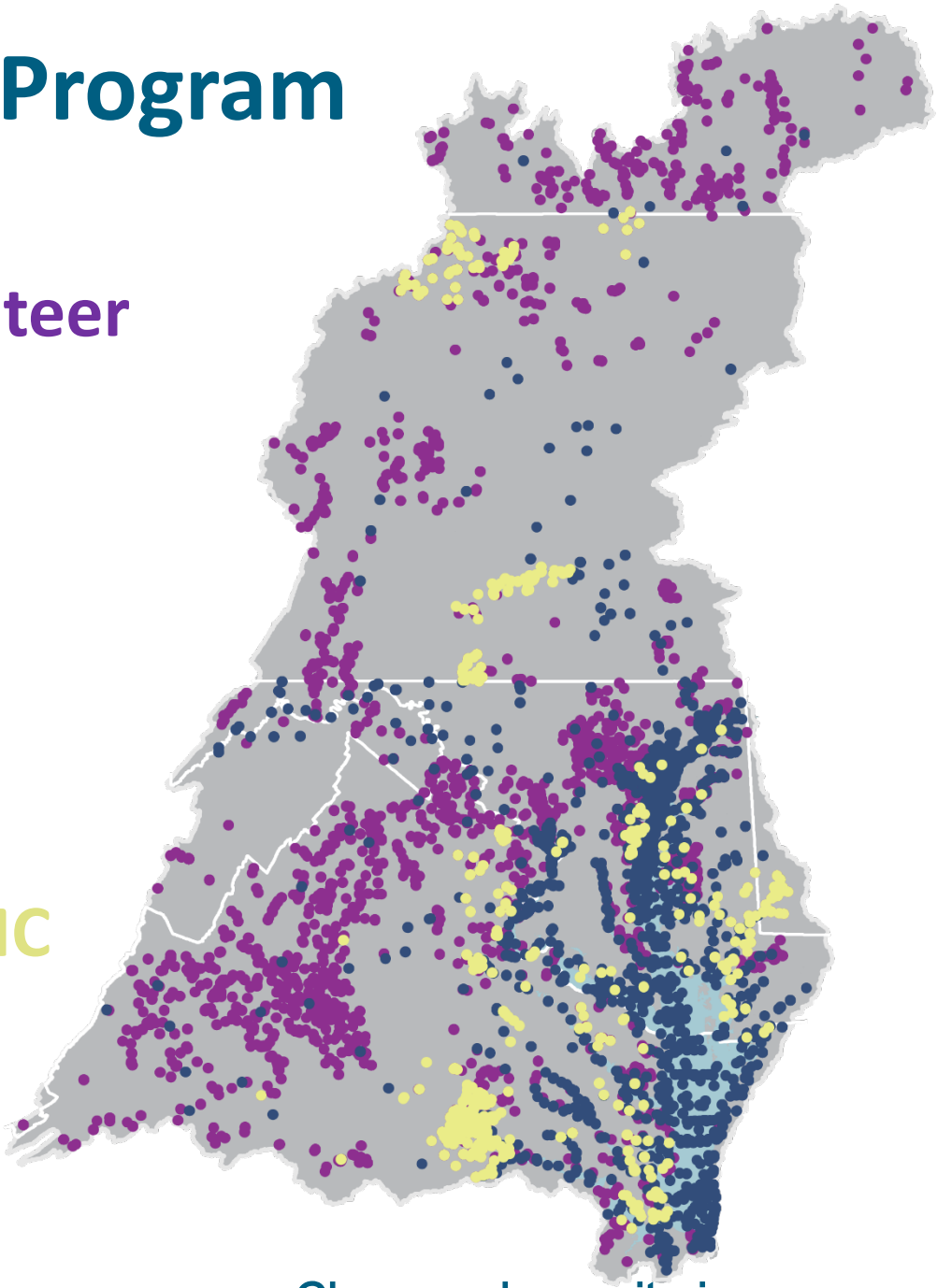
Chesapeake Bay Program Monitoring Sites

Chesapeake Bay Volunteer and Nontraditional Monitoring Sites

Chesapeake Bay Volunteer and Nontraditional Monitoring Sites Integrated into the CMC



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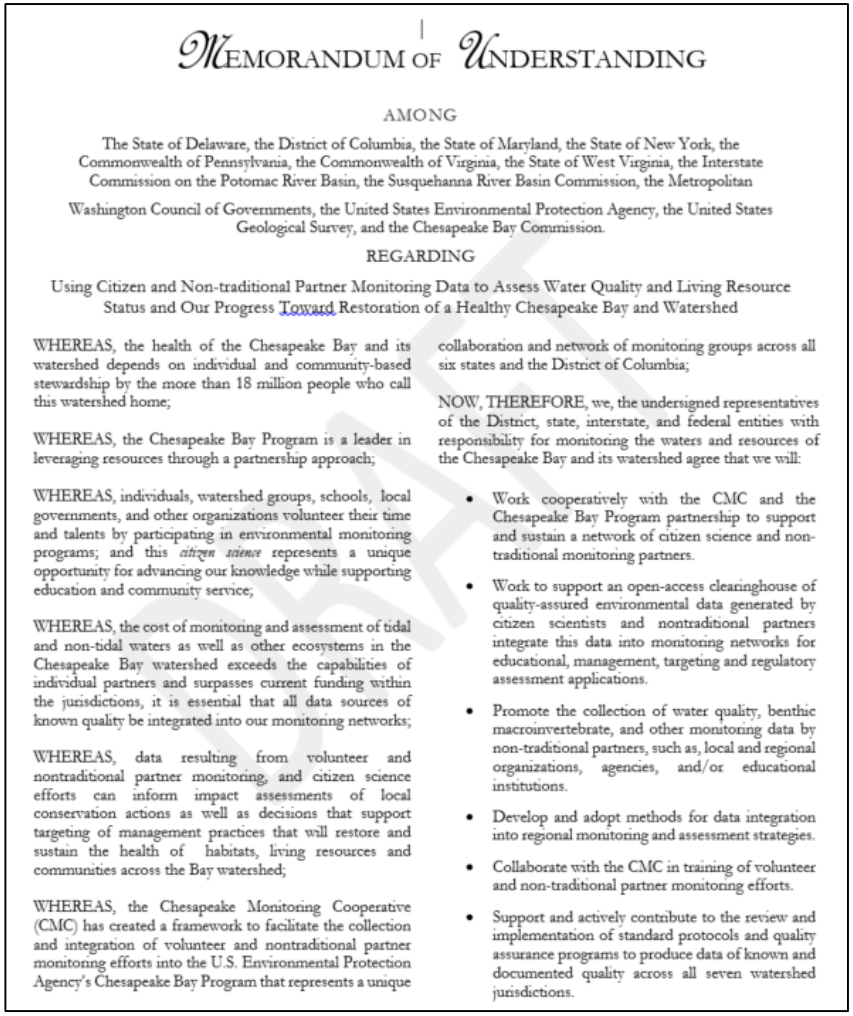
Memorandum of Understanding



MEMORANDUM OF UNDERSTANDING

AMONG

The State of Delaware, the District of Columbia, the State of Maryland, the State of New York, the Commonwealth of Pennsylvania, the Commonwealth of Virginia, the State of West Virginia, the Interstate Commission on the Potomac River Basin, the Susquehanna River Basin Commission, the Metropolitan Washington Council of Governments, the United States Environmental Protection Agency, the United States Geological Survey, and the Chesapeake Bay Commission.

REGARDING

Using Citizen and Non-traditional Partner Monitoring Data to Assess Water Quality and Living Resource Status and Our Progress Toward Restoration of a Healthy Chesapeake Bay and Watershed

WHEREAS, the health of the Chesapeake Bay and its watershed depends on individual and community-based stewardship by the more than 18 million people who call this watershed home;

WHEREAS, the Chesapeake Bay Program is a leader in leveraging resources through a partnership approach;

WHEREAS, individuals, watershed groups, schools, local governments, and other organizations volunteer their time and talents by participating in environmental monitoring programs; and this *citizen science* represents a unique opportunity for advancing our knowledge while supporting education and community service;

WHEREAS, the cost of monitoring and assessment of tidal and non-tidal waters as well as other ecosystems in the Chesapeake Bay watershed exceeds the capabilities of individual partners and surpasses current funding within the jurisdictions, it is essential that all data sources of known quality be integrated into our monitoring networks;

WHEREAS, data resulting from volunteer and nontraditional partner monitoring, and citizen science efforts can inform impact assessments of local conservation actions as well as decisions that support targeting of management practices that will restore and sustain the health of habitats, living resources and communities across the Bay watershed;

WHEREAS, the Chesapeake Monitoring Cooperative (CMC) has created a framework to facilitate the collection and integration of volunteer and nontraditional partner monitoring efforts into the U.S. Environmental Protection Agency's Chesapeake Bay Program that represents a unique collaboration and network of monitoring groups across all six states and the District of Columbia;

NOW, THEREFORE, we, the undersigned representatives of the District, state, interstate, and federal entities with responsibility for monitoring the waters and resources of the Chesapeake Bay and its watershed agree that we will:

- Work cooperatively with the CMC and the Chesapeake Bay Program partnership to support and sustain a network of citizen science and non-traditional monitoring partners.
- Work to support an open-access clearinghouse of quality-assured environmental data generated by citizen scientists and nontraditional partners integrate this data into monitoring networks for educational, management, targeting and regulatory assessment applications.
- Promote the collection of water quality, benthic macroinvertebrate, and other monitoring data by non-traditional partners, such as, local and regional organizations, agencies, and/or educational institutions.
- Develop and adopt methods for data integration into regional monitoring and assessment strategies.
- Collaborate with the CMC in training of volunteer and non-traditional partner monitoring efforts.
- Support and actively contribute to the review and implementation of standard protocols and quality assurance programs to produce data of known and documented quality across all seven watershed jurisdictions.

Purpose is to forge a deeper understanding of and commitment to the use of citizen-based and other non-tradition partners' monitoring data in individual partners and shared partnership decision making.

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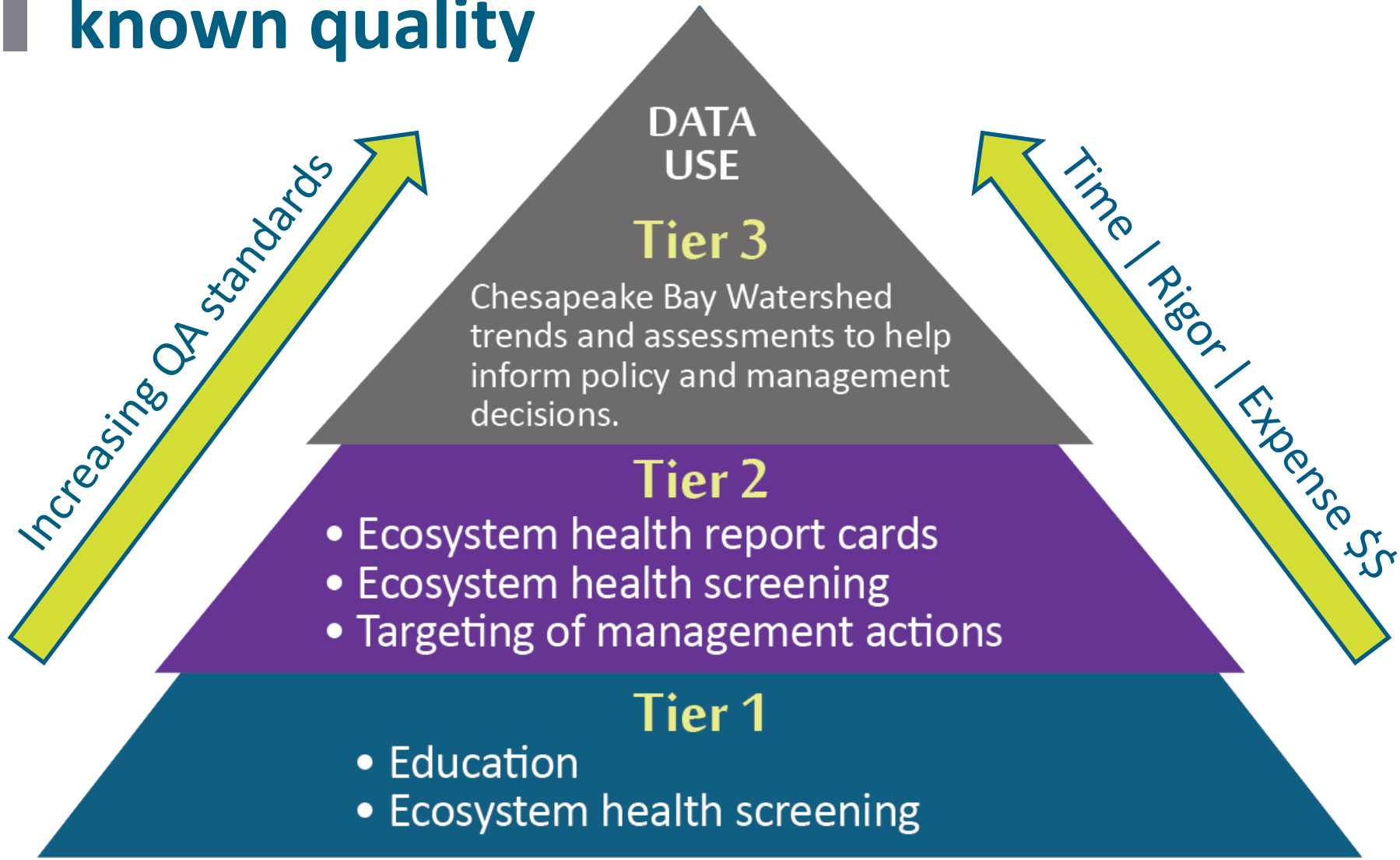
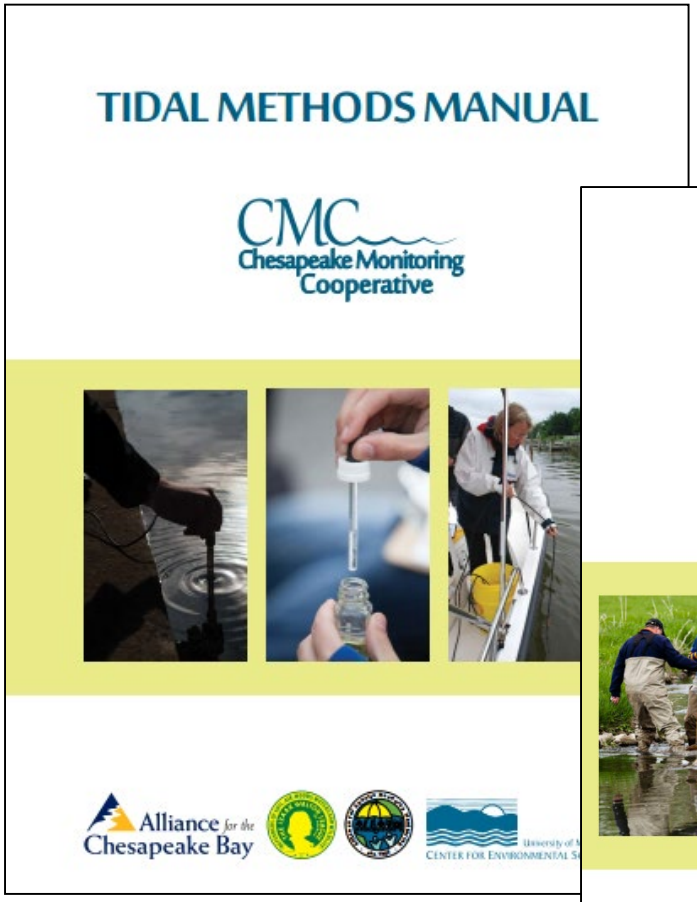
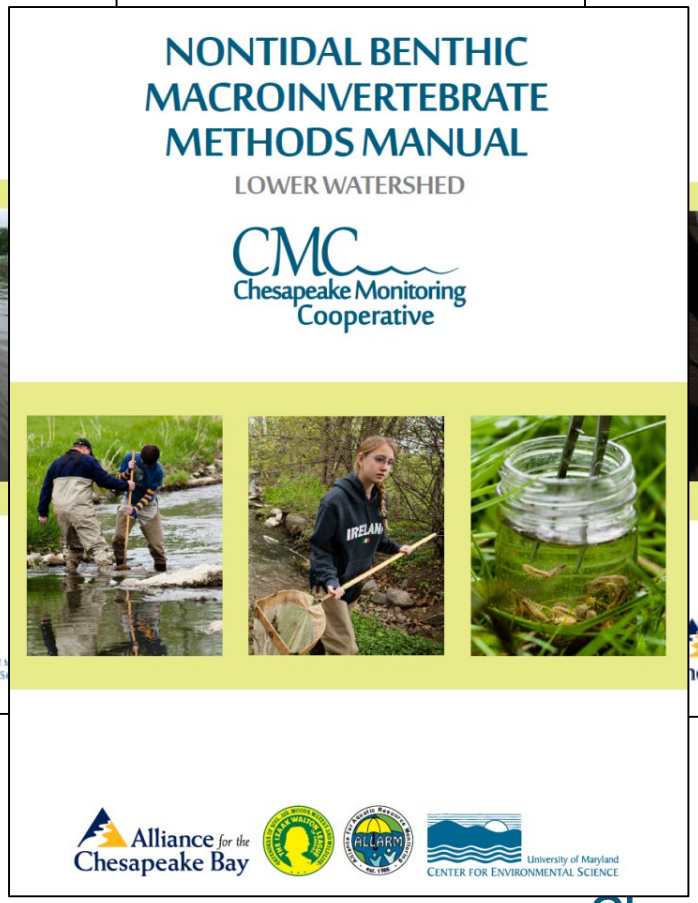
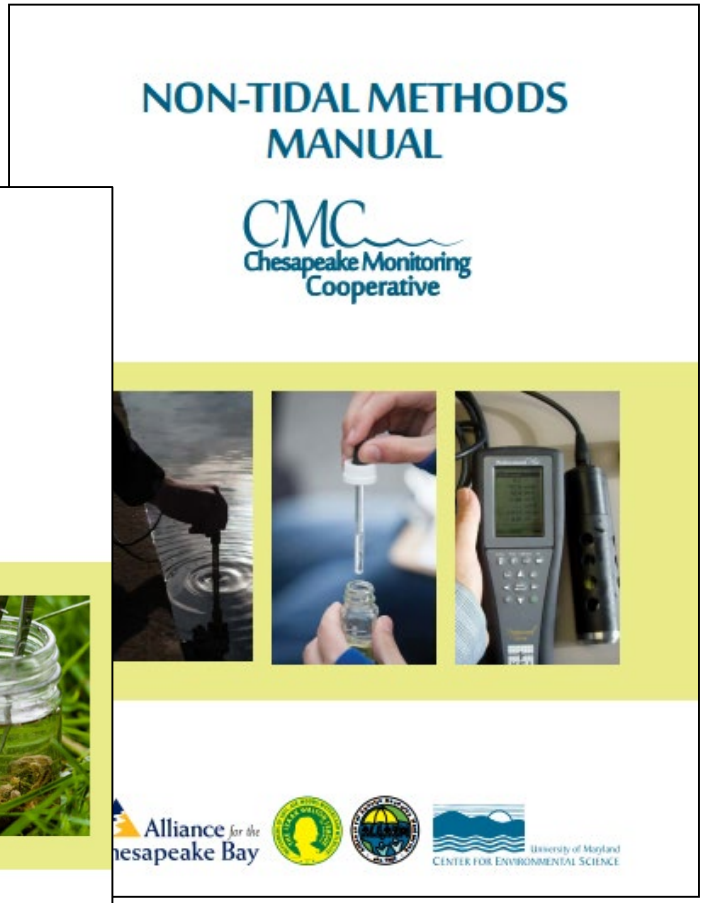
Quality Assurance: to classify data of known quality



Tools and Resources: **Method Manuals**







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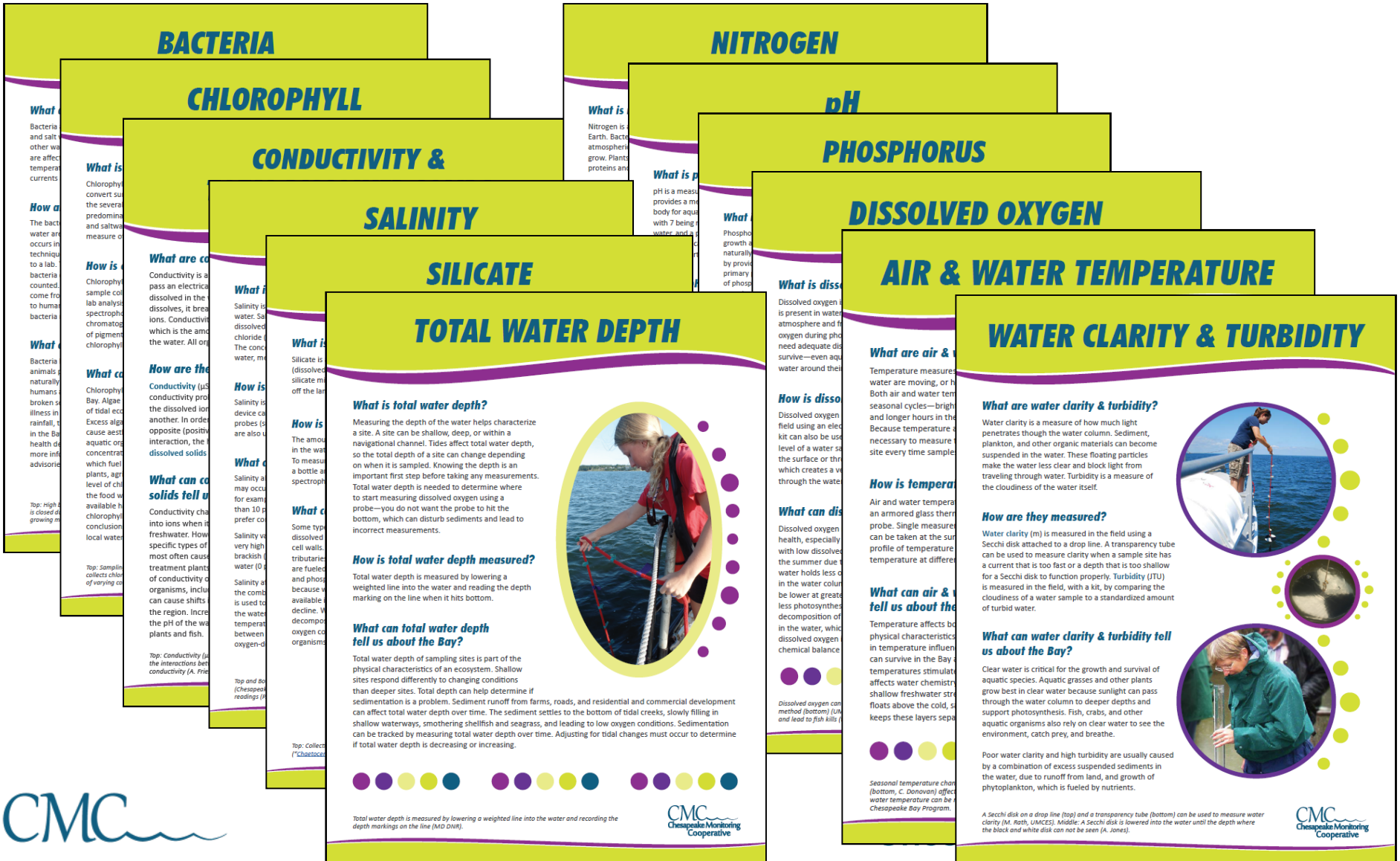
Tools and Resources:
Indicator Fact Sheets



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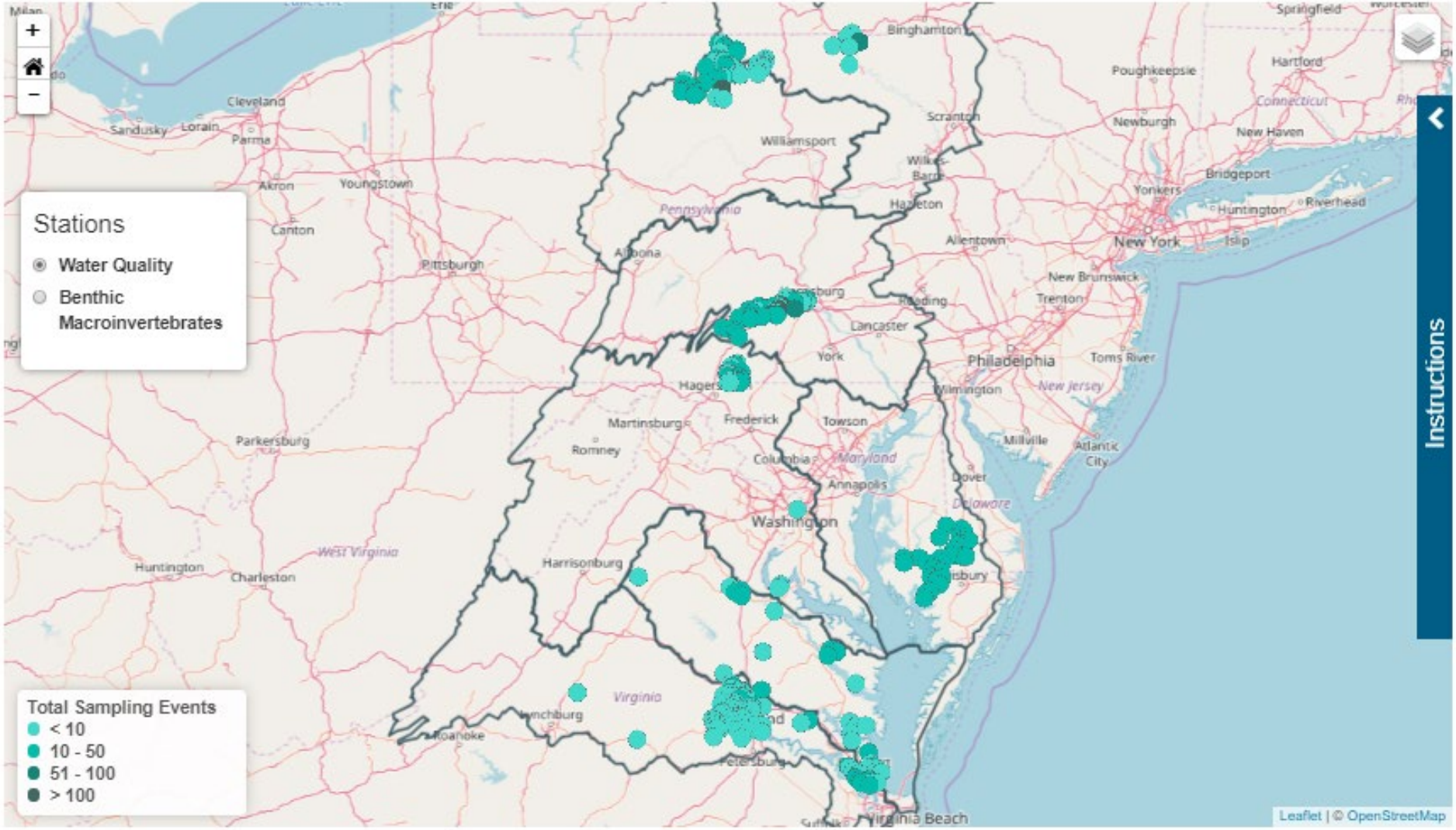
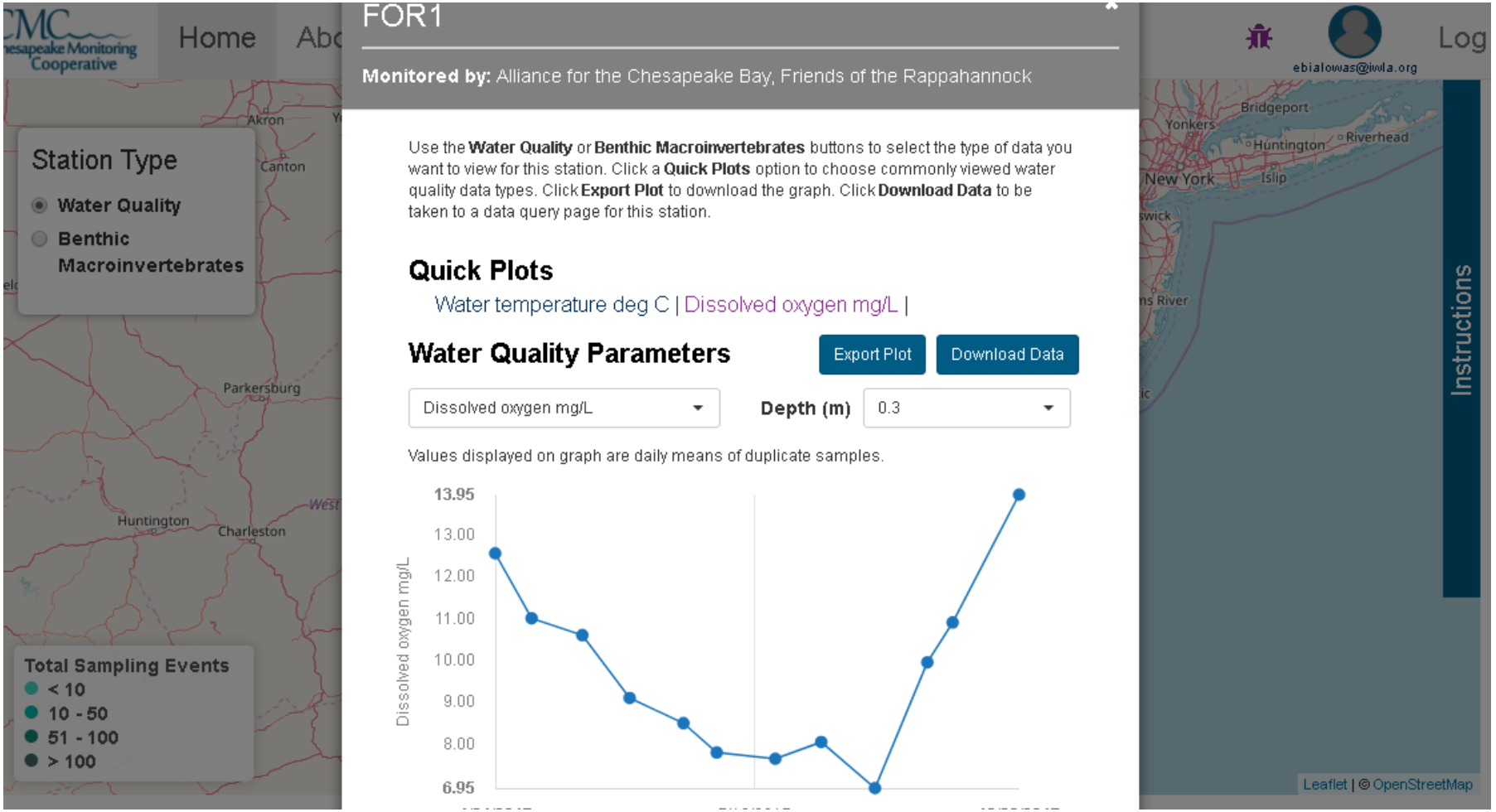
EXAMPLES MONITORING TOOLKIT

CHESAPEAKE DATA EXPLORER

Chesapeake Data Explorer



Chesapeake Data Explorer



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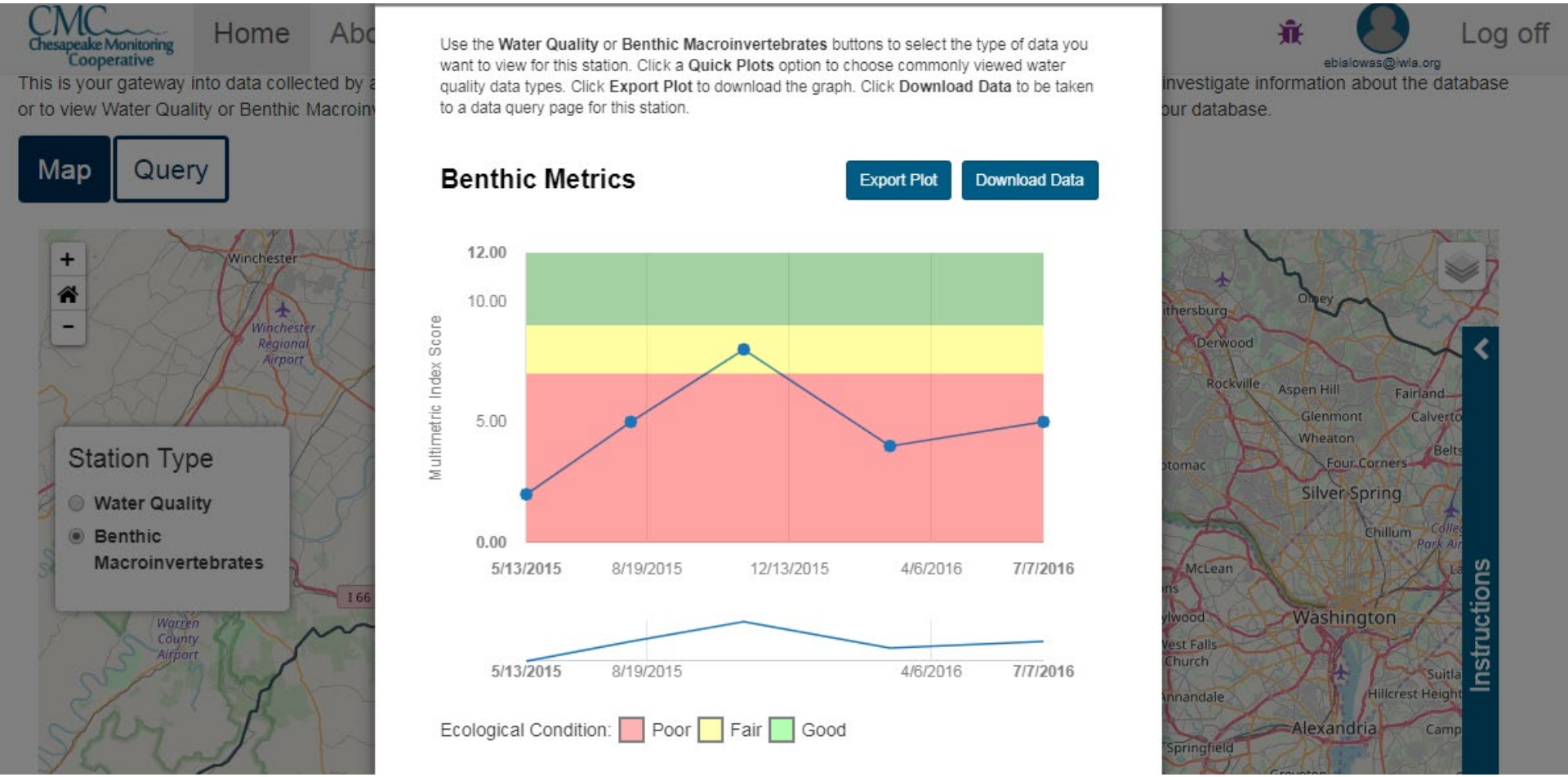

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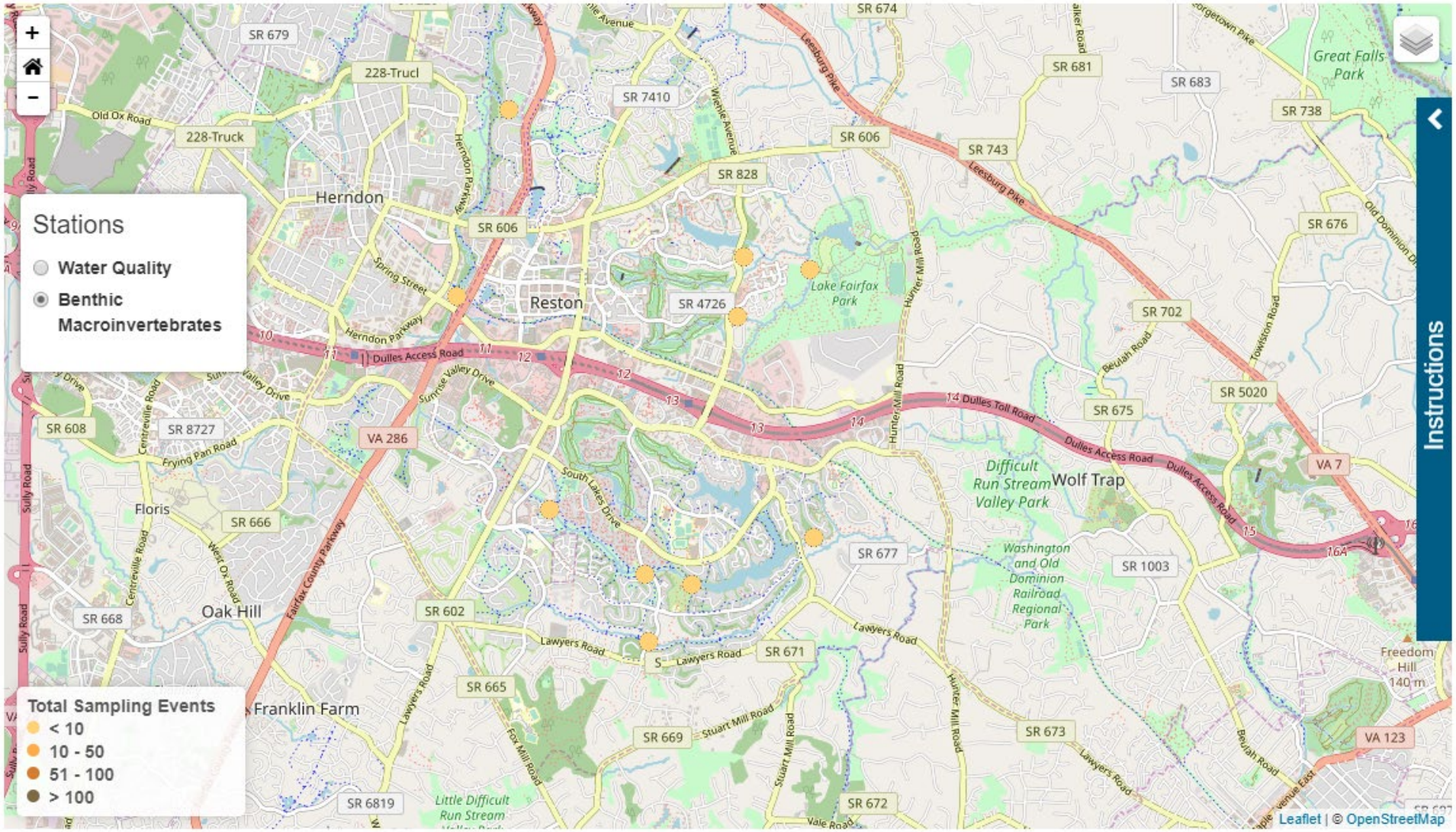


Chesapeake Data Explorer

STEPS TO BECOME A **CMC PARTNER**

Application for Assistance

To apply for assistance:

STEP 1

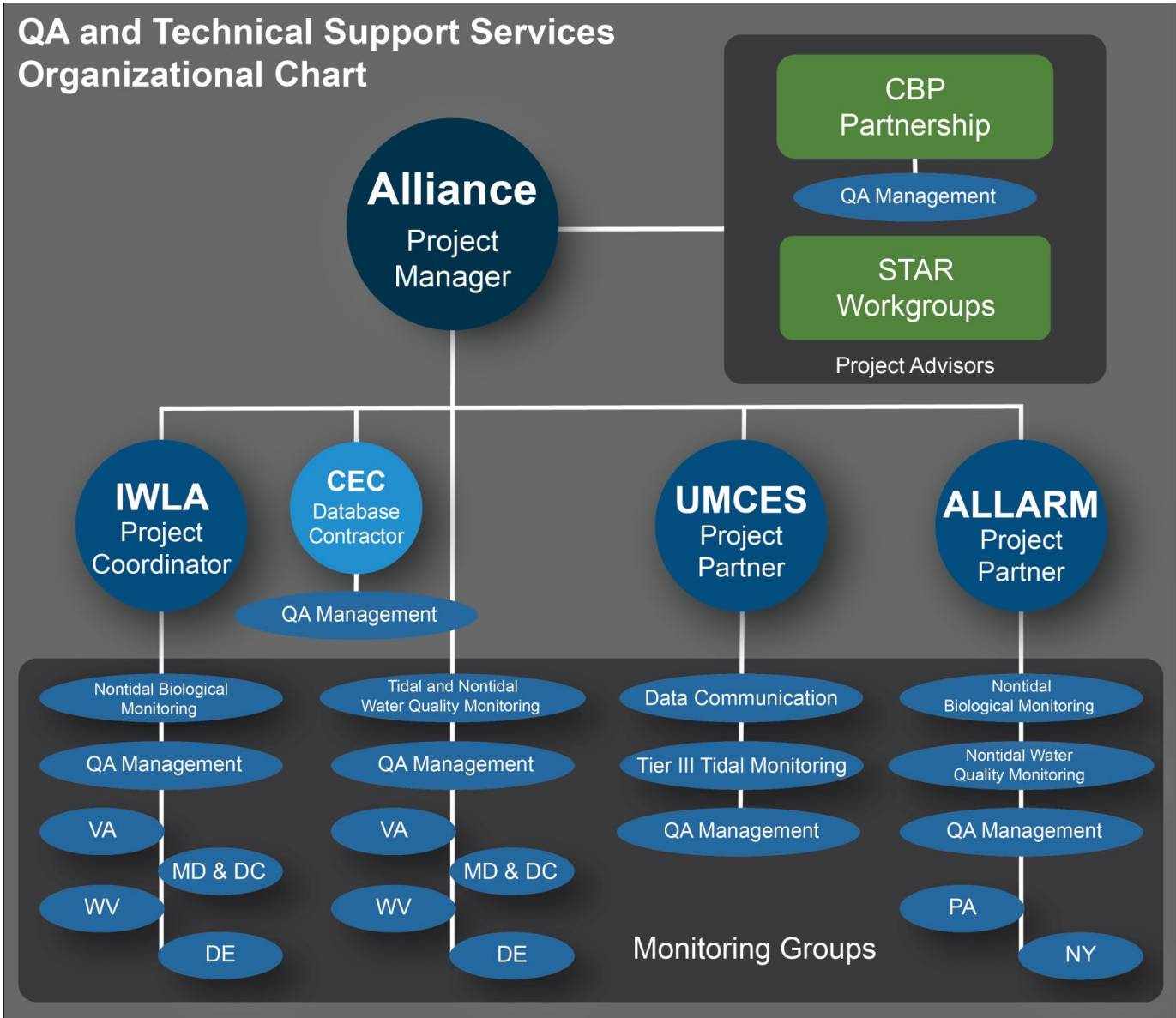
1) Complete the brief Application form.
   i. Basic organizational and contact information
   ii. Checklist of technical assistance needs
   iii. Open-ended Q's about the purpose for technical assistance
   iv. Identify service providers you've previously worked with

2) Email the completed form to Liz Chudoba at: lchudoba@allianceforthebay.org.

Connect with a CMC Service Provider

STEP

2



On Boarding

STEP 3

New Monitoring Groups – the CMC service provider works with each group to conduct a Study Design workshop, Training workshops and equipment selection.

OR

Existing Monitoring Groups – the CMC service provider works with each group to review current quality assurance and standard operating procedures to determine Tier level.

Technical Support Services

- Study Design Workshops
- Water Quality and Benthic Macroinvertebrate Monitoring Trainings, Certifications, and Re-certs
- Benthic Macroinvertebrate Order Level Identification
- Equipment and Equipment Suggestions
- QA trouble shooting
- Data Interpretation and Report Card Workshops
- Data Verification & Quality Control
- Support for Data Uploads

Photos courtesy of the Chesapeake Bay Program

Enter Data into Chesapeake Data Explorer

STEP

4

Minimum eligibility requirements:

- GPS coordinates of your monitoring sites
- Documented methods
- Documented quality assurance procedures

Next Steps

- Sign up for our E-Newletter
- Come talk to us
- New Website
- Other sessions at the forum
  - Data Interpretation
  - Water Quality Monitoring 101


Questions?
Credit: Chesapeake Bay Program