Building the Chesapeake Monitoring Cooperative: engaging partners in collaborative data collection

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Goals of Project

• Fill spatial and temporal gaps in agency data with volunteer and non-traditional data

• Integrate non-traditional data into Chesapeake Bay watershed health assessments

• Provide technical support and resources to volunteer and non-traditional monitoring groups

• Build a database that is the central hub for non-traditional data in the Bay watershed that is user friendly and accessible to monitors and data users

• Work with the CBP Partnership to benefit and support the work they are already undertaking
We have come a long way...

- New team of people
- Better understand our process
- Better idea of where and how folks are monitoring
- Better understand our limitations
Where we started

• Needed to find the existing groups monitoring
• Needed to understand what was being monitored and where
• Needed to get states to support and use CMC data
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- Shared a Census survey
  - To known groups and asked them to share
  - Asked where they were monitoring
  - Asked what parameters they were monitoring
Thank you for taking 15-20 minutes to help us learn about your monitoring efforts!

Are you monitoring in the Chesapeake Bay watershed?

This census is the first step of a larger project called the Chesapeake Monitoring Cooperative, which brings together data from community, municipal, county, state, and other non-federal monitoring programs, to aid understanding of the health of the Chesapeake Bay watershed in cooperation with the Chesapeake Bay Program.

With your help we will be able to identify locations, frequency, and types of monitoring taking place, throughout the watershed.

Through the Chesapeake Monitoring Cooperative there will be many opportunities for your program, including:

- A Chesapeake-wide database to store, retrieve, analyze, and interpret data;
- Capacity-building technical support to assist in monitoring program implementation;
- Access to data communication workshops, and
- Increased collaboration and networking across the watershed.
Census Outcome

600+ non-traditional groups engaged

- Coordinates of monitoring sites
- Understanding parameters measured and frequency
  - 82% of groups collecting temperature data
  - 52% of groups collecting benthic macroinvertebrate data
  - 45% of groups monitoring monthly
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  – Asked what parameters they were monitoring

• Met with state agencies
• Held a prioritization workshop
Prioritization Workshop
Prioritization Workshop
Outcome: Prioritization Report
Where are they monitoring?

Preliminary site coordinates of nontraditional monitoring

- Traditional Sites
- Nontraditional Sites
Data needs
MDE is interested in specific creeks for determining if a TMDL is needed.
Parameters of interest include:
- Dissolved oxygen
- Biological Oxygen Demand
- Chlorophyll $a$
- pH
- Total Suspended Solids
- Turbidity
- Water temperature
- Nutrients
Lessons Learned (cont’d)

• In practice, this is an iterative process
  – We have connected with more groups and more data since our Census and Prioritization process

• Engaging and integrating groups takes TIME
  – In practice, we are only getting existing groups into the CMC by the end of this grant cycle
Looking Forward

• We now know where we want to get
  – Where we want to fill gaps
  – What parameters are important to state agencies and the Chesapeake Bay Program

• What existing groups monitor does not always match the identified gaps
  – Now that we have our process in place, we will need to shift practices to help groups start filling in the identified gaps
Chesapeake Bay Program Monitoring Sites

Chesapeake Bay Volunteer and Nontraditional Monitoring Sites

Chesapeake Bay Volunteer and Nontraditional Monitoring Sites Integrated into the CMC
Questions?