

STAC Integrated Monitoring Workshop



April 12th to 13th, 2016

DAY ONE

- **Day 1, Session 1 – Common Understanding Phase**

Overview of Existing Monitoring Networks in the Choptank River Basin related to select Chesapeake Bay Agreement outcomes.

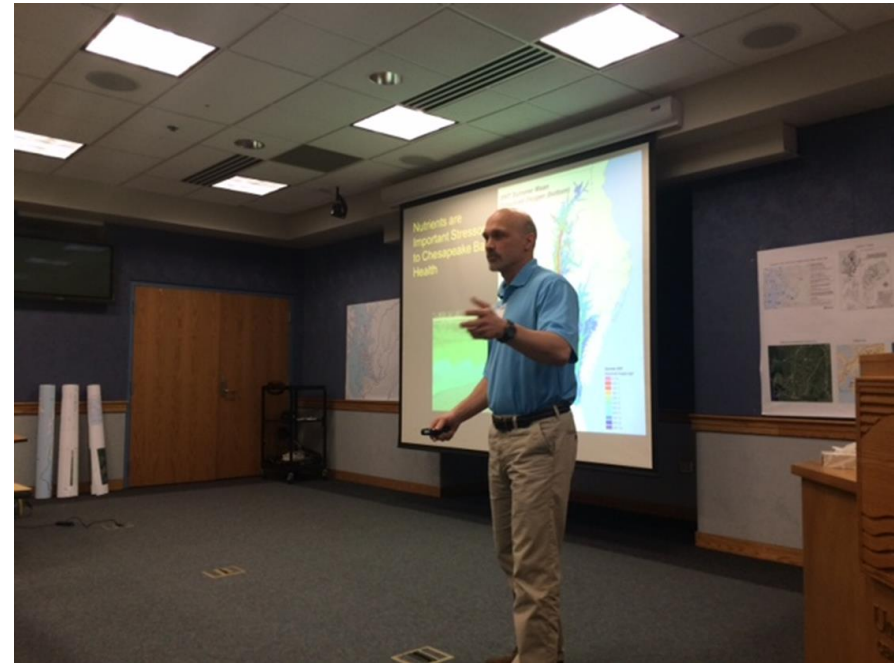
(Moderator: Peter Tango)

Tom Fisher: Water quality and agriculture (UMCES)



BMPs on Farmlands in the Upper Watershed

Scott Stranko: Bugs and fish (DNR)



More is needed besides the BIBI to determine stream health.

Ken & JJ: SAV (VIMS)



Bruce Vogt: Oyster restoration (NOAA)



Charlie Poukish & Matt Stover: PCBs and Hg (MDE)



Jennie Gundersen: Fort Meade EPA Lab Capabilities



Day One

- Day 1, Session 2 – Participatory Challenge Phase: Barriers to Integration Exercise.

Session 2: Barriers to integration of these monitoring networks and a look at initial solutions to overcome barriers.

Prioritize and discuss the types of barriers to enhanced monitoring integration (Moderator Bill Dennison)

Ice Breaker: Conceptionary Activity

Main Barriers to Monitoring and Integration

Voting for Barriers

Objectives not aligned (19)

System inertia (9)

Communication gap (19)

Different protocols (2)

Vested interests (2)

Variable data quality (7)

Instrumentation (0)

Lack of rewards (5)

\$ (20)

Variable end uses (5)




Guess the Keywords

Conceptionary

Conceptionary Barriers to developing integrated monitoring programs

Concept: Difficulty in obtaining reliable and equitable funding

Keywords: inflationary costs
unbalanced funding
sporadic funding



Chesapeake Bay Program
Science. Restoration. Partnership.

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Conceptionary

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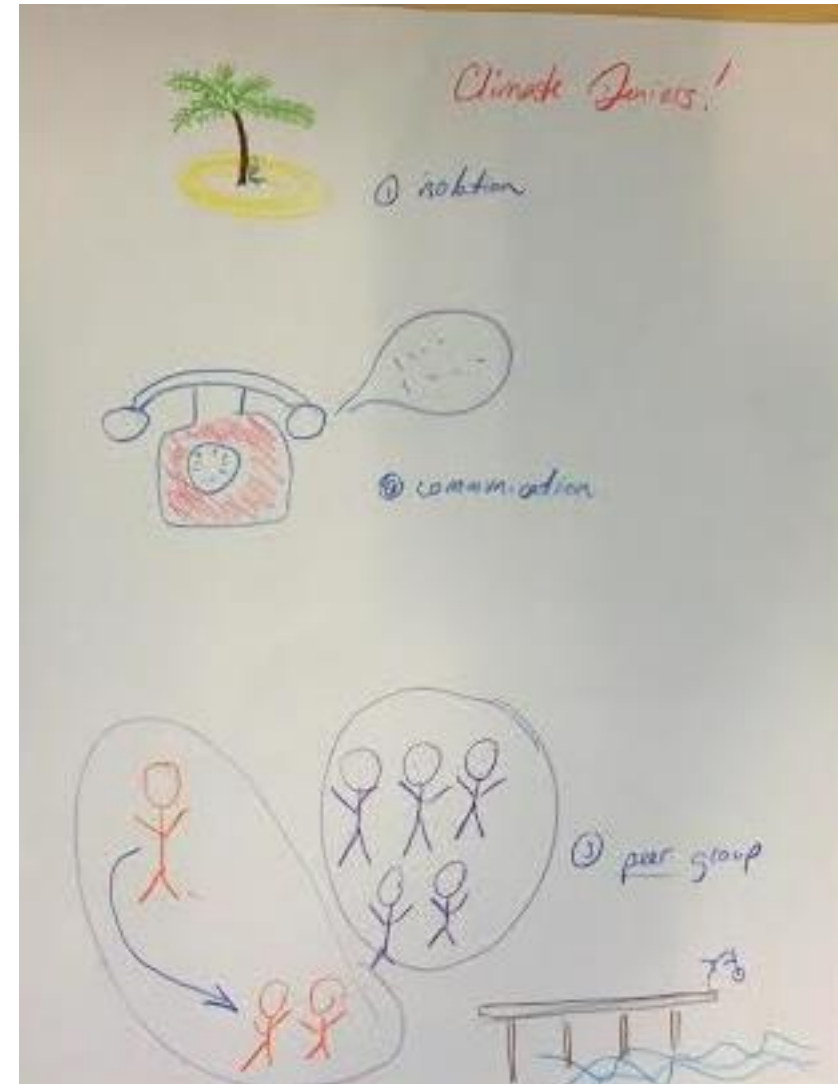
Barriers to developing
integrated monitoring
programs

Concept: Lack of communication
between monitoring groups

Keywords: isolation
communication
peer groups



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Conceptionary

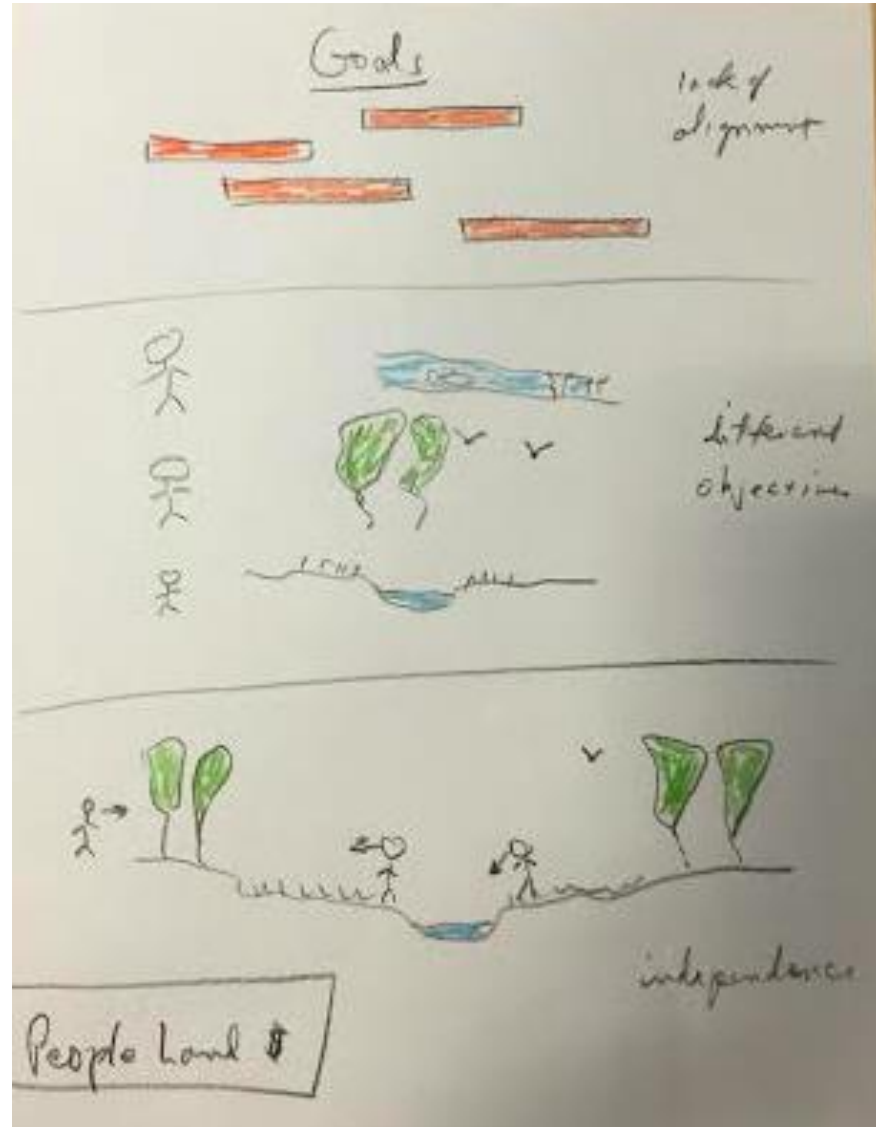
Conceptionary Barriers to developing integrated monitoring programs

Concept: Monitoring objectives not aligned between groups

Keywords: alignment
objectives
independence



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Brainstorming how to overcome barriers

ming lack of communication between multi
 wps Multiple Databases

Barriers: Laziness

Lack of funding

Lack of resources → Finding willing partners
 → need to make priorities

Lack of trust
 → different goals & objectives
 → different guidelines

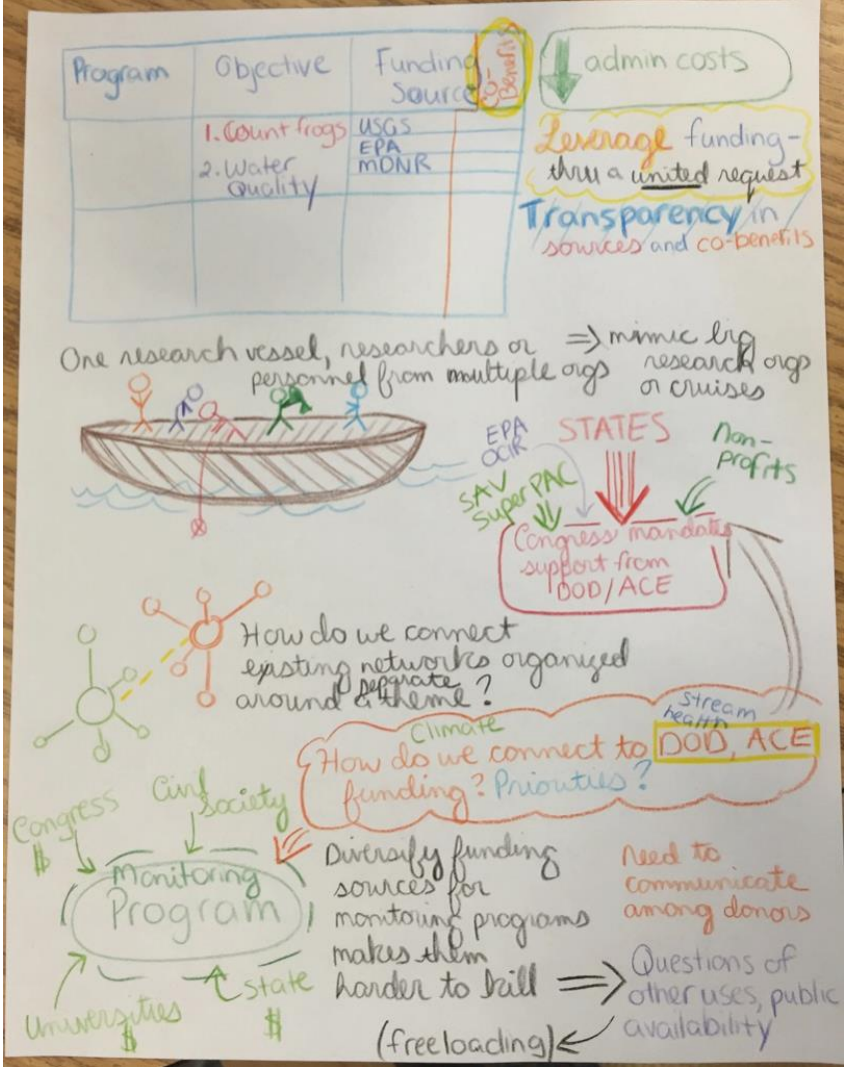
No clear message

Solutions: Get rid of red tape?

One dedicated group to oversee all data collection groups

One stop database

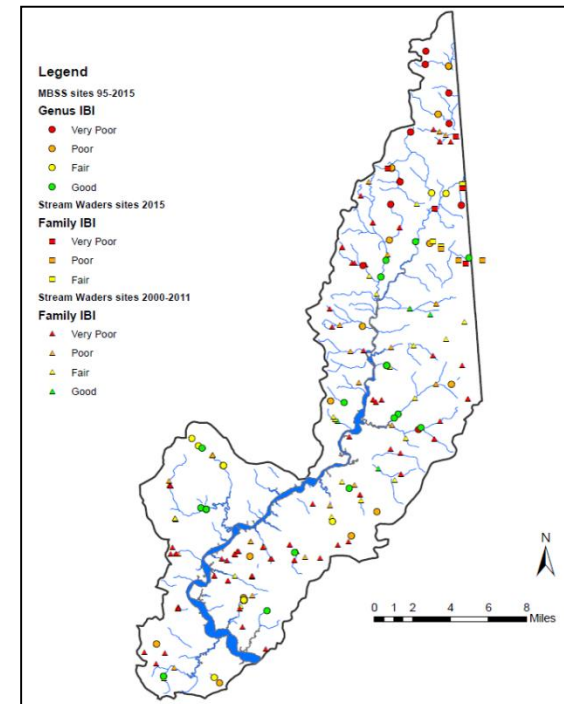
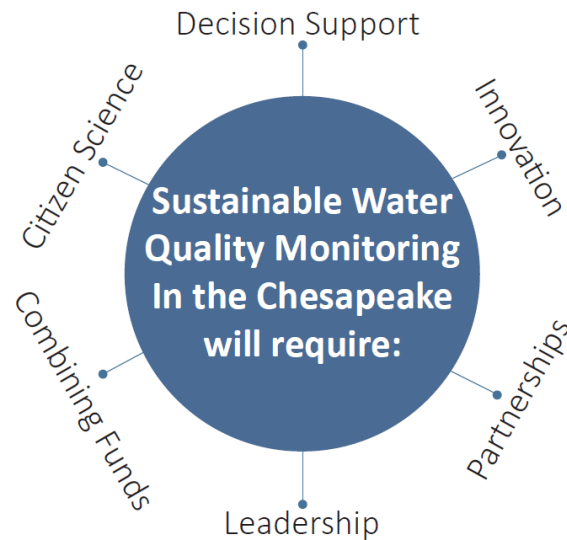
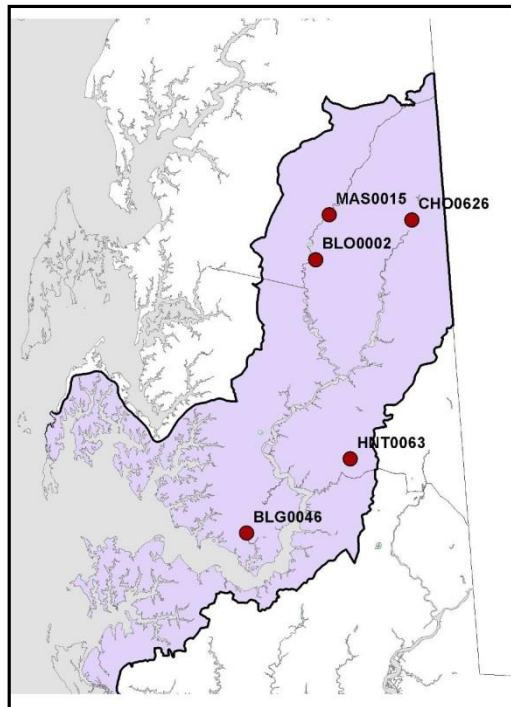
Inventory of universities group



DAY TWO

- Day 2, Session 3 – Participatory Action-Solution Phase

Session 3: Opportunities and Solutions to Better Integrating Networks (Moderators: Peter Tango and Mindy Ehrich).



Mapping and Discussions Group Exercise





Outcomes of Workshop

- Great discussion and networking; it was an example of fruitful communication among place-based monitoring interests. Expanded communication is essential to identifying and aligning common objectives.
- But integration at even the Choptank scale would benefit from inclusion of more monitoring partners. Thus the ability to integrate monitoring at the much larger Bay Watershed scale remains a daunting task.
- Open data sharing and improved awareness of available data sources and monitoring efforts is essential to aligning objectives, improving monitoring efficiency, and appropriately targeting new monitoring projects and technologies.
- Expanded, quality-controlled citizen science is a promising pathway toward the commitment of cost-effective new resources to additional high density monitoring. The efforts of the Midshore RiverKeeper Conservancy in the Choptank provides a model for additional programs Bay-wide.

Consensus Recommendations to Better Align Objectives/Improve Communication

With regards to aligning objectives:

- Build bridges between programs based on common elements.
- Build trust/develop written cooperative agreements between groups.
- Highlight the most important overarching goals while recognizing the significance of individual goals too.
- Be willing to give up control over some areas; agree to make adjustments in objectives.
- Include modelers – they often highlight key objectives that build on essential, diverse monitoring data sets.

With regards to improved communication:

- Diverse monitoring groups/interests should periodically get together at community meetings; promote place-based discussions with all partners in an area.
- Bring groups together early in the process; pre-communicate who's doing what and why.
- Promote/facilitate open and rapid data sharing; link publications to archives of accessible data.
- Maintain an easily accessible directory of monitoring data sources and groups involved in monitoring.

Consensus Recommendations to Expand/Preserve Funding/Optimize Use of Funds

With regards to new funding/monitoring efforts:

- Diversify sources of funding (fed, state, NGOs, private).
- Leverage new funding partnerships by promoting joint monitoring efforts.
- Expand spatial/temporal extent and data types collected by quality-controlled citizen monitoring.
- Identify additional funding and tools for quality-controlled citizen science.

With regards to preserving/optimizing existing funding/monitoring efforts:

- ID the most critical monitoring infrastructure and essential long-term data.
- Prioritize monitoring at the scale being managed.
- Coordinate groups that are sampling at (or nearly at) the same site; piggy-back monitoring.
- Highlight BMP/restoration successes.
- Leverage existing long-term monitoring sites where possible if adding new parameters to monitoring.

Thank you from your Steering Committee and Coordinators

CBP STAR
Leadership



Bill Dennison



Scott Phillips



Mark Bennett



Mindy Ehrich



Peter Tango



Rachel Dixon



Carl Friedrichs



Kathy Boomer



Peter Kleinman



Natalie Gardner

Some Recommendations and Suggestions to Pursue Alignment and Integration Across Outcomes

- Use SAV aerial survey for wetland and shoreline delineation
- SAV survey in previously unsurveyed areas. Needed in the upper Choptank R.
- Ecological studies with the oyster restoration, linking to WQ
- Work with Citizen Science groups that have highly developed monitoring programs
- Incorporate MDE shellfish monitoring data
- Further connect tidal and non-tidal/upland monitoring needs, resources and objectives
- Coordinate groups that are sampling at (or nearly at) the same site
- Integrate upper watershed water quality and biological mapping
- Highlight BMP successes
- Consider additional parameters at the long term monitoring sites (TBD)
- Improve fish data availability
- Collecting new fish data in underrepresented habitats
- DATABASE of all data

Outcomes of Workshop

- Great discussion and networking
- Follow-up needed to work with ALL participating partners in the Choptank area to fully understand the network to get to a more detailed level of integration
- Citizen Monitoring will be a great link –Midshore RiverKeeper Conservancy has numerous stations that could be collaborated upon