Integrated Monitoring Networks Workgroup (INWG) Conference Call

Wednesday, February 17, 2016
1:00- 3:00 PM
CBPO Location: 305A Conference Room
Conference Line: 1-866-299-3188 **Code** 267-5715
Adobe Connect: http://epawebconferencing.acms.com/inwg/ (enter as guest)
Meeting Materials: http://www.chesapeakebay.net/calendar/event/23601

Minutes

1:00 Welcome, Introductions, Announcements *(Peter Tango – USGS@CBPO, Coordinator)*

It was discussed that, at a minimum there need to be quarterly/biennial meetings alternating between tidal and nontidal. Meetings have been scheduled for 2 hours but if need be, time can be expanded to facilitate appropriate discussion.

- Please note future suggested agendas below.
- Suggestion of including all three every meeting: nontidal, tidal, Cit Sci.
- Chair needed for Integrated Monitoring Networks Workgroup- members are asked to consider the position. For more info or to volunteer, contact Peter Tango.

STAC WORKSHOPS:

- Zoë Johnson in Climate Workgroup mentioned the focus on discussing monitoring and climate signals for future STAC workshop- working with 4-5 GITs to discuss monitoring needs (including SAV, brook trout, and oysters.
- STAR has been putting in proposals for STAC workshops to help with analysis needs and support work.

1:10 Citizen Science: Directions for Macroinvertebrate Data *(Lea Rubin, IWL, Citizen Science Project Coordinator)*

The citizen science and nontraditional monitoring project through a grant awarded to the Alliance from the Chesapeake Bay is examining macroinvertebrate data collected by volunteer monitoring programs across the watershed. The IWL is working with ICPRB to explore specific areas of interest.

- Lea Rubin discussed how this data is currently being used and how we might use it in the future.
- With the addition of this data, the Bay Program should be better able to track progress in stream health. ICPRB is working to focus on a smaller HUC 8 or HUC 12 watershed to see if the health of the stream can be tracked with the help of this information.
- The goal would be for macroinvertebrate data to fall into (Tiered Framework Document) Tier 1 and Tier 2. Standards and Attainment Assessments would need data classified to genus level, but volunteers only go to family level. It was added that in the Bay, the Bay Program currently uses macroinvertebrate data for ambient living resource standards and assessments.

Discussion:

What specific uses do you have at state or Bay Program level for volunteer-collected macroinvertebrate data? Are there regions of interest or specific areas for bmps?If volunteer programs are in place, are they willing/able to match their programs to the standards needed for data collection?

- Some of the family level volunteer monitoring could potentially be used for Status and Trends, although 2008 baseline has not been created yet. However it will probably be genus based. Going forward there will be two indices: genus and family based.
- The team is currently working on a survey in April to determine where/how often, how long monitoring programs are currently. This will help identify where monitoring is taking places, as well as how this data might be used. There are opportunities in Maryland and VA for datasets down to genus and family levels. Confident of standards and coverage.

Potential regions where you may be interested in more macroinvertebrate data?

- Some local governments do collect tidal samples. The data could be used to enhance indicator assessments. Might be useful to have data in the connection between tidal and non-tidal areas.
- Mindy noted that it would be interesting to know how much the volunteer groups would fill in the current maps available - to see where they would fill in the maps we currently have.
- The Citizen Science Program will follow up with state agencies to see if they'd be interested in using this data. Currently, many state agencies are already engaged, with letters of support from state agencies. VADEQ uses the citizen data for their 303d and 305d lists, based on criteria that will be used for this project. MD and WV agencies are engaged as well.
- Contact Lea with questions or ideas etc. lrubin@iwla.org

Is the database being used for the Chessie BIBI different from the CitSci database or is there overlap?

- Hopefully these data management protocols within these databases could be transferred over. We hope to transfer these scripts to agencies, etc. the metrics and protocols. These data management protocols would be able to be transferred to states.

2:00 Nontidal Network supplemental sampling – *(All Discussion)*

Recent work by USGS has highlighted a need for more information needed on storm events to enhance load estimation. During some years, too few storms occur in a quarter and samples may still get collected to address a projected annual number of samples collected each quarter even though they are not effectively storm samples. A more effective use of the resources may be to hold over the effort and collect additional samples in high flow events. We would like to discuss the consideration by the community of addressing the focus on data needs in high flow events by conserving budget and effort resources during quarters without storms and using the effort in the next high flow event rather than targeting 'supplemental samples' at more routine flow conditions just to meet a sampling effort target.

- Based on analyses of sampling records, there is recognition that highest flows are under-represented in the sampling.

- Base and mid-range flows have been well covered by the monitoring program.
- Acknowledging limited resources, should we still continue collecting smaller discharges, or can we reserve samples until larger storms to facilitate information gains to better characterize conditions at higher flowers?
- Please note Excerpt from Chapter 5 Nontidal WQ Network Monitoring Doc

Discussion of possible adjustments to the Chapter 5:

- There is concern about sampling approaches that try save resources and NOT sampling a storm. There should be additional samples, not less. There are not enough storm results coming through to support the analysis.
- Possibly need to sample more if a note-worthy event occurs to sample the larger storm results, as opposed to not sampling at other times. The goal is to characterize range of hydrologic conditions throughout the year.
- Won't always fit in neat quarterly quotas of samples. There are some basins where we aren't getting the high end of the storms coming through. We want to prioritize the high flow data; we need to build our database of those larger storm events. Database needs to be built of the largest storm events.

Challenges in capturing larger storms:

- It's hard to know big storms until after the fact at the end of the year. Possibly future collection on larger storms might include three samples: rise, peak, and decline to categorize a storm.
- We can provide feedback to show the jurisdictions how representative the historical sampling is for the individual sites relative to the stream flow record that might help to better identify extreme events, although we don't have that information summarized for stations with less than five years of record.
- Some resources: USGS have predictions on hydrograph for sampling times. Jurisdictions would like input on particular sites that might give a better picture.
- Other difficulties include karst topography sites. Knowledge of individual stations is required.

Does the text in the guiding document reflect the type of flexibility in sampling that is already being utilized in the field to capture storm events? i.e, does the document reflect flexibility to capture multiple storms in one quarter and possibly no storms in another quarter without being penalized. Jurisdictions are already adjusting their schedules to capture the storms.

- **This document should be rewritten to reflect the priority to catch the larger storms, vs capture one storm per quarter**. This document was redrafted last Nov. It would need to go AMQAW (data integ) for review coming up Mar 30, 2016. Doug (Moyer) agreed to take a look and revise. In the latest version of chapter 5, there is a table of collection agencies as of 2016. Doug could start populating agencies' specific stations, number of samples collected, and where on the hydrograph the sample was taken.
- This sampling can then be presented to the sampling groups to show examples of good coverage. Also to showcase patterns for the model, etc. Possibly in the next one or two meetings.

2:30 STAC Integrated Monitoring Workshop Plans update: *(Mindy Ehrich, UMCES)*

An effort to pilot a small region integrated monitoring plan as a template to addressing multi-indicator needs over the whole watershed is the focus of an upcoming Spring 2016 STAC workshop. Mindy will present that status of workshop thinking and we will welcome your suggestions, insights and comments as the workshop plan gets finalized this winter.

Summary:

- This workshop will focus on barriers and opportunities for existing monitoring networks related to other agreement outcomes with a focus on blue grabs, fish habitat, SAV, WQ, stream health, toxic contaminates. This two day meeting will occur between April 12-13. It will focus on the Choptank watershed, held at the Horn point Laboratory in Cambridge, MD. Tom Fisher from Horn Point will provide background of current work. This workshop will have exercises working with barriers to these issues to come up with strategies to integrate monitoring needs. This will be a small group workshop. A lot of monitoring going on in Choptank- Ocean Acidification monitoring, shoreline hardening, oyster restoration, etc. that can help to work with this workshop.
- **The outcomes desired:**
    - To create approaches by piloting a process in a smaller watershed that can be applied to a larger scale.
    - To gather knowledge from work currently going on and to create partnerships to share information and direct future work.

3:00 Adjourn

ATTENDEES

Coordinator	Peter Tango	USGS
Staff	Melissa Merritt	CRC
MD & VA	Adam Griggs	ICPRB
Academic	Caroline Donovan	UMCES
VA	Cindy Johnson	VDEQ
MD & VA	Claire Buchanan	ICPRB
Federal	Doug Chambers	USGS
Federal	Doug Moyer	USGS
Federal	Jeni Keisman	USGS
Federal	Jennifer Greiner	USFWS/CBPO
Federal	Joel Blomquist	USGS
Federal	Ken Hyer	USGS
NY, PA & MD	Kevin McGonigal	SRBC
Federal	Laura Free	EPA
Regional	Lea Rubin	IWLA
MD	Leah Miller	IWLA
PA	Lee Eicholtz	USGS PA
PA	Mark Brickner	PA-DEP
MD	Mark Trice	MDNR

Federal	Mary Ellen Ley	USGS/CBPO
Federal	Mike Langland	USGS
MD & VA	Mike Mallonee	ICPRB/CBPO
Independent	Roberto Llanso	Versar
MD	Sherm Garrison	MDNR
Federal	Zoe Johnson	NOAA