



Integrated Monitoring Networks Workgroup (INWG) Conference Call

Wednesday, February 15, 2017

1:00- 3:00 PM

CBPO Location: 303 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/24695/>

Minutes

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

Peter recapped the Feb 8-9, 2017 SRS Kickoff meeting, which set the stage for the upcoming two years with the new review meeting schedule. Topics discussed at this meeting included the budget changes possible for the new year, as well as new perspectives that can enhance Bay Program work including sociological research as well as immersing new research from STAC that could have impacts for Chesapeake Bay work.

Peter also discussed upcoming meetings for the Criteria Assessment Protocols workgroup regarding the Benthic IBI. There are some locations in the Bay states that have TMDLs because of the BIBI scores. To better dissect the causes and move the TMDL forward, there is interest in better understanding the BIBI scores, and possibly add new information into how these scores are used for TMDL implementation.

1:10 Chesapeake Monitoring Cooperative Report on the Prioritization Process – *Lea Rubin, Izaak Walton League of America*

The Chesapeake Monitoring Cooperative (CMC) has investigated spatial data gaps and needs of the CBP partnership by meeting with and listening to data user stakeholders including federal and state agencies, watershed jurisdictions, and inter-state commissions. Additionally, CMC has surveyed volunteer and non-traditional data producers to determine what is currently being monitored and what motivates volunteers to monitor in the watershed. Lea will present this report which summarizes the findings of these two investigations.

ACTION: IMN workgroup members will have until **March 1, 2017** to review and provide comments and feedback on the Prioritization Report to Lea Rubin, lrubin@iwlwa.org.

This report was sent to all members of the IMN workgroup.

This report summarizes the findings of spatial gaps and data gaps and needs, and avenues for non-traditional data to meet some of those needs. If the individual states could review their section (DE, PA, VA, DC) to make sure this information accurately reflects what was stated originally.

Lea reviewed not only contents of the report, but also additional priorities of CMC, including facilitating the inter-state communication of monitoring groups to more effectively cover multi-state watersheds, supporting additional volunteers for current monitoring programs, and providing success stories as a method to allow other groups to use this framework and information for their own goals.

All workgroup members received this document on the same day this meeting was held. Again, workgroup members are asked to please review this document to make sure that all priorities are

Next IMN Meeting: Mar 15, 1:00pm-3:00pm

reflected accurately in this report. IMN workgroup members have until Mar. 1, 2017 to provide any feedback for this report.

1:40 Review of the Status of the Nontidal Water Quality Monitoring Network –Peter Tango, USGS@CBPO, STAR Coordinator

In Jan, SRBC, WV, PA and VA provided updates for their non-tidal monitoring programs. This month, MD provided an update, with WV and PA providing additional information.

Tom Parham gave an update on Maryland's non-tidal sampling for 2016: Maryland's nontidal network includes 24 sites, with 6 western MD sites added. There have been no issues to report.

Originally PA DEP started sampling six stations in MD when the non-tidal network was initiated in 2005. PA DEP decided to turn over sampling those stations to MD DNR in October 2014. Mary Ellen added that a comparison study between the labs was devised to test for a possible "lab effect". 42 samples were collected (by DNR) under the study and 13 samples were collected prior, between July and September 2014. Mary Ellen noted that the information was presented by Bill Romano in the November Data Integrity Workgroup meeting, and is still being reviewed, but most elements seemed comparable between the labs. However, it cannot be determined if there was any error between field procedures between PA and MD sampling.

Mark Brickner reaffirmed the update for Pennsylvania, noting that everything was running smoothly.

Action: Peter added that he will get in touch with Mike Langland for any additional monitoring concerns or information for Pennsylvania.

Lucretia Brown gave the update for Washington, DC. Some parameters were added in 2016, including mercury. The FY17 commitment has been started. There are 3 stations in Washington, DC that is sampled by USGS, reporting the data to the CBP.

Doug Chambers gave an additional update for West Virginia. Sampling is going well; there are no problems to report. The staff in the Leetown field office has helped improve sampling capability in the Eastern Panhandle.

Mary Ellen added that the nontidal data submittals for water year 2016 are due soon.

Doug Moyer asked about when the USGS can expect to receive water quality data from nontidal stations from Sept. 30, 2016. His hope is to have that data by early/mid March 2017. This would allow the loads and trends to be provided to the jurisdictions by June/July. Doug added that it takes about four months for USGS to process this information to then send out to interested parties.

Cindy added that Mar 31 is the deliverable due date as listed in their grant. Data through September 2016 has already been transmitted. There was a question of whether there are separate draft and final submittal dates.

Action: Peter and/or Mike Mallonee will look into finding the deadlines for data submittal.

2:10 Chessie BIBI Action Team Meeting Recap- Kyle Runion, Habitat GIT Staffer

Next IMN Meeting: Mar 15, 1:00pm-3:00pm

Kyle is with the Stream Health workgroup with the Habitat GIT.

Kyle provided a background to the Chessie BIBI. This is an acronym for Basin-wide Index of Biotic Integrity, which measures the biological quality of streams on a common scale using macroinvertebrate data collected by federal, state, and local stream monitoring programs in the Bay region. The BIBI was developed in 2011 by CBP & ICPRB and named in the Stream Health Management Strategy and Workplan as the indicator for tracking improvements in stream health and function. Refinement of this index began in 2016 to make additions to the stream macroinvertebrate database to hone the index sensitivity and test genus-level metrics.

A [draft report](#) of the refinement and instructions on accessing the database used for refinement was distributed in early 2017. The analysis database contained over 25,000 sampling events with sampling sites classified into five categories ranging from reference to degraded based on 85 metrics of habitat and water quality from these raw samples.

The BIBI Index was created on two spatial scales: bioregion and region. 12 bioregions were used to accommodate natural variation in stream biota based on hydrology, topography, and climate. Bioregion-specific indices are good for identifying local causes of degradation and measuring biological responses to restoration efforts. Bioregions were then divided and grouped into coastal and inland regions to more effectively report stream health for the watershed as a whole.

Claire noted that scores shown in the bio-regions are area-weighted. Claire added that this is different than what was originally done by the CBP.

Metrics keyed to order-, family-, or genus level attributes were used to build versions of the index for different taxonomic resolutions in the raw counts. Order-level indices are less sensitive, but they do not require laboratory cataloguing and are suited for rapid screening in the field. Family-level indices performed very well in most cases. Genus-level indices performed marginally better than family-level indices in some but not all bioregions. This is likely because genus-level indices are affected by seasonal differences that are not accounted for in the indices.

Kyle added that one of the goals of this project is to develop an indicator for the Stream Health Outcome. The SH Goal is to improve the health and function of ten percent of stream miles above the 2008 baseline for the Chesapeake Bay watershed. To use this data as an indicator, ideally it would be available through the Chesapeake Environmental Data Repository (CEDR). Many data providers must make their data available through EPA's Water Quality eXchange program (WQX), so while there are no requirements to submit to CBP the data is publically available.

Data providers run on data collection cycles of 3-5 years for their entire collection of sampling sites. Measuring trends on an annual basis may be difficult if a) data providers prefer to submit their entire dataset at once every so many years, and b) because annual submissions will not tell the whole story. There is a possibility of updating progress every number of years. Most CBP indicators follow an annual update, but there are some examples of multi-year indicators. Data providers have indicated that they are happy to submit whatever data has been collected annually – the group will work with the Stream

Next IMN Meeting: Mar 15, 1:00pm-3:00pm

Health Workgroup to determine how often any indicator should be updated. The project team is willing to provide the r-script used to calculate the BIBI or an app to do so for any agency interested. Those with staff who have knowledge of r code would probably find the script useful and those without could easily calculate the same indices with the app.

2:30 Aligning Staffer Skills with GIT and Workgroup Needs- *Melissa Merritt, STAR Staffer*

Melissa will brief the group on an upcoming process to involve staffers directly with identified GIT/workgroup needs.

Melissa discussed an opportunity to further engage staffers and provide possible assistance to the needs of the CBP.

Many needs assessments have been/ are being conducted within the Bay Program. Staffers are encouraged, and want, to contribute to the Bay program in meaningful projects. But many GITs and workgroups of the CBP, and the staffers who work with them, are susceptible to working on singular issues within their group, unsure of what other groups are doing, or how to best combine efforts to achieve results that could benefit more than one group. Therefore, I would like to establish a process/method for allowing staffers to potentially help address some of those needs in meaningful projects, with a focus on over-arching questions that will provide enhanced value outputs to be used by more than one GIT/workgroup.

Melissa discussed that the IMN workgroup has a perspective of needs and questions that drive much of the Bay work, before it's gotten funneled into different GITs. It would be helpful if anyone in this group could keep this initiative in mind when thinking about questions that need support to answer, and who might be able to work towards that answer. Feedback is welcomed.

3:00 Adjourn

Participants: Peter Tango, Kyle Runion, Mary Ellen Ley, Lea Rubin, Laura Free, Doug Moyer, Doug Chambers, Cindy Johnson, Lucretia Brown, Mark Brickner, Tom Parham