



## Integrated Monitoring Network Workgroup (IMNWG) Meeting

Wednesday, April 17, 2019

1:00 PM – 3:00 PM

Conference Line: +1-929-205-6099 Meeting ID: 341-945-457

Webinar\*: <https://zoom.us/j/341945457>

Meeting Materials:

[https://www.chesapeakebay.net/what/event/integrated\\_monitoring\\_network\\_workgroup\\_april\\_2019\\_meeting](https://www.chesapeakebay.net/what/event/integrated_monitoring_network_workgroup_april_2019_meeting)

CBPO Location: Conference Room 305

\*If you are joining by webinar, please open the webinar first, then dial in.

### AGENDA

#### *Theme: Capacity Building*

#### Action Items

- ✓ Ask for suggestions of any additional data the workgroup would like collected from the Citizen Monitoring Cooperative to help evolve future asks. If a workgroup member has any ideas, please contact Breck Sullivan ([bsullivan@chesapeakebay.net](mailto:bsullivan@chesapeakebay.net)).
- ✓ Ask for suggestions of projects for the C-Stream interns to complete this summer. If a workgroup member has any ideas, please contact Breck Sullivan.
- ✓ Contact Breck Sullivan if any workgroup member would like to mentor a C-Stream intern.
- ✓ Looking for ideas on how to shape future interactions with DataKind and the type of requests to bring to them. If a workgroup member has any ideas, please contact Breck Sullivan.
- ✓ Peter will work with the workgroup over the next three months for the development of the business plan. He will get in contact with MD DNR to give a presentation on their work for the shallow water monitoring program

**1:00**

**Welcome, Introductions & Announcements** – Peter Tango (USGS@CBPO), Coordinator

- The Bay Barometer was released on April 2, 2019. It received a lot of media press including national coverage.
- The CBPO Indicators Coordinator Laura Drescher has taken another position outside of the CBP, and there is an interim coordinator Daniel Giddings from EPA that will be in the position for a few months.

- The SAV Workgroup's proposal for a STAC workshop was approved. It will focus on updating the SAV monitoring program with the use of new satellite imagery and interpretation algorithms.
  - Some of IMN workgroup members will be invited to the workshop and hopefully help the team.

#### **Upcoming Conferences, Meetings, Workshops, & Webinars-**

- [CBP STAC Workshop on Microplastics](#), April 24-25, 2019. George Mason University Potomac Environmental Research Center.
  - Doug Moyer has been part of special study on microplastic. Two of the non-tidal network sampling sites, Difficult Run and Accotink Creek have microplastic samples that are being included in a broader regional study. There is also microplastic sampling done for Roanoke. At least in Virginia, some of the microplastic information is being collected.
- [Coastal and Estuarine Research Federation Conference](#) (CERF), November 3 – 7, 2019. Mobile, Alabama. Abstracts due May 1, 2019.
  - Sessions of interest for the workgroup:
    - [Innovative approaches for estuarine/watershed data analysis mining and visualization](#)
    - [Responsive, relevant, ready: new directions in coastal science and modeling](#)
    - [Identifying restoration priorities and evaluating socio-ecological benefits at multiple scales](#)
    - [Solutions-based science to support coastal environmental management: approaches and challenges](#)
  - [Link](#) to all CERF sessions
- [Annual Water Resources Conference](#) (AWRA), November 3 – 7, 2019. Salt Lake, Utah. Abstracts due May 6, 2019.
- [Chesapeake Studies Conference](#), June 5 – 7, 2019. Salisbury University, Salisbury, MD.
- [Chesapeake Watershed Forum](#), November 15 – 17, 2019. National Conservation Training Center, Shepherdstown, WV. Proposals due May 24, 2019.

**1:10**

#### **Non-tidal Network - All**

Each of the jurisdictions will be invited to discuss their progress towards maintaining expected levels of output and any challenges faced.

A key question posed to nontidal community here is: Should an individual Non-tidal Network group be split off from the IMN WG? Community members have expressed some interest in this over the last two years. We will put this to vote, *A Nontidal Nexit or Stay in the IMN WG*. ☺. Hard or soft *Nexit* considerations are welcomed.

Doug does not support a full Nexit but believes there should be focused meetings on non-tidal issues in addition to these regularly scheduled meetings with the Integrated Monitoring Network workgroup. If this is not reasonable, then a breakout group could meet at a minimum quarterly.

Peter commented the IMN workgroup allows the opportunity to look at other groups and incorporate their work and representation into this cross-monitoring network. It is important to have the occasional representation of the non-tidal network.

Joel agreed with a quarterly non-tidal focused meeting. He suggested having 2 meetings in one day, and one meeting is focused on non-tidal. He stressed that the workgroup should reestablish continuity of their network especially with the sampling partners.

Peter asked if a 1 – 2 hour timeframe was okay.

The workgroup agreed that this timeframe was okay for a quarterly meeting basis with a non-tidal focus and not following through with a separate group from the IMN workgroup. In the future, the workgroup can assess if they need to meet more frequently.

Mike announced his work on of the [NTN WY2018 Events Stats](#) which gives a good representation of the storm sampling done. There is only one outstanding state data set that he hopes to get in a week and then will send it to the USGS for their loads and trend work. There are 2,290 events for the water year so far.

Joel explained how the Conococheague Creek is long-term monitoring station, but Maryland had some funding issues, so they dropped this site. USGS reallocated some funds to take over it themselves. The issue is the USGS can not continue to afford to sample this site, and this site is big yielder of nitrogen for the Bay. Joel is hoping to find some funds, but stresses the workgroup needs to continue having these types of conversations so that the group can figure out how to reallocate funds to meet program needs.

Dough asked if Joel needed complete funding for the site or if the money from DNR is going to USGS and he is looking for money to supplement it. Joel answered the gage is fully funded by the water quality sampling is not funded. Dough then asked what happened to the funding that was going to DNR to operate that site. Renee answered that MD DNR are level funded and cannot afford to do everything and due to the safety issues that site is no longer in the budget. As a result, the money is no longer coming to DNR.

Doug asked if Peter had any discussion with the Pennsylvania Water Science Center. PA is working with York County to evolve the monitoring at the existing non-tidal network stations. At Codorus Creek, they have been sampling downstream from the gage again because of safety issues. They are trying to get

support for a gage down there and looking for funds. Peter mentioned he is going to PA soon.

### ***Citizen Monitoring Analysis Opportunities- Capacity Building 101***

**1:30**

#### **Citizen Monitoring Database**

An update will be provided on the status of the Database.

Question to the workgroup – looking ahead to the next 5 years, what should the next step(s) in expansion be? The feedback from the community can help guide the next 6 year workplan.

Emily mentions there has been steady growth with the database. Data has been coming in for about a year. Before there was a public face to the database, there was a chance to upload data to it. The database holds quite a bit of historical data from some groups, and it focuses on water quality parameters and benthic and macro vertebrates.

Peter mentioned the program works on a six-year timeline. The Chesapeake Monitoring Cooperative is now focusing on data collecting and networking for information they do not currently have available. Their networking has focused on the benthic up in the watershed, water quality issues in the Bay, and SAV. Peter asked if anyone in the workgroup had a suggestion for the database that would be helpful to expand their efforts such as additional parameters or factors affecting an area. Is there any additional data the workgroup would like to have collected?

Peter mentioned as an example the Salt Workshop he went to in DC because the salting of our freshwater is occurring and possibly due to the salt thrown onto the road. It is a factor impacting the water quality trends that most people do not think about for data collection. He also mentioned others may be interested in environmental justice. He will come back to this question at a later meeting.

Mike announced the first Chesapeake Monitoring Cooperative data upload was April 16, 2019 which is about 11,000 data records. He is now tasked to add 400 new stations, 20 new data collectors, and a few new labs and then can proceed with the data upload.

**1:45**

#### **Tidal Water Quality Data Analysis Intern**

The CBP will be hosting a Tidal Water Quality Data Analysis intern this summer and want to reach out to the workgroup if they have any ideas for the intern's project. Ideas include having the intern looking at the CMC Database and connecting it to the CBP's work by characterizing information in the database and creating summary tables and graphics allowing the CBP community to understand what data may be of use to them in their analyses or assessments for management targeting. We welcome group input on possible focus work for

an intern project regarding information display or more analytical work to verify with the data what we know about water quality in the watershed or possibly spatial data distributions?

This summer there will be two interns coming on board through C-Stream which started last year. This will provide an opportunity for the interns to work on the continuous monitoring database. Peter asked if there are any suggestions from the workgroup on a project the interns could work on in the summer. This could include tasks for a project a workgroup member is currently working on and is looking for help.

Emily Trentacoste explained how she is looking over the applications for the internships. It consists of undergraduates and recent college graduates from the class of 2019. This is an effort to provide an opportunity for college students of underrepresented groups with an environmental field internship along with a mentorship program. If a workgroup member would like to be a mentor, please contact Breck Sullivan.

Peter mentioned that they would like to bring the interns around the organization so if workgroup members could please let them know of any field work or day trips the interns could participate in during the summer.

Peter asked for insight on the skillsets for the possible interns. Emily said she is still going through the interview process, but a lot of the students have come from environmental backgrounds and have technical skills in GIS and coding.

Emily Bialowas asked Emily Trentacoste when the interns would start. She answered it would be based on their school schedule, but they would start sometime around May and end in August.

**2:00**

#### **DataKind - All**

This volunteer, not-for-profit group is a diverse set of professionals who enjoy diving into data! <https://www.datakind.org/chapters/datakind-dc/>. This organization brings together data scientists with social organizations to address humanitarian challenges together. It is fundamentally different from CMC because it brings together professionals for more difficult projects.

Several of us have engaged with them to help develop outputs linked with the citizen science database. These could be outputs for internal use (e.g., interfaces for probing the database, etc.) or outputs that provide interfaces and products for public consumption. We welcome your insights on the best ways you find to interact with databases as well as concepts for effective communication outputs

to interface with the professionals and the public. This resource is an opportunity for analysis support in our community.

Peter announced there is a national program and DC chapter of Datakind. He was put in contact with these folks who are interested in citizen science and who noticed the CMC was getting a lot of data. They are a Nonprofit not asking for resources but asking for a problem that they can help figure out while providing their own man power and time.

Emily mentioned how the CMC has paired with a project managing team. They have met twice to go over the CMC goals to build a project on data visualization or data analysis. The group is trying to figure out what skills are needed and what tasks the volunteers need to do. She announced there will be a DataDive or where volunteers come out to work on the CMC project.. This is the first time the CMC is doing this endeavor so they do not know what will come out of it.

Peter is welcoming additional insights if anyone has experience with creating effective communication tools, ideas on requests for DataKind, or assistance on the final project for the CMC database from the DataDive.

Breck asked what the CMC wants out of the DataDive. Peter said they want an map which displays parameter outputs. Along with the static map, they want a more real time information/interactive part such as announcing data recently uploaded.

In future meeting, Peter will give an update on what came out of the DataDive.

### ***Business Planning for Monitoring- Capacity Building 202***

**2:15**

#### **Business Planning for Monitoring**

The Water Quality GIT has a workplan element to develop a monitoring program business plan in the next year to 18 months. The workgroup will discuss topics involving sustaining, adjusting, growing and integrating the existing networks to address information such as:

1. Where are present risks and gaps in our existing resources?
2. Recommendations for increases, decreases, and adjustments in tidal and/or non-tidal monitoring efforts including a. Stations, b. parameters. C. frequency (common versus monthly/biweekly) and d) programming (e.g., shallow water, mainstem, nontidal, benthics)
3. Updates on the SAV program.

As previously announced, the SAV workgroup will participate in a STAC workshop on integrating satellite imagery for the SAV survey work. The SAV program is an example of a program with the challenge of continuous funding and gathering

sufficient data. Hopefully the STAC workshop can help the program move forward to change the way of business and overcome some challenges.

Through STAR, there is a present understanding of science needs. Peter would like to come to the workgroup with key themes that need strategic understanding and address what the workgroup can do and when it needs to be done.

Peter announced there is a new Director, Dana Aunkst. There will also be a new Director for Science, Analysis and Implementation whom has always worked closely with the monitoring network.

Peter stated that he will work with the workgroup over the next three months for the development of the business plan. He will get in contact with MD DNR to give a presentation on their work for the shallow water monitoring program.

**2:50**

**Closing remarks- All**

Does the workgroup think the IMN Meeting should be monthly, every other month or quarterly?

Peter asked if the quarterly meeting schedule would work for the workgroup. Joel suggested to look at the year's funding schedule to see if there is a reason why the workgroup needs to meet prior to three months from now.

Peter stated the state's fiscal year will start in July, and the federal fiscal year will start in October so there will need to be internal discussions prior to the three-month period.

The next workgroup meeting will be no later than three months from now with a non-tidal meeting probably sooner.

**3:00**

**Adjourn**

**Participants: Emily Trentacoste, Peter Tango, Mike Mallonee, Breck Sullivan, Martina McGarvey, Renee Karrh, Jesse Iliff, Emily Bialowas, Joel Blomquist, Doug Moyer, Manksey, Sarah Giordano, Tammy domanski, Doug Chambers, Matt Stover, Carl Friedrichs**