



## Non-Tidal Network Meeting

Wednesday, January 29, 2020

1:00 PM –3:00 PM

Conference Line: 929-205-6099 Meeting ID: 532-053-455

Webinar\*: <https://zoom.us/j/532053455>

Meeting Materials: [https://www.chesapeakebay.net/what/event/non\\_tidal\\_network\\_meeting1](https://www.chesapeakebay.net/what/event/non_tidal_network_meeting1)

CBPO Location: 303 Conference Room

Annapolis, MD

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

### AGENDA

#### Action Items

- ✓ Non-tidal Network data for water year 2019 is due to Mike Mallonee on March 15<sup>th</sup>.
- ✓ At the next meeting, Doug Moyer will present results on the non-tidal network load and trend computations up through water year 2018.
- ✓ Durga will share examples of the Field Audit videos once they are ready.
- ✓ Durga will give updates on audits if she schedules any more.
- ✓ Peter will provide updates about funding for monitoring program when available.
- ✓ Depending on funding, Peter will set up a timeline to decide on the Conococheague funding.
- ✓ Follow up with the request to move a Conewago station to Chiques Creek to assist with BMP assessment.
- ✓ At a future meeting, Peter can show the work Claire Buchanan and Kelly have completed on the macroinvertebrates.
- ✓ Breck will look for a place to hold the face-to-face June meeting and send out a calendar notice.

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

- [Ocean Sciences Meeting](#), February 16 – 21, 2020. San Diego, CA.
- [Association of Mid-Atlantic Aquatic Biologists](#), April 1-3, 2020, Berkeley Springs, WV. Deadline for paper submissions is February 28, 2020.
- [National Watershed and Stormwater Conference](#), April 14-17, 2020, Austin Texas.
- [Choose Clean Water Conference](#), May 19 – 21, 2020. Richmond, VA.
- [Chesapeake Research Symposium \(ChesR20\)](#), June 8 – 10, 2020. Annapolis, MD. Abstracts are due March 15, 2020.
- [Chesapeake Studies Conference](#), June 11 – 12, 2020. Salisbury, MD. Poster proposals are still being accepted.

- [The National Conference on Ecosystem Restoration](#) (NCER), August 2 – 6, 2020. Portland, Oregon.
- [World Seagrass Conference & International Seagrass Biology Workshop](#), August 9 – 14, 2020. Annapolis, MD.
- [The National Coastal and Estuarine Summit](#), October 4 – 8, 2020. Providence, RI. Call for Proposals is open until April 3, 2020.
- [A Community on Ecosystem Services](#) (ACES), December 14-17, 2020. Bonita Springs, FL.

**1:00**

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

- Update on Mattaponi 94.94 site – Cindy Johnson
  - VA DEQ is still collecting data from this site. There were some challenges, but everything is solved.
- Mike Mallonee stated to Non-tidal Network data provides that water year 2019 data is due March 15<sup>th</sup>.
- Doug Moyer has been working with Mike Langland on the Non-tidal network load and trend computations and results through water year 2018. It will be publicly assessible in two weeks. They will update this team on the results in the next meeting. He has already provided information to Qian to update indicators.
  - The trend results for the stations with ten or more years of data encompasses the first portion of the TMDL: 2009 - 2018

**1:20**

**[Susquehanna River sampling report](#) – Durga Ghosh (USGS)**

Durga will present on the results of the report.

The history behind the Susquehanna River audit is in April 2016 there was a two-day audit at SRBC. The findings from the audit concluded that a modified isokinetic sampler was used that may not have been appropriate for all sampling conditions. There was lower than accepted number of cross-sectional increments collected, and the transit rates and velocity checks were not considered prior to sampling. Also, the sample processing techniques were not entirely in accordance with CBP protocols.

From this audit, a few questions were raised: Is there a need for more training? What happened, and how long has this been going on? Can SRBC change this moving forward?

SRBC was given a report and implemented what was asked of them. The validity of the sampled data set was questioned so a study was designed, and the results Durga is presenting is from the sampling that was completed from it.

Doug asked if the autosampler was used at all sites prior to 2004. Durga will get back to Doug with the answer.

The study collected four samples over two storm events (8/4/18 – 8/22/18) at the Marietta site. Both the old DH-48 and new DH-95 sampler were used to collect samples. Duplicates were collected each time bringing the total number of samples to sixteen. Storm one samples were collected as Split duplicates; Storm two samples were collected as Concurrent duplicates. There was not a lot of variability observed between the two methods, except for TSS and SSC. Normally you want to see 20% variability, so most variables look suitable. Split and or concurrent duplicate results were comparable, in both cases variability is well within limits. Storm two SSC data under Peak flow conditions was an exception.

Based on the results, the old data under the considered available resources is legitimate enough so the historical data will not be biased.

Doug asked what the peak discharge was at the Marietta during the storm events. Doug's concern is that 15,000 cubic feet per second which is shown on the graph is a low discharge and is below the long-term average discharge at that site. Joel said there was 100,000 cfs range at Mariatta during those events which is a normal amount so there was a conversion error on the graph. Therefore, they can move forward with preserving the historical record.

Dough Chambers asked if there are other audits scheduled. Durga said there is one scheduled in April for the tidal mainstem for ODU. There are also many citizen monitoring efforts for CMC for MD and VA. Durga does not have anything for non-tidal. She was hoping for one in DE, but it is not confirmed.

**1:35 Update on Training Modules for field audits - Durga Ghosh (USGS)**

To supplement the Field Audit program, videos were made to show sampling methods for different parameters. Durga has gathered multiple videos, and James Beckley offered to edit them. He will have an example of the work later this week. Durga will share it with the team.

If the team has any videos that are older, he is willing to help edit them.

Durga will give updates if she schedules any other audits.

**1:50 Present EPA budget outlook providing support for the NTN monitoring program – Peter Tango**

EPA management discussed funding with Peter for the fiscal year. Lee McDonell is the new Science Director, and he supports monitoring. Peter talked with him about the tidal and non-tidal program, and Lee asked about the funding

challenges for it. Peter brought forward the Conococheague funding issue, and Lee will be lobbying for additional support for it in a leadership meeting tomorrow. Peter will provide updates about funding for monitoring program when available.

The funding for the CBP has received an additional \$12 million, but it assigned to specific aspects of the CBP work.

Bruce said they have been level funded for a decade, but they cannot continue with the monitoring they have been doing with the level funding due to inflation, cost of living, and maintenance of equipment. Bruce will make sure Peter has this language next week and will make sure it aligns with VA.

Cindy stated they had in the past ten years a 50% cut in their funding at the state level so it too will be hard for them to continue their work without an increase in funding.

Mark Nardi said he is looking forward to continuing the partnership and helping where possible.

**2:05 Conococheague funding – Peter Tango**

In the last NTN meeting, the team discussed 1 year to accommodate funding to sustain Conococheague. Peter will discuss two potential paths forward for funding.

He highlighted this as a very important aspect for the Non-Tidal Network team to Lee for his management meeting.

Joel reiterated that USGS is giving funding which means for the immediate future it is covered. There is not a long-term commitment on it. If level funded is still given, the team will still need to look at options for prioritizing sites and which ones to drop. In the next few months, Peter can set up calls to go over it and use criteria the team has used in the past.

Mark asked when these decisions need to be made and how they would affect the current agreement with USGS and EPA. Updates to the grants are in September for federal, but states are submitting grants in March and April. Depending on what Peter finds out from Lee, he will create a timeline and send it out to the team.

Bruce mentioned that MD DNR does not have the correct equipment to sample it like USGS, and there is also a safety issue.

**2:20**

**Conewago station move for BMP assessment – Curtis Schreffler (USGS)**

Chris discussed the possibility of moving a non-tidal network station. NRCS and Lancaster County Conservation District put in a grant for a land conservation and flood protection project. It is a long-term funding opportunity, and they are focusing on stream restoration efforts, mainly removing legacy sediment and connecting the stream to the watershed in Chiques Creek watershed. NRCS and the Lancaster County Conservation District asked if USGS could monitor the progress.

PA DEP has a site in the area where water quality samples are collected every six months. There are also two sites in the Conewago station. Chris asked if the project could move one of those sites down into Chiques Creek. He stated it would be an opportunity to look at a large watershed wide stream restoration.

Chris said they still need to submit the plan, design the plan, and implement it so this project is a few years out.

Peter is not aware of precedent in moving sites from one watershed to another. He did mention this opportunity to Lee.

Joel said with the Non-Tidal network the first goal is to meet the 5-year load commitment, and the second commitment is to having trend computations done to understand what changes have occurred. The third commitment is to continue to track and monitor in the future. He was advocating that since none of the monitoring programs can continue with a set budget, the team needs to make sure those commitments are met first for the Partnership. Looking at the Partnership's priorities could help make this decision.

Dough asked what will be learned by having two sites on the Conewago.

Peter asked if PA DEP could support it. He mentioned the Fish and Wildlife Foundation might consider supporting it.

Joel mentioned having support from NRCS would be important because it was a part of an agreement with the EPA.

A decision was not made at the January meeting. The team will come back to this topic during the summer.

**2:35**

**Introducing the topic – Opportunities for macroinvertebrate sampling at NTN sites? Stream health indicator/model development with anticipated sample analysis support – Peter Tango**

There is a large amount of area in the watershed where macroinvertebrates are not sampled. Kelly Mallony is working on a model using landscape variables to

measure IVI scores for benthomacroinvertebrates community integrity. Information from the monitored sites and other variables are used to score the environment.

Peter was wondering if there are opportunities, if they were trained, for student involvement or other employees to get trained to take an invertebrate sample. This would support the Stream Health Workgroup at the CBP. If samples are provided they could be shared with an EPA lab willing to assist the CBP. Some of the issues with citizen monitoring is that the data could be taken if it went to the family level of taxonomy but most do not do it at this level.

Cindy said she is open to asking her field staff to collect this and having other people join them.

At a future meeting, Peter can show the work Claire Buchanan and Kelly have completed.

**2:40 Review actions, updates for in-person meeting in June/July – Peter Tango**

- High value topics could include:
  - integration of other data collecting/data needs at long-term NTN sites - a role for Citizen science or other work for field crews?
  - NGWOS - it's in the Delaware, will we be proposing additional work in the Chesapeake and what recommendations can we make to any proposals for network enhancement opportunities?
  - Remote sensing - can we assess nontidal proliferation of aquatic vegetation and macroalgae that affect nutrient and sediment cycling and flows in watershed streams and rivers using any publicly available data resources (.e.g Landstat?) or do we need commercial data source integration (e.g. Worldview satellite resources)?
  - Explaining trends in water quality and living resources and linkages with the estuary.

Peter suggested the Thursday and Friday after the USGS meeting in Shepherdstown. The team agreed with it. Breck will look for a place to hold the meeting and send out a calendar notice.

**3:00 Adjourn**

**Next meeting: TBD**

**Participants:** Breck Sullivan, Peter Tango, Durga Ghosh, Mike Mallonee, Cindy Johnson, Mark Nardi, Curtis Schreffler, Bruce Michael, Joel Blomquist, Jeni Keisman, Kristen Hyer, Amy Emery, Becky Monahan, Doug Chambers, Doug Moyer, Kathy Knowles, John Wirts