



Non-Tidal Network Meeting

Tuesday, October 22, 2019

1:00 PM –3:00 PM

Conference Line: 929-205-6099 Meeting ID: 256-952-599

Webinar*: <https://zoom.us/j/256952599>

Meeting Materials:

https://www.chesapeakebay.net/what/event/non_tidal_network_meeting1

CBPO Location: National Park Service, Suite 314 Large Conference Room
Annapolis, MD

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

AGENDA

Upcoming Conferences, Meetings, Workshops, & Webinars-

- [Maryland Water Monitoring Council Annual Conference](#), Dec 6, 2019. Linthicum, Maryland. Early registration ends on Nov 18th.
- [Turning a New Leaf Conference](#), December 6, 2019. Harrisburg, PA [Ocean Sciences Meeting](#), February 16 – 21, 2020. San Diego, CA.
- [National Watershed and Stormwater Conference](#), April 14-17, Austin Texas
- [Chesapeake Research Symposium \(ChesR20\)](#), June 8 – 10, 2020. Proposed sessions are due November 29, 2019.
- [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. Session and Workshop abstracts due December 1, 2019.
- [A Community on Ecosystem Services](#) (ACES), December 14-17, 2020. Bonita Springs, FL.

Action Items:

- ✓ Tentatively save June 15, 2020 in calendar for face-to-face meeting. Breck Sullivan will confirm date and location at a later meeting.
- ✓ Breck will look for a place to host the face-to-face meeting in Shepherdstown, WV.
- ✓ Respond to survey about potential theme(s) for face-to-face meeting in June 2020.
- ✓ Contact Conococheague related counties to see if they are interested and willing to fund the station.
- ✓ Follow up on the Conococheague issue to secure funding.

- ✓ Look into any other sites at risk of losing funding for next year and announce it at the next meeting.

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

1:15 Key items to review

- Overview of upcoming findings of the high flows of 2018-19 review/website update on flows, habitat impacts to the bay and its living resources.
 - Doug Moyer announced that water year 2019 was the #1 ranking year of freshwater flows to the Bay since the computations began in 1937.
 - This record-setting amount of freshwater flow into the bay had a detrimental effect on summer dissolved oxygen (hypoxia) and salinity. It was the 3rd worst on record for dissolved oxygen, and the freshwater flush lowered salinity levels and impacted oyster survivorship and length of crab season. The following web link will take you to the recent description of this record-setting year:
https://www.usgs.gov/centers/cba/science/record-freshwater-flow-water-year-2019-affects-conditions-chesapeake-bay?qt-science_center_objects=0#qt-science_center_objects
 - Also, the USGS maintains the "Freshwater Flow into Chesapeake Bay" web page. This web page is updated monthly to show the current freshwater flows into Chesapeake Bay. The link for this page is:
https://www.usgs.gov/centers/cba/science/freshwater-flow-chesapeake-bay?qt-science_center_objects=0#qt-science_center_objects
 - The following link provides all the graphs and downloadable historical freshwater flow to the bay data through an interactive user interface:
<https://exchange.iseesystems.com/public/samuel-austin/chesapeake-bay-estimated-streamflow-test-model/index.html#page1>
 - In 2018, it was hard to gather the baywide SAV survey with the aerial aircraft due to bad weather. Satellite imagery was used to fill the gaps of areas not able to get surveyed. In 2019, all the over flights were able to be completed, but using satellite imagery will be continually investigated.
- Less than 1 year to accommodate funding to sustain Conococheague. Discuss funding insights and options.
 - This site is on the border of MD and PA and is one of the most historic sites. The USGS was able to find gap funding, but it is not enough for a long-term solution. Peter talked with leaders at the CBPO, and they are not able to accommodate a long-term solution. Bruce stated part of the issue with this site is safety. Therefore, USGS might be more equipped to sample the bridge crossing.

- Doug asked how the funding for this site has changed. Bruce said it was part of a MD grant and there had to be cuts to the monitoring program so this site because of the safety issues was cut. It is currently funded by the water year funding through USGS.
- For the next NTN meeting, the NTN team will consult with other members about future funding possibilities. It might be useful to consider funding from counties around it. This might be hard since they need to meet the implementation of Phase III WIPs which they are currently struggling to do. The team should also consider other sites at risk for losing funding and announce these sites at the next meeting.
- Request per our last NTN WG meeting - Can we plan an annual meeting? Where and when might be convenient? For example, can we tag this event to a half day early arrival at the USGS Annual Chesapeake Bay Meeting in Shepherdstown, WV in summer or perhaps to stay off campus can we consider folks traveling to Leetown on the day before our annual Chesapeake meeting?
 - High value topics could include:
 - 1) status of BMP monitoring/growing continuous monitoring station network - further design considerations?
 - 2) integration of other data collecting/data needs at long-term NTN sites - a role for Citizen science or other work for field crews?
 - 3) 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?
 - 4) 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)?
 - 5) Explaining trends in water quality and living resources and linkages with the estuary.
- The team agreed to having a face-to-face annual meeting before the USGS meeting (June 16th – 18th). The team is going to aim for an overnight meeting on June 15, 2020. Breck will look for a place to host the meeting in Shepherdstown, WV.
- Breck will send out a survey before next meeting for team members to comment on topics for the annual meeting.

2:00

Round-robin report across the watershed

Round-robin report-outs have been helpful in highlighting progress towards meeting season and annual sampling targets, identifying field, lab and study design issues that need to be researched and addressed, discussing funding

issues/partner shifts, etc. It's your time to highlight successes and challenges with the program work. We will hold a lightning round of just a few (3-5) minutes each to hear from the network efforts across the watershed.

- Kevin gave an update for Pennsylvania. They are on par for most of the mainstem sites, and the biggest weakness they have in collecting samples is the Juniata River Basin. A lot of the storms are missing the Juniata. The data he had available was only from January 2019 to the present moment, not water year 2019.
 - Peter clarified that it wasn't too challenging to get to the Juniata due to this wet year, but instead it was an area less influenced by the storms.
- Kevin also announced that they participated in a PFAS & PFOA collection at all the sites (Per- and polyfluoroalkyl substances).
- Tammy also gave an update for PA. In August, 178 sites across the state were sampled for the PFAS & PFOA. The storm samples went well this fiscal year except for Big Spring Run. It is pretty flashy, so they are considering installing an automated sample to make sure to get all the storm samples in a year. York County gave funding to sample six sites within York County, three which are existing non-tidal sites. Instead of doing the discrete loads which PA already does at these three sites, they are upgrading the sites to include continuous water quality instruments to get continuous loads. They will also install three new sites to gather all the same parameters as the existing sites, and they will be treated as non-tidal network sites.
- Bruce gave an update for Maryland. They were able to get all their storm event samples. They are looking forward to analyzing the data and using Generalized Additive Models (GAMs) for looking at trends. GAMs allows them to use a flow correction on their trends and compare to the non-tidal network sites.
- Mike Langland announced that he is retiring at the end of the 2019 calendar.

2:45

Topics for next meeting – help shape the agenda

Options include:

- Advancing Annual Meeting plans for 2020. Place, time and topic(s) for the meeting.
- Catoctin as I understand is a secondary site. Mattaponi 94.94 I am told is problematic - any changes we should prioritize with sustaining, improving operations at these sites?
 - Cindy stated it is a site now under USGS because they sample it from a farm. VA DEQ use to sample it from a bridge but the bridge no longer exists. Doug will talk with Cindy offline about the issues that still exist with this site and will bring this topic back up at the next meeting.
- Susquehanna River sampling comparison work - any final results to share?

- Durga announced there is a report. She will present on this topic at the next meeting.
- Flow study at Codorus, ongoing USGS work, eventually report out on any backflow conditions and site design for sampling at that location.
- York Co, PA and Prince William Co, VA have enhanced watershed monitoring - review of the design considerations can help inform us all in preparing for a growing interest and need for BMP implementation and assessment of progress toward nutrient/sediment/additional pollutant reductions.
- VADEQ requests half day demo from Doug and Jimmie - can we plan this for 2020? Is there a good time to schedule this?
- Audit schedules for 2020.
- Your must-have discussion topic for winter 2019-20.
 - Doug Moyer announced that he is planning to film the EWI methodology to serve as a training tool in addition to field training and audits. Kevin stated he has a recording of Dough Chambers doing this a few years ago and will send it to Dough and Durga.
 - Durga will give an update on the training modules for field audits. The clips are unedited at the moment, but she found a volunteer to edit them.
 - Doug Moyer is also organizing a meeting with fellow members of this Non-tidal Network team to discuss how to maintain and evolve the database Mike Langland has managed before he retires.

3:00 Adjourn

Next meeting: January 2020

Participants: Bruce Michael, Cindy Johnson, Doug Moyer, Jennifer Rapp, Dough Chambers, Durga Ghosh, Mike Mallonee, Tammy Zimmerman, Peter Tango, Breck Sullivan, Mike Langland, Kevin McGonagall, Greg Pond, Tom Parham, Emily Bialowas