



Non-Tidal Network Meeting

Wednesday, May 19, 2021

1:00 PM – 2:30 PM

Meeting Link*:

<https://umces.webex.com/umces/j.php?MTID=m90a68e052f777664d17ca2207f1f4e1a>

Meeting Number: 120 179 7551

Password: CBPNTN

Conference Line: +1-408-418-9388 Access Code: 120 179 7551

Meeting Materials:

https://www.chesapeakebay.net/what/event/nontidal_network_may_2021_meeting

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

This meeting will be recorded for internal use to assure the accuracy of meeting notes.

Action Items:

- ✓ Peter Tango will reach out to workgroup members on NTN stations spreadsheet.
- ✓ Doug Moyer will share information on assigning stations to jurisdictions.
- ✓ Add a section in the PSC report for objective/utility of the monitoring program.
- ✓ Workgroup members will add information to the status/vulnerabilities document available on the Teams page before the next meeting.
- ✓ Ken Hyer would like the workgroup to connect some of the network analysis that is done for the PSC request with the planned network analysis for the NRCS-EPA water quality team.

AGENDA

- 1:00 Welcome, Introductions & Announcements – Peter Tango, Coordinator (USGS@CBPO)**
Peter Tango will reach out to workgroup members that can help fill out the spreadsheet on station information.
- 1:10 Web-based meeting materials – Breck Sullivan (CRC)**
Breck will provide information on where to find and work on materials for the Nontidal Network (NTN) WG.

A Teams page for the Nontidal Network Workgroup is available [here](#). The Teams page is where members are asked to review documents and provide comments and edits all in

one place. Documents available on the Teams page is a Discussion Paper about the PSC request, NTN station spreadsheet, and NTN status/vulnerabilities table.

Breck Sullivan is also working with the Chesapeake Bay Program (CBP) to set up a chesapeakebay.net webpage. This page will provide the scope and purpose of the workgroup, workgroup member names, and finished documents relevant to the work of the NTN WG.

Peter Tango and Breck Sullivan have started a monthly monitoring newsletter. The newsletter provides meeting dates, agenda topics, homework assignments, and actions by each monitoring group helping to complete the Principal Staff Committee (PSC) request. The Monthly Newsletter is available on the [STAR webpage](#). Breck Sullivan can also add interested parties to the mailing list.

1:15 PSC Review materials: NTN status/Vulnerabilities to maintaining stations and network support - All

Review table of vulnerabilities assembled so far, round robin to collate insights (e.g., COLA impacts, partner loss, in-state budget capacity, etc.).

Peter Tango reminded the workgroup the PSC request to review the CBP monitoring program is a 9-month effort that aims to answer 8 questions highlighted in the Discussion Paper on the Teams page, and the deliverable will be a short synthesis to address the questions and vision going forward. There will be a short 1 - 2 portfolio for each CBP monitoring program with focused recommendations. Another item Peter is working on during this effort is a report that addresses the topics with single paragraphs that will be added as supplemental information to the PSC. Peter would like to use time during the workgroup meetings to review the information for NTN and fill in missing item.

Peter Tango went over the NTN information in the report. Doug Moyer commented Joel Blomquist and himself have done some work to assign stations to jurisdictions. There is a handful the site resides on the opposite side of the state border. He can provide this information to Peter.

David Montali asked if Peter wanted the utility of the network included in the report. Peter Tango said they can add an objective section to the report so they can add that information.

Peter Tango then discussed the vulnerabilities of the monitoring programs. Tammy Zimmerman commented they have had issues with property owners because they decided they no longer wanted a gauge on their property. As a result, they have had to

work with an adjacent property owner to move the gauge a few hundred feet from the original site.

1:30 NRCS monitoring requests – Ken Hyer (USGS)

Ken will provide an overview of the NRCS monitoring requests to the NTN leadership team so we can discuss how to include in the improving CBP networks effort.

Ken would like the workgroup to connect some of the network analysis that is done for the PSC request with the planned network analysis for the NRCS-EPA water quality team.

The Federal Water Quality Monitoring Team from the NRCS effort met to review some of the monitoring networks, analyses, and some of the information distribution work to develop recommendations. The goal was to further coordinate among the agencies and assess how to implement, monitor, and interpret results. The group focused on the impacts of agricultural conservation practices implementation on improving water quality. It is more focused than the PSC request.

The Federal Water Quality Monitoring Team reviewed the monitoring and analysis activities and had four major findings:

- Strong Chesapeake Bay Non-tidal Monitoring Network and others
- Really strong at the regional and watershed scale, but they are lacking strategic monitoring at finer scales
- On-line tools available to compile WQ Data (How's my watershed)
- Studies to assess impacts of practices on WQ

The recommendations from the findings include identifying watershed with the greatest needs and opportunities for monitoring impacts of BMPs. They plan to work with different agencies to create a map and do the analysis for understanding siting of BMPs. Another recommendation is to identify opportunities to further coordinate WQ monitoring programs and interpretation of results. They want to leverage the current monitoring system to best support the current BMP implementations. The final recommendation is to improve communication to engage decision makers. As a result, the next step is to have a Senior Executive Briefing, but a lot will depend on findings from the Funding Team.

Both the PSC monitoring review and the NRCS recommendations are going to require development of site criteria to characterize all the sites in the network and network analyses to understand the status and gaps. Coordination between these two efforts will help reduce redundancy as any expanded NRCS monitoring will be informative to the NTN network and provide information on what monitoring is needed in the future. The outcome of the NRCS effort should expand monitoring at a finer scale which is a gap

for the current NTN network, and it should not result in any loss or realignment of NTN sites.

Peter Tango asked if the intent is to have NTN-equivalent sampling effort at the sites (i.e., 12 routine monthly plus 8 storm samples targeting 2 per season) plus high frequency monitoring at a smaller scale. Ken Hyer said the first analysis would be equivalent to a load's analysis, and the second is equivalent to a trend analysis. Also, a recommendation in the report is to include more innovative tools which is similar to work the PSC monitoring review is collecting.

Doug Moyer asked how much the showcase watershed effort was being considered by NRCS. Ken Hyer noted the showcase watershed effort is part of the NTN sites. They are an example of the type of work that needs to be done, but the group avoided designs steps at this point. Some sites the NRCS monitors may be in those showcase watershed areas, but they would like the data to help them dictate where to monitor.

Doug Moyer also said the NRCS and NTN work are probably viewed as two independent networks that will need to be managed differently based on scale. He asked if Ken agreed. Ken Hyer said it might be too early to decide, but when they are talking about connecting, they want to connect the analysis being done and not the network. If each group is looking at characteristics of potential monitoring sites and building out information on those sites, then it makes sense to collaborate.

Ken Hyer showed a document which provides a summary of the NRCS and PSC efforts and reasons for connecting the efforts. The other document is the first draft criteria table. Both documents are available [here](#).

Dave Montali asked if benthic or higher trophic level monitoring was being considered or is it only Nitrogen (N), Phosphorous (P), and Sediment (S)? In West Virginia there is concentrated stream restoration coupled with upland Ag Best Management Practices (BMPs) aimed at brook trout. Especially if nested such that there is a downstream NTN station, monitoring bugs or fish might tell a positive story. Other thought was site criteria should avoid unaddressed upstream impacts. Ken Hyer responded at this point, it's too early to say whether we are considering the addition of benthic or not, but he agrees that looking at the habitat and/or ecology (in addition to the N, P, S) would be productive. Maybe said another way, the Team identified the need for enhanced monitoring at smaller scales but didn't get into how the monitoring should occur. He thinks they will dig into this idea more as we discuss a coordinated monitoring effort at identified sites.

1:50 Watershed Science: West Virginia's Cacapon River filamentous algae issue – Gordon "Mike" Selckmann (ICPRB)

The Cacapon River produces excessive primary production, a biological symptom of nutrient enrichment, in the form of large, dense submerged aquatic vegetation (SAV)

and/or filamentous green algae beds. Surface source(s) of nutrient enrichment are not evident. Preliminary data suggests groundwater may be a significant nutrient pathway in this watershed. Mike will highlight the issue and present understanding regarding the challenges of managing the filamentous algae issue on the Cacapon River.

Peter Tango asked if there are any other changes in biology that are significant while also complementary in time to bug or fish community. Mike said there are temperature thresholds for the dominant species of algae. There are flow impacts on how the bloom manifests and what will be the dominant species. The interaction with the different types of algae is an area for more research.

Tom Parham asked if this is similar to what people are seeing in lower Shenandoah. Mike said it seems interesting to him why there are old growth forests in the Shenandoah producing algae blooms when there are not agricultural fields upstream. Looking at the risk map in the Shenandoah, they see a higher likelihood that algae could form in the area.

2:30 Adjourn

Next meeting: Wednesday, June 16, 2021, 1 PM – 2:30 PM

Participants: Breck Sullivan, Peter Tango, Ken Hyer, Dave Montali, Doug Moyer, Doug Chambers, Durga Ghosh, James Colgin, James Summers, Jamie Shallenberger, JJ Dillow, John Wirts, Kristen Heyer, Lucretia Brown, Mike Mallonee, Mike Selckmann, Teresa Koon, Tammy Zimmerman, Tom Parham, Mark Brickner, Mindy Neil, Cindy Johnson