



Delaware River Basin Commission

25 Cosey Road
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Steven J. Tambini, P.E.
Executive Director

Monitoring Advisory and Coordination Committee (MACC)

Meeting Minutes

May 12, 2020 - 1:30 PM

Delaware River Basin Commission – Remote Spring Meeting

GoToMeeting Link: <https://global.gotomeeting.com/join/464365901>

Attendees:

Sheila Eyler (USFWS)	Matthew Fritch (PWD)
Ron MacGillivray (DRBC)	Namsoo Suk (DRBC)
Elaine Panuccio (DRBC)	Li Zheng (DRBC)
Emily Nering (EPA)	John Yagecic (DRBC)
Preston Luitweiler (WRA DRB)	Elizabeth Brown (PA Audubon)
Eileen Murphy (NJ Audubon)	Emily Baumbach (PDE)
Leslie McGeorge (NJDEP)	Kelly Somers (EPA)
Victor Poretti (NJDEP)	Meg McGuire (Delaware Currents)
Andy Weber (NPS)	John Jackson (Stroud)
Robert Schuster (NJDEP)	Kristin Regan (EPA)
Jake Bransky (DRBC)	Don Hamilton (NPS)

1) Welcome and Call to Order

- Welcome & Call to order around 1:35 PM with introductions on the call. Elaine Panuccio called off each person's name in order of the Attendees List on GoToMeeting.

2) MACC Business

- Around 1:45 PM, newly appointed MACC non-reserved members were announced. The MACC welcomed the following for a 2-year term: Eileen Murphy with NJ Audubon, Preston Luitweiler with Water Resources Association of the Delaware River Basin, Emily Baumbach with Partnership for the Delaware Estuary, Elizabeth Brown with PA Audubon, and Matthew Fritch with PWD.
- Elaine Panuccio recommends renewed emphasis on partnering efforts and regular coordination among MACC non-reserved and reserved members. Leslie McGeorge looks forward to coordination for efficient monitoring plans. Future MACC meeting business to be discussed



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among members, such as meeting summary processes, elections within committee, etc.

3) Group Discussion (monitoring and other constraints of COVID19)

- DRBC explains monitoring suspension amid the COVID19 pandemic and plans moving forward. The DRBC initiates discussion on development and/or updates of Health and Safety Plans as they are beginning to assess steps that would need to be taken to return to the field. At the current time, DRBC's contract laboratories are closed and not taking any samples, which is the first consideration regarding resuming fieldwork monitoring. Other considerations are availability of supplies such as gloves, masks, face shields, etc., emergency room availability, social distancing protocols, modifications to fieldwork tasks, and other relevant aspects. Driving separate vehicles to monitoring locations, omitting close-contact sampling projects or activities, maintaining distance for bridge river sampling, being prepared with disinfectant, extra gloves, hand sanitizer, soap and water, etc. to minimize risk of exposure to COVID19 are among some considerations for resumed fieldwork.
 - Leslie McGeorge requested that DRBC share their current SOP ideas.
- While DRBC is unable to resume monitoring, DNREC is considering a Boat Run monitoring event at the end of May.
- NJDEP – Leslie McGeorge explains that all freshwater fieldwork is suspended except for HABs, sewage spills, and other urgent environmental issues in which rotating staff are on call. A Health and Safety COVID19 SOP is in development and a Solo Sampling SOP already exists, which is a commonplace practice for both Freshwater and Marine monitoring projects. In the SOP, solo samplers must report before and after field monitoring, but adaptations to account for potential emergency hold-ups include reporting to a supervisor any time a solo sampler returns to land during monitoring. In addition to these steps, Marine solo samplers must bring PFDs with GPS tracking device for USCG to track an individual's location in the event of an emergency. Robert Shuster explains that marine emergency sampling is ongoing and field crews are taking separate vehicles to locations when working in crews. Fecal coliform monitoring for Shellfish Program on hold. National Coast Assessment coming up with continued remote training on adapting to new protocols amid the COVID19 pandemic.
 - Namsoo Suk requested for Leslie McGeorge to share Solo Sampling SOP.
- PDE – All staff are currently working from home with fieldwork if necessary and approved, however, boating and carpooling are prohibited. Mussel and wetland survey work continuing with a maximum of a 3-person crew. Laboratory work still unavailable. In-office work is the current focus and recently hired on two new staff scientists with virtual on-boarding. One individual is a fellow at the Freshwater Mussel Production Hatchery and the other a Staff Science focused on database management. Regarding the PDE Science Summit, there are plans in the works for postponing the event for 1 year (2022) or create a virtual event for 2021.
 - Kelly Somers commented that she recently attended a virtual conference (Skype) and it was very successful with more participation than in-person conferences.



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- NPS – Andy Weber and Don Hamilton explain that all staff are currently working from home with no fieldwork at the time. They are in “red status” until at least June 5, 2020. An Adaptive Recovery Strategy is being developed following state policy and guidance in order to navigate COVID19 constraints. In addition, job hazard analyses occurring before resuming regular work. NPS following county’s rules to initiate any fieldwork. Law Enforcement are the only NPS staff not working from home.
- USFWS – Sheila Eyler explains that all fieldwork is suspended for entire Northeast corridor unless it is for survival of endangered species. All staff working from home following states orders.
- PWD – Matthew Fritch explains that the PWD laboratory is still open and staff are continuing to maintain Philadelphia USGS gages (solo work). Bioassessments and special studies are planned to continue following safety guidelines. There are concerns assessing the next fiscal year’s budget as the monitoring budget may drastically reduce.
- NJ & PA Audubon – Eileen Murphy and Elizabeth Brown (NJ & PA Audubon Societies, respectively) explain that the organizations are following state guidance to work from home and to suspend monitoring. Eileen Murphy with NJ Audubon organizing virtual meetings. Virtual birding program had a historic number of participants as it allowed people to participate from a location of their choosing. Results were reported online post-birding event.
- EPA – National Coastal Assessment will have recommendations for safe sampling and best practices.

4) Monitoring and Other Updates (including input from committee)

- John Yagecic (DRBC) gives 2019 Bacterial Monitoring results updates. Monitoring in 2019 initiated based on WQAC meeting conversations about recreation in Zones 3 and upper 4 of the mainstem Delaware River. This stretch of the river is designated as secondary contact, but people are primarily recreating, so the question of whether this area could be updated to primary contact based on water quality needed to be answered with monitoring of bacterial indicators. As CSO long-term plans are in progress, there are some actions underway to potentially decrease the bacterial loading to the Delaware River in this section. Monitoring of bacteria from center-channel via the Boat Run indicates not much of an issue with elevated bacteria concentrations, so shore-based monitoring was initiated in 2019 to identify if the results were comparable to center channel. The results indicate that there are big site-by-site and event-by-event differences in concentrations, but mostly not meeting water quality criteria for primary recreation. Other natural factors to assess, such as wildlife and rainfall. In 2020, there are plans for monitoring transects for bacteria. It was announced for anyone interested in viewing the presentation to visit the DRBC WQAC 4/30/2020 meeting materials (https://www.nj.gov/drbc/about/advisory/WQAC_apr302020.html).
 - Robert Schuster comments that NYNJ Harbor and NJ side of Delaware Bay’s focus is largely on shore-based sampling. NJ & DE hourly rainfall information from multiple



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- stations to be shared with John Yagecic. He also indicates that after rainfall events, tributaries are likely sources of bacteria.
- Preston Luitweiler asks what is being done to track bacteria sources. He mentions that geese, having a relatively large population, are likely large contributors to bacteria concentrations in the river. John Yagecic and Elaine Panuccio agree that there are at least 3 sites that consistently have a large population of geese on-site. Preston suggests genetic profiling and lipid tests.
 - Robert Shuster indicates that NJDEP's laboratory has trackback capabilities using weight of evidence, antibiotics, PCR. High bacteria largely due to infrastructure issues.
 - Preston asks how these issues can be fixed. Robert Shuster suggests sewer line fixation, sources identified, and NJDEP work with township to resolve.
 - DRBC bacterial source tracking efforts occurred about 15 years ago. Used DNREC's library for bacteria to determine source, but results were inconclusive.
 - Leslie McGeorge inquires about any favorable locations regarding bacteria levels and how CSOs have improved since initiation of Long-Term Plan. John Yagecic and Namsoo Suk replied that more sample collection will need to be done and conceptual modeling to be done in order to answer these questions.
 - Matthew Fritch indicates that PWD's 10th year of 25-year CSO Long-Term Control Plan shows differences in dry and wet weather bacteria monitoring results, pointing toward CSOs as problematic in the urban corridor regarding bacteria concentrations. This presentation from the April 30, 2020 WQAC meeting is available on the web (https://www.nj.gov/drbc/about/advisory/WQAC_apr302020.html).
- Elaine Panuccio presented 2020 Delaware at Trenton and Schuylkill River and Tributary Nutrient Monitoring projects. Currently on hold due to work from home and state orders. Will adjust frequency dependent on when DRBC resumes fieldwork. This presentation is available on the web (https://www.nj.gov/drbc/about/advisory/MACC_index.html).
 - Elaine Panuccio continues to give update on chloride efforts. DRBC currently assessing simple model of SPW chloride data (loading of tributaries to mainstem vs. mainstem concentration) to identify potential missing loads. DRBC submitted RFP application to NJDEP to address Non-point Source Pollution in the Upper Delaware. If awarded grant funding, will deploy continuous specific conductance loggers in several tributary sites with an expanded SPW Monitoring Program focused on chlorides. The new sites added for this effort may not be monitored for whole suite of SPW Monitoring parameters but will have a focus on salinity and chloride.
 - John Jackson asks if we know summer base flow and how much of it is contaminated by groundwater inflow chlorides. DRBC isn't sure of this yet as we are in preliminary study stages. John Jackson asks if we see a long-term trend upwards. John Yagecic indicates that increases in concentration of chloride evident at Delaware River at Calhoun Street



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Bridge along with spatial trends between mainstem and tributary sites in the non-tidal river. John Jackson indicates that the sites are geographically different and need to approach analyses carefully. Lastly, he highlights the non-linear change of chloride concentrations at some sites in the last 5-10 years (example: Chester County, PA) and suggests looking into potential causes.

- Leslie McGeorge comments that NJDEP is working with USGS on this issue and very interested in working with DRBC as well.
- Jake Bransky explains plans for Microplastics monitoring in 2020. Samples were collected in 2019 and sent to Temple University for method development and analyses (using FTIR). Currently have 2020 monitoring on hold due to COVID19.
 - Kelly Somers updates the group that EPA Region 3 collected sediment samples from 2019 are being processed and ORD Narragansett developing standard methods for analyses. These sediment samples were collected from areas of the tidal Delaware River and some tributaries. Will share methods as they are developed.
 - Don Hamilton updates the group about the partnered NPS and USGS microplastics sampling effort in non-tidal mainstem river from Callicoon, NY to Lambertville, NJ and a few tributaries. Samples for microplastics in the following were collected from each site: sediment, 2 species of fish (White Sucker and Largemouth Bass), and freshwater mussels were collected. NPS received some preliminary results and will share with DRBC and group once available.
- Jake Bransky continues to update the group about the continued efforts regarding the Mussel Cage Study, initiated in 2019 with PDE. Six sites on the Delaware River upstream and downstream of Lehigh River were selected for installation of mussel cages to study possible impacts from the Lehigh River as previous mussel studies indicated mussel population density changes near confluence to the Delaware River. Macroinvertebrate index values differ in this area as well compared to the surrounding area. The cages were installed in September 2019, and were checked and fine in November 2019, but the flows have been high, and staff were unable to safely assess the cages currently prior to work-from-home orders.
- Ron MacGillivray gives a presentation about Contaminants of Emerging Concerns. DRBC has been working on CECs since 2004 (fish sampling). This presentation is available on the web (https://www.nj.gov/drbc/about/advisory/MACC_index.html).
 - Eileen Murphy explains involvement with these studies decades ago and that it is still not figured out how to analyze and assess combined chemical effects vs. a single chemical.
 - John Jackson asks how we can handle the multiple types of PFAS. Proposal approved for biosolids application in relation to PFAS. Suggests overlap with DRBC and PWD – potential partnership/parallel project/match?

- Emily Murphy comments that no luck was had with biosolids analyses in the past. Inquires about urban runoff monitoring. Vic Poretti responded that NJDEP collected urban runoff samples from 125 sites and submitted a proposal for continued monitoring.
- Leslie McGeorge updates the group that NJDEP monitors for 1,4-Dioxane and PFAS in NJ tributaries' surface water. John Yagecic notes that DRBC added 1,4-Dioxane to Boat Run monitoring program.
- Matthew Fritch updates the group that PWD monitors for PFAS year-long in surface water of the Delaware River, some tributaries, and the Schuylkill River. Data will be ready to share soon.

5) PDE CCMP Monitoring Assessment

- Emily Baumbach presents about PDE CCMP Monitoring Assessment inventory and needs. Requests feedback from MACC through 1) peer review and 2) providing input on future research and monitoring priorities. Suggested that MACC provide top 10 priorities for TREB and CCMP. This presentation and relevant materials are available on the web (https://www.nj.gov/drbc/about/advisory/MACC_index.html).

6) Roundtable Discussion

- Around 3:40 PM, the group moved onto an open discussion.
 - Kristen Regan with EPA Region 3 updates the group about SAV monitoring plans in tidal Delaware River for 2020 pending COVID19 constraints. The 2020 monitoring for this project has not yet been initiated.
 - Leslie McGeorge with NJDEP updates the group about PFAS Monitoring that occurred in February 2020 of 28 PFAS at 122 long-term sites. The plan is to collect 2 times in February-March and August-September with low-flow targets (water column samples). Ron MacGillivray is interested in analytical methods selected as no EPA lab-approved method at the time. Leslie McGeorge indicates that on May 27th, the NJWMC virtual meeting will have PFAS as a discussion item. Additionally, NJ HABs monitoring is continuous. Recreation response strategy involves continuous monitoring, meters/satellite imagery, and potential drones for aerial surveys to identify and address potential HABs.
 - **Meeting adjourned by 4:00 PM.**