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John Denniston, MDOT  
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Bob Hilderbrand, UMCES  
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Rupert Rossetti, Octoraro Watershed Association  
Nancy Roth, Tetra Tech, Inc.  
Brian Smith, MD DNR  
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Chris Victoria, Anne Arundel DPW  
Alice Volpitta, Blue Water Baltimore  
Michael Williams, Univ. of MD College Park

## MINUTES

### MARYLAND WATER MONITORING COUNCIL BOARD MEETING

OCTOBER 18, 2022 - *VIRTUAL*

#### In Attendance

Matt Stover (Matt), Katherine Hanna, Nancy Roth, Richard Mitchell, Najma Khokhar, Mat Pajerowski, Byron Madigan, Megan Brosh, Mark Southerland, Alice Volpitta, Michael Williams, Lindsay DeMarzo, Chris Victoria, Ken Staver, Bob Hilderbrand (guest speaker), Jason Dubow, Andy Becker, Brian Smith, John Denniston, and Matt Harper

Matt Stover [Chair] called the meeting to order (10:03 AM). Matt reviewed the meeting agenda.

#### The Minutes (10:05 AM)

Katherine Hanna [Executive Secretary]: minutes from our previous meeting went out last week. She asked for any edits to the minutes. None responded and the minutes were approved.

#### Introduction of New Board Members (10:07 AM)

Matt explained that one board candidate (Micah Miles) had to withdraw due to ethical considerations - a conflict of interest between DNR and FEMA. The four other candidates accepted and three were present. Matt invited the new members to introduce themselves:

**Brian Smith** from DNR: since 2009 in Tidewater Ecosystem Assessment, Division of Resource Assessment Services. Works with Shallow Water Monitoring Program, which maintains continuous monitoring of 20 stations. Has been part of MWMC in the past, including involvement in the conferences.

**John Denniston** from MDOT, Secretary's Office, Water Quality Program Manager, Office of the Environment. Have attended the conference a few times. Looking forward to being more involved.

**Matt Harper** with Montgomery County Parks. Matt works there as a Natural Resources Manager specializing in water quality and aquatic ecology issues related to County stream valley park system. He has been in the region 10 years and managed the County's biological monitoring program and works in resource protection and stormwater management under the County's NPDES permit. Matt has been involved in the conference as a presenter and is looking forward to being on the board.

Matt invited the other board members to quickly introduce themselves: Matt, Katherine, Jason, Nancy, Alice, Mat, Megan, Lindsay, Michael, Andy, Richard, Ken, Mark, and Najma.

Matt related that we have board positions representing different organization types. We try to fill each position with a person of appropriate background. Details can be found in the bylaws.

### Nominating Committee (10:22 AM)

Matt: This year DNR has required board members to go through formal approval procedures. This will mean new members fill out electronic forms to be vetted by the Governor's Appointment Office. Their office will look through the submitted materials, including resumes, to look for professional conflicts and run background checks. Until vetting is complete, new members are welcome at all meetings and to become involved in committee activities, however they are not allowed to vote until approval.

Katherine thought new board member applications were going to the DNR secretary's office for approval. The new members do not have to fill out the entire form that the Governor's Office would require.

Brian asked if this was the first time this submission was required.

Katherine stated that it was the first time for our board, but it has been used in other instances.

Matt brought up the Board At-Large vacancy due to Micah Miles becoming unavailable. There is a running list, but if anyone present at the meeting has a suggestion for someone who can bring energy and enthusiasm to the group, please suggest.

Mat asked Katherine or Matt to list the Board vacancies, and what background candidates should have.

Matt: we have one At-Large vacancy. Also, board members whose term will be expiring at the end of this year are: Ken Staver, Michael Williams, Chris Victoria, and Byron Madigan. Since all four have served two terms, we will need a special vote for them to continue.

If any of the four members do not wish to continue, let us know by the end of the month. We may need to start another recruitment process. The goal is to fill any of these seats that are vacated by January 2024. If you're planning to leave the board, we would welcome any suggestions for replacement. The possible four seats to be vacated are: at-large, (2) local government, and academia.

Matt: given that I am Chair of the Board, I would like to vacate the position as Chair of the Nominating Committee. A volunteer is needed to take my place. It's an easy way to contribute to the Council. I have put together SOPs, and you can reach out to Board members for help.

### Committee Reports (10:32AM)

**Monitoring and Assessment (Andy):** The committee will put on the Stream Roundtable again, probably in the latter half of February. He and Clark Howells have discussed a fall workshop and others not scheduled. They are trying to coordinate the water service industry and water monitors to share to data drinking water plant operators. Andy will follow up with Clark to develop a possible spring workshop.

Matt commented that following discussions he has had, there is more of a interest in this collaboration. Matt verified if Andy needed help with the Stream Roundtable. Andy said there should not be any problems, other than determining if it should be in person or virtual. Matt asked Andy to describe what the Roundtable is, to solicit help from the Board. Following Andy's description, Matt commented that MDE makes great of use on the map generated for the Roundtable. He also commented how duplicate sampling impacts the sample sites and reduces our access to sample sites via the property owners.

**Stream Restoration Subcommittee (Nancy):** This committee is headed up by Lisa, Frawley McNeil, and Bill Stack with quarterly meetings, evaluating the effectiveness of stream restoration projects. Topics that came up at the last meeting:

- Greg Noe is heading up a **STAC** (State of Stream Restoration Science) workshop in March 2023 – a look at the science and see where it might inform policies Baywide.
- The MD Stream Rest. Assoc. is developing factsheets and slides to answer public questions.
- Center for Watershed Protection looked at the benefit of riparian restoration best practices.
- Mark leads a current project looking at indicators of stream health, funded by the CBP, analyzing biological, geomorphic, and hydrological indicators. In information gathering phase, results 2023. Mark added that there USGS are greatly involved and developing a suit of indicators for the CBP.

Matt suggested there could be a couple of lunchtime talks from the subjects Nancy raised. Nancy offered to talk to the riparian group to present. Matt anticipated the next Board Quarterly Meeting in Jan/Feb. The dates for 2023 meetings should go out soon.

**Citizen Science and Community Stewardship:** There was no representative present from the committee.

**Information Management and Communications (Najma Khokhar):** At the last quarterly meeting with 20 attendees, the main topic was the standardization of taxa names for water quality projects. When collecting data, some use scientific names, others common names. The translation of common names produces different results. Using scientific names throughout projects would help with QA/QC checks. They recommend not to use the common names except for public outreach. Also, they discussed how to centralize all data sets from different monitoring groups. A database that can help with data reuse.

Richard asked if the issue with name consistence is largely with fish and not macroinvertebrates. Najma said it is very common with fish tissues and also with chemical names. Richard agreed that monitors should use the ASF listed common names for fish biological data and not local vernacular, and those could have a crosswalk to the scientific names.

Matt commented that one of MDE's greatest challenges is data standardization to automate our data assessments, both for impairment listing and to measure restoration success.

**Groundwater (Mat):** They did not meet this quarter. With retirements, the committee has faltered and will call for new members at the conference. He invited board members to join his committee. Topics discussed include saltwater intrusion of wells; survey of county well water data and pulling it into a common database.

**Student (Lindsay):** Looking for new interest from the group. Have not met because of involvement with the Annual Conference. The fall career chat did not happen this year; instead, will have it in February. If anyone is interested in working on the student committee, please reach out.

**Annual Conference Planning (Katherine):** We are technically without our venue. We are penciled in with the Maritime Conference Center. The bids are not out and she is working the request through fiscal.

Only 2 speaker spots remain empty in the conference. Some speakers have not turned in their abstracts. We have a good set of posters this year, including student posters. Weber Award nomination are open. No responses yet; please, if you know of someone, we are accepting nominations. We need plenary speakers. Ideally one from our usual sources and one from public utilities. Sylvia Malm from EPA fell through.

Matt reminded that we had possible plenary speaker suggestion, Mike Nardolilli, by Clark Howells.

Katherine will go back to the original list and welcomes new suggestions as well. Matt asked the board for any ideas for both plenary speakers. Katherine said we could go with one speaker and give them a longer time to talk.

Mat recommended getting Mike Nardolilli as speaker. Jason suggested someone from MDE involved in source water protection, such as Suzanne Dorsey. She knows the issues behind saltwater intrusion, issues regarding carbon sequestration, and has led the climate change commission. Matt offered to ask Suzanne to be the plenary speaker or get her suggestions for one.

Matt asked what the empty speaker spots are. Katherine: we have an opening in contaminants and contributed talks section. Ken suggested Lance Yonkos or one of his students for the contaminant section and offered to check with him. Mat reminded people to coordinate through the section moderators.

Chris offered two possible talks he could give (chloride sampling and seasonal habitat assessment). He was planning to submit an abstract.

Matt confirmed with Katherine that we are set for December 15. Katherine has not sent out a hold-the-date announcement because of fiscal policy. Ken pointed out that our speaker line-up would fall apart if we changed the day. Katherine said that the venue bid stipulates December 15. Jason thought it was okay to send out notice without a registration link, and Katherine and Mat agreed. There was no timeline for the request-for-bids. A discussion of improving future bids ensued.

Matt asked if we had a plan for a social. Katherine would discuss it with Andy. Andy went over our funding sources for the social, and there is no reason not to have the social, even without a conference.

Richard verified the attendance limit, which Katherine quoted to be at 350. Mat went over prior rationale for the lower attendance cap.

Katherine noted that speakers can present virtually if the moderator is willing to accommodate.

Matt asked Katherine if she still needed help with the annual conference. Katherine needed help with the Weber Award nominees, recruiting student & general posters, and forwarding the message for vendors.

Mat asked Katherine if Lindsay reached out for posters, as head of the Student Committee, and if she needed more help reaching out to colleges and universities. Katherine did not hear from Lindsay regarding posters, she did need help, and she would send out the flyer again to the Board.

Matt explained the Weber Award is given in recognition of a long career in the monitoring community and contributions to the issues of water quality and monitoring overall in Maryland and the Above & Beyond Award for early career. Contact Clark Howells, Mat, Matt, or Katherine if you have someone in mind.

#### Special Topic (11:26 AM)

Ken and Mat discussed saltwater intrusion. Jason explained that the General Assembly defined saltwater intrusion more broadly: groundwater, agriculture, and wetlands. The Department of Planning used *saltwater intrusion* as movement into aquifers and *salinization* for effects on soils/waterbodies. Scientists are also using saltwater intrusion in a broader sense. Ken suggested we have a speaker who can clarify this.

#### Guest Speaker (11:31 AM)

**Bob Hildebrand:** eDNA and Water Monitoring

Bob presented on experiences in sampling streams using eDNA methods and equipment and answered questions.

#### News Roundtable (12:34 PM)

**Matt:** This Friday we should have our final action on our triennial review of water quality standards. Changes will become final, but it will need to be approved by the EPA. Our Tier II review of the maglev project is ongoing. UMCES is doing the economic benefit analysis. We will have a good look at the social & economic benefits analysis and be able to balance those against forest/buffer loss vs. impervious surface gained. The data solicitation for the integrated report will be coming in the next month or two. You will receive an email from Becky Monahan requesting data up through the end of 2021. Najma is heading up two new data management projects. There is more TMDL work associated with the new phase of the Chesapeake Bay model.

**Byron Madigan:** We are moving our NPS sites to start a new long-term study for MS4 program. We are taking on a project from the Center for Watershed Protection, a continuation of are CBT grant, in Novem-ber. Fall is NPS and ACoE reporting.

**John Denniston:** Nothing to add.

**Matt Harper:** We are finalizing the NPDES recording of our Phase 2 permit. Collaborations have come out of that with our neighboring jurisdictions. We have finished our summer sampling and will be doing macroinvertebrate identification analysis over the winter. The environmental impact statement regarding the widening of I-270 was released. As a result, we will be moving forward with water quality mitigation projects on adjacent Montgomery County park land.

**Megan Broch:** Writing reports. We have a new project with the Center for Watershed Protection to prioritize our outfalls, to identify outfalls with the highest risk for illicit connections. With 12,000 outfalls in the county we're required to go down to 150; the Center is developing risk analysis. This will improve the health of our streams and get us more nutrient credit for gray water infrastructure development.

**Nancy Roth:** Working with Harford County on their PCB source assessment, a first phase of developing a TMDL for PCBs. The National Water Monitoring Conference will be April 23 & 24 in Virginia Beach.

Matt: Jason left a message in chat for the Maryland Brownfield Conference, November 16.

**Najma Khokhar:** Working on QA/QC for the database and a list of standardized checks.

**Katherine:** MBSS sampling has been completed for the year. We are cleaning up our data to use it for reporting. We are purging our old samples. Email Scott Stranko for the possibility of acquiring them. Matt asked how long they keep samples. They are supposed to keep samples for five years but have some that are 10 years old and a few older. Chris asked how long they keep their subsamples of the picked bugs. She understood that to be indefinitely, and they should still be at the lab.

**Mat:** USGS is starting a bacteria monitoring program of the anacostia in DC. We are using a fluorometer and measuring other common parameters. With this data, we are using AI to develop a model to predict rises in bacteria, thus recommendations for water contact. DC would like the Anacostia River to be swim-mable and fishable. This could be used in other places too. We will also be using a *fluidion* to auto-sample bacteria. After a year's worth of data, we will make some interpretations. We're also doing some sediment fingerprinting in Hickey Run, Prince George's County, which runs into DC. There could be a relationship between sediment and bacteria levels.

We are sampling at wastewater treatment plants in the Potomac Basin for patterns of PFAS and PCBs. We are identifying the source of these contaminants and what activities they are associated with in the watershed. You can follow USGS Maryland/Delaware/DC on our Twitter, Facebook, or Instagram account.

**Ken Staver:** He asked if we have a talk at the conference summarizing the state of PFAS in Maryland. Mat will look into having a speaker on PFAS from USGS. Ken S. asked if the topic should be for a plenary speaker for a state-level view. Mat: we are reassessing as to how we can get there, after 40 years of effort.

It's becoming clear that the agricultural sector will not meet the 2025 deadline for the Bay TMDL nutrient reduction goals. However, Maryland is in better shape than the rest of the states in the watershed. The main project I'm working on is a cooperative agreement with NRCS. It is a nationwide modeling effort for agriculture to decrease nutrient input from ag; as well as storing carbon in improving soil quality.

**Brian Smith:** The shallow tidal water monitoring will be completed in the next few weeks. We are finalizing the hypoxia summary for the main stem of the Bay. This summer's values ranked the 11th over the 38 years we have been doing the summary.

**Chris Victoria:** We're completing a project with USGS of core sampling precolonial channel sediment in the county. With microfossil identification and radio isotope analysis, we are trying to identify what sort of ecological system is buried beneath the legacy sediment in the coastal plain of Anne Arundel Co. Initial results indicate pollen of woodland species. Gearing up for a fourth year of county-wide monitoring.

**Richard Mitchell:** National Lake Lurvey wrapped up at the end of September. We are analyzing our chemistry data and will have it available by the spring. Biological data will be available in the summer. We are organizing the rivers and stream survey and will reach out to the States and other partners with guidelines through webinars. We will be publishing

the 2018/2019 Rivers & Streams report by the end of this year. We will be sharing it with our state partners for review in the next month or so. For the National Water Monitoring Conference, I'm looking for individuals to review presentation abstracts.

**Bob Hildebrand:** Nothing to report.

### Action Items (1:03 PM)

Mat [Vice-Chair] listed the items he had identified:

- We all should consider a nominee for our vacant At-Large board position.
- Chris, Ken S., Byron, and Michael should get back to Matt by the end of the month if extending their board memberships, which expire at the end of this calendar year. If not interested, we can start recruitment.
- We need a new chair to head our nominating committee, since Matt is now board chair. Please contact Matt if you are interested. Matt pointed out that there already is a committee to head.
- Please contact Mat if you're interested in joining the groundwater committee.
- Contact Lindsay Demarzo if you're interested in the student committee.
- Contact Katherine if you have good ideas for a plenary speaker for the annual conference. Matt reminded that we are potentially looking for a speaker on PFAS for the plenary. We have an opening remaining in the contributed talk section.
- We also need Weber Award nominees for the annual conference, for both the Weber and Above & Beyond awards. Contact Clark Howells for that.
- Please contact us if you have a suggestion for a student poster or someone who can outreach to students. Katherine reminded the board that there is a form to fill out for student posters on our conference website. Katherine also noted that Weber Award nominations can be done through a form on our website.

Matt added items:

- Matt will see if he can get Suzanne Dorsey as a plenary speaker.
- Nancy will contact someone as a speaker at our next meeting on riparian restoration.
- Hold a committee chair brainstorming meeting early next year to consider new ideas for webinars and workshops. Each committee chair would pick a topic to work on throughout the year. Each chair can share the progress on that topic at board meetings throughout the year.

### Adjourn (1:10 PM)