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Michael Williams, Univ. of MD College Park

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## MINUTES

### MARYLAND WATER MONITORING COUNCIL BOARD MEETING

#### JULY 11, 2023 – *VIRTUAL*

#### In Attendance

Matt Stover, Katherine Hanna, Alice Volpitta, Andy Becker, Brian Smith, Byron Madigan, Christopher Victoria, Jason Dubow, John Denniston, Kenneth Staver, Lindsay DeMarzo, Michael Williams, Mike McMahon, Nancy Roth, and Richard Mitchell.

Matt (Stover) [Chair] called the meeting to order at 10:04AM. Matt verified that nobody was new to the Board Meeting. Mat (Pajerowski) did not join due to conflicts.

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

Matt: minutes from last meeting were approved.

#### Nominating Committee (10:09 AM)

Matt: he reminded board members to submit names of their alternatives. These would be individuals in the same group or program that would attend meetings in place of the members. Send the names of your alternates to Ken (Mack).

Matt reminded Jeff, Nancy, Megan, Andy, and Richard that their board membership was up at the end of the year. He asked them to notify if they were continuing or assist in finding replacements.

Matt reminded members of an upcoming vote on the outstanding board vacancy on between: Heather Quinn (Maryland Geological Survey) and Thomas Gay (Severn River Association). We are planning to fill this vacancy by January 1, 2024.

#### Committee Chairs Meeting [May 19] (10:12 AM)

Matt said that the attendance was low, but they got some good work done. He listed items accomplished at the meeting:

- Byron volunteered to be the new Monitoring and Assessment Committee chair.
- Byron volunteered to help with the eDNA workshop.
- They discussed standards for MS4 jurisdictions that the council may help with. Matt mentioned the idea of jurisdictions sharing data and implementation ideas.
- Chris detailed plans for the eDNA workshop. He plans to have final invites sent out in a week or so. A final list will be presented to the board members at that point. The date will be in the Fall or January, depending on commitments from the final speakers. Case studies presented will probably be from Maryland only. He's planning to hold the workshop at the USGS center because it has appropriate media facilities. The Patuxent Conference Center does not have internet and is unable to hold a hybrid meeting.
- We discussed the Information Management Committee, talking about workshops on various QA/QC topics. We started a list of best practices for water quality data. At this point we're thinking of a one-hour webinar until the committee builds further.
- Lindsay covered a lot of good activities by the student committee.
- They decided to forego further committee chair meetings and allow each committee to proceed with its activities. Matt applauded the committees and their leaders.

#### Committee Reports (10:40AM)

Monitoring and Assessment: Byron explained that he learned what is expected of the committee. He got some good ideas from members and other committees. He will reach out to the committee members to start activities.

Citizen Science and Community Stewardship: no representative in attendance.

Information Management Committee: Matt reported for the committee. We considered some ideas for workshop topics. There was no critical interest in sharing data. We settled on inviting an EPA expert(s) on water quality assurance to speak. They would speak on quality assurance plans, using the water quality exchange/portal. We could queue up a recording of a previous presentation during a lunch and learn session. We will open the workshop up to all the organizations on the board and plan to hold it in August or September.

Richard asked if they were contacting the region or EPA headquarters? Matt thought he was communicating with Jillian Adair in Region 3. Richard will look into connections at EPA HQ. Richard said that QAPP requirements vary from region to region. Jason posted a contact for EPA Region 3 (Varena Joerger).

Alice said Durga Gosh at CBP helped them develop their monitoring QAPP. She suggested a QAPP development workshop for non-traditional monitoring groups such as riverkeepers. Her riverkeepers monitoring program was based on DNR's shallow water monitoring program. This would be an opportunity to help community water monitoring projects and feed their data into the Chesapeake Bay model. Richard said that part of his group, the EPA National Water Quality

Monitoring Council, does have those connections, but sees the need that Allison brings up. He will speak to his chief. Matt suggested that we could partner with them.

Groundwater Committee: Steering the committee to update the Maryland Saltwater Intrusion plan. Jason and Mat are now committee co-chairs. Other committee members are Andy Staley, Kirk Marks, John Anthony, Cody Madison, and Kate McClure. Jason got feedback to revise chapters of the plan. The main challenges for the plan are resource constraints. He asked MGS to estimate costs to complete research within a time frame. We are developing a model similar to Maryland's Chesapeake Bay Phase 3 WIP. The concern is for coastal septic systems and surficial wells, including those used by farmers.

They also discuss HB 11, which revises requirements for analytes to be tested when certifying a new well or property transfer. They were more concerned about the bill requiring a study to be completed by the end of 2025 detailing monitoring and analysis of groundwater resources across the state.

They consider the ramifications EPA 's proposal for a PFAS rule and classification on Maryland groundwater. What does it mean in the fractured rock areas of the state? How does it affect municipalities? How does it affect farmers? He asked for any news on the topic. Matt explained that his group is part of a team working on a PFAS action plan due by the end of the year. Jason and Matt discussed a fishery advisory in the Piscataway put out in 2022. Matt said the next report is due in 2024, and likely that there will be more PFAS advisories for fish tissue.

Annual Conference Planning (Katherine): She related the May 25 planning meeting. They worked out preliminary sessions and moderators and developed a list of potential speakers for those sessions. Matt reminded that we settled on the date of November 17. We posted the date to our conference website. Katherine presented a spreadsheet of our tentative session layout, based on last year's schedule. The plenary speakers have been contacted but not confirmed. There remain unassigned sessions that could be for open talks. We are aiming for 450 attendees. We're continuing to go with 18 breakout sessions. The preliminary total cost from the Maritime Center is \$37,000.00. With the net fund rollover from last year, we could reinstitute our student and nonprofit discounts.

Mike will continue to plan to separate sections for drinking water and storm water. He has a moderator for each. Richard volunteered to moderate the Cutting-Edge Biology session. Nancy asked to tell anybody talk to Michael Williams about during the Restoration session. Katherine will reach out to him. Matt asked if there was a target date for abstract submission. Katherine said that our drop-dead date would be the end of September. She posted a link for online submission of abstracts. She asked organizers to have speakers fill out the online form.

Jason is preparing the Megafauna session. One speaker asked if she might present virtually. Katherine said that last year we set up a Google meeting for one of the speakers. Audio from the computer was not great. Jason concluded that virtual was not desired unless we bring good audio equipment. Jason listed possible speakers he was recruiting and asked how to contact one speaker.

Matt verified with Katherine that we have for sessions without a topic for contributed talks.

Ken S(taver) asked why there isn't a session addressing climate change. Matt related the speaker list he was developing for thermal impacts, as they might be related to climate change. Ken S asked about his responsibility developing the ag session. He asked what the overall theme was.

Katherine: "Stepping Up Our Efforts: Now Is the Time"

John said he might be able to get start Sandy Hertz at MDOT to speak on climate change.

Mike pointed out Jason's comment about climate change in the chat box. He asked whether we need five breakout sessions? Katherine responded, in the years leading up to COVID, we had 650 people and had enough break out space, plus people milling in the halls. Matt asked what the capacity of the smallest rooms according to fire code? Katherine said it was about 50.

Katherine canvassed for session moderators. Brian and Byron volunteered to moderate. Matt and Katherine are reminded that speakers should submit their abstracts through the provided link by the end of September.

Student [Lindsay DeMarzo]: Lindsay was not present. Matt asked anyone on the committee to report. Brian reported that the committee has not met since prior to the last board meeting.

#### Lunch Break (11:12 PM)

Matt: Skipped, since we were well ahead of the agenda.

#### News Roundtable (11:13 PM)

Brian: at DNR we are doing our hypoxia monitoring for the summer in the Bay main stem. Due to the very dry spring with a lack of runoff, the prediction was a small area of hypoxic waters. Following two cruises in June, that's exactly what we're seeing. Through early June, hypoxia was the second lowest in over 39 years of monitoring. Late June monitoring showed the same results.

Katherine: DNR stream survey the program has had another successful summer training course. The monitoring season started June 1. Surveys have been understaffed. Not surprisingly, many of our sites were dry the first couple of weeks in June. New technicians will be starting next week, enabling us to tackle larger sites.

Mike: nothing new in regards to restoration of the Choptank. We are starting work on restoration of the coastal bays, which is new since we always worked in freshwater, now tidal salt water. It's a bit deja vu for me because I worked on salt marshes and my graduate work.

Ken S: MDA decided to privatize its Nutrient Management Plan assistant program and not offer it through the university. There is no change for the farmers. They're required to do this for a 3rd of their acreage. They have to find a path forward. A written nutrient plan is required to participate in other programs, such as the cover crop program.

It's been crisis dry in the Eastern Shore. We were dry at the start of the growing season and have had half of the usual precipitation for April, May, and June. Runoff at the Center has been super low all year.

I am involved in developing the phase 7 Chesapeake Watershed model. There will be some big changes, because even after all these years, there are technical issues, especially with phosphorus. In the next two years we will face the fact that we have not met the 2025 goal, and intense issues must be discussed. This involves all states in the watershed. States dot directly at the Bay may refuse to meet requirements of the TMDL.

Jason: we have a date for the 3rd Annual Brownfield Conference. This is for the local governments, in conjunction with MDE's land restoration program. It will be at MDE on November 15. There will be various presentations, some related to monitoring challenges, and others relating to land developments issues and financial/technical assistance. We are continuing to administer the Patuxent River Commission. Covering long range issues, we are identifying what needs to be changed in laws and regulations for restoration by 2040. It's a challenge since there is no accountability framework including TMDLs.

Nancy: we are working on a Chesapeake Bay-wide planned for microplastics. This follows work in the Potomac. The goal is to look for the source of microplastics, hotspots. We are studying different sections of the Potomac, comparing them to land use, to understand sources of plastics coming into the water. They will be talking to local governments to see if they're interested in participating in microplastic monitoring. They want to link that to existing efforts. EPA is providing the funding, and they can provide feedback to the agency.

Matt suggested that it would be a good topic for our lunchtime presentation. Nancy said to check back with her after they've gotten further along in the project.

Richard: I have been working on the National Streams Emergency Assessment. Traveling all over the country auditing and training cruises. We have been in the field since June collecting data on the selected probabilistic sites. We are collaborating with DNR and other states. Our goal is to get 800 to 900 sites sampled this and next summer to develop our report. We have had a hold up of the national report for rivers and streams because of the new PFOS monitoring requirements in fish tissue. A paper came out using the interim EPA Standard for PFOS. It stated that almost every fish in inland waters that you eat are above the limit. Based on the new screening criteria, it's not as bad as that, but not great either. It's likely that a lot of sites around the country are going to have consumption advisories PFOS. Matt verified Richard was discussing PFOS, not PFAS.

Mike asked if he was including saltwater fish. Richard clarified, Only only freshwater/inland rivers and streams. However, based on the National Lakes Assessment 2022, they did also start screening lake sites. The rivers and streams standards would be applied to lake fish monitoring.

Chris: like many of you, we are busy with summer biological monitoring, heading into the primary sampling. KCI and Coastal Resources are sampling fish for us. Some of my colleagues are working on bacterial source water tracking in a TMDL watershed (Marley's Creek?). We have

coupled conventional bacteriological monitoring with eDNA sampling to correlate these in a particular watershed. We are working with MDE and Dr. Ghosh in a PCB TMDL watershed.

Alice: regarding the ongoing lawsuits with Baltimore City for their permits at the Patapsco and Back River WWTPs, we are still negotiating consent decree. It's good news that both plants are reaching their permit effluent concentration requirements. She explained to Nancy that she would like to get an understanding of what type of plastics are coming out of WWTPs. We have monitoring stations directly over the Patapsco Plant effluent pipe. So, we have a long term data set from the surface water outside the plant. She offered this as an interesting site for historical and continued monitoring.

We have an ongoing lawsuit with Fleischmann's Vinegar Co. for discharging acetic acid into the Jones Falls.. What's different, is that it's not based on DMRs, but our own data. She thought it would be a good session for the conference, citizen lawsuits from monitoring data. But she thinks that she and her colleagues are not at a point to be able to present in this way. She will reach out to them for case studies that they would talk about in a conference setting. Met thought it was a good idea. Mike thought it was a good idea especially if you could cross it with environmental justice. Alice thought that MDE might have cases to contribute talks. She would reach out.

Brian commented that he no longer could access the sewage overflow database at MDE. He used to use it to look up data for his Masonville study. I found no data in this database. Alice explained that he needed to download the entire data set with no filters, all days, all jurisdictions. You will have to apply manual filters. Matt said that his group uses the same data set for annual compliance. He was uncertain, but he thought he overheard that MDE's Compliance Program was developing a mapped version of the database. Jason posted a link that explains a training delay is holding up this new tool.

Byron: we are in full summer monitoring. We moved our monitoring location to begin a new long term study under our new permit. We have been working on the new INSR grant for a few years. Stations are 20 miles apart, so we're not always capturing the same storm. We are at Piney reservoir every 2 weeks doing full sampling. With this recent dry weather, we have been visiting our monitoring wells every 2 weeks, and making recommendations to local towns.

Andy: about halfway done with summer MBSS fish sampling. Helping those with required monitoring plans to meet requirements of MS4 permits and TMDL action plans.

Michael: focusing time and energy on graduate student projects. Projects on the delmarva shore coast and bays. Planning a long term study with gas flux towers with a gradient of wetlands. We can study changes due to the climate change, greenhouse gas production, and carbon sequestration. The USDA has approved the project. Looking at a great deal of stream restoration data that if gathered over the years. Matt asks if the study was centered around the coastal bays. Michael explained that it was in the Goldsboro area.

Linday: at our recent student meeting, we discussed having a listserv to reach out to students and faculty. Lindsey asked Katherine about MWMC's listserv. Katherine explained that the Council's email list is long but has no affiliation or name tags. The student committee also discussed student

involvement in the conference and potential involvement in the council going forward. Possibly, students could come to board meetings and give short presentations. They discussed best student participation in the conference. They decided not to have a lunch activity. There was mention of lightning talks for the conference, or having a session devoted to student talks. Connections to volunteer organizations such as stream cleanup.

From the Howard County perspective, we just finished our climate resiliency plan. We concentrated on mitigation, trying to balance equity, to have a holistic approach. Lindsey will be heading up the nature based climate resiliency part.

Matt: my people got our water quality standards report approved by the EPA. We have some designated uses that are changing from warm water class to a cold water class. We put out a number of cold water use standards to protect cold water obligate species. The existing use provision gives us the ability to go above previous standards. We adopted almost 70 human health criteria including, cadmium and ammonia for fresh waters. We also updated some Tier II criteria for the antidegradation implementation section, making them easier to read and understand. We are already working towards our next set of standards changes.

I attended the volunteer monitoring conference by ALARM in Carlisle, PA. It was well done and well attended, and it was great to see Maryland partners there. We gave a couple of presentations on how MD uses data, develops standards and reports. We've hired 2 new people in my group: Melinda Cutler, who will help with water quality standards, and Jacob Greene, to help Becky Monahan with the integrated report of surface water quality. We are also reviewing the MS4 implementation monitoring plans. Working on the PFAS action plan for the state.

### Action Items (11:55 PM)

Matt listed the items he had identified:

- Send your alternate board members contact information to Ken Mack.
- If you're one of those board members whose term is coming to an end, reach out to Ken Mack and let him know if you want to continue or not: Jeff Reagan, Nancy Roth, Richard Mitchell, Megan Brush, and Andy Becker
- We ask that all board members serve on at least one of the committees, if you already haven't.
- We have not been successful getting file sharing to work. Will continue to use email to get information out to the group.
- Matt asked Richard to reach out to colleagues on quality assurance, or National Water Quality Monitoring Council. We want to move forward with the workshop/webinar plan for QA/QC.
- If you are recruiting speakers for the conference, make sure they get their abstracts in by the end of September through the link Katherine will provide.
- John Denniston will reach out to Sandy Hertz to speak at our conference or one board meeting.

Katherine added:

- She will be sending out the link to the speaker abstract form. Please forward this on to potential speakers.
- Katherine will send the list of academia that attended our last conference..

Ken S suggested session topics:

- He suggested session on PFAS. What about WWTP sludge applications to ag land contaminating the the food supply with PFAS?
- How about large photovoltaic installations impact on stream health?
- Is there a stream report card, should it be developed?
- What about saltwater intrusion?
- The Maryland mandate on soil health, including its used for carbon sequestration?

Matt 's opinion on ag BMP 's, we haven't touched upon it much in this council. Some of us would learn a lot from such a session, even though it might be old news to the direct community.

Michael mentioned Claire Buchanan 's work to develop a stream health report card. Take a look at the IAN website.

Ken suggested presenting a stream health report card at each conference, etc.

Matt suggested that we consider addressing other water bodies, other than streams.

**Adjournment (12:13 PM)**