



Maryland Water Monitoring Council
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Andy Becker, KCI Technologies
Megan Brosh, Baltimore Co. DEPS
Lindsay DeMarzo, Howard Co. OCS
John Denniston, Maryland Dept. of Transportation
Tom Guay, Operation Osprey
Matt Harper, M-NCPPC
Ken Mack, Montgomery Co. DEP
Becky Monahan, MD Dept. of the Environment
Byron Madigan, Carroll Co. BRM

Heather Quinn, Maryland Geological Survey
Rupert Rossetti, Octoraro Watershed Association
Nancy Roth, Tetra Tech, Inc.
Brian Smith, Maryland DNR
Ken Staver, Univ. of MD WREC
Angel Valdez, MD Dept. of the Environment
Greg Voigt, EPA Region 3
Michael Williams, Univ. of MD College Park

BOARD MEETING REPORT

MARYLAND WATER MONITORING COUNCIL BOARD MEETING

JANUARY 21, 2025 – VIRTUAL

In Attendance (virtual):

Andy Staley (alternate for *Heather Quinn, new member), *Angel Valdez (new member), *Becky Monahan (new member), *Brian Smith, Brock Reggi, *Greg Voigt (new member), *John Denniston, Katherine Hanna, *Ken Staver, *Lindsay DeMarzo, *Matt (H)arper, *Mat Pajerowski, Matt Stover, *Megan Brosh, *Michael Williams, Mike McMahon, *Byron Madigan, *Nancy Roth, *Rupert Rossetti, *Tom Guay (new member)

Not attending: *Ken Mack (no alternate), *Andy Becker (no alternate)

*Board Member

Matt called the meeting to order at 9:51 AM. He started with the general thanks to all who helped with the fall conference and recent workshops.

Then he asked all present to give a quick introduction, including new board members Becky Monahan, Angel Valdez, Thomas Guay, and Greg Voigt. Also, not present, Heather Quinn was confirmed to the board by the DNR secretary. Andy was her surrogate during the meeting.

The Meeting notes from the prior board meeting held on October 22nd, did not go out until the Friday before the meeting. *Katherine* gave the board members a few more days to respond with comments or corrections. *Matt* asked that members respond about the meeting notes by Friday.

Matt announced Chris Victoria's retirement, stepping down from the board, and relocation. He asked for candidates to fill his Local Government vacant position, and pointed out that board members can enlist staff and friends to aid them in their objectives.

Membership

Matt asked for recommendations for Board candidates; three openings: local government, academia, and volunteer. *Becky* asked if we could recruit high school educators for the board? *Matt* pointed out that our daytime meetings might be an impediment. *Nancy* asked who was on the membership committee. *Matt* explained that it had been himself, *Mat*, and *Clark* and mentioned the SOPS for the committee. He again announced that this was the last year he would be Board Chair and pointed out a need for a new chair starting January 2026. *Mat* interjected, if someone was interested in the job, talk to him or *Matt*. It would be great to have someone early this year. *Matt* plans an orientation meeting for new board members. He asked for comments from attendees.

Committee Updates

Monitoring and Assessment (*Byron*)

The committee has met often over the past few months planning the PFAS workshop. He quoted Katherine's 560+ registrants. The workshop will be at the USGS Water Center. Each committee member pitched in, recruiting two to four speakers, making it easy to organize.

Mat asked *Byron* for a list of people who registered to be in person. He wanted to create a sign in sheet. *Matt* suggested he ask Katherine for that. *Byron* thought that the audio visual issues had been solved for tomorrow, the day of the conference.

Ken cited an article in the New York Times on PFAS in our soils. *Byron* commented on how they were used in herbicides and pesticides. *Mike* asked if they were part of the inert ingredients in these applications. *Ken* considered them largely coming from applied biosolids. *Mike* searched for and posted the EPA link regarding PFAS in agricultural applications. *Michael* pointed out a researcher at Chesapeake Bay Laboratories concentrating on analysis of PFAS in the environment. He also cited an NHK news story about concerns for PFAS in Japan.

Matt asked about any news regarding round table. *Byron* said he's waiting for *Andy* to get back at the end of January. He expects to have it planned before MBSS work begins in March.

Stream Restoration (*Brock*)

Being new, I'm trying to figure out how this group works and my position. We had a couple of good meetings with 37 attending and 12 or 16 core members. Discussing speaker lineup for the forum. We are looking at crediting issues for nutrient runoff to the Chesapeake Bay. We are discussing possible similar topics on developing technologies in stream monitoring, including eDNA. It's a better way to get a solid look at the watershed baseline and any increase in stream restoration bio habitat. We also discussed floodplain issues using drone monitoring. I have done a lot of fine tuning of monitoring requirements to provide data as usable metrics period. In the March meeting, I will finalize what we're going to contribute to the next annual conference. There's an assumption that discharges will act the same on receiving waters. I reject the one-size-fits-all approach. I'm spearheading a group to figure out issues affecting sediments and soils, particularly higher erodible soils. We are working with *Tess Thompson* on these issues. Also, what site-specific parameters might help reduce long-term stream restoration needs in the future.

Michael asked to touch base regarding the drone monitoring.

Rupert asked if the eDNA work was intended to detect pollution sources. *Brock* confirmed. *Rupert* also asked if he was using an indicator of ecosystem health. *Brock* explained that it was being used as a sensitivity index or what species are in the watershed with too few individuals to sample. *Nancy* asked to talk with *Brock* on possible topics or speakers for the stream restoration sessions held during the annual conference.

Information Management (Matt)

Najma Khokhar has stepped down from the committee, and we are looking for someone to take over chair of the committee. *Mike* asked if we could recruit someone from the committee itself to chair? Do they have to be a board member? *Mat* clarified that committee Chairs did not have to be board members. *Katherine* said that *Tomas Ivasauskas* may be interested in the position as long as he is not the solo lead. *Matt* will check with *Kara*. Someone from VA DEQ might be interested. The committee is soliciting ideas for webinars. Anne Arundel Co. and USGS may have some contacts.

Brock offered the idea of a webinar on the state of the science of stream restoration. Time to renew public interest by showing the positives. *Michael* cited the STAC report. *Brock* wondered how many people see it and *Michael* agreed it would make a good webinar topic. *Ken* brought up correcting misinformation. *Brock*, *Michael*, *Ken*, and *Nancy* continued discussing details.

Mike cited an earlier meeting report to lead Information Management. *Mat* recommended *Brenda Maggetti* from USGS as a speaker. We discussed iPad vs. Toughbooks. *Chris Victoria* mentioned regional informatics. *Mike* suggested *Olivia Devereaux* from the CBP to talk about their data.

Tom brought up his own skepticism about stream restoration practices, including tree removal. He pointed out a bird sanctuary lost to tree removal. He commented how six to eight years of data has shown no improvement of the Severn River. The recent drought has impacted salinity levels. He expressed his insight as a citizen scientist and its importance. He cited a failed stormwater pond due to lack of maintenance after \$1.5M spent. *Michael* mentioned an associated step pool that blew out in 2020 or 2018. *Brock* said this is a rising issue across the nation. People do not want to say they had a bad project and be denied the next one. *Tom* expressed his concern about the utility of computer models. *Brock* said in VA they don't look at the nutrient reduction as restoration success, but the fauna. He was concerned there was a "band-aid" effect going on. *Matt* suggested that this would lead to a webinar series or workshop. *Ken* suggested a link to the STAC Report be shared in the chat. *Mike* brought up the value that some projects might have restoring the floodplain, even if not returning aquatic species. This includes nutrient reduction. *Brock* brought up BDAs, beavers, and lack of protection of ephemeral stream headwaters.

Groundwater (Mat)

Mat said the committee has not met. *Heather Quinn* and colleague have shown interest to lead.

Student (Lindsay)

The student session turnout at the annual conference went very well. Six students presented lightning talks, and six students presented posters. We met in the fall before the conference to hash out details. We are thinking of having a career chat in the next few months. So, I might be pinging

some of you to join. She asked *Tom* for a possible collaboration. Ken asked if some of the students were from high school, which *Lindsay* verified. *Brock* volunteered to help.

Citizen Science and Community Stewardship (*Rupert*)

Reforming the committee. Will connect up with Tom. Planning to revisit the citizens science data workshop in 2016/17. Matt and Katherine provided a lot of background material. We have a large interest from the Chesapeake Monitoring Cooperative: Liz Chudoba and Matthew Kierce, and Alex Fries. Many of our people are retired by necessity. Working with Byron on the workshop and interested in a hybrid model for the long term. We welcome input.

Annual Conference Planning (*Katherine*)

Starting with the budget, we rolled over 28,379, we spent \$38,600 this year on the conference center. We brought in about \$36,000 on registration, just under \$4,000 on exhibitor tables. We rounded out 2024 with \$29,972, very close to where we started. Majority of registration were early bird. People found out about the conference through bulk email. She proceeded to present more data and survey results from the conference. *Matt & Katherine* concluded from the positive results no need to change the conference.

Matt suggested a potential theme for next year's conference could be Technological Innovations. He had a couple of contacts for plenary speakers along those lines. *Ken* suggested Jane Nishida as a possible plenary speaker. *Greg* said she recently retired. *Matt* suggested speaker from the EPA and NASA (PACE Project). *Becky* agreed with the technology theme.

Katherine said she will get the planning committee back together soon and start the bidding process for this year's venue. The expected date for the conference will be November 20, 2025. *Matt* pointed out that we had 51 no-shows, but they paid and therefore supported us.

News Roundtable

Tom: Will be debuting this water operation Osprey project in the spring; becoming a published historical fiction novelist;

Rupert: nothing more.

Nancy: working on a couple of bacteria monitoring projects, bacteria source tracking with the City of Virginia Beach and other counties.

Byron: Carroll County's Annual report in for the year; three Army Corps reports submitted this year for monitoring; letters out for MBSS sampling to start in the spring; survey work for Army Corps permits.

Mike: working on revising the bacteriological TMDL for Anacostia River; colleagues are going to be submitting the year-end report for the 319; EPA in changes in directive regarding EJ.

Megan: Baltimore County is analyzing a full year of follow-up sampling at our outfalls that had high *E. coli*, high for canine; will stop spending the money on that analysis because it's usually low or non-detect; hoping that would generate some good data for pet waste outreach.

Ken: There are arguments about nutrient loads in the ag sector; PFAS from biosolid applications is an issue; the federal farm bill for water quality and conservation initiatives; issues over the

current drought and cold weather, water table of unconfined aquifers are at lowest in last 10 years, unable to do edge of field monitoring, small order stream are dry.

Katherine: MBSS has started their year again; our training scheduled for late February, our prospective sites are out for permissions; gearing up for our spring benthic sampling.

John: I'll have more information on the smart pond project next time.

Greg: [Matt reads message from chat] EPA completed a story map on nutrient pollution reduction efforts across the US; released draft human health water quality criteria for three PFAS compounds, open for public comment.

Ken asked about sampling nitrate level in cold weather. *Matt* recommended contact Jen Jaber, of MDE field office crew.

Mat: year-end wrap-ups. USGS report comparing WQ in shallow groundwater near agricultural areas in Coastal Delaware. Cited a journal article of microbial degradation of PFAS.

Brian: DNR is wrapping up data analysis from last year and writing up reports; plan for the 2025 monitoring season; final report Chesapeake Bay hypoxia on the mainstem released, hypoxia in both Maryland and Virginia slightly above average in May and early June, June to September/October below average, in both Maryland and Virginia slightly above average in May and early June.

Becky: MDE has finished our data solicitation to get ready to prep for the 2026 Integrated Report, keep the group posted.

Angel: I am the coordinator for Tier II high quality water anti-degradation. This year we are getting MBSS data we can use to update our high-quality segments health status; starting to confirm our mitigation and other special conditions; working with economists to increase the rigor of our social and economic justification.

Andy: MGS continues to do our ongoing groundwater level monitoring from our network across the state along with the USGS; producing contoured potentiometric surface maps out of the data for southern Maryland; radio nuclides from Potomac group aquifers in Charles County; reporting on the effects of stream restoration on nutrients and shallow groundwater at the Sassafras restoration site; looking at chlorides in groundwater and geochemically fingerprinting them to various sources road salt, landfills, septic, etc.; projects planned at DNR properties on radio nuclides in southern Maryland; involved revision to the saltwater intrusion plan; PFAS sampling at DNR properties in Fair Hill close to Gore Tech facilities. Ken asked about detectable ranges for potassium chloride.

Matt: MDE's Water Quality Standards program has an existing use determination pending for section of the North Branch of the Potomac River downstream of Jennings Randolph Lake and Westernport Maryland. We are also preparing Maryland's Triennial Review of Water Quality Standards within which we will be proposing PFAS water quarter criteria to protect aquatic life. We are also working on a Fishing Bay Pilot Project in an attempt to comprehensively assess dissolved oxygen (DO) in one segment of the Bay for all the applicable DO criteria. To do this, we are working with the Chesapeake Bay Program to run data through the current interpolator and the new 4D interpolator.

Action Items

- Fill local government representative Board position and two others
- Chairs for the Information Management and Groundwater committees
- Volunteers to chair the Board next year
- Katherine will send survey results and suggestions for this year's conference.
- Katherine will set up the conference planning committee meeting.
- Tom will get in touch with Lindsay (working with students) and Megan (bacteria monitoring).
- Rupert will discuss hybrid webinar production with Byron.
- Brock will help Lindsay with student events.
- Lindsay was also looking for folks who are willing to participate in a career chat.

Adjournment (12:28 PM)