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Maryland Dept. of Natural Resources  
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Sandy Hertz, Maryland Dept. of Transportation  
Chair

Mat Pajerowski  
Vice-chair

Katherine Hanna, Maryland DNR  
Executive Secretary

#### Directors

Andy Becker, KCI Technologies  
Megan Brosh, Baltimore County DEPS  
(P) Drew Budelis, Versar, Inc.  
Jai Cole, M-NCPPC  
(P) Lindsay DeMarzo, Howard Co. OCS  
(P) Jason Dubow, MD Dept. Planning  
Clark Howells, Baltimore City  
(P) Bob Hilderbrand, UMCES  
(P) Ken Mack, Mont. Co. DEP  
Byron Madigan, Carroll Co. BRM  
Richard Mitchell, US EPA

Jeff Reagan, Biohabitats, Inc.  
Nancy Roth, Tetra Tech, Inc.  
Ken Staver, Univ. of MD WREC  
Matt Stover, Maryland Dept. of the Environment  
Mark Trice, Maryland DNR  
Chris Victoria, Anne Arundel DPW  
(P) Alice Volpitta, Blue Water Baltimore  
Michael Williams, Univ. of MD College Park

(P) = Pending

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## MWMC Board Meeting

April 20, 2021

In Attendance: Sandy Hertz, Alice Volpitta, Bob Hilderbrand, Byron Madigan, Chris Victoria, Clark Howells, Drew Budelis, Jai Cole, Jason Dubow, Ken Mack, Ken Staver, Lindsay DeMarzo, Mark Southerland, Mark Trice, Matt Stover, Megan Brosh, Michael Williams, Najma Khokhar, Nancy Roth, Mat Pajerowski, Richard Mitchell, Katherine Hanna

Sandy Hertz began the meeting at 10:01.

Minutes from February 16 Board meeting were approved.

### Recent Legislation

Sandy Hertz opened a discussion on recent legislative topics and bills involving water quality interests. She brought up the Maryland Climate Solutions Now Act of 2021, which is associated with Chesapeake Bay restoration funds, including funding for the Chesapeake Bay Foundation's tree plantings. Senator Pinsky was in favor of the bill, while MDE Secretary Grumbles was against. The bill called for a reduction of 60% in statewide greenhouse gas emissions by 2030. The bill failed to pass, but may come back up in next year's legislative session. The forestry portion of the bill was incorporated into another bill from Senator Pinsky.

Sandy also brought up Maryland Senate Bill 737, the Comprehensive Conservation Finance Act, which would create other options for restoration solutions using a "pay for success" credit system used in other jurisdictions. It is similar to how MDOT worked with MES on a Walmart runoff/storm pond monitoring project, with MDE administering the credits involved. The bill did not pass, but will undergo further negotiation and will be revived in the next legislative session.

Jason Dubow noted that there were no bills brought forward on salinization, but there was some deliberation on nutrients, PFAS, and plastic use. Sandy stated that there was one relating to use of glyphosate for controlling phragmites where it's invading waterways. Use of glyphosate has been approved by MDE for phragmites control, but without that option, phragmites would need to be removed by manual or mechanical means. The bill would likely come back in the next session. Sandy emphasized the need for exotic plant control options and best practices. Ken Staver pointed out that

glyphosate is under scrutiny for issues relating to human health, which may eventually stop the herbicide's manufacture. Jai Cole said that Montgomery County has banned glyphosate in human use areas, but has not extended the ban to natural areas. Mark Southerland mentioned a bill in favor of low-impact landscaping, requiring HOAs to allow rain gardens and other environmental landscaping. He also described a ban on balloon releases.

Sandy then inquired about bills at the federal level. Mat Pajerowski explained that the nature of federal legislation was less seasonal, and support of environmental policies was dependent on the new administration. Current emphasis has been placed on climate change and a goal of 30% of land in conservation, as well as some focus on PFAS and microplastics. Richard Mitchell added that EPA is pushing climate change and environmental justice policy. Sandy noted that this was consistent with Maryland. Richard continued, stating that EPA would be reassessing PFAS standards recommended for states, reevaluating pesticides for environmental aspects, and calling for nominations to the EPA science panel. There would also be a review of "Waters of the US" and a return to hearing peer-reviewed scientific advice.

### Committee Reports

**Monitoring & Assessment:** Michael Williams was considering working on climate change, road salt, and environmental effects of the pandemic as workshop topics. The annual roundtable was not held this year, but will most likely be resumed next year.

**Nominations:** Matt Stover thanked everyone who voted for the new Board members. He introduced Alice Volpitta, who joins the Board from Blue Water Baltimore as the Baltimore Harbor Waterkeeper. She started as a Natural Resources Biologist with DNR's Field Office under Sally Bowen, then brought the ideas from the shallow water monitoring program to Blue Water Baltimore and shared the methods across the country. Matt Stover noted that MDE has been using the data for TMDLs and other work. He went on to introduce Dr. Bob Hilderbrand with the UMCES Appalachian Lab. Bob described his work at the AL to research stream restoration in urban environments, emphasizing realistic expectations. He also contributes to monitoring and assessment using microbial and eDNA protocols, and is interested in how eDNA can be used to complement other monitoring. Matt suggested eDNA as a workshop topic, and Jason thought Bob could hold an eDNA webinar. Matt then shared that Drew Budelis was now officially a Board member, although he has been helping the Board for years. Drew appreciated being involved and supports the work being done. He's looking forward to helping with the Annual Conference. Matt then listed the Board members who would be continuing on for another term: Nancy Roth, Jeff Reagan, and Lindsay DeMarzo. Katherine Hanna had checked on the status of the DNR Secretary's confirmation of new Board members, but received no response. Sandy offered to check into it as well.

**Information Management:** Najma Khokhar had two attendees at the last committee meeting, and 15 are signed up to attend the next meeting. The interest form went out to the MWMC community the morning of the Board meeting, and Najma will schedule the committee meeting and send that information to Katherine to share.

**Groundwater:** Mat had no committee updates to share at this time.

**Student Involvement:** Lindsay DeMarzo is looking for ideas on student involvement. Sandy suggested a webinar for upcoming and new graduates in June, and thought Bob may have additional insights. The webinar could discuss starting out on different environmental career paths.

**Monitoring & Stream Restoration:** Nancy Roth described the recent subcommittee meeting, and thought that they would serve as a means of connection within the restoration community. There is another meeting in planning phase.

No representative was available to provide a Citizen Science Committee report.

**Annual Conference Planning:** Katherine reported on the last committee meeting and the current status of the conference. The plan is to put on another fully virtual conference, themed Environmental Justice in a Time of Climate Change, with conference support from a consulting company. A small registration fee will be charged to attendees to

cover costs. Katherine will reach out to Dr. Sacoby Wilson of UMD's School of Public Health and editor-in-chief of *Environmental Justice* to serve as the conference's plenary speaker.

### Clickable Map

Katherine Hanna and Mark Trice presented the case for retiring the Clickable Map, as the data are infrequently updated and maintaining the map is a bigger task than can be supported at this time. Sandy Hertz envisioned a transformation into a resource page. Matt Stover thought a directory of places to find data would be useful, consisting of known collections and pages. Richard Mitchell thought it would make sense to build off existing tools and send email surveys annually to determine updates to known data sources. Sandy wanted it to have links to equity mappers, including from the UMD School of Public Health, and thought that each resource on the page should be marked with a "last updated" date. Matt Stover suggested that this might be a project more suited to the Information Management Committee. Najma had already planned to discuss collection of similar data as an agenda item at the next committee meeting. Mark Trice thought it shouldn't be a problem to keep the map up indefinitely or until a replacement is available, but he would check. Sandy thought a new splash screen addressing the datedness of the map contents would be appropriate. Katherine will create a Google Sheet to collect information on application and data sources for the revised resource page, then send it to Najma Khokhar for Information Management Committee use and distribution.

### News Roundtable

Drew Budelis: Versar will continue DNR's long-term benthic monitoring.

Mark Trice: DNR's Tidewater Ecosystem Assessment Division is working through challenges with data management in 2020, and has provided data to the Chesapeake Bay Program for clarity assessments.

Byron Madigan: Office is finishing up spring MBSS fieldwork, NPDES, and boat work.

Chris Victoria: Anne Arundel County is finishing up spring sampling.

Clark Howells: Baltimore's working on LSR monitoring, climate change resiliency, forest resource adaptation to climate change with different species, finishing up data collection for the season, then creating a plan through the American Waters Act Sourcewater Protection Committee Regional Chair for the 2018 Farm Bill, which dedicated 20% of funding for grants to implement BMPs for the water supply, and is looking for participants. The committee has an agricultural and utility communication goal, and is looking to work with engineers to share data and tools.

Katherine Hanna: DNR's Monitoring and Non-Tidal Assessment Division is in an MBSS field season. MBSS certifications have been extended for an additional year.

Ken Mack: Montgomery County is sampling, working on an agricultural study, restoration work and five-year post-restoration monitoring, an urban stream study, and work on the MS4 permit.

Ken Staver: Working on small-scale field monitoring, 2025 TMDL nutrient monitoring with emphasis on soil health, which seems to have overpromised for water quality climate change effects. The UMCES office recorded 72" of rainfall over the previous year, and observes that rainfall amounts appear to be trending upward. He's waiting to see how federal funding goes for agriculture. Ken then raised the question of whether there was a report card for aquatic invertebrates, or other indicator of changes over time. Katherine described the MBSS Round 4 study for which monitoring had recently been completed and analyses comparing sites over 14 and 20 years difference were underway. Ken clarified that he was looking at the big picture, but other smaller jurisdictions like counties have lots of data as well. Richard Mitchell pointed out that with aquatic insects identified to genus rather than species, it gives you different information. Bob Hilderbrand added that genus data makes it harder to detect trends.

Sandy Hertz: Regarding the change in precipitation, on March 18<sup>th</sup>, the Federal Highway Administration approved a study to update floodzone data for Maryland. This would allow different state DOTs to work together. So far Virginia and Delaware are on board and the study is moving forward using NOAA Weather Service data. An update is expected in 2-3 years, and will address flooding occurring outside of the 500-year floodzones. She's also happy with the progress on the Annual Conference, updates to web page, etc., and encourages expansion of MWMC influence into other professional networking outlets such as LinkedIn in order to share info and expand our reach. The conference should have a session for emerging threats of weather and flooding, and whether we see nutrient changes: "Concerns of Critical Infrastructure's Resilience to Threats"

Mark Southerland: The chat log contains a list of bills that have passed this session.

Matt Stover: MDE has its triannual review of water quality standards, and plans changes to language protecting coldwater resources, updated ammonia parameters to protect freshwater mussels, and revising language on protections. Data is under review for the Integrated Report. The Chesapeake Data Explorer displays work that has been done. MDE is working with DNR TEA on potentially delisting Fishing Bay.

Megan Brosh: No news to contribute at this time.

Michael Williams: Working on Eastern Shore wetlands. He asks if anyone is monitoring streams for a Brood X "cicada effect" and suggests a cicada session at the Annual Conference.

Najma Khokhar: No news to contribute at this time.

Nancy Roth: TetraTech is conducting a Maryland Healthy Watershed Assessment, which uses geospatial data to assess watershed health and relate it to MBSS biological data and brook trout susceptibility to climate change. The next step is putting these pieces together. In other news, short-nosed sturgeons were sighted in DC.

Bob Hilderbrand: Working on eDNA and has a graduate student finishing up a BMP study, and should get stormwater data this summer for temperature differences in BMPs.

Mat Pajerowski: USGS monitored through the pandemic without loss of data. The Delaware River basin is the pilot location for comprehensive monitoring using new sondes and new ways to transmit data (Next Generation Water Assessment System).