

Water Quality Advisory Group – Draft Meeting Summary

Date and Time: December 11, 2023 (7:00 – 8:30 p.m.)

Location: Microsoft Teams meeting

Staff Liaison: Miranda Reid, DEP (Miranda.reid@montgomerycountymd.gov)

Members present: Amy Stephens, Tracy Rouleau, Amanda Rockler, Bob Buglass, Linda Silversmith, Phillip Mariscal, Edward Ohanian, Miranda Reid, Mark Symborski, Tim Stemann

Members Absent: Keith Brooks, Allison Wright

Others Present: Samantha Puckett, Clean Water Director, Issak Walton League

Meeting Summary:

Introduced new members and guests. :

Samantha Puckett, Formerly Samantha (Sam) Briggs sbriggs@iwla.org but spuckett@iwla.org.

Issak Walton League is national

Salt watch was launched after a salt spill near muddy branch. 30 ppm spiking to 600 ppm

Salt watch focuses on road salt and how it affects stream life and drinking water. Traditional water treatment plants do not filter out chloride, which means your drinking water is not pristine.

Chloride is incredibly corrosive and costs the US billions of dollars a year in infrastructure repair.

Salt in the Potomac has seen a 200% increase in the last 30 years.

Reverse osmosis can remove salt/chloride but is very expensive.

Salt Watch's goal is to raise awareness to the general public about the connections between salt and stream/public health.

Salt watch also tries to identify chloride hot spots and advocate for smarter application of road salt.

Salt watch kits are provided by the clean water division of IWL. They include chloride test strips, with instructions, a conversion chart, and instructions to upload data. Participants are encouraged to test water after major rain events. This helps make monitoring affordable.

People are involved in salt watch because they want to eliminate or reduce salt use. They also monitor local waterways and provide education to students and the public.

Over 15k data points have been collected by salt watch since 2018. From those data points, 15% of samples were found to be over 230 ppm, which is toxic and poisonous to stream life after extended exposure.

Anything over 50 ppm negatively impacts stream life but anywhere from 30 – 60 ppm is considered "good"

Tracy Roleau asked what is high enough to impact humans. 60 ppm doesn't generally impact people except those who are hypertensive or have kidney disease.

Sam explained that the greater harm to humans may come from anticorrosives and pipe damage.

Travis asked if salt is so corrosive, how come it is used in water softeners to reduce corrosion. Sam responded that the real threat is old urban infrastructure where the salt might cause lead in old pipes to leach out. Sam also offered to have Abby, an associate, provide a pamphlet that explains the threats in greater detail.

Montgomery county has had quite a few mild winters, so there has not been major spikes in our area, though we have had minor spikes.

Some commercial parking lots and private salt applicators apply road salts even when there is no threat of winter weather, due to a fear of slip-and-fall/lawsuits, or because they are expected to apply a certain amount. There may be more spikes this winter if today is any indication (we had snow today)

It is very difficult to effectively salt for storms that start out as snow or freezing rain, but then become all rain and then return to snow or freezing rain. Most of that salt simply washes away.

Sam shared in the powerpoint presentation some samples of salt watch advocacy resources. Since these resources have been being distributed, complaints have shifted from heavily about there not being enough salt to more favoring complaints about too much salt that needs to be cleaned up. There has also been more information about salt pollution in the news.

Philip Mariscal asked about the accuracy of the test strips. Sam answered that there were some early concerns about accuracy with some strips, but not the ones that IWL distributes. Coverage regarding the accuracy has been more favorable recently.

Sam said that IWL salt watch lives or dies based on the partnerships, and that salt watch is actively trying to engage more partners. There are a number of watershed groups in the region assisting with salt monitoring. Sam mentioned that Abby has done a great job adding partners to the list.

Salt watch has a number of grants from the Chesapeake bay trust. Two focus on Montgomery County, and when specifically in Gaithersburg. The grants are to assist "getting the word out" at events that are not environmentally focused "the usual choir" to reach out to members of the public who are unaware.

Interestingly, these programs have shown that public perception is largely that not enough salt is used, particularly, and surprisingly, among youths in primary education. They do not feel like enough salt is used.

Salt watch kits were passed out at a recent event.

Sam mentioned that the brine uses 1/50 of the chloride that road salt uses. A number of contracting companies are continuing to use road salt, however. Since public applicators have such volume, they have done much in the use of brine to reduce salt pollution.

The presentation included a mug which showed how much salt is needed to properly treat a section of pavement.

Some efforts have been made to reach out to applicators in the city of Gaithersburg to educate on properly calibrating equipment.

The goal for now is to reduce, not eliminate salt application. Educating homeowners to sweep, apply, and retreat as needed through the winter as opposed to blanket application. "If it crunches beneath your feet, you already have too much down."

The "Paint the plow" event was used this year in Gaithersburg with "smart salt" messaging. Examples were shown.

Translating messaging to reach children in bilingual communities is also part of the Gaithersburg efforts.

What's next?

More intensive monitoring.

Applicator training (Sam and Abby will be taking just to provide feedback).

Salt applicator training legislation may be on the horizon for private applicators.

Behavior change campaigns are being looked into changing public perception to improve water quality moving forward.

Where the water advisory group can help:

Promoting the program to new audiences (not just the "usual choir")

Reaching underserved communities, which are often in areas with the most aged infrastructure

Sharing results with graphics, story maps, newsletters, metrics provided.

Advocating for solutions. As a 503-C, IWL can advocate for solutions.

Green infrastructure, rain gardens to reduce excessive runoff which reduces how much salt washes into waterways.

There is a "Salt responsibly" Road sign.

Samantha mentioned that people are very concerned about salt on their animals paws.

Travis asked about salt sold in hardware stores. Samantha answered that there is no standard for labelling of salt bags sold in stores. These "Eco friendly" "Pet safe" alternatives often have the same amount of chloride, if not more. Samantha mentioned that an acetate solution, which is about 5X more expensive, is probably the safest alternative.

Phillip Mariscal asked a question about monitoring and the work being done to make sure sampling is done after storms and in winter where it is most likely to get results. The test strips, Samantha said, really "hook" people when they see the strip change color.

Tracy Rouleau asked about the areas that are being targeted for salt watch. Samantha mentioned that the Silver Spring area has tons of impervious surface and is generally lower income, with very few stormwater practices. This combination makes it a target zone where IWL would like to see more

monitoring. Samantha also mentioned that around the intakes in Darnestown, Bethesda, North Potomac would also be better because much of the county's water is supplied through those intakes.

Tracy Rouleau mentioned Silver Spring again. Sam answered that Friends of Sligough (SP) Creek and Anacostia Waterkeepers are engaged.

Amy Stevens mentioned that there are some branches where her group are trying to increase monitoring and is wondering if there is an opportunity for collaboration.

<<END of Samantha's Presentation>>

Tracy Rouleau thanked Samantha for the time and presentation.

2024 Meeting Schedule

Review that last meeting we discussed moving some meetings to the second Monday unless otherwise specified (April, July, October) January was a request to be moved but could not be accommodated.

Travis asked about a time change but it was decided that the time should remain the same.

Vote on revised calendar

Unanimous, 7 out of 7 voting members, on revised calendar

Conversation starting today around presenters and topics we would like to hear from. Conversation will finish at next meeting.

Miranda put together a spreadsheet and people can tally what they would like to hear about.

Top 4 areas are TMDL Implementation Plans, Chesapeake Bay Trust – Research Restoration, MS4 Permit Review, and MS4 Annual Report.

We all spoke with The Director of DEP but we need to be more proactive about integrating climate change into our stormwater management and water quality advisory group topics. The flood study is forthcoming but there is no set date for when it will be released.

Phillip Mariscal mentioned that he attended a conference, but he is not aware of any stream restoration projects in the county but would like to have somebody speak on stream restoration. Tracy said that Miranda can send out some of the notes from previous presentations on stream restoration.

Tracy mentioned that stream restoration is a hot-button topic in the county, with strong opinions on both sides. Mentioned something from Tetra Tech about stream restoration monitoring.

Amanda mentioned a 6-part series in stream restoration. Amanda also mentioned an interest in looking at other contaminants being looked at in the TMDL program besides phosphorus nitrogen and sediment and particularly looking forward beyond 2025.

Amy mentioned having Sadie Drescher give a presentation in January about the research being done. Montgomery County is a funding partner for the Chesapeake Bay Trust Research Restoration Program.

Tracy mentioned that the group is not typically proactive with budget proposals, we are usually retroactive and provide a letter of support with suggestions for future funding. Tracy is wondering about water quality protection charge funding and where it is at. This might be another topic.

Next meeting is January 8.

Meeting Adjourned