

DuPage River Salt Creek Workgroup
Meeting Minutes
Lombard Village Hall
December 9th, 2015
9:00 – 11:00 AM

1. Approval of October 28th 2015 Meeting Minutes (Attachment 1)

Nick Menninga made motion to approve the October meeting minutes as presented; seconded by Steve Zehner – motion carried unanimously.

2. Beads of Destruction: A Survey of Great Lakes Plastic Pollution

The study of plastic pollution started in the worlds' oceans, most famously focused on what has been called the 'Great Pacific Garbage Patch.' Despite a United Nations' report suggesting that 80% of this oceanic debris came from land and, thus, was likely transported through a freshwater system, very little research with regard to marine debris has focused upon these freshwater systems. Given the size and importance of the Great Lakes, they provide a significant representative model for other freshwater ecosystems throughout the world. During the summers of 2012 and 2013, we conducted the first-ever survey for plastic pollution within the open-waters of the Great Lakes. We present here our results from these initial open-water surveys, as well as additional investigations that were engaged upon as a result of these studies. Also covered will be the findings of the analysis of microplastics within wastewater treatment plant effluent.

Presenter: "Sam" Sherri A. Mason, Ph. D., Professor of Chemistry, Environmental Sciences Program Coordinator, the State University of New York at Fredonia.

Karen Daulton-Lange asked which personal care products contained microbeads. Mason replied Crest Pro Line, men's body wash, certain facial scrubs and various cosmetics (i.e. foundations) that are marketed to reduce wrinkles and lines on the face. In essence, you are depositing the plastic beads into said wrinkles.

Larry Cox inquired as to what percent of total plastics found in study were from microbeads. Mason responded about 15-20 %; it varied by lake. The results for Lake Michigan included around 4% microbeads, 16% fibers and 75% fragments. Lake Michigan had less microbeads than fibers, which is the reverse of the other Lakes.

Dan Bounds asked whether this difference could be explained because the fibers stayed suspended longer. Mason replied that in a study of 29 tributaries that empty into the Lakes, the samples had much higher fibers than the Lakes. Microfibers, like nylon, are dense, which should sink, but the turbulence kept them afloat. As rivers empty into the Lake and turbulence decreases, the fibers settle out. Not sure why Lake Michigan is different.

Ed Young stated as MWRD-GC doesn't discharge into Lake Michigan, he wondered about the inputs from other dischargers.

Dave Gorman inquired whether they found any evidence of fibers in the guts of animal life. Mason responded that yes, fibers were included in counts of plastic in fish they've seen. They are excreted after time, then a steady state of plastic within the organism occurs. The majority

of findings in fish are fibers because they become enmeshed in the gastrointestinal tract. Mason examined the GI tract under a microscope and saw fibers woven into GI tract unlike fragments and pellets.

Dennis Streicher noted that about 50% sink and get into sediment and asked what happens at that point. Mason replied that they don't really know. These studies all started with floating plastics. There are not many studies examining the sediments in oceans. Moving into lake and river systems, Patricia Corcoran was the first to look at plastics in lake sediments. The plastics that are deposited into the sediment and buried (potentially out of the food chain) doesn't mean bottom feeders and mussels couldn't move the plastics back into the food web. We don't really have an answer for that question at this time.

Larry Cox asked whether these fine particles are found in our drinking water or if the treatment removes them. Mason responded that she can't say we know for sure. She does not expect the particles to be present in drinking water because of the filtration. However, the closest study Mason is aware of for drinking water was a "German Beer" study conducted in September 2014. Twelve (12) different brands of beer off the store shelf were examined and plastic was found in the beer. The source(s) of the plastics may have been from air (deposited as brewed), microfibers shed from people's clothing, or drinking water. Still, Mason suspects the plastics would not be found in drinking water and noted it would be interesting to do a study on filtered tap water; it hasn't been done.

Stephen McCracken asked Mason about the European study on removal rates at POTWs which tested the difference in concentrations and loads between influent and effluent. Mason replied that there was a Swedish government association doing work for that which would not be published in peer review articles. They shared data (limited sampling) with Mason on influent versus effluent efficiency. Removal was 90-95 % for larger particles but fell as particle size decreased. The concentrations of plastic released in effluent is similar to the numbers Mason is seeing. Keeping in mind that even at 90% removal, you still see millions of particles released. Mason is interested in knowing how much is found in the sludge and where that goes. Sludge is a nutrient rich source and if it is applied to farmland (versus landfilled), those plastics will be released back into the environment through runoff.

Stephen McCracken thanked Mason for taking time off from writing up their research to provide the presentation.

Karen Daulton-Lange asked for clarification on the State of Illinois' ban on microbeads. McCracken replied that he would need to look more closely, but he believed the ban was on the sale of products containing microbeads. Deanna Doohaluk added that the ban does not go into effect until 2018/19/20 giving the product manufacturers a grace period. Doohaluk also stated that it appears only the Crest Pro Line contains microbeads (not the regular \$1.99 product) and that an oral surgery sited damage from microbeads that had become embedding in the patient's gums.

PCBs and PAHs absorb into food supply. Deanna Doohaluk also noted that plastics can contain BPAs which are endocrine disrupters. Stephen McCracken added that his wife, who studies

packaging, does not allow the use of some types plastic bottles in the home. Larry Cox stated that the ban on microbeads is interesting but noted that passing a bill to ban PAHs has not met with success. McCracken noted that any proposed ban on coal tar sealcoat was met with furious opposition and that there may be something to be learned from their approach. Doohaluk stated that there might not have been much resistance to the ban on microbeads in the personal care industry as they are always reformulating products to market them as “new and improved.” The coal tar industry has no such luxury.

Stephen McCracken will ask Sam Mason for permission to post her presentation on the website.

3. Assessments for NPDES Permit Special Conditions (New Business)

- **Special Conditions Permit Issuance Update (Attachment 2)**
Progress of permits issued: 4 currently on pre-notice (Addison both) MWRD-GC still pre-public. 3 not yet issued because they have not yet expired (Elmhurst, Wood Dale, Wheaton Sanitary District). The Sierra Club issued a letter during the public comment period which covered water quality based effluent limits; they issued a second letter clarifying that the first in no way lessened their support for the special conditions permit. Overall, the negotiation team and Board are happy with how the permits are proceeding.
- **MWRD-GC Permit Condition**
MWRD-GC opted out of part of the DRSCW special condition but gained an extended compliance period by virtue of marking large total reductions at their larger plants. The DRSCW Board meet with MWRD-GC executive director, David St. Pierre, and made a presentation to the MWRD-GC Board about how to proceed. MWRD-GC will be participating in the “study” parts of the condition and will be adopting the financial contribution formula used with Bensenville and Itasca. MWRD-GC has also placed funds of up to \$2M on the table to be used to implement selected projects. These funds will be accessed ad hoc following authorization and approval by the MWRD-GC Board.

We would like to thank MWRD-GC’s Board for supporting these initiatives. Obviously, this is a huge boost to improving aquatic life scores. With MWRD-GC on board, this means that every member is participating. Larry Cox added that we now have participation from all 19 agencies.

DuPage County, and its associated watersheds, is being carved out in the country as an example for how EPA is looking at a different approach. This is a unique experiment. Larry Cox clarified that participation is from both DuPage and Cook Counties.

Dave Gorman thanked all the POTW members for getting approval from their boards. Stephen McCracken noted that we are receiving calls from other parts of country inquiring about the methodology and how plans were implemented. David St. Pierre stated this is an example for how 303(d) compliance gets done.

- A workshop covering parts of the special condition is planned for January 28th 2016. The workshop will cover pretreatment for phosphorous, optimization and trading models and will include time set aside for discussion amongst members.

The workshop is designed for POTW wastewater operators. Nick Menninga stated there are opportunities to work together to implement new aspects of the permit conditions. All are looking at the same requirements. Our members offer various expertise on such issues as Phosphorus and pretreatment for P. For example, Addison has a very advanced industrial pre-treatment program as they have lots of industry. We can examine how they evaluate and make reductions, and perhaps ride their coat tails.

Chuck Fonte of Glendale Heights inquired about whether the group would collaborate on an RFQ for a single engineer to do work on top of the CMOM. This, and other potential opportunities will be discussed in further detail at the workshop on January 28th. If others have ideas to pool resources, please send them to Stephen. Regular meetings with the group to share resources and possibly hire a consultant to do prep for CMOM might be too specific a task, but for optimization, a more generic plan may be called for in order to get things going in the right direction.

The wet weather issue leads to potential ammonia DO limits on wet weather. While our groups' permits have identical special conditions, there are many other new permit requirements. A question as to whether Menninga could speak to Bob Mosher about deadlines was raised. Menninga replied that the permits people are open to talking; however, at this point their hands are tied if you already have a deadline - they may not have the flexibility to change the date. Stephen McCracken talked to Mosher about a collaboration for the mixing study. Mosher indicated that he would be open to this and that he didn't like the time limit, and was open to getting such a study at a later time. These are the kinds of things we need to talk about and Illinois EPA is definitely open to additional conversations.

The workshop is on 1/28/15 from 9:00AM – 12:00PM at Lombard Village Hall. Michael Marchi asked if this was the same date as the transportation meeting. Dave Gorman will check on this.

The agenda includes:

- Nutrient trading
- Village of Addison (Industrial Pretreatment)
- Downers Grove Sanitary District (Optimization, what you need to evaluate the study)
- Group versus individual obligations in the permit

Please let Stephen McCracken know if you have another topic for which a technical resource should be located. Individually, members might want to invite their consultants.

4. Funding update (SB2081) (Old Business)

- IGIG grant program

Larry Cox asked whether now is a good time to send a message inquiring about releasing separate funds. The State is facing much bigger negotiations and we are not hopeful these funds will be released. Stephen McCracken responded that he sent a message to Alec Messina. No response as of yet.

5. Projects Committee (New Business)

- Fawell Dam Update - The Projects Committee will meet in December to review work completed to date and plan for new scopes. Looking for authorization to access up to \$14,000 from staffing assessment FYE 2016.

V3 Companies and Inter-Fluve submitted new scopes. Oak Meadows is ongoing but work to moving the Fawell project along must continue. DuPage County Stormwater Management is providing modeling and hydraulics analysis and DRSCW is providing analysis on flow and fish. There is currently \$30K in the budget and the scopes come to about \$44K. Stephen asked members for approval to take \$14K from the staffing assessment to put toward the Fawell project. We are collecting around \$75K for staffing and not immediately using. Nick Menninga and the projects committee will go back through and review the scopes and make changes before the money is authorized. Larry Cox made a motion to release \$14K from the staffing assessment to the Fawell project after review and approval of scopes from the project committee. Steve Zehner seconded; all voted in favor.

- PAHs & Coal Tar Sealants (CTS) Update
- Oak Meadows Update.

Erik Neidy stated that about 100ft are complete on the north end. They will pull sheet pile then conduct wetland restoration then move to the golf course. The project is slightly behind schedule due to the weather. We are working on an agreement with MWRD-GC to determine the best method to transfer funds to FPDDC. Dennis Streicher asked about the dollar amounts. Stephen McCracken replied that the DRSCW agreed to contribute \$2.25M to the project over a three year period and MWRD-GC agreed to pay some portion of that, which needs to be worked out. We don't want to get ahead of David St. Pierre by providing a figure. The funds DRSCW budgeted can be used for other projects.

Erik provided a marketing/publicity video clip on their spring brook #1 project. The FPDDC Executive Director and Joe Cantore wanted to highlight this project. The clip shows the old channel and the new channel. This project is P2 in our permits. A project partner is the Illinois Tollway as part of their Elgin-O'Hare Western Access project. Ed Stevensen, golf superintendent, provided the drone footage. Thanks to the FPDDC for supplying the video.

- Lower Salt Creek Watershed Plan – DRSCW and DuPage County Stormwater Management have signed a MOU with CMAP under which the DRSCW will collect, digitize and submit physical data on the waterway for the 319 watershed plan. The County will be conducting wash off modeling, stormwater BMP recommendations and coordinating stormwater basin assessments.

Funds from Illinois EPA were approved to fund the creation a 319 watershed plan for the lower salt creek watershed, making those within the watershed eligible to apply for 319 funding. These funds must be allocated to the Chicago Metropolitan Area Planning (CMAP). A three-way agreement with DuPage County Stormwater Management, DRSCW and CMAP is in the process of being executed. DuPage County will provide wash-off modeling, and coordinate the stormwater basin assessment; DRSCW will provide enhanced QHEI analysis for streambank erosion; CMAP will create the watershed plan. Salt Creek assessment is next in the three year rotating assessment schedule, during which time we will conduct enhanced data collection. The board commented that the agreement was good. DRSCW and DuPage County Stormwater Management signed the agreement and returned it to CMAP. We have the data, largely, and the stormwater basin assessment has started as well.

Karen Daulton-Lange inquired if the basin assessment mentioned is the same assessment Mary Beth Falsey is conducting. Yes, they are the same and will be included in the watershed plan with the water resources inventory.

Stephen McCracken noted that requirements for watershed plans frequently change and CMAP has a reputation for completing plans and having them approved.

- Ammonia – N standards development (update)

6. Monitoring Committee (Old Business)

- The 2015 biological/habitat and chemical surveys on the West Branch DuPage River and three reference sites in the Fox River basin are completed.
- The East Branch POTW chloride monitoring update
- The 2012 Technical Support Document for the West Branch DuPage River is being revised based on comments received from a final review. Special thanks to Jennifer Boyer and Robert Swanson (both of DuPage County Stormwater Management), Jessi DeMartini (Forest Preserve District of DuPage County) and Thomas Minarik (MWRDGC).

MBI fell behind in producing watershed TSDs with the development of the IPS tool for both the DRSCW area and the much larger analysis in Cincinnati. MBI hired new staff and is catching up on deliverables.

- Resource Managers Guide to Aquatic Bioassessment (update)
This is being edited.

7. Chloride Reduction Committee (Old Business)

- Model Facility Plan is on the website
- Chloride Offset Program with the Illinois Tollway (update)
- CAWS and Des Plaines River Chloride Variance (update)

Dan Bounds provided a recap of the DRSCW's work on chlorides thus far: outreach materials developed, workshops executed, training provided. Now, it's time for implementation. In the graphs Bounds presented, chloride is noted as "estimated" as it is

calculated with the r-squared correlation with conductivity. Comparing data from surveys year to year is difficult; last years' winter was not typical. Bounds mentioned he would see if a quick/cheap trend analysis can be completed with the existing data.

Larry Cox asked whether we have enough data for more complex analysis. Bounds replied that it is difficult to normalize salt use. For example, as much or more salt may be used for one freeze event than a 14" snow event. Cox added that chloride is rising in importance in the constellation of pollutants and asked if any additional monitoring was needed, as both EPAs are paying attention. Stephen McCracken agreed that if there are gaps in gathering data, we need to rectify that now. Chloride is creeping into permits and there may be additional requirements.

Dave Gorman suggested examining tons of chloride loading per snow event. Bounds noted there are differences in winter and summer months which relates to the load of chloride coming in. Gorman asked whether trends could be compared to other watersheds. Stephen McCracken replied that for summer trends, we have "only" 3 years of data per watershed, which is not sufficient to define a trend.

Karen Daulton-Lange stated if reducing chlorides is a source reduction issue, for municipalities changes start at the top. When residents call for bare pavement, it is difficult for municipal officials to explain all this. Does the DRSCW have plans to conduct outreach/marketing efforts for this population? Dan Bounds noted that some trends have changed that you can see. For example changes to plowing and application after incorporating pavement temperature sensors.

Jennifer Hammer stated that she has been in touch with Bluestem Communications. While many agencies have information that can be used to reach residents, it is not in a format that works. We are investigating the use of focus groups to create more applicable messaging. These messages would not encourage residents to use less salt, but rather what they accept for levels of service. Frequently asked questions and complaints can be useful tools to craft these kinds of messages. Bluestem Communications noted that for the people answering phoned in complaint,s and for elected officials, simply having information/talking points is helpful in addressing complaints and communicating changes.

Hammer also noted that as we review data, it presents a good opportunity to look at the deicing survey to ensure we are asking questions the right questions.

Larry Cox suggested the DRSCW support the development of a video like FPDDC used with their spring brook #1 project to communicate issues other than road safety. DuPage County Stormwater Management has a video targeting residents about sensible salting.

Ron Hursh added that LaGrange Park is addressing chlorides with the public. Dave Gorman will talk to Mary Mitros about possible collaboration. There might also be opportunities to develop PSAs for local cable channels.

Andrea Cline stated that in the past, Lake County has held a deicing workshop breakfast for elected officials to give them tools to talk to residents about salt reduction and policies. People attended but they did not continue the workshop. They did note that the workshops should coordinate with the election schedule.

Andrea also provided an update on the chloride variance process, as Illinois EPA reached out to the Upper Des Plaines River Watershed Workgroup (DRWW), for which she is the technical advisor. US EPA clarified their rule making process for variances and encouraged states to apply.

Stephen McCracken noted that he asked how a variance would impact areas that already have TMDLs in place and has not yet received a response. He continued that a water quality certificate for a parking lot project was held up due to the increase in post project chloride loading. He is also worried about POTWs being flagged for chlorides during winter storm events.

The new draft MS4 Permit includes language that states that if a variance process is occurring, agencies must participate in order to avail themselves of the variance. The Tollway has questions about the variance process as well.

Andrea Cline said that she asked Illinois EPA whether agencies should be applying for variances for other water quality standards they are not meeting met. Their response was, “no.”

We will discuss this process with member agencies at the annual meeting in February.

Data shows we are not exceeding the chloride water quality standard very often. Industrial discharges, Citgo and Exxon Mobile, have high TDS.

Jennifer Hammer stated that the CAWS initiative was the precipitating factor; the discussion has grown from there.

8. Watershed Permitting Update (Old Business)

9. TMDL Development for the DuPage River/Salt Creek (Old Business)

Abel not able to be here – will ask for annual meeting

10. Watershed Committee Updates – West Branch, East Branch and Salt Creek

- East Branch Resiliency Competition and Watershed Plan – update

Mary Beth Falsey reported that the Phase 2 application has been submitted.

Marilyn Sucoe expressed concern for how the tight timeline for the resiliency planning process impacted the community outreach component of the watershed planning process. She noted that Lisle residents have put out a petition against the plan. Sucoe added that this lack of community involvement has hurt her agency’s credibility with the public. Sucoe proposed

that East Branch communities ask the County for assistance to complete a watershed planning process that helps build community support for projects.

Larry Cox inquired about the watershed plan in this context, and asked whether there are other ramifications for what DRSCW is trying to do for stream restoration.

Deanna Doohaluk, Hey and Associates, stated that they were asked to complete the watershed plan in 3 months, to fit within the resiliency plan timeline. While required components of the watershed plan can be found in the resiliency plan, an outline for other components is included as well, though not as detailed as a subwatershed plan. For additional guidance and to get residents engaged at the next level, Hey and Associates submitted an RFP to the County. They have not yet heard back.

Marilyn Sucoe noted that the HUD application schedule was insane; she understands why the process lacked components and wanted to know whether there were plans to circle back.

Mary Beth Falsey stated that the County is still dedicated to watershed planning and that they are working on a water quality focused plan for St. Joseph's Creek. Residents in the St. Joseph's Creek area can be sent meeting/workshop dates.

11. Business Items (New Business)

- Membership Dues Update (Attachment 3)
- Accounts Update – (Attachment 4)
- Other Business

We would like to thank Tom Richardson, Sierra Club, for his service on the DRSCW board. Richardson moved out of the area and Rick Federighi, Village of Addison, has agreed to fill this vacancy. Federighi will be included in the slate of officers which will be voted on at the annual meeting.

12. DRSCW Calendar, Presentations and Press Coverage (Old Business)

- November 10th – Stephen McCracken presented on the IPS methodology and outcomes to a Chicago Wilderness technical group looking at water resources.
- October 19th – Stephen McCracken presented on the IPS methodology and outcomes, “Data Driven Solution to Aquatic Life Impairments” to the MWRDGC Board at a District study meeting.
- A new newsletter (winter 2015) is being produced.

13. Workgroup Meeting Schedule

- February 24, 2016 (Annual Meeting)
- April 27, 2016
- June 29, 2016
- August 31, 2016
- October 26, 2016
- December 7, 2016