# **DuPage River Salt Creek Workgroup**

**Meeting Agenda** 

## **Maple Meadows Golf Course**

October 28, 2015 9:00 – 11:00 AM

#### 1. Approval of August 26, 2015 Meeting Minutes (Attachment 1)

## 2. Oak Meadows Dam Removal and Stream Restoration. Special Conditions Project #1.

In 2008 the Dam at Oak Meadows was flagged as the second largest warm weather DO sag on Salt Creek after the Fullersburg Woods Dam. The IPS analysis also found the site wanting on all priority habitat areas: riffles, riparian conditions, substrate, channel and pool. However there was neither the desire on the part of the owner, or funding available to the surface water community to act on any of the recommendations. In 2011 new management at the site opened up the possibility of having the dam removed and the discussion morphed into the Oak Meadows Golf Course Redesign Project which included removal of the dam and extensive enhancement of the stream corridor. The design team worked for two years to integrate to golf course redesign with optimization of the physical condition of the waterway. The presentation will include a visit to the diversion channel and portions of the restored river channel.

Presenters: Beth Wentzel, PE, Interfluve, Ed Stevenson, PGA, Forest Preserve District of DuPage, Manager of Golf Operations.

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

- Special Conditions Permit Language Update.
- Dues invoicing schedule. Member dues invoices have been mailed.

#### 4. Funding update (SB2081) (Old Business)

• IGIG grant program.

## **5.** Projects Committee (New Business)

- Fawell Dam Update- Project has restarted and new scopes of work have been submitted by contractors.
- PAHs & Coal Tar Sealants (CTS) Update Barbara Mahler, USGS Researcher, was in town presenting her research. Her visit was sponsored by the Sierra Club and the DRSCW.
- Lower Salt Creek Watershed Plan DuPage County Stormwater Management held a second workshop on the collection of stormwater basin assessment information on September 18th. A MOU between CMAP and the DRSCW to produce certain deliverables has been submitted to the Board for review.
- Ammonia N standards development (update).

#### **6.** Monitoring Committee (Old Business)

- The 2015 biological/habitat and chemical surveys have been completed on the West Branch DuPage River.
- The biological/habitat and chemical survey at the three reference sites selected for 2015 have been completed. Reference sites are on the Ferson Otter Creek system.
- The East Branch POTW chloride monitoring will be starting this week.
- Resource Managers Guide to Aquatic Bioassessment Update (update).

#### 7. Chloride Reduction Committee (New Business)

- Our Public roads workshop was held on the 9/24/15 and had 173 attendees.
- Our parking lots & sidewalks on the 10/8/2015 had 98 attendees.
- Thanks to the following sponsors DuDOT (facilities and staff), Munroe Truck Equipment (financial sponsor) and K-Tech Specialty Coatings (financial sponsor). Also, Bass Pro Shops donated three winter jackets for a lottery.
- Facility Plan update.
- Chloride Offset Program with the Illinois Tollway (update).
- CAWS and Des Plaines River Chloride Variance (update).

## 8. Watershed Permitting Update (Old Business)

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

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

• East Branch Resiliency Competition and Watershed Plan - update

#### 11. Business Items (New Business)

- Membership Dues Update (Attachment 2).
- Accounts Update (Attachment 3).
- Other Business.

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

- At the request of Representatives Fine's office and the Sierra Club a presentation of PAH concentrations in the Upper DuPage and Salt Creek was made in Wilmette on 10/15/2015. Presentation was as part of a panel on Coal Tar based sealants and PAHs.
- The DRSCW continued to be represented as part of the environmental team for the Central Tri-State Environmental Working Group at the invitation of the Tollway.
- The DRSCW was invited to be part of Chicago Wilderness's strategy group on water management. Included a presentation on the special conditions on the October 14<sup>th</sup> (Jennifer Hammer).
- The DRSCW participated in the Lower DuPage River Watershed Coalition's public roads deicing workshop.

#### 13. Workgroup Meeting Schedule

- December 9, 2015 –speaker "Sam" Sherri A. Mason, Ph. D., The State University of New York at Fredonia, plastic filaments and debris in waste water.
- February 24, 2016 (Annual Meeting)
- April 27, 2016
- June 29, 2016
- August 31, 2016

## **DuPage River Salt Creek Workgroup**

Meeting Minutes Lombard Village Hall August 26, 2015 9:00 – 11:00 AM

#### 1. Approval of June 26, 2015 Meeting Minutes (Attachment 1)

Motion to approve June 26, 2015 meeting minutes as presented made by Tom Richardson, seconded by Nick Menninga; motion carried unanimously.

#### 2. Proposed MS4 Permit

Illinois EPA has been working on language for an updated MS4 permit. Since 1990 the NPDES Storm Water program has required medium and large municipal separate storm sewer systems (MS4s) to obtain NPDES coverage. Since then the program has expanded and now requires small MS4s in urbanized (a residential population of at least 50,000 people and an overall population density of at least 500 people per square miles areas) to obtain NPDES permits and implement six minimum control measures. The proposed language on the updated permit has additional requirements for monitoring of post storm flows, management of chloride stock piles and green infrastructure.

Presenter: Jeff Hutton, Environmental Protection Specialist, Illinois EPA (Attachment 2, DRSCW comments on draft permit language)

Jim Huff inquired whether Illinois EPA is currently issuing new MS4 permits using the current language. Jeff Hutton responded no, the new permit was to be implemented in January but they have no idea of the timing now. It is their hope that US EPA will approve the monitoring component as set out by IEPA (flexible and watershed based). After approval, it will go out as a final document and they hope this will occur before the end of December 2015.

Jim Knudsen asked if US EPA planned to incorporate the previously proposed stormwater rule that had regulations for retrofits into the MS4 permits. Hutton replied that if there were any US EPA initiatives for retrofit regulations they would be included in the MS4 permit. When US EPA places it in theirs, Illinois EPA will follow. The post construction stormwater controls retrofit was a big issue and outside the scope of what they were looking at and they plan to reconvene and address this at a later date. An issue in older areas with urban flooding awareness actions (basement backups, flooding) led to Chicago being sued by insurance companies, which seems very appropriate here. Illinois EPA is not going to make it happen in response to legal action.

Jim Knudsen asked if US EPA planned to put a new stormwater rule for retrofits in the MS4 permits. Hutton replied that any initiatives for a retrofits rule would be included in the MS4 permit. When US EPA places it in theirs Illinois EPA will follow. The post construction stormwater controls retrofit was a big issue and outside the scope of what they were looking at and they plan to reconvene and address this at a later date. An issue in older areas with urban flooding awareness actions (basement backups, flooding) led to Chicago being sued

by insurance companies, which seems very appropriate here. Illinois EPA is not going to make it happen in response to legal action.

Sue Baert inquired whether their "no exposure" exemption was going to stay in place; Wheaton Sanitary District has an industrial stormwater permit. Hutton responded that any treatment plant over 1MGD has to have industrial stormwater permit. The no exposure, where all maintenance activities are indoors and not exposed – will stay in effect. Permit renewal for current no exposure would continue every 5 years.

Shirley Burger asked about monitoring. For example, working together one takes upstream and the next monitors downstream and splitting the costs. Hutton replied that they would like to see groups work collaboratively (with regulatory discretion). For example, if Glendale Heights and Glen Ellyn want to split sampling, Illinois EPA would say ok and to report data in both reports.

Dennis Streicher asked if BMPs will have to be monitored one time, continuously or some other frequency (they fail all the time) and incorporate seasonal differences. Hutton responded that communities would provide the plan for what they'll do. At this point these schemes are all very tentative and they are looking for direction from US EPA about what is acceptable and not.

How will watershed specific monitoring requirements be different than monitoring for TMDL parameters? Hutton said he did not know the answer at this time. IEPA was working to create a provision where watershed groups to create a monitoring plan to submit to the State for approval.

Stephen McCracken noted the usefulness of data resulting from a comprehensive monitoring program was much greater than that of data collected in a cookie cutter program.

Hutton stated that Illinois EPA doesn't have the manpower to determine monitoring schemes/sampling programs. There is a high probability that a comprehensive plan will be approved, but without having looked at it, he couldn't say. It would depend on where the issues are and what and where there was monitoring. Ultimately the concept will have to be approved by Region 5.

Ed Young asked if the need for MS4 monitoring could be eliminated if a community is participating in the workgroup. Obviously, communities can't skate and not pay. They would need to sign off as a participant of the workgroup's plan to avoid separate individual sampling. If they don't want to participate, they would need to complete their own MS4 monitoring.

Tony Charlton inquired whether a county-wide regional stormwater program would be sufficient or if Illinois EPA needed individual MS4 permits. Hutton responded that he would need to see the proposed idea and that they were open to that concept.

Tom Minarik asked what the Green Infrastructure requirements, if any, looked like. Haile stated that the permit itself does not require GI but that they are considered and made part of BMPs. Some communities may wish to use such BMPs others may not, IEPA has sought to make it flexible for communities. Aurora, for example, is very involved with GI and they are waiting to see data effectiveness. It may offer an innovative alternative. With all the new technologies; some are effective and others not. GI is the same. Additionally maintenance can be intensive – rain gardens have to be weeded and the right kind of plants must be used etc.

Jennifer Hammer asked about chlorides which can appear in any number of these permits. Haile stated he would have to use the WQS 500 mg/l.

Contact Jeff Hutton with technical questions 217-782-0610 or Cally Demeroukas/ Melissa Parrott.

#### 3. Navigating Winter with the Illinois Tollway

The Illinois Tollway maintains and operates 2,172 lane miles. This vast system of ramps and high speed roadways requires careful consideration of materials, staff training and management and specialized policies to effectively navigate the winter. Over the last few years, the Tollway reviewed their chloride management policies and made strides to implement practices that will improve their efficiency with regard to the use of chlorides, potentially making huge positive impacts for area waterways.

Presenter: Scott Kapton, General Manager of Maintenance and Traffic, Illinois Tollway

Larry Cox asked whether we could get chlorides loadings lower than the threshold at which it is harmful to aquatic life. Concentrations effect aquatic life at 140 mg/l and the WQS is 500 mg/l but we have no idea how either of these relate to spread rate. With the amount of pavement in an urban area, even with BMPs is it possible to get to a level of 140 mg/l in the stream? Kapton responded that they have the opportunity to look at this and just started collecting data in 2014. The Tollway has some information for some sections (190 corridor) based on seasonal or storm numbers from how much salt was on the work order. A challenge arises if it (main line storm route) passes over a creek/river there are a number of considerations: depends on traffic, geography, weather, etc. — we need long term averages (no garbage in/out). Stephen added that meting even the 500 mg/l in winter was probably impossible. However he felt that there may be some justification for suggesting winter concentrations were less harmful to aquatic life than summer ones. Could a higher winter standard and lower summer one meet both the needs of transport departments and the Clean Water Act?

Dennis Streicher inquired whether spreaders use only 100 lb increments. Kapton replied the application rates can be set to any level they want. The last few years have been almost counterintuitive (took away 500 lb spread rate) now it's encouraging to see operators take up the challenge to make further reductions.

Larry Cox asked why Illinois DOT has limited liability while the Tollway does not. Reed Panther noted that it was a factor for tolling agencies as part of the Highway Act.

Dave Gorman thanked both Reed Panther and Bryan Wagner with the Tollway for their involvement with chloride management in the area.

Stephen McCracken informed everyone that Scott Kapton spoke at the public roads deicing workshop last year and his presentation was very well received — on BMPs he added that a change in driver mentality is the best BMP we can hope to achieve. There is a balance; more salt doesn't always mean safer roads and at certain temperatures, it doesn't even melt ice.

## 4. Assessments for NPDES Permit Special Conditions (New Business)

- Special Conditions Permit Language update.
- Expanding coverage of the special conditions.
- Project and Staffing Assessments.
- Dues invoicing schedule.

Stephen McCracken summarized the philosophy behind the new special conditions, rather than a primary focus on nutrient removal, the alternate special conditions allow monies (approximately 1/2 cost of chemical removal) to implement IPS projects and TMDL projects. Of the 19 eligible agencies, 16 have currently accepted. The DRSCW Agreement/letters of intent were signed and returned to the DRSCW. Each POTW will go through their permit's public notice individually. P removal has been moved back from 10 years for chemical or 11 years for BPR. The project assessments will generate a fund of over \$10.5M to implement IPS projects focused on moving aquatic life scores. The Oak Meadows project implementation has already started and will be completed in 2016. If we have a relatively dry September, we plan to visit the site for our next meeting to see the project's progress. This is a really big deliverable for workgroup. Thanks to all who worked on this. We need all the permits to go through without obstacles – Downers Grove Sanitary District's permit with be the first, issued at the end of September, with others issued throughout the year end. Two permits will not expire until early next year and will be issued next spring.

McCracken continued that Itasca and Bensenville (implementing P removal) have both submitted language to Illinois EPA to pay into the special assessment in return for a guaranteed 1mg/l over the course of their participation. This option was discussed with POTW members. If Illinois EPA accepts their proposed language it will strengthen the overall program.

Dennis Streicher asked for clarification that 18 of 19 eligible agencies are on board with the special conditions. McCracken responded affirmatively and reiterated that we are still in need of Illinois EPA approval of the additional 2, who have a modified version of the permit language.

Agency membership dues, including all applicable project and/or staffing assessments were mailed with POTW agencies receiving a copy of their executed agreement.

#### 5. Funding update (SB2081) (Old Business)

• IGIG Program.

We are not actively pursuing at this time – there is a large budget negotiation at the State level. If/when we receive the IGIG funds, we are well set up to integrate these funds immediately, but can also make it work with our current funding level.

#### **6.** Projects Committee (New Business)

- Fawell Dam Update- Project has restarted and new scopes of work are being developed. This is the second project in the special conditions language (list of projects Oak Meadows/ Fawell) \$40K in budget to keep pushing this project forward. DuPage County Stormwater Management is providing modeling staff to the team. Scopes of work for V3 and Inter-flue will go to the projects committee for review this week. Two team meetings have been held and a more in depth look at the modeling will occur before the start.
- Oak Meadows Update- Project is underway. Possible site visit in October. We hope to keep everyone abreast of the project progress. A site visit will depend largely on the weather as to if the work is sufficiently far enough along instream BMPs will be executed in September. Stephen made a visit to the site and was pleased with progress.
- PAHs & Coal Tar Sealants (CTS) Update.
- Lower Salt Creek Watershed Plan a workshop to collect detention basin location and meta data for the plan was held on the 7.23. 2015.

Mary Beth Falsey provided an update. A brief meeting about the watershed plan, and specifically a required detention basin assessment was held. The detention basin assessment can be used to help document ways to improve water quality. The County will hold a training on September 18<sup>th</sup> at the County office in Wheaton for municipal/public works staff to review the assessment form and learn how to consistently complete form. We hope they will also reach out to others responsible for basin maintenance within their boundaries such as Schaumburg.

DuPage County is very gracious to help organize this data collection (one consistent form) which will be useful for all parties involved in the Lower Salt Creek. CMAP would not be able to assess all the basins without this additional support, which includes all government units for all basins. More information will be sent in next few days.

• Ammonia – N standards development (update)

Jim Huff stated there is work at the state to implement new ammonia standards. New toxicity data is being produced around fresh water mussels – more sensitive than fish/benthic organisms. Bob Mosher, Illinois EPA is leading group of volunteers to revise ammonia WQS. In a nutshell, effluent limits would be cut in half (acute chronic). US EPA has a higher bar than Illinois EPA. If your receiving steam ever had mussels – it probably applies.

How would a stream be shown to have had mussels? Historical records or the presence of shells would do it.

Illinois EPA field monitoring has shown an increase in ambient pH. This is important because the toxicity of ammonia-N increases with pH. Big plants can meet this new standard with no problem but it may be an issue for smaller plants. 7Q10 flow is used to set effluent limits for the entire period. Illinois EPA talked with EAGs who are ok with this approach. This is an opportunity to be more sophisticated on how we derive effluent limits. Now have continuous monitoring 24 hour swing in pH instead of just grab samples. US EPA alt water effects ratio – use stream water if there's lower toxicity. The question remains will lower ammonia-N concentrations alone allow mussels to return? What about other factors such as dams and siltation? Just be aware of this and monitor especially when it goes to the PCB.

Dennis Streicher asked about an exemption if the stream dried up. More historical records of 15-20 years on Salt Creek show it has no natural flow. Huff stated that toxicity is based on whether they are currently or were historically present. The species they're using are chronic – fingernail clam other species.

## 7. Monitoring Committee (Old Business)

- Both the biological/habitat and the chemical surveys are underway for the 2015 West Branch survey.
- Both the biological/habitat and the chemical survey are underway at the three reference sites selected for 2015. Reference sites are located on Ferson and Otter Creeks.
- The East Branch POTW chloride monitoring will probably begin in late-summer. The
  need for this contract will be reviewed as new permits are likely to require chloride
  sampling at POTWs.
- Geodatabase Update.
- Resource Managers Guide to Aquatic Bioassessment Update.

#### 8. Chloride Reduction Committee (New Business)

• Public roads deicing workshop on 9/24/15, parking lots & sidewalks on 10/8/2015. (Attachment 3)

Jim Knudsen asked members to send these flyers to as many groups as possible, especially for the parking lots and sidewalks workshop. We really need to address the private side – developers, contractors, public management operations.

Jim Huff gave a brief history of the variance actions in the CAWS. With chloride standards being placed on the CAWs chloride limits again to appear in permits, a variance was suggested by IEPA in order to gain time to meet the chloride WQS. Originally 10 years sought that is now changed to five years. The Board adopted Chicago Sanitary and Ship Canal winter/acute/chronic 620/910. Sanjay is promoting the variance in the CAWS (MWRD-GC) and the Lower Des Plaines. It is evident that staying beneath 500 mg/l in the worst storm event will be impossible. The need for the variance is driven by fear of numeric standards in MS4 and POTW permits. How to write a variance to meet compliance is not

well thought out, it is data intensive and it is unlikely the goal will be met. Perhaps fresh thinking on biological outcomes and site specific chloride standards are needed.

Nick Menninga stated that we are all getting NPDES permits with chloride monitoring requirements, so we will be set for the next 5 years. Next MS4 permits will be statewide/general probably asking for watershed permits that will ask for monitoring (avoid limit). Looks like 5 years, expect 5 years.

Stephen McCracken stated a construction permit was held up because of the CAWS chlorides issue. May have to look at other facilities to offset. McCracken agrees with Menninga but also believes the issue may pop up in other permits (401 WQ certification) for roads and parking lots. Alert to potentially huge item. What else would we be expected to do? Need folks to attend workshops. Big driver in chloride program – private contractors/ schools/ libraries/ colleges/ more builds up credibility we're serious and doing something. Also need a private program.

Nick Menninga stated that some plants have over 500mg/l due to water softeners (i.e. Frankfort (INI); Romeoville averages 400 and during winter is over 900 in POTW discharge. Jim Knudsen added that water softening is used for radium or calcium. Menninga continued that they can't not violate in the winter — but need lower numbers in the summer to hit the goal. Stephen repeated that he suspected the two were not mutually exclusive. Meacham Creek is meeting aquatic life but is also almost certainly impacted by chloride (small tributary with roads). This indicates you can meet aquatic life use and break the chloride WQ standard. Winter violations is not a barrier to meeting biological goals. State WQS doesn't change by season but evidence should be considered that it maybe should.

Jim Huff suggested seeking our own chloride standard. Larry Cox stated that it is frustrating that we haven't even gotten to where we're going with P and already face another economic barrier and new obligations, especially with the TMDL even more ludicrous with fecal expectations with all the other stuff coming down.

Stephen McCracken noted that the board needs to discuss this. We are not deluded to think we can hit the WQS in winter. Nick Menninga added that's what we're set up to do. Cox interjected not for another 10-15 years.

Stephen McCracken asked whether we plan to piggyback or not – there is a sense of urgency. The chloride committee and board will discuss further.

Able Haile – Stephen McCracken sent comments regarding the draft TMDL which were shared with the consultants and they are still looking for other comments. At this time the 2007/2008 data was updated with new water quality data Stephen sent and also with follow up data requested. Consultant included data which are applicable to impairment. In 3-4 months we expect to receive the revised updated report. Any new information can be communicated with Stephen, including information or requests with the consultant pH/chloride/fecal requirements. Also the 2007/2008 MS4 data was updated with newer MS4 data.

- Chloride Offset Program with the Illinois Tollway update.
- CAWS and Des Plaines River Chloride Initiatives update.

#### 9. Watershed Permitting Update (Old Business)

#### 10. TMDL Development for the DuPage River/Salt Creek (New Business)

• Comments on DO have been supplied to Illinois EPA and Tetratech.

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

• East Branch Resiliency Competition and Watershed Plan update.

#### 12. Business Items (New Business)

• Membership dues update.

POTW and MS4 Agency Membership dues invoices have been mailed. Associate and Individual Membership dues will follow this week.

Welcome our newest member, Lisle Township Highway Department.

- Accounts Update (Attachment 4).
- Website Updates- the website was redesigned.
- Audit for FYE2015 is complete.
- Other Business.

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

- Presentation requested on September 3, 2015 in Addison at the IWEA NRR Annual Workshop on the DRSCW's watershed approach. Presenter Nick Menninga (DGSD).
- WEFTEC 2015

  –application for track on "Stream Geomorphology and Restoration 101"

  Update.

#### 14. Workgroup Meeting Schedule

- October 28, 2015 possible visit to Oak Meadows dam removal and stream restoration
- December 9, 2015 speaker "Sam," Sherri A. Mason, Ph. D., The State University of New York at Fredonia, plastic filaments and debris in wastewater.
- February 24, 2016 (Annual Meeting)
- April 27, 2016
- June 29, 2016

Nick Menninga made a motion to adjourn the meeting, seconded by Jennifer Hammer; motion carried unanimously.