

**DuPage River Salt Creek Workgroup**  
**Meeting Minutes**  
**Lombard Village Hall**  
**April 24 2013**  
**9:00 – 11.00 AM**

**1. Approval of minutes from the February 27<sup>th</sup> meeting (Attachment 1)**

*Larry Cox made a motion to approve the minutes as presented, seconded by Steve Zehner, motion carried unanimously.*

- 2. Presentation:** The Village of Itasca, Illinois Wastewater Treatment Plant Relocation is a case study for the effectiveness of stakeholder participation to create a superior outcome. The Village of Itasca faced the need for improvements to the wastewater treatment plant to increase capacity and to replace aging equipment. Significant challenges included a very limited site in a residential neighborhood, increased discharge into impaired waterways, and the concurrent development of TMDLs for Salt Creek. The Village and Baxter & Woodman convened a broad coalition of stakeholders early in the process. This presentation will describe some of the issues the stakeholders addressed and highlight features of the final project.

**Presenters:** Carl Fischer, P.E. BCEE, Manager, Wastewater Department, Baxter & Woodman, Inc. and Jeffrey Mohler, P.E. BCEE, Senior Engineer, Wastewater Department, Baxter & Woodman, Inc.

*Larry Cox asked if 1mg/l regulation was already in place when they started this process. The 1.0 mg/l phosphorus effluent limit was not in place when Itasca started the process. It did not come into consideration until 2006 with the first Technical Advisory Group (TAG) meeting during Facility Planning. The environmental advocacy groups (EAGs) asked Itasca to adopt a 1.0 mg/l phosphorus effluent limit. Also, the Interim Phosphorus Rule had been, or was just about to be, adopted by the Illinois Pollution Control Board. When the Facility plan was completed in 2007, Itasca formally made a commitment to accept a 1.0 mg/l phosphorus effluent limit. The actual effluent limit did not appear until 2009 when the NPDES Permit for the new WWTP was issued.*

*The DRSCW's participation was an important component to securing a permit on impaired waters. Environmental advocacy groups liked the DRSCW's monitoring activities.*

*Dennis Streicher asked whether they received any pushback after rejecting 2 and postponing one of the initial 16 conditions. No pushback was experienced after the conclusion was reached that there were better places to spend funds than irrigating the chancery. Much of that land will be developed due to the Elgin-O'Hare Western Bypass Expansion project; it was not a good investment.*

*Glenn Sullivan stated that they tried to acquire a property from ComEd in the 11<sup>th</sup> hour for enhanced wetland monitoring, but subsequently were unable to because the property was collateral on a loan. The property was key, but they secured an easement to temporarily*

*store on that section to build. Larry Cox noted that the environmental advocacy groups were understanding of the fact that they were not able to purchase the property.*

*Dennis Streicher asked what their wetland monitoring would have included. A full spectrum nutrients and metals. Sullivan stated that USEPA finances support what would become part of permit. Infiltrate or evapotranspiration? Sometimes Phosphorus removal sometimes added; same with Nitrogen.*

*John "Ole" Oldenburg asked when they started endocrine disruptor monitoring and how it was going. Monitoring is not occurring at the plant currently, if a monitoring program was designed and funded the plant has agreed that it would cooperate (they are committed to allowing monitoring. There are currently no filters at the plant; space onsite for filters and in the hydraulic profile to pump to the filter are available. They need a source of funding and are looking for some kind of partnership to help assess efficiency to monitor the decrease after treatment (in/out). This seems possible only if US EPA would fund a program.*

*Ole asked why the batch reactor design is square. The Sequencing Batch Reactors (SBRs) are square because square tanks are more economical to construct than round tanks. For example, straight concrete walls are easier to form. Straight handrail is less expensive than curved. The floating mixer that is used in each SBR does not leave dead zones in the corners. In addition, there are air diffuser grids along the perimeter of the SBRs that also aid in the mixing and ensure that there are no dead zones.*

*Cox asked if the cost estimate included the public works enhancement. The public works enhancements were not originally part of the project, but later they were combined with the New WWTP. The estimate for construction of the new WWTP and public works enhancements was \$45 Million prior to the August 2009 bid. However, bids had been coming-in at 67%-75% of engineers' estimates in the preceding seven months of 2009. So, Itasca was not surprised, but nonetheless delighted, when the low bid was \$34 Million. There were some changes during construction which raised the final construction cost to \$35 Million. Engineering for design and construction added another \$4 Million. The total project cost was \$39 Million. The Village received a \$20 million loan from IEPA's Water Pollution Control Loan Program, which was partly capitalized by the American Recovery and Reinvestment Act of 2009 (ARRA). The terms of the loan were 0% interest, 20 year payback, and \$5 Million of principal forgiveness (Itasca must payback only \$15 Million of the \$20 Million loan). The public works enhancements were declared ineligible for funding from the \$20 Million in loan funds. Itasca funded the public works enhancements and the rest of the other \$19 Million of project cost with "Build America Bonds", which were also part of ARRA.*

*What are the Ammonia levels? The SBRs produce an effluent with ammonia averaging below 1 mg/L and total N about 5.5 mg/L.*

*Are there issues with odor control? The SNDR ammonia comment likely relates to odor control. The ATAD produces a very high ammonia off gas as well as high ammonia in the sludge. The SNDR tank runs through oxic-anoxic cycles to denitrify the sludge and also to*

*absorb some of the high ammonia off gas into solution. The result is reduced ammonia in the off gas which then is readily treated by the coated wood root media in the odor control system. While Jeff did not quote numbers he stated with confidence that the digested sludge, did not have any elevated ammonia odor.*

- 3. Presentation:** Presentation: Elgin O’Hare – Western Access (EOWA) Project is currently pursuing both 404 and 401 permitting. A major water quality obstacle faced by the project is that it will increase chloride concentrations in the Salt Creek and West Branch DuPage River, both of which have an approved chloride TMDL. To solve this issue and keep the project on schedule the Illinois State Toll Highway Authority (Tollway) and DRSCW are working to put in place an MOU between the organizations. The MOU would set out a framework to identify and fund chloride loading offset opportunities in the public and private sectors at municipal and county levels. The objective of the MOU is to create conditions where the post project chloride loading to tributaries and main stems in both basins is the same as or lower than current conditions.

**Presenters:** Reed Panther Illinois Toll Highway Authority, Stephen McCracken, DRSCW

*Larry Cox asked for clarification on the actual project. The project will consist of the rehabilitation and widening of the existing Elgin-O’Hare Expressway, and an extension of the existing roadway from I-290 to the Western-side of O’Hare International Airport. The project will also include the construction of a bypass around the western-edge of the airport which will connect to I-90 to the North and I-294 to the South as well as several minor improvements to existing local roads and interchanges. Stephen McCracken stated that members interested in participating in a chloride offset program with the Tollway should consider joining the chloride committee which was the group at the DRSCW which would be the first reviewers of any material generated by the project.*

*John “Ole” Oldenburg asked if the Waters of US was mitigated. It appears that mitigation for impacts to those waters is taking place in Lake County.*

*Concerns raised regarding entering an agreement with the Tollway:*

- *Is there a legal obligation for municipalities to make “best efforts”?*
- *What are the limits for such obligations*
- *If we don’t meet reductions expected, is there a shift in responsibility to municipalities?*
- *If the Tollway doesn’t meet reductions, what are their repercussions? Aren’t we doing them a favor.*
- *What about ongoing program costs? Life of equipment? Capital costs?*
- *Funding source (Tollway has stable funding source i.e. tolls)*
- *Don’t minimize what this does for the Tollway.*
- *Consider M&O calculations, ongoing costs, changes in administration, and payment for DRSCW to play arbiter to keep eye on store.*

*Stephen McCracken said that on the life cycle of the project such BMPs had been shown to reduce operating costs. He asked the opinion of the Chloride Committees consultant, Steve*

*Kaar, who agreed, adding that municipalities could see immediate cost savings and reduced chloride loadings. Kaar continued that the equipment/ replacement cost are 10-12 years out in his experience the savings would more than pay for them. Stephen continued that the aim of the Chloride Committee was to identify the most cost effective reductions and execute them, with a substantial margin of error. The reductions would have to be documented so there would be no doubt of meeting proposed reductions. Jim Huff stated that the agreement with the Tollway is implementation of BMPs and reporting the outcomes. The Tollway would be responsible for making up any difference. Stephen McCracken continued that the Tollway would also be reporting on its reductions.*

*John "Ole" Oldenburg asked about infrastructure design changes. Reed Panther stated that the Tollway has a policy not to discharge into waterways from their bridge decks and that all storm water from this project will drain to BMPs. Stephen noted that the BMPs were designed to control peak flows and others to deal with suspended pollutants, but they do not filter out chlorides. There has to be a source reduction strategy for which the Tollway is accountable. Ole worried about the area between the storm drain outfall and the mitigation. Stephen agreed that it was a potential problem but one that was difficult to eliminate entirely. He continued that a map of discharge points would increase the resolution of what we are doing.*

*Antonio Quintanilla asked what the draft permit language states. Stephen McCracken has had a few conversations with Illinois EPA about this but it is still an unknown. While the DRSCW doesn't want to hold up the process, we don't want a change in leadership/board at the Tollway to put the agreement back up in the air. The DRSCW will work with Illinois EPA will work with wording the special conditions language.*

*Rob Swanson pointed out that a zero net increase listed waterway is called for and asked if the current TMDL's 60% reduction is also being considered. Stephen McCracken stated that goal is for a decrease. This would be accomplished by having an offset ration of >1 ton for every ton increased.*

*Glenn Sullivan stated that he was worried about the effects of weather (having a good winter) so we need to look at a composite, not just snowfall, to compare annual results. Jennifer Hammer stated that application rates will be the determinate. We'll be controlling for variation in meteorological conditions (Stephen McCracken suggested also looking at pavement temperatures).*

*Steve Zehner asked if there had been any further discussion to include IDOT which presented some very low hanging fruit. Stephen McCracken stated that many communities have expressed frustration with IDOT's practices (i.e. stored salt is exposed, salt is dumped on roads, he noted that the volume control recommendations the state was considering suggested that draining bridges to rivers is noted as a BMP, etc.). The DRSCW may want to approach environmental advocacy groups in pursuing chloride reduction strategies with IDOT. A number of regulations do not apply to IDOT and they would obviously have a powerful lobbyist and some of the highest salt application rates.*

*IDOT has limited liability while the Tollway has unlimited liability. Stephen McCracken and Steve Kaar stated that there was a false dichotomy between salting and road safety. Steve Karr continued that after incorporating anti-icing at Naperville, there were fewer accidents, less black ice, fewer callouts, less salt used, etc. He continued that some of the practices that worked for thinly populated rural areas such as northern Wisconsin, where would not work for densely populated urban areas.*

*Larry Cox stated DRSCW can accomplish low hanging fruit, and that the Tollway should help get communities to the next level. What was the end game here? Dan Bounds stated that liquids are the next level. Jim Huff stated that some of the identified communities would be closer to anti-icing than others. Steve Kaar said that this was true but all but all of them could do things to improve their programs.*

*Stephen McCracken stated that Hanover Park's next level is parking lots. – changing the geographical application of a BMP. Mark Willobee said the DRSCW's and Tollway's goals should be the same and included in the permit.*

*Larry Cox suggested that we think bigger and plan to get communities to the anti-icing level. Jon Oldenburg agreed. Dan Bounds stated that we only get one shot at this - why take baby steps? Getting communities to the anti-icing level also addresses Steve Zehner's longevity concerns. Steve Kaar stated that the private sector may be more inclined to move directly to anti-icing (i.e. LEED), but that it may be too big a step for public agencies to make at one time. Kaar recommended using steps to get agencies up to levels four and five, and giving an incentive to get to anti-icing (maybe \$125% of the cost).*

*Antonio Quintanilla asked about the water quality impact from using carbohydrates. Dan Bounds stated that anti-icing does not have to include carbs. Stephen added that oxygen demand was typically low during the winter minimizing the impacts of additional carbohydrates.*

*Tam Kutzmark stated municipalities in the corridor already feel the burden from demands associated with the EOWA project (plan reviews, etc.). There should be enough front end time for them to review the products and resources available to get comfortable. She also asked if the DRSCW would be seeking legal assistance for this project.*

*How will the consultant be paid? We don't have money budgeted for this. These costs should be recuperated from the Tollway.*

*We may need to call a special meeting for approval to enter into an agreement with the Tollway before the regularly scheduled June meeting as the permits were time sensitive. Larry Cox made a motion for the Board to negotiate and draft an MOU with the Tollway, seconded by John "Ole" Oldenburg, motion carried unanimously.*

#### **4. Project Implementation and Financing Update (new business)**

The DRSCW Board met with representatives of Illinois Environmental Protection Agency (IEPA) on 3.18.2013 in Dwight to review the white paper; the meeting was very constructive. IEPA asked for clarification on several parts of the proposal:

- Phosphorous reduction for nonpoint sources and point sources
- Which pollutants will be addressed, or not addressed, through the agreement (listed in the Integrated Report or standard updates such as ammonia-N)
- Explicit list of Members and responsibilities covered by agreement
- Generate additional funding for projects

A second special meeting to work through these various items will be called during the next few weeks. If your agency has a POTW it is important that you attend.

*Nick Menninga said that IEPA was reviewing our proposal which would include not giving numerical P limits in the renewed permits, or adding other (unspecified) more stringent requirements. IEPA believes it needs more emphasis on P reductions in order to support the proposal, including discussion of POTWs looking at what tweaks they could make to limit phosphorous. For example, they could look at what reductions could be made by industrial customers, what minor changes to processing arrangements that can be made (re-arranging activated sludge for Phosphorus uptake), or looking for inexpensive phosphorus-precipitating chemicals via waste clearing-house resources. IEPA is also interested in POTWs conducting planning studies to assess the technology and cost needed to meet a 1mg/l limit in the future. We will hold a 2<sup>nd</sup> special meeting to discuss in more detail.*

*Other pollutants of concern include ammonia, currently at 1.5-4.0 mg/l summer/winter, which is expected to be reduced to the 0.3 mg/l range in summertime following the implementation of pending federally-mandated rules. DRSCW already knows ammonia is an issue based on studies.*

*Larry Cox stated the IEPA, environmental advocacy groups and John Oldenburg have indicated that the dollar amount we proposed to put into projects is too light. From the perspective of dollars saved from capital costs the figure is light; we had to start somewhere. Illinois EPA did not provide an estimated dollar figure. Cox asked members to consider a "ramp up" approach in preparation for the special meeting. Years one and two would be funded at the currently proposed \$1.5M level. Years three and four would increase to \$2.2M (around 35% increase). Year five would include an increase to \$4.3M. This would bring the total to \$12M invested into the streams over 5 years.*

*Albert Ettinger was informally suggesting that 2% of median household income should be considered.*

*Jennifer Hammer stated that it takes time, from an administrative perspective and the monitoring feedback to plan next steps, to spend money. You can only spend it so fast. Also, the 2% could include other components such as CSOs and SSOs.*

*Stephen McCracken reviewed the NPS reductions. Adding a small landscaped area workshop was also suggested.*

## **5. Monitoring Committee (new business)**

- 2013 Salt Creek basin assessment. We have budgeted \$59,050 for water and sediment chemistry and \$119,960 for the biological assessment. The Board and Monitoring Committee are seeking authorization to negotiate contracts up to these amounts with contractors.

*Nick Menninga moved to authorize the Board and Monitoring Committee to negotiate these contracts, seconded by Jennifer Hammer, motion carried unanimously.*

- East Branch DuPage River Basin Assessment 2011 – working on report
- 2012-2013 conductivity monitoring completed
- Database Development Update

*Jennifer Hammer made a motion to approve a contract for \$14,480 with Geosyntec Consultants to build the geodatabase website interface and rehire the intern this summer to populate the geodatabase (budgeted at \$5,400), seconded by Steve Zehner, motion carried unanimously.*

## **6. Projects Committee (new business)**

- The scope of work with Inter-Fluve for the Oak Meadows Dam Removal and Stream Restoration Project is being reviewed for expansion so we can continue to support the river naturalization part of the project.

*Larry Cox made a motion to authorize expanding the scope of work, seconded by Fred Maier, motion carried unanimously.*

- Stephen is reviewing the Ammonia Mass Balance Study update (lower East Branch DuPage River)
- IPS outreach materials
- PAHs – Coal Tar Sealant MOU (Attachment 2)

## **7. Chloride Reduction update (new business)**

- The Chloride Committee is negotiating an MOU with the Illinois State Toll Highway Authority. The MOU would set out the framework for a partnership between the two entities to design a chloride offset program for the areas of Salt Creek and the West Branch DuPage River impacted by the proposed Elgin-O'Hare West Bypass expansion.
- The Chloride Committee is negotiating a contract with a private contractor to do a rapid appraisal of Tier 1 communities' current practices and outline efficient interventions under the MOU. The budget has \$5,000 for future initiatives. Request authority for Board to release these funds committee has negotiated a contract.
- The Chloride Committee is negotiating a new contract with CDM; we have \$15,000 budgeted for this item. Request authority for Board to release these funds once the committee has negotiated a contract amendment.

*Jennifer Hammer made a motion to give the Board authority to release \$5000 for an appraisal of Tier 1 communities and \$15,000 for a contract amendment with CDM Smith, seconded by Nick Menninga, motion carried unanimously.*

## **8. Watershed Permitting Update (old business)**

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

## **10. Business Items**

- 2012-2013 Audit
- 2013-2014 Membership Dues. Letters and invoices scheduled to be mailed in May.
- Accounts Update – Attachment 3
- Grant Management Update
- Other Business

## **11. DRSCW Calendar, Presentations and Press Coverage (new business)**

- 4.25.2013 - Panel spot and Presentation on dam evaluation and removal at the 2013 Clean Rivers, Clean Lake Conference in Wisconsin (hosted by the Sweet Water - the Southeastern Wisconsin Watersheds Trust, Inc.)
- 6.5.2013 – The Conservation Foundation’s Clean Water Award will be presented to a POTW at their Spring Luncheon at Cantigny

## **12. Workgroup Meeting Schedule**

- June 26, 2013
- August 28, 2013
- October 30, 2013
- December 11, 2013
- February 26, 2014 (Annual Meeting)
- April 30, 2014

*Motion made to adjourn the meeting made by Steve Zehner, seconded Fred Maier, motion carried unanimously.*