MidMoraine Water Quality Collective

10:00 Wednesday, December 6, 2017

Jackson Village Hall

Meeting Notes

Agenda Item: Success Stories: WWTPs; Saukville and Cedarburg, Dave Arnott (Ruekert & Mielke, Inc.), Eric Hackert (C of Cedarburg)

Dave Arnott (R/M) shared actions taken by the Village of Saukville wastewater treatment plant staff over the past few years, including:

- Outreach to contributing industrial facilities about TMDL, pollutant limits
- Better efficiency of coagulants by using them in different areas of the plant than before
- Found alternative chemicals to be more efficient than ones traditionally used
- Evaluating potential benefits of adding a filter

Village wastewater treatment plant staff are concerned about time and management of an adaptive management or trading program with property owners outside of the Village, so they are evaluating other alternatives at this time to optimize the efficacy of the treatment plant. Village staff participated in a tour of a filter manufacturing facility in IL recently.

Eric Hackert (C of Cedarburg) shared some of the alternatives and improvements that have been implemented at the City of Cedarburg's wastewater treatment plant recently, including:

- Updated SCADA
- VFP
- Ability to boost bioP at the plant
- Testing reactive vs. nonreactive

Some of the concerns City staff have about increased discharge limits to the treatment plant include:

- Only 1 industry in the City discharges to the WWTP (already doing pre-treatment)
- Adaptive management options seem time consuming and costly to manage
 - o Can the County or a non-profit entity run a successful adaptive management program?
- Will the changes to the WWTP actually result in changes to the creek?
- WWTP budget has not increased in 12 years
 - Other communities expressed similar budgets (no increase in 8 years, 10 years, etc.)
- Desire for a single set of permit limits and timing of implementation (TMDL vs. NR 217, recent article about EPA being sued for backsliding); difficult to do expensive, long-term planning with multiple targets and time frames.

- Filters to achieve this reduction cost ~\$7M, in an environment where budgets may not have increased for many years, and the agricultural sector is held to a different standard.
- Not enough staff time
- The stream may not be affected by POTW limits
- Decision making on 5-year budgeting processing; e.g. Cedarburg has no budget increase for the past 12 years

Bryan Hartsook, DNR Wastewater Supervisor (SE WI), provided some additional information re: WWTP limits:

- Tables showing mass concentrations for facilities in the Milwaukee River Basin have been added to the DNR's Milwaukee River Basin web-page: http://dnr.wi.gov/topic/TMDLs/Milwaukee/documents/TP%20Effluent%20Limits.pdf
- DNR is currently working on rule Package 5, which will address inconsistencies (in NR207) with federal backsliding requirements
 - This is in part being done to acknowledge technology limits
 - If a TMDL is in place, it is possible for a WWTP to have less restrictive phosphorus (P) limits
- Re: agricultural runoff, there are some success stories of increased implementation of runoff controls benefitting the local waterways. The TMDL is meant to be a "budget" to help direct a long-term watershed restoration approach.
- Non-point timeframe and budget is much longer than it is for point sources

Eric (C of Cedarburg) asked whether construction of a new WWTP on City-owned land would be considered a new discharge; Bryan(DNR) indicated further discussions and details would be needed to make that determination.

Agenda Items: TMDL status update, TMDL Implementation sector team update – Mark Riedel (DNR)

- The DRAFT Milwaukee River Basin TMDL was submitted to EPA on 10/19/17; EPA doesn't foresee any substantial changes. EPA was an advisory partner on the team that developed the TMDL which added time to the process at the front end but should make approval go more smoothly. The DRAFT TMDL is on the DNR's web-site: http://dnr.wi.gov/topic/TMDLs/Milwaukee/
- The timeframe for this is 60 days, however it has taken longer than this in the past
- Milwaukee River Basin TMDL Sector / implementation teams will not meet until after TMDL is approved.
- The WWTP optimization and trials from Saukville and Cedarburg are very positive, and are similar to some successes that have occurred in the Rock River Basin.

- Remember that TMDL limits do not have to be met overnight; DNR staff are available to assist.
 EPA & WDNR acknowledge TMDL compliance will take multiple permit terms.
- TMDL implementation is a long-term approach, designed for in-stream improvements in the future. Many individual projects will not produce noticeable in-stream improvements immediately, but when completed in combination with other, multiple projects in the area, can produce positive, long-term improvements.
- TMDL Implementation Sector Team Updates: wastewater and MS4 limits will be implemented through the permit process; ag. & Nonpoint goals are done through NR 151 implementation with counties, DATCP and encouraged private implementation. Many private practices are not recorded through grants, plans, etc., and are performing better than originally realized.
- Implementation meetings:
 - Coming from third party
 - o Implementation is being funded by MMSD and its partners
 - Next meeting will be after the TMDL is issued and finalized
- Positive examples from the Madison Lakes area, where farmland is releasing less TSS/phosphorus
- Private implementation through farmer led groups is making much more progress than expected
- Legacy phosphorus is an issue in some areas. Example: Legacy phosphorous issue in Rock River –
 old sediments from 50+ years will take time to address, even if phosphorous stopped being
 added to the system.
- Legacy phosphorus may mean agricultural reductions, but would still not mean that targets are hit for TMDL
- Adaptive management programs can be initiated with the understanding that the implemented projects can be converted to trading in the future.
- Trading credits can be computed, don't need to be measured in-stream.

Agenda Item: MS4 Permitting Update:

- Electronic MS4 annual reports (revised form), Menomonee River Watershed Permit update Ben Benninghoff / Marissa Thalen (DNR)
- The Menomonee River Watershed MS4 Permit to be reissued after the TMDL is approved;
- DNR requested basic information from communities with MS4 permits that expire in 1st half of 2018; additional Request for Information will be sent to communities later, prior to reissuance of permits

Matt Bednarski (GRAEF) suggested inviting representatives from the Menomonee River Watershed MS4 Permit to come to a future MMWQC meeting to share experiences of being part of this permit group. Maggie Anderson from City of Wauwatosa is willing to come to a future meeting to talk about life under a watershed-based permit.

Ben Benninghoff (DNR) shared the new eReporting system for MS4 permits that is currently being tested. This system is meant to be available in a month or so for use with the MS4 annual reports due in March 2018. The eReporting system will also allow multiple MS4 programs to be entered into this electronic system. This system should streamline reporting, etc. (ex.: 1 report for multiple communities under a group permit?) A webcast will be held in the near future about this system and the MS4 annual report.

- Administrative extension for relevant communities is required to meet minimum Clean Water Act requirements.
- Menomonee group is the trial; TMDL is expected to be approved before this permit is reissued.

Jen Linse (Sweet Water) provided additional information on a system under development by DNR, MMSD, Sweet Water and the TMDL development consultant to collect MS4 information to better understand implementation of 9-key-element plans over time. This system will be a watershed-wide scale, to encourage ag., urban, WWTP representatives to talk about progress over time.

MWQC Watershed Permit update Maureen McBroom (R/M), Evan Nisbet (GRAEF)

Maureen McBroom (R/M) presented a brief review of the potential MMWQC Watershed MS4 Permit and some information to be evaluated in 2018, as well as current reachsheds impacting the MMWQC communities (from a MS4 permit standpoint) and the TSS & phosphorus reductions for each reachshed. Maureen also shared common results from storm water planning efforts completed for other communities affected by TMDLs so far, including:

- Communities with grass swales typically have much better TSS & phosphorus controls than curb & gutter systems;
- New and redevelopment projects since 2004 can have a significant impact on a community's pollutant control;
- Controlling TSS in urban storm water runoff is expensive, but controlling phosphorus in urban storm water runoff is *very* expensive.

The question of how effective computer modeling is compared to in-stream monitoring was discussed by the group. Some communities have staff currently collecting in-stream monitoring results and processing them at local labs; there is a possibility of those staff doing additional monitoring, but it's not clear where the best locations would be to do this, how frequently it should be done, or what exactly should be monitored. Some MMWQC would like to do additional monitoring to get a current understand of the water quality in the local waterways as compared to the TMDL assumptions or the computer modeling that is/will be done.

Evan Nisbet (GRAEF) shared an example of enhanced storm water treatment controls on a road reconstruction project in the Village of Shorewood. The road reconstruction project is located in a drainage area that is a direct tributary to the river, which makes it an ideal location for installing a storm water treatment practice. Storm water practices that are added on to planned road reconstruction projects are less costly than practices that are constructed or installed separate from other work.

• Capital improvement projects, including road reconstructions, provide an opportunity for communities to piggyback water quality projects without purchasing land to accommodate BMPs. This is particularly true where riparian land is already largely developed.

Ray de Bruijn (Village of Saukville) shared his experience with installing permeable pavers on a municipal road reconstruction project in 2017. There is a need for education for contractors on the installation techniques specific to the newer storm water practices that are being developed.

Agenda Item: TMDL Modeling for MS4 Permits: Annual Percent Reduction Method Bryan Hartsook (DNR)

Bryan H. (DNR) presented information on the MS4 permit / storm water modeling approach to determine progress so far toward meeting the target pollutant reduction goals listed in the TMDL report. He stressed that the TMDL goals are large-scale planning tools, not refined compliance-based tools. The modeling efforts previously done for MS4 permit compliance (with the 20% TSS reductions) is not the same as the modeling that communities are currently doing to get a current view of the designed effectiveness of existing storm water treatment practices in comparison to the TMDL's TSS & phosphorus reduction goals.

The period of record for the TMDL study was 1989-1998, and the precipitation information was based on the 1969 recorded data, which is generally consistent with the past 10 years.

Future: Need to add in new development and break down by reach-shed.

Agenda Item: 9 Key Element plans in the MKE watershed – Will Kort (Sweet Water)

Will Kort (Sweet Water) gave an update on the 9 Key Element plan development in the Milwaukee River Basin, specifically in the Cedar Creek and the Pigeon – Ulao Creeks subwatersheds. 9-key element plans are based on criteria that EPA recommends for successful watershed improvement planning and implementation. Many grant funding entities are now requiring 9-key-element plans for project to be eligible for those grant funds. These plans take more into account than solely the information addressed in the TMDL report (chlorides, etc.). Information from existing planning efforts is being reviewed and included in these 9-key-element plans. *Please contact Will with any local water resource plans to ensure the 9-key-element plans are as comprehensive as possible. wkort@uwm.edu

Agenda Item: Leaf Collection Study/Guidance Update –Ben Benninghoff (DNR), Maureen McBroom (Ruekert & Mielke, Inc.)

Maureen M. (R/M) and Ben B. (DNR) updated the group on DNR's draft guidance document for including phosphorus in the storm water treatment estimates for TMDL planning. Current guidance would allow up to 17% reduction in the annual phosphorus totals, and includes:

- Applicable to medium density residential land use
- Applicable to curb & gutter systems
- Leaves should not be raked onto the street/into the curbline
- Leaf collection should be completed at least 4 times during the fall

- Street sweeping should follow up leaf collection activities within 24 hours after collection
- An ordinance is required prohibiting residents from raking leaves into the streets

DNR is currently reviewing comments submitted during the public comment period for this draft guidance document; finalized guidance is anticipated in the near future.

The group discussed some of the details of this proposed guidance in comparison to existing leaf collection programs and equipment. Many communities do not have equipment that enables collection of leaves left on the terrace; the equipment is designed to collect leaves from the street. The required ordinance listed in the guidance may be controversial and difficult to pass in some communities. Most communities exceed the frequency of leaf collection required in the guidance (some communities do daily leaf collection during the fall). More discussion and information on different leaf collection programs may help planning efforts move forward.

Agenda Item: Respect our Waters campaign – Jake Fincher (Sweet Water)

Jake Fincher (Sweet Water) updated the group on the Respect our Waters campaign for 2018. Respect our Waters is the public outreach program re: storm water that communities participate in, which meets the requirements of the public information and education and public involvement conditions of the MS4 permits. Sparkles (the water spaniel) is the puppet who is the "face" of this program on TV, posters, and other materials.

Story telling will be a major component of the 2018 program. A link to the Respect our Waters web-site can be added to a municipal site, and a link to a municipal site can be added to the Respect our Waters site. *Please contact Jake with water quality and storm water outreach efforts within your community to be highlighted this year: fincher@swwtwater.org or 262-716-2211

Agenda Item: DNR update – Ben Benninghoff (DNR)

Ben B. (DNR) informed the group that he expects to hire a new storm water engineer in the near future.

Agenda Item: Web-site / Dropbox Demo – Dave Arnott (R/M)

Dave A. (R/M) shared the new MMWQC.org web-site. Various maps, meeting agendas/notes, and other documents will be available on the web-site. The new MMWQC logo is also shown on the web-site. Dave also shared the information stored in the MMWQC DropBox, including monitoring, additional maps, grant project details, etc.

Agenda Item: Update on Grants - Matt Bednarski (GRAEF)

Matt B. (GRAEF) updated the group on the status of the grant applications we applied for earlier this year. The Fund for Lake Michigan grant application was not successful, primarily due to the sheer number or applications that were submitted and the FFLM's desire to focus first on on-the-ground projects. The DNR UNPS & Storm Water planning grant application awards have not been sent out yet;

the MMWQC application is close to the total amount of money DNR is able to award, so we are waiting for information on whether we will receive that grant award or not.

Agenda Items: 2018 MMWQC Planning, 2018 Meeting Schedule: (3/14; 6/13; 9/12; 12/12) - Matt Bednarski (GRAEF)

We are currently planning the 2018 activities for the MMWQC. In general, this will include TMDL implementation planning for the group after the TMDL is approved and we move into implementation. An evaluation of the pros and cons of a MMWQC Watershed-style MS4 Permit, along with assistance with the MS4 permit reissuance process, is also anticipated. Future meeting topic suggestions include the financial structure of the MMWQC group, grant opportunities for TMDL implementation within the Milwaukee River Watershed, adaptive management and trading information, and meetings specifically regarding the upcoming MS4 permit reissuance and a potential MMWQC Watershed-style MS4 Permit.

The 2018 quarterly meetings have been scheduled:

Wednesday, March 14, 2018 Wednesday, June 13, 2018 Wednesday, September 21, 2018 Wednesday, December 12, 2018

^{*}Please send any suggestions for 2018 work activities or scheduling conflicts to Matt Bednarski (GRAEF), Evan Nisbet (GRAEF), Dave Arnott R/M, or Maureen McBroom (R/M).