



MINUTES
August 24, 2017

A meeting of the Technical Advisory Committee (TAC) of the Shingle Creek and West Mississippi Watershed Management Commissions was called to order by Chairman Richard McCoy at 8:30 a.m., Thursday, August 24, 2017, at Crystal City Hall, 4141 Douglas Drive North, Crystal, MN.

Present were: Andrew Hogg, Brooklyn Center; Todd Tuominen, Champlin; Mark Ray, Crystal; Ben Scharenbroich, Plymouth; Richard McCoy and Marta Roser, Robbinsdale; Ed Matthiesen and Diane Spector, Wenck Associates, Inc.; and Judie Anderson, JASS.

Not represented: Brooklyn Park, Maple Grove, Minneapolis, New Hope and Osseo.

- I. Motion by Ray, second by Scharenbroich to approve the **agenda**. * *Motion carried unanimously.*
- II. Motion by Ray, second by Hogg to approve the **minutes of the April-27 June 22, 2017 meeting**. * *Motion carried unanimously.*
- III. **Updates.**

A. Fish Survey Results. As part of the routine, in-depth lake monitoring completed in advance of conducting TMDL Five Year Reviews, Wenck is performing fish surveys in addition to aquatic vegetation surveys and water quality sampling. This year fish surveys were completed on Lake Magda in Brooklyn Park and Meadow Lake in New Hope. Results of those surveys were presented to the members.

A summary of the results showed that Meadow Lake is dominated by fathead minnows which consume zooplankton and detritus, resuspend and relocate nutrients in the water column, are very tolerant of low Dissolved Oxygen, and can survive winter kills. All in all, Meadow Lake does not have very good water quality and demonstrates poor transparency.

There are no historic fish survey data for Lake Magda. Magda is populated by black bullhead that feed on organisms in the sediment, black crappies that consume zooplankton and invertebrates, and smallmouth buffalo that feed on detritus and organisms in the sediment. All of these fish resuspend and relocate nutrients in the water column. Magda may be improving a little, perhaps because of weather conditions. It has also been reported that someone is stocking the lake.

B. Becker Park Infiltration Project. This project is a 43,000 SF infiltration gallery beneath a ballfield at Becker Park in Crystal. The gallery will infiltrate 0.5 inches of runoff from a 147 acre, 51% impervious watershed that includes untreated mixed land uses. The proposed project will reduce TP annual load to Upper Twin Lake by 118 pounds and TSS by 38,400 pounds. It has localized flood control benefits as well. The trunk storm sewer on Bass Lake Road is undersized and frequently floods. The project will reduce the peak discharge rate into the trunk sewer from the current 110 cfs to 90 cfs for a 2-year storm event.

To date the Commission/City of Crystal have amassed almost \$1.2M in grant funds to help offset the cost of this \$2.5M project.

C. Biochar Project. The three bio-char sites (Champlin City Hall, North Lions Park, and Humboldt Avenue) are in the second year of monitoring. The 45th Avenue Pond was not constructed. In-pond and outlet monitoring is being performed. Staff is seeking permission from MPCA/EPA to perform bench monitoring, including cores, to determine removal efficiency – how filters change over time and what improves efficiency. Wenck is proposing to reallocate \$20,800 from the lab analysis budget by significantly reducing sampling for Dissolved Organic Carbon, as well as providing an additional \$28,878 of cash match from excess levy funds.

Staff discussed some of the issues regarding this project, namely difficulty in obtaining biochar in quantity; basins are difficult to monitor; monitoring ports are hard to modify; retrofit ponds require modifying outlet structures, thus increasing cost; and sediment collects on the filter bed.

D. Twin Lake Carp Project. Carp migration tracking and biomass estimating continue.

[Tuominen arrived 8:50 a.m.]

IV. Other Business.

A. When project reviews located in the Maple Grove Gravel Mining Area come before the Commission – do they have an Industrial MS4 permit? Should the Commissions' rules be revised to recognize this scenario?

B. The DNR has money to update the **Flood Maps**. What is the next step? Who should do the updating?

C. The **next meeting** is scheduled for September 28 or October 26, 2017, at 8:30 a.m. at Crystal City Hall. [The September 28 meeting was cancelled.]

D. The meeting was adjourned at 10:04 a.m.

Respectfully submitted,



Judie A. Anderson, Recording Secretary