

MINUTES
March 24, 2016

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 8:37 a.m., Thursday, March 24, 2016, at Crystal City Hall, 4141 Douglas Drive North, Crystal, MN.

Present were: Andrew Hogg, Brooklyn Center; Mark Ray (via telephone), Crystal; Rick Lestina, Maple Grove; Liz Stout, Minneapolis; Bob Paschke, New Hope; Ben Scharenbroich, Plymouth; Richard McCoy, Robbinsdale; Diane Spector, Wenck Associates, Inc.; and Amy Juntunen, JASS.

Not represented: Brooklyn Park, Champlin, and Osseo.

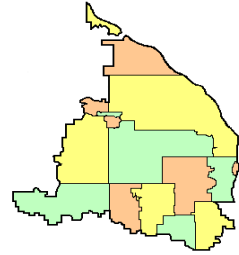
Also Present: Doug Baines, Dayton; Lex Reinke and Monte Nieme, First State Tire; Joe Otte, Wenck Associates, Inc.; Steve Christopher, Board of Water and Soil Resources (BWSR); and Ali Durgunoğlu, Hennepin County Dept. of Environment and Energy (HCEE).

I. Motion by Scharenbroich, second by Paschke to approve the **agenda***, moving item 4 to later in the agenda to allow the Minneapolis representative to be present for the discussion. *Motion carried unanimously.*

II. Reinke, Nieme, Joe Otte presented on **Tire Derived Aggregate (TDA) within stormwater management systems**. First State Tire Recycling is located in Isanti, MN and manufactures and supplies TDA for civil engineering applications. Tires were prohibited from landfills in 1995 and the US currently averages one junk tire per person per year. Most junk tires are burned, some junk tires are now being transformed into shreds. TDA has been tested and tests show that the material leaching from tires is “drinking water clean” in neutral water, much cleaner than blacktop. TDA does not degrade except in extreme pH conditions. TDA is a free draining material, very light weight, has high internal shear strength, and is less expensive than aggregate, as well as cheaper to transport since it is much lighter. Negatives for TDA include regulatory inconsistency and lack of engineering data concerning placement, compaction, and deflection over time. TDA has been used as road underlayment in areas with weak soils, in retaining walls since the product is lighter and drains better than dirt or aggregate, and in some stormwater treatment BMPs. The Metro Metals site was used as an example of a subsurface treatment BMP. TDA has also been used in septic systems. Other states, like California and Colorado, promote the use of TDA, but Minnesota has been slow to accept the product.

[Stout arrived 9:13 a.m.]

Ray noted that one city roadway used tire shreds, but when repairs were needed to utilities under the street and they had to cut through the tire shreds, many employees cut themselves on the shreds, and it was very difficult to get the shreds out of the space to allow work below the street. Past tire shreds were inconsistent, and may have resulted in different lengths and not a full separation between shreds. Now shreds are consistently at a small length and are not intertwined, making the product easier to work with.



The presenters will distribute videos, a PowerPoint, and other materials created by other states regarding TDA. The product was used for the Midway Stadium parking lot project. Two sets of data sampling pipe will also be installed on that site. The Midway project used about 1 million tires, or 25,000-30,000 cubic yards of TDA.

III. Motion by Paschke, second by Scharenbroich to approve the **minutes of the February 4, 2016 meeting.** * *Motion carried unanimously.*

IV. 2016 Cost Share Applications.* The Cleveland neighborhood in Minneapolis submitted an application for *Blooming Alleys for Crystal Lake*. This type of project has been done successfully around Lake Nokomis and the Powderhorn neighborhood. Minneapolis will contribute money for basic raingarden education. Hennepin County is contributing \$10,000 and labor from the Conservation Corps. The City has contracted with Metro Blooms to complete annual inspections and required maintenance. The neighborhood views this as a three-year process, but using watershed funding for the first year as a pilot project. This project has the potential to reduce 150 lbs. of sediment per year, as well as treating runoff to Crystal Lake. Iron could also be added below the rain gardens to reduce dissolved phosphorus. Minneapolis will be responsible for enforcing maintenance.

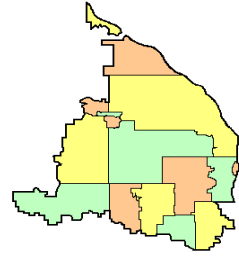
Motion by Scharenbroich, second by Paschke to recommend that the Commission fund this cost-share request at \$17,000. *Motion carried unanimously.*

V. Grant Updates.

A. Connections at Shingle Creek. As construction began, the scour hole downstream of Monkey Falls was discovered to be three feet deeper than anticipated. The rocks on hand were used to stabilize the bottom, but now \$20,000 of additional rock is needed to stabilize the stream banks. This removes most of the excess money thought available to participate in the cost of the outdoor classroom. The first priority of this project is to complete the stream stabilization.

B. Public Art Reaeration Project. A draft Request for Qualifications (RFQ) is intended to be sent out this week to a select base of artists. Forecast will host a workshop on April 21 for artists to learn more about the sites, solar power options, pumps, and mechanical requirements. The deadline for concept submittal is May 5. One to three artists/groups of artists will be selected. Criteria identified for selection include concept for the artwork, how the artist(s) would work together with the community, how local history/information could be included in the project, and how well the artwork is expected to function in aerating the stream.

C. Iron/Biochar Enhanced Sand Filters Project. Staff is creating a Memorandum of Understanding (MOU) with the Minneapolis Park Board for Olson Middle School and the Shingle Creek location at Webber Park. The concept for Shingle Creek Falls is to install a job box on the viewing platform, extend a pipe into the falls to intake water to the job box through the filter medium, then return the water to the stream. This location will monitor both inflow and outflow to measure the reduction. Staff is also working with Crystal for the Lions Park location and Champlin for the new City Hall pond location. Staff recently received and are reviewing the plans for the 45th Avenue Pond in Robbinsdale. An agreement for maintenance of that location is needed between Robbinsdale and MnDot.



D. Twin Lake Carp Management. Staff is working with the DNR to determine the best timing for the first capture/release of carp. Once the timing is determined, the first public meeting will be scheduled.

E. Becker Park. The agreement for this project has been received and funding continues to be assembled. Support is growing for the project within the city and county.

VI. Potential Rules and Standards Revisions.* This item was delayed to the April meeting due to time constraints.

VI. Other Business.

A. McCoy noted that Robbinsdale has a street constructed over shredded tires, but the utilities are built in the sides, not in the tire fill. The street is currently badly cracked, but probably due to the thin overlay rather than the TDA. Street Aid is completing a mill and overlay of the street.

B. The **next meeting** is scheduled for April 28, 2016 at 8:30 a.m. at Crystal City Hall. The Rules and Standards discussion will be the primary agenda item.

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

Respectfully submitted,

Judie A. Anderson

Recording Secretary

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