MINUTES Technical Advisory Committee August 11, 2022

A meeting of the Technical Advisory Committee (TAC) of the Shingle Creek and West Mississippi Watershed Management Commissions was called to order by Chair Richard McCoy at 11:30 a.m., Thursday, August 11, 2022, in the Aspen Room, Plymouth Community Center, 14800 34th Avenue North, Plymouth, MN.

Present: Mike Albers, Brooklyn Center; Mark Ray, Crystal; Derek Asche, Maple Grove; Nick Macklem, New Hope; Amy Riegel, Ben Scharenbroich, and Hailey Olson, Plymouth; Richard McCoy and Mike Sorensen, Robbinsdale; Diane Spector, Todd Shoemaker, Chris Meehan, and Katie Kemmitt, Stantec; Kris Guentzel, Hennepin County Environment and Energy; and Judie Anderson, JASS.

Not represented: Brooklyn Park, Champlin, Minneapolis, and Osseo.

Email: judie@jass.biz • Website: www.shinglecreek.org

Also present: Andy Polzin, Plymouth.

- **I.** Motion by Ray, second by Riegel to **approve the agenda.*** *Motion carried unanimously.*
- **II.** Motion by Ray, second by Riegel to **approve the minutes*** of the July 14, 2022, meeting. *Motion carried unanimously.*
- III. Fourth Generation Watershed Management Plan.

TAC members received memos* summarizing Stantec's work to date on **revisions to the Shingle Creek and West Mississippi watershed legal boundaries.** Included in the memos are links to Stantec's GIS online map showing the existing and updated legal boundaries as well as the hydrologic boundaries for the Shingle, Elm, Bassett and Mississippi watersheds. The members are asked to take some time to review and comment on the updated legal boundaries, especially where the Shingle and adjacent hydro boundaries differ.

The Commissions established their existing legal boundaries after each was formed in 1984 using parcels and hydrologic data available at that time. Parcel subdivisions, topographic changes, and the construction and modification of stormwater conveyance systems have occurred over the years. As part of the Fourth Generation Plan development process, the Commission chose to undertake a review of the watersheds' legal boundary to ensure the boundary better reflects today's hydrologic conditions. Staff are recommending modifications to the legal watershed boundaries to follow the watersheds' hydrologic divides more closely. The Commissions may then petition the Minnesota Board of Water and Soil Resources (BWSR) for a change in the legal boundary (Minnesota Statute 103B.215).

A. The Shingle Creek watershed shares a boundary with four Watershed Management Organizations (WMOs) within Hennepin County - Elm Creek, West Mississippi, Mississippi, and Bassett Creek. The West Mississippi watershed shares a boundary with two WMOs within Hennepin County – Elm Creek and Shingle Creek. The current and proposed boundaries can be reviewed in more detail through ArcGIS online at Shingle Creek & West Mississippi Watershed Boundary Updates.

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GIS software was used to determine which parcels should be evaluated for inclusion within the watershed's legal boundary. For each parcel intersecting with the hydrologic boundary, GIS software calculated the portion of the parcel's area located within the hydrologic boundary. Stantec used this model to determine which parcels should be included in the watershed's jurisdiction following the process detailed below.

- **1.** Stantec considered a parcel to be inside a watershed legal boundary if over 50% of the parcel was inside the hydraulic boundary.
- **2.** Stantec digitized a proposed legal boundary in GIS following the boundaries of the parcels identified as over 50% within the hydrologic boundary.
- **3.** Stantec then confirmed the digitalized legal boundary with a visual review of the entire boundary, comparing the hydrologic boundary, storm sewer networks, and the parcels identified as over 50% within the hydrologic boundary to ensure accuracy of the proposed boundary. Areas of special consideration are described in more detail below.
- 4. Stantec complied a summary of all parcels that were previously in the Shingle Creek or West Mississippi legal boundaries and determined to be outside of them or were previously deemed outside their legal boundaries and now are considered inside.
- **B.** In Shingle Creek, the portion of the legal boundary located within the Mississippi River near 42nd Avenue North was left unchanged. In West Mississippi, the portion of the legal boundary within the Mississippi River, the westernmost boundary on the separate northwest portion of the watershed, the eastern boundary just south of the Mississippi River on the eastern portion of the watershed, and the southern boundary east of Humboldt Avenue along 53rd Avenue were left unchanged other than minor corrections to follow current lot lines.
- 1. Parcels that had connected housing, such as townhomes, required special consideration where each townhome has its own parcel separate from the parcel of land around the units. In these cases, Staff considered the connected housing units and the land parcel around them as one plot, instead of numerous separate units. These combined plots were included in the legal boundary when more than 50% of their total area, housing and land combined, fell within the hydrologic boundary. Parcels that had connected housing where lots were split by unit to include the surrounding land were also considered one plot, so all units in a connected building would be considered within the legal boundary when more than 50% of the total area, housing and land combined, fell within the hydrologic boundary.
- 2. In areas where the hydrologic boundary split parcels to nearly 50%, resulting in the occasional lot in or out along a section of parcels, Staff individually checked the lot using topography and aerial photography to determine at a smaller scale the accuracy of the hydrologic boundary to determine which direction the parcel primarily drains. If topography and aerial photography could not indicate a change in the defined boundary, the line was left as it was originally set.
- **3.** Non-residential plots, such as railroads and parks, were treated the same as residential plots.
- **4.** Available storm sewer network data indicated that a portion of the hydrologic boundary near 55th Avenue and Weston Lane excluded an area that drains into the Shingle Creek watershed. A review of the development plans confirmed that this area all drains to a pond within the Shingle Creek boundary. Stantec updated the legal boundary in this development to include those parcels draining into the watershed.

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- 5. The Elm Creek watershed hydrologic boundary data showed the boundary running from Zachary Lane east along 101st Ave. then following Nathan Lane north to 109th Ave. However, available storm sewer and topographic data indicate that a portion of that area outside the boundary identified by Elm Creek watershed actually flows into the West Mississippi watershed. Stantec updated the West Mississippi hydraulic boundary adjacent to 101st Ave North and Nathan Lane North to include those areas draining into the watershed. The proposed legal boundary is based on this new hydrologic boundary through this area.
- **C. Implications.** The proposed Shingle Creek Watershed legal boundary more accurately reflects the current hydrologic boundary. With a change to this updated boundary, parcels will change watershed jurisdiction, either into Shingle Creek or into an adjacent watershed.

The proposed West Mississippi Watershed legal boundary more accurately reflects the current hydrologic boundary. With a change to this updated boundary, parcels would be moved either into West Mississippi or into an adjacent watershed.

D. Next Steps.

- **1.** August: review boundary update with member city staff; update boundary based on member city staff comments; prepare letter of concurrence template for member cities and adjacent WMOs. Members are asked to get their revisions to Shoemaker by August 26.
- **2. September:** present boundary final draft at Commission meeting; send final draft boundary files and letter of concurrence template to member cities and adjacent WMOs, requesting review by September 30, 2022.
- **3. October:** update boundaries based on comments from member cities and adjacent WMOs; review by Commissions' attorney.
- **4. November:** present final update at Commission meeting, requesting authorization to submit to BWSR; coordinate review and approval with BWSR.

IV. Water Quality.

- **A.** Palmer Creek Estates Stream Stabilization Project. Meehan presented 60% design plans for the Palmer Creek Estates stream stabilization project located upstream of Bass Lake in Plymouth. The project is being funded \$384,000 by a Clean Water Implementation Grant and \$81,000 by the Commission, for a total of \$465,000. Construction will occur during the winter of 2022-2023.
- **B.** Plymouth/Maple Grove Pike Creek Project. Scharenbroich presented the Plymouth/ Maple Grove Pike Creek restoration project comprised of decreasing bank erosion, removing stream blockages, and improving water quality. Funding partners include the two cities, the Board of Water and Soil Resources Clean Water Fund, and the Commission. The total project cost is \$395,500) and construction will occur this coming winter.
- **C. Crystal Lake Management Plan.** Kemmitt reported on the second year of carp management on Crystal Lake. WSB executed six removal events and removed over 3,500 fish from the lake, bringing the total number of carp removed in 2021-2022 to over 7,500. The second alum treatment is scheduled for Fall 2022. Kemmitt also presented water quality and sediment data collected from the lake in 2022 and provide an update on project progress.

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D. Bass Lake Vegetation Improvements. On July 27, Stantec, the DNR, volunteers from the Bass Lake Improvement Association and Schmidt Lake, and the City of Plymouth worked together to harvest and introduce native, desirable aquatic plants to Bass Lake. Twelve native species were collected from Big Carnelian Lake near Stillwater and brought back to Bass Lake where they were "planted" in burlap mats and secured to the lake bottom in fenced-off plots. Staff will check the plots periodically throughout the rest of the summer to see what plantings are successful.

V. Grant Opportunities.*

A. The Board of Water and Soil Resources (BWSR) is now taking applications for its annual **Clean Water Fund Projects and practices grants.** Applications are due August 22, 2022.

At this time Shingle Creek has no pending projects that are positioned for construction or implementation. The next projects that might benefit from grant funding are the proposed Bass Creek Stabilization from TH 169 to 63rd Avenue, and the Eagle Lake Management Plan. Both those projects require additional planning and feasibility work before they would be ready to request grant funding, perhaps in 2023.

A project in West Mississippi that Brooklyn Park and Hennepin County have proposed in the past, stabilizing severely eroding Mississippi Riverbanks adjacent to several private properties, is eligible for funding this round. This project could be submitted again, noting that the West Mississippi Commission is dedicating a majority of its Watershed Based Implementation Funding as well as Partnership Cost Share to the project. An application to fund this project will be presented to the Commission at its regular meeting today.

B. The SCWM **WBIF Convene Committee** will meet in the coming weeks to finalize funding for the Education & Outreach contracted coordinator position

VI. Other Business.

- **A.** The **next TAC meeting** is scheduled for 11:00, September 8, 2022, prior to the regular Commission meetings.
 - **B** There being no further business, the TAC meeting was adjourned at 12:36 p.m.

Respectfully submitted,

L. a. A Alduson

Judie A. Anderson Recording Secretary

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