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May 31, 2019

Commissioners  
Shingle Creek and West Mississippi  
Watershed Management Commissions  
Hennepin County, Minnesota

The agenda and meeting packet are available to all interested parties on the Commission's website at <http://www.shinglecreek.org/minutes--meeting-packets.html>

Dear Commissioners:

Regular meetings of the Shingle Creek and West Mississippi Watershed Management Commissions will be held **Thursday, June 13, 2019**, at Edinburgh USA, 8700 Edinbrook Crossing, Brooklyn Park, MN. Lunch will be served at 12:00 noon and the meetings will convene concurrently at 12:45.

Please email me at [judie@jass.biz](mailto:judie@jass.biz) to confirm whether you or your Alternate will be attending the meeting.

Your meal choices are:

- Cobb Salad, Grilled Chicken, Romaine Lettuce, Tomato, Avocado, Egg, Bacon, Bleu Cheese, Parmesan Dressing on the side, Freshly Baked Breads
- Roast Beef Sandwich, Caramelized Onions, Mushrooms, Tomato, Baby Kale, Horseradish Sauce, Focaccia, Kettle Chips
- Sautéed Salmon, Peas, Fingerling Potatoes, Charred Tomato Relish
- I will be attending but DO NOT want a meal.
- I will not be attending the meeting.

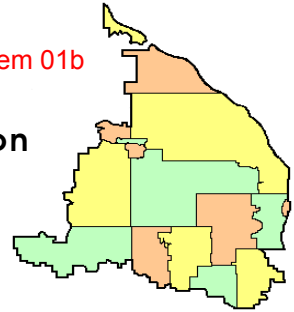
We must make final reservations by **noon, Wednesday, June 5, 2019**. Please make a reservation, even if you are not requesting a meal, so we can arrange for sufficient seating and meeting materials. Thank you.

Regards,

Judie A. Anderson  
Administrator

cc: Alternate Commissioners	Member Cites	Troy Gilchrist	TAC Members
Metropolitan Council	MPCA	DNR	Wenck Associates

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A combined regular meeting of the Shingle Creek and West Mississippi Watershed Management Commissions will be convened on Thursday, June 13, 2019, at 12:45 p.m. at Edinburgh USA, 8700 Edinbrook Crossing, Brooklyn Park, MN. Agenda items are available at <http://www.shinglecreek.org/minutes--meeting-packets.html>.

1. Call to Order.
  - SCWM a. Roll Call.
  - ✓ SCWM b. Approve Agenda.\*
  - ✓ SCWM c. Approve Minutes of Last Meeting.\*
2. Reports.
  - ✓ SC a. Treasurer's Report.\*\* ✓ WM d. Treasurer's Report.\*\*
  - ✓ SC b. Approve Claims\*\* - voice vote. ✓ WM e. Approve Claims\*\* - voice vote.
  - ✓ SC c. Accept 2018 Audit Report.\*\* ✓ WM f. Accept 2018 Audit Report.\*\*
3. Open Forum.
4. Project Reviews.
  - ✓ WM a. WM2019-003 610 Crossings, Brooklyn Park.\*
  - ✓ WM b. WM2019-004 Highway 169 and 101st Avenue Interchange, Brooklyn Park.\*
5. Watershed Management Plan.
  - ✓ SC a. New Hope Cost Share Program Application.\*
6. Water Quality.
  - ✓ SC a. Magda and Meadow Lakes TMDLs 5-Year Review.\*
  - ✓ SC 1) Request for Meadow Lake Management Plan.\*
  - ✓ SC b. Request for Cedar Island Lake SWA.\*\*
  - SCWM c. Next TAC meeting –8:30 a.m., Friday, June 21, 2019, Crystal City Hall.
    - 1) May 30, 2019 TAC Meeting Minutes\* - *information only*.
7. Education and Public Outreach.
  - SCWM a. Education and Outreach – update.\*\*
  - SCWM b. Next WMWA meeting – tentatively 8:30 a.m., Tuesday, July 9, 2019, Plymouth City Hall.
8. Grant Opportunities and Updates.
  - SC a. Twin Lake Carp Removal.\*
  - ✓ SC b. Bass and Pomerleau Lakes Alum Application.\*
  - SC c. Becker Park.
  - SC d. SRP Reduction Project.
9. Communications.
  - SCWM a. Communications Log.\*
10. Other Business.
  - ✓ SCWM a. Liability Waiver.\*
11. Adjournment.

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\* In meeting packet    \*\* Emailed or available at meeting    \*\*\*Previously transmitted    \*\*\*\* Available on website    ✓ Item requires action

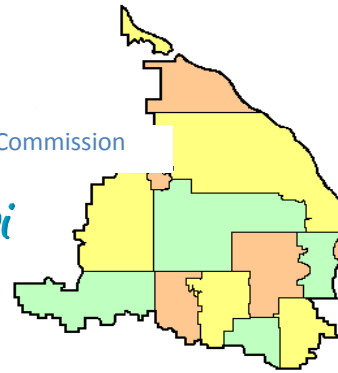


Watershed Management Commission



item 01c

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**MINUTES**  
**Regular and Public Meetings**  
**May 9, 2019**

(Action by the SCWMC appears in blue, by the WMWMC in green and shared information in black.  
\*indicates items included in the meeting packet.)

I. A joint meeting of the Shingle Creek Watershed Management Commission and the West Mississippi Watershed Management Commission was called to order by Shingle Creek Chairman Andy Polzin at 12:45 p.m. on Thursday, May 9, 2019, at Edinburgh, USA, 8700 Edinbrook Crossing, Brooklyn Park, MN.

Present for Shingle Creek were: David Vlasin, Brooklyn Center; John Roach, Brooklyn Park; Burton Orred, Jr., Crystal; Karen Jaeger, Maple Grove; Gary Anderson, Minneapolis; Bill Willis, New Hope; Harold E. Johnson, Osseo; Andy Polzin, Plymouth; Wayne Sicora, Robbinsdale; Ed Matthiesen and Diane Spector, Wenck Associates, Inc.; Troy Gilchrist, Kennedy & Graven; and Judie Anderson, JASS.

Present for West Mississippi were: David Vlasin, Brooklyn Center; Steve Chesney, Brooklyn Park; Gerry Butcher, Champlin; Karen Jaeger, Maple Grove; Harold E. Johnson, Osseo; Ed Matthiesen and Diane Spector, Wenck Associates, Inc.; Troy Gilchrist, Kennedy & Graven; and Judie Anderson, JASS.

Also present were: Andrew Hogg, Brooklyn Center; Alex Pasch and Mitch Robinson, Brooklyn Park; Todd Tuominen, Champlin; Mark Ray, Crystal; Terry Muller and Mark Lahtinen, Maple Grove; Robert Grant and Megan Hedstrom, New Hope; Ben Scharenbroich, Plymouth; Richard McCoy and Marta Roser, Robbinsdale; and Zoe Bakken-Heck, Minneapolis.

II. **Agendas and Minutes.**

Motion by G. Anderson, second by Wills to approve the **Shingle Creek agenda**. \* Motion carried unanimously.

Motion by Chesney, second by Jaeger to approve the **West Mississippi agenda**. \* Motion carried unanimously.

Motion by Orred, second by G. Anderson to approve the **minutes of the April meeting**. \* Motion carried unanimously.

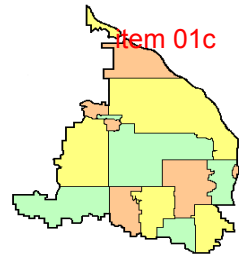
Motion by Butcher, second by Chesney to approve the **minutes of the April meeting**. \* Motion carried unanimously.

Motion by G. Anderson, second by Wills to ratify the **actions of the Commission at the April meeting**. Motion carried unanimously.

III. **Finances and Reports.**

A. Motion by Orred, second by Wills to approve the **Shingle Creek May Treasurer's Report**. \* Motion carried unanimously.

Motion by Orred, second by G. Anderson to approve the **Shingle Creek May claims**. \* Claims totaling \$187,020.16 were approved by roll call vote: ayes – Roach, Orred, Jaeger, G. Anderson, Wills, Johnson, Polzin, and Sicora; nays – none; absent – Brooklyn Center.



**B.** Motion by Jaeger, second by Chesney to approve the **West Mississippi May Treasurer's Report.\***  
*Motion carried unanimously.*

Motion by Chesney, second by Johnson to approve the **West Mississippi May claims.\*** Claims totaling \$14,213.26 were *approved by roll call vote: ayes – Chesney, Butcher, Jaeger, and Johnson; nays – none; absent – Brooklyn Center.*

*[The regular meeting was suspended at 12:53 p.m. in order to conduct a public meeting.]*

**IV. Public Meeting.** The Shingle Creek and West Mississippi Capital Improvement Programs (CIPs) are proposed for a Minor Plan Amendment (MPA) to the joint Third Generation Watershed Management Plan. This amendment revises capital project cost share policies and adds one project and specifies the location of a second project on the Shingle Creek CIP. The Board of Water and Soil Resources (BWSR) agreed with the Commissions' February 19, 2019 request to proceed as an MPA as long as Hennepin County did not object.

On March 14, 2019 the Commissions initiated the MPA. Notice was sent to the member cities, county, and reviewing agencies, and published as required by statute and the Plan. The purpose of this meeting is to discuss the proposed amendment and any comments received prior to or at a public meeting. After that discussion, each Commission will consider a resolution adopting the Minor Plan Amendment contingent on County Board approval of the Minor Plan Amendment, which will be heard at a County Board hearing in June 2019.

The 2020 CIP includes a generic "Lake Internal Load" project. This revision would specify that the project would be the 2019 Crystal Lake Management Plan at an overall cost of \$370,500. The proposed plan amendment would also revise some of the provisions of the CIP program, namely increasing the voluntary \$500,000 annual levy limit and lifting the \$250,000 per project maximum.

Staff's May 3, 2019 memo\* includes the Notice of the Minor Plan Amendment. The proposed revisions are shown as additions (underlined) or deletions (~~strike-outs~~) to Table 4.5, Shingle Creek WMC Third Generation Plan Implementation Plan, and Appendix F, CIP Descriptions, of the Management Plan. **No revisions were proposed for the West Mississippi Implementation Plan.**

Table 4.5. Shingle Creek WMC Third Generation Plan Implementation Plan is revised as follows:

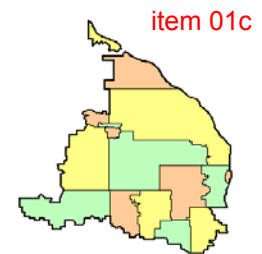
Action	2018	2019	2020	2021	2022
Lake Internal Load Improvement Project			<u>200,000</u>		200,000
-Commission Contribution			<u>200,000</u>		200,000
-Local Contribution			<u>0</u>		0
<u>Crystal Lake Management Plan</u>		<u>370,500</u>			
- <u>Commission Contribution</u>		<u>370,500</u>			
- <u>Local Contribution</u>		<u>0</u>			

Appendix F, CIP Descriptions, is hereby revised as follows:

*Lake Internal Load Improvement Projects*

The 13 lake TMDLs now in implementation in the Shingle Creek watershed recommend internal load improvements for several of the lakes. These projects could include rough fish removal and installation of fish barriers, chemical treatment such as alum, drawdowns, whole-lake aquatic vegetation treatment, etc. Typically, implementation emphasizes reducing the load from external sources before completing internal load reductions. Some lakes not shown here may require internal load reductions if external load reduction is insufficient to meet state water quality goals.

Potential lakes to be improved include the following (not in priority order):



1. Twin Lake. (Crystal, Brooklyn Center, Robbinsdale). 2015 Project: Rough fish tracking and removal, fish barriers, and aeration system; Future Project: aquatic vegetation treatment.
2. Pomerleau (Plymouth). 2018 Project: Chemical treatment.
3. Cedar Island (Maple Grove). Rough fish removal, fish barriers, drawdown.
4. Eagle Lake (Maple Grove.) Aquatic vegetation treatment.
5. Bass Lake (Plymouth). 2018 Project: Chemical treatment, aquatic vegetation management
6. Crystal Lake. 2019 Project: Chemical treatment, rough fish management, aquatic vegetation management.

**A. Open public meeting.** The public meeting was opened at 12:57 p.m.

1. No comments on the proposed amendment were received from either the reviewing agencies, member cities or the public.

2. No one was present from the general public.

3. The public meeting was closed at 12:58 p.m.

**B. Commission Discussion.**

Motion by Wills, second by Roach to adopt **Resolution 2019-01** Adopting a Minor Plan Amendment Revising the Capital Improvement Program.\* *Motion carried unanimously.*

Motion by Johnson, second by Chesney to adopt **Resolution 2019-01** Adopting a Minor Plan Amendment Revising the Capital Improvement Program.\* *Motion carried unanimously.*

*[The regular meeting was reconvened at 12:59 p.m.]*

**V. Open Forum.**

*[Vlasin arrived 1:03 p.m.]*

**VI. Project Reviews.**

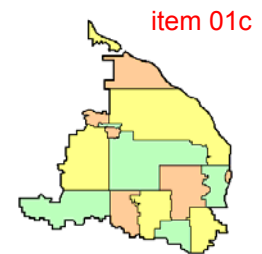
**A. SC2019-007 Silver Creek on Main Expansion, Maple Grove.\*** Expansion of existing senior living community by 75 units on a 1.27-acre site located at 8200 North Main Street. Following development, the site will be approximately 62 percent impervious, with an increase of 0.79 acres of net new impervious surface. A complete project review application was received on April 24, 2019.

To comply with the Commission's water quality treatment requirement, the site must provide ponding designed to NURP standards with dead storage volume equal to or greater than the volume of runoff from a 2.5-inch storm event, or BMPs providing a similar level of treatment, i.e., 85% TSS removal and 60% TP removal. This project is located within the Gravel Mining Area at Arbor Lakes and all water leaving the site has been accounted for by the regional ponds under City ownership. Two 4-foot sumps are provided for pretreatment of stormwater entering the regional ponds. The applicant meets Commission water quality treatment requirements.

Commission rules require that site runoff is limited to predevelopment rates for the 2-, 10-, and 100-year storm events. This project is located within the Gravel Mining Area at Arbor Lakes. Runoff is proposed to be routed to nearby regional ponds. The applicant meets the Commission's rate control requirements.

Commission rules require the site to infiltrate 1.0 inch of runoff from new impervious area within 48 hours. The new impervious area on this site is 0.79 acres. However, this project falls within the Gravel Mining Area at Arbor Lakes, and the applicant proposes to use the city infiltration credit that has the capacity to infiltrate the required volume within 48 hours. The applicant meets Commission infiltration requirements.

The National Wetlands Inventory does not identify any wetlands on site. The applicant meets Commission wetland requirements. There are no Public Waters on this site. The applicant meets Commission Public Waters requirements.



There is no FEMA-regulated floodplain on this site. The low floor elevations of the buildings are at least two feet higher than the high-water elevation of the nearby regional ponds. The applicant meets Commission floodplain requirements.

The erosion control plan includes a rock construction entrance, silt fence, and inlet protection. The erosion control plan meets Commission requirements.

A public hearing on the project was scheduled for April 29, 2019 as part of Planning Commission and City Council review of this project, meeting Commission public notice requirements.

A draft Operations & Maintenance (O&M) agreement between the applicant and the City of Maple Grove has not yet been provided.

Motion by Jaeger, second by Orred to advise the City of Maple Grove that project SC2019-007 is approved contingent upon receipt of a draft Operations & Maintenance agreement between the applicant and the City. *Motion carried unanimously.*

**B. SC2019-008 The Woods at Taylor Creek, Plymouth.\*** Construction of 24 single-family homes on 19.2 acres located at the end of Ranchview Lane across the railroad tracks from Providence Academy, (5100 Ranchview Lane North). Following development, the site will be 11 percent impervious, with 2.19 acres of impervious surface, an increase of 2.19 acres. A complete project review application was received April 11, 2019.

To comply with the Commission's water quality treatment requirement, the site must provide ponding designed to NURP standards with dead storage volume equal to or greater than the volume of runoff from a 2.5" storm event, or BMPs providing a similar level of treatment - 85% TSS removal and 60% TP removal. Infiltrating 1.3-inches of runoff, for example, is considered sufficient to provide a similar level of treatment. If a sump is used the MnDOT Road Sand particle size distribution is acceptable for 80% capture.

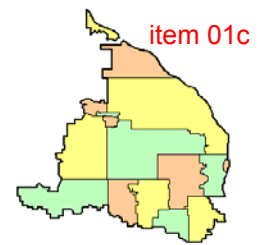
The site is primarily comprised of Type C soils, and relatively high groundwater conditions. Therefore, runoff from the site is proposed to be routed to a wet stormwater detention pond with a biofiltration bench, prior to discharging to the adjacent wetland. The applicant used P8 to model TSS and TP load reduction from the site and demonstrated 96.4% removal of TSS and 67.8% removal of TP.

In addition, three sumps with SAFL baffles are proposed by the applicant. One of the SAFL baffles will serve as pretreatment to the proposed stormwater detention pond. The other two will provide pretreatment within the new storm sewer that will transport offsite water across the project site to the wetlands containing FES-9 and FES-14. All SAFL baffles will be in the City street. The applicant meets Commission water quality treatment requirements.

Commission rules require that site runoff is limited to predevelopment rates for the 2-, 10-, and 100-year storm events. Runoff from the site will be routed to Ranchview Lane, which is routed to a proposed detention pond with a filtration bench via a new storm sewer system. The applicant meets Commission rate control requirements.

Commission rules require the site to infiltrate 1.0 inch of runoff from new impervious area within 48 hours. However, due to the presence of soils with low infiltration capacity and relatively high groundwater levels, the applicant proposes to provide filtration instead of infiltration. The new impervious area on this site is 2.19 acres, requiring abstraction of 0.18 acre-feet [7,950 CF] within 48 hours. The applicant proposes to construct a detention pond with a biofiltration bench that has the capacity to filtrate the required volume within 48 hours. The applicant meets Commission volume control requirements.

The National Wetlands Inventory identifies probable and potential wetlands on the site. The City of Plymouth is LGU for Wetland Conservation Act (WCA) administration. Wetland buffers 30 feet in width are provided. The applicant meets Commission wetland requirements.



There are no Public Waters on this site. The applicant meets Commission Public Waters requirements. There is no FEMA-regulated floodplain on this site. The low floor elevations of the buildings are at least two feet higher than the high-water elevation of the detention ponds/infiltration basins according to Atlas 14 precipitation. The applicant meets Commission floodplain requirements.

The erosion control plan includes a rock construction entrances, perimeter silt fence/biolog, silt fence surrounding detention ponds/infiltration basins, inlet protection, rip rap at inlets, slope checks, and native seed specified on the pond slopes. The erosion control plan meets Commission requirements.

A public hearing on the project was held on February 7, 2018 as part of Planning Commission and City Council review of this project, meeting the Commission's public notice requirements.

The City of Plymouth will maintain the stormwater systems related to this project.

Motion by Orred, second by Jaeger to advise the City of Plymouth that project SC2019-008 is approved with no conditions. *Motion carried unanimously.*

**C. MAC Crystal Airport EA/EAW.\*** The Metropolitan Airports Commission (MAC) is contemplating making improvements to Crystal Airport and has prepared a draft Environmental Assessment/Environmental Assessment Worksheet to identify the potential environmental impacts and mitigation strategies. Such a document is not expected to set forth specific solutions, simply to identify potential impacts and how they might be mitigated. In general, the improvements include making various changes to the runways and facilities on site as well as potentially releasing unused land along 63rd Avenue on the north side of the airport for potential aviation or non-aviation development.

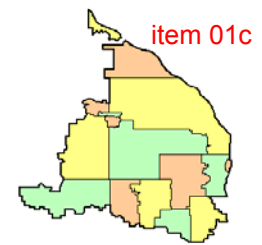
The EA/EAW does evaluate potential impacts to water resources, including surface waters and stormwater, floodplains, groundwater, and wetlands. The site is tributary to Upper Twin Lake and to Wetland 639W, both waters of concern to the Commission. The proposed actions would add approximately 6.3 acres of impervious surface associated with the runway, taxiways, run-up pads, perimeter roads, and aircraft parking apron. However, approximately 5.1 acres of existing impervious surface will also be removed, for a net increase of about 1.2 acres.

The proposed improvements would alter the existing stormwater management system. The new taxiway system would fill approximately 0.8 acres of land that is currently a stormwater infiltration area. Stormwater management practices will be investigated during final design to replace the lost stormwater storage volume. The document acknowledges that, because of the size of the project, it will need to be reviewed by and meet the standards of the Shingle Creek Commission. There are no expected impacts to groundwater or to floodplains. Erosion control practices will be followed to minimize sedimentation.

Two components of the proposed improvements potentially affect onsite delineated wetlands. The area along 63rd Avenue that might be released for private development contains three small wetlands. Two are located on the east side of the development area near the Twin Creek corridor, and the other is located west of the Airport access road. The MAC will require developers of this site to comply with any wetland rules and buffer requirements set by the Commission. A proposed new perimeter road segment on the south side of the airport will likely require fill in two small Type 1 Seasonally Flooded wetlands. Because the disturbance to the wetlands is likely below the de minimis threshold, impacts will be minimal, and replacement of these wetlands is not expected to be required. If, during detailed design, it is determined that more than 1,000 SF of wetlands will be affected, a replacement plan will be developed and implemented.

In general, the EA/EAW adequately identifies the potential water resources impacts and appropriate mitigation strategies. Staff recommends that the Commission notify the Metropolitan Airports Commission that its concerns are adequately addressed.

Motion by Jaeger, second by Roach to approve Staff's recommendation. *Motion carried unanimously.*



## VII. 2020 Operating Budgets.

**A. Shingle Creek.\*** The Joint Powers Agreement (JPA) governing operations of the Shingle Creek Watershed Management Commission requires a budget and the resulting proposed city assessments for the coming year to be reported to the member cities by July 1.

The budget is separated into an operating budget and a project budget. The annual operating budget revenue source is primarily city assessments and funds the Commission's core activities. Projects and studies are funded through a variety of grants and other sources, most of which do not proceed on an annual fiscal year basis. Tracking budgets separately provides more clarity as to the activities the cities are funding directly from their annual budgets.

The assessment cap in the Commission's Joint Powers Agreement (JPA) limits the annual city assessment increase to the June-to-June increase in the Consumer Price Index-Urban (CPI-U), using the assessment in 2004 as a base. The "SC Allowed" assessment that could be made for 2020 based on accumulated CPI-U change is \$363,690. That compares to the "SC Actual," which is the amount actually proposed to be assessed. While the current estimate of annual inflation is 0.9%, the allowable increase is based on the accumulated inflation rate since 2003. The preliminary recommended draft 2020 budget assumes an assessment of \$363,590, a 1.9% increase.

With a few exceptions the proposed budget generally continues the same activities at the same level of effort as in 2019. Some items to note:

**1. Interest.** The Commission currently has about \$1 million in the bank, most of which is restricted funds dedicated to grant and levy projects. That balance is earning considerable interest, which Staff recommends letting accrue to the cash reserves rather than spend.

**2. West Metro Water Alliance (WMWA) Programs.** Shingle Creek acts as the fiscal agent for WMWA. The Commission's budget shows both revenues received from our WMO partners for general WMWA programming as well as the partners' share of WMWA expenses. The rain garden workshops are handled in a different way. They are funded directly by cities and invoiced through Shingle Creek as a convenience, and the Commission contributes funds to subsidize this cost for workshops hosted in the watershed.

**3. Subwatershed BMP Assessment.** The 2019 budget allocated \$20,000 from 2019 funds budgeted for subwatershed assessments and \$5,000 for contribution to the 4th generation plan to provide cost share to the HUC-8 flood mapping update (the DNR is contributing \$50,000). Those funds have been carried over to 2019 as that project continues. The 2020 budget restores the \$20,000 annual contribution to the Subwatershed Assessment account.

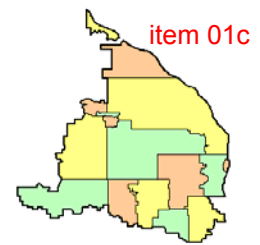
**4. Contribution to 4th Generation Plan.** The Commission has been contributing annually to a restricted account to finance the upcoming 4th Generation Plan. At the end of 2019 that balance will be \$65,000. Staff believe that, along with West Mississippi's contribution, this will be sufficient to provide an update to the management plan, especially given the management plan implementation work that has been ongoing: the TMDL 5-year reviews, HUC-8 modeling, the robust monitoring program, and the annual water quality report.

Motion by G. Anderson, second by Jaeger to approve the 2020 Shingle Creek Operating Budget as proposed. *Motion carried unanimously.*

**B. West Mississippi.\*** The Joint Powers Agreement (JPA) governing operations of the West Mississippi Watershed Management Commission requires a budget and the resulting proposed city assessments for the coming year to be reported to the member cities by July 1. This budget, too, is separated into an operating budget and a project budget and member assessments are determined in the manner described above.

The "WM Allowed" assessment that could be made for 2020 is \$165,290. The draft 2020 budget assumes an assessment of \$153,600, no increase over 2019. In past years the Commission supplemented the assessments with a contribution from the cash reserves to draw down what was a substantial balance. The proposed 2020 budget assumes no contribution from the cash reserves. The unrestricted fund balance at the end





of 2017 was estimated to be about \$90,000 and Staff recommend that, if necessary, assessments continue to be increased by steps over a few years to fully fund the operating budget without that supplement.

Some items to note.

**1. Subwatershed Assessments.** The Commission has set aside \$10,000-20,000/year to complete subwatershed assessments(SWAs), including one in Champlin and one in Brooklyn Center. No applications have been made in the past two years, so it is recommended that no funds be budgeted specifically for SWAs. Should a member city request a SWA in 2020, the Commission may consider amending the budget for that purpose.

**2. Contribution to Construction/Grant Match Fund.** The Commission has set aside \$5,000 each year in a restricted fund for construction projects or to match grants. Aside from one project in Brooklyn Center, the funds have not been used and the audited balance at the end of 2017 was \$79,320. It is recommended that no funds be budgeted specifically for this purpose.

**3. Contribution to 4th Generation Plan.** When the member cities agreed to an “above the cap” assessment for the Third Generation Plan, they advised the Commission to begin setting aside funds every year in a reserve to pay for the Fourth Generation Plan, which expires in 2022. Shingle Creek sets aside \$10,000 per year for this purpose and has accumulated \$65,000. Because of the significant balance in the cash reserves, the West Mississippi Commission had previously declined to specifically set aside funds. Staff recommends that the Commission again consider segregating an amount in the reserves specifically for the Fourth Generation Plan, that that amount be \$25,000, and that no contribution from the annual budget be made.

**4. Updated Floodplain Mapping.** Commission staff are currently working with the DNR to undertake updated floodplain modeling in Shingle Creek. While the DNR is not prioritizing updating flood modeling and mapping in West Mississippi, the existing flood delineations are quite old and were prepared when the watershed was much less developed. Staff has recommended updating the modeling and mapping at the same time as Shingle Creek for economies of scale. The DNR has no funding available to underwrite this work in West Mississippi. Staff estimates that the cost of this work would be about \$25,000. The 2019 budget allocated \$25,000 from reserves for West Mississippi work; if not completed in 2019 those funds could be carried over to 2020.

With the above exceptions the proposed budget generally continues the same activities at the same level of effort as in 2019.

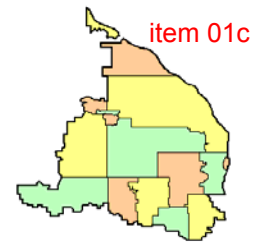
Motion by Butcher, second by Jaeger to approve the 2020 West Mississippi Operating Budget as proposed. *Motion carried unanimously.*

**VIII. Watershed Management Plan.\***

The Commissions must set the maximum amount of capital projects levy they expect to certify to Hennepin County. The actual levies will be certified in September, after the Commissions hold public hearings on the proposed projects. The CIP projects that will be considered in September are shown below.

**A. Shingle Creek.**

Projects	Total Est Cost	City/Private	Grant	Comm Share	Total Max Levy
Cost share (city projects)	\$200,000	\$100,000	0	\$100,000	\$106,050
Crystal Lake Management Plan	\$370,506	\$0	0	\$370,500	\$392,915
Partnership cost share (private projects)	\$100,000	\$50,000	0	\$50,000	\$53,025
<b>Subtotal</b>	<b>\$670,506</b>	<b>\$150,000</b>	<b>\$ 0</b>	<b>\$520,500</b>	
<b>5% additional for legal/admin costs</b>				<b>26,025</b>	
<b>Subtotal</b>				<b>546,525</b>	
<b>TOTAL LEVY (101% for uncollectable)</b>				<b>\$551,990</b>	<b>\$551,990</b>



Even though the Shingle Creek Commission has been awarded a Section 319 grant by the MPCA for the Crystal Lake Management Plan, the EPA has not yet officially approved it. Therefore, Staff recommend that the Commission use the full project cost as the maximum levy. The final EPA approval should be known by September when the final levies are certified.

**B. West Mississippi.**

Projects	Total Est Cost	City/Private	Grant	Comm Share	Total Max Levy
Cost share (city projects)	\$100,000	\$50,000	0	\$50,000	\$53,025
<b>Subtotal</b>	<b>\$100,000</b>	<b>\$50,000</b>	<b>\$ 0</b>	<b>\$50,000</b>	
5% additional for legal/admin costs				2,500	
<b>Subtotal</b>				<b>52,500</b>	
<b>TOTAL LEVY (101% for uncollectable)</b>				<b>\$53,025</b>	<b>\$53,025</b>

[Jaeger departed 1:42 p.m.]

The Maximum Levy sets the ceiling for the capital levy; the Commissions can certify a lesser levy but cannot increase it. In 2016 the Commissions began levying an additional 5% to cover administrative costs, and an additional 1% to cover uncollected levies, based on the historical rate of uncollectables. These maximum levies will be forwarded to Hennepin County.

Motion by Johnson, second by Sicora to set the 2019 maximum Shingle Creek levy at \$551,990. *Motion carried unanimously.*

Motion by Butcher, second by Chesney to set the 2019 maximum West Mississippi levy at \$53,025. *Motion carried unanimously.*

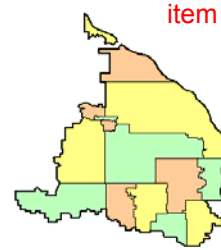
**IX. Water Quality.**

**A.** Over the winter one of the Commission’s **Joboxes** used to house monitoring equipment was stolen from its location in Coon Rapids Dam Regional Park, just off West River Road in Brooklyn Park. This is the site of the channel discharging from the Environmental Preserve. The box had been chained down, but thieves apparently cut through the chain and hauled out the heavy steel box. Fortunately, the monitoring equipment had been removed for the winter. This is the second time a box has been stolen from this location; in 2011 thieves did the same thing. Shingle Creek also lost a box to theft a few years ago. Staff discussed whether to start removing the boxes and storing them over the winter. They estimated it would take a two-person crew at least four hours to make three trips to haul the five boxes away (only two fit in a truck at a time), which would add roughly \$2,000 to the monitoring budget each year. Staff replaced the box with a backup one from their inventory of Commission equipment. The theft has been reported to the police and to the Commission’s insurance carrier. The cost of a new box is \$720. The Commission has a \$250 insurance deductible. Staff recommends replacement of the Jobox, with the \$250 insurance deductible funded from cash reserves.

Motion by Chesney, second by Johnson to replace the Jobox as stated above. *Motion carried unanimously.*

**B.** Motion by Roach, second by Orred to approve the **2019 Citizen Assisted Monitoring Program (CAMP) agreement** with Metropolitan Council. *Motion carried unanimously.* Under the agreement, three lakes will be monitored – Cedar Island, Meadow and Success - at a cost of \$760 each.

**C.** The next **Technical Advisory Committee (TAC) meeting** has been [re]scheduled for 8:30 a.m., Thursday, May 30, 2019, at Crystal City Hall. The April 25 TAC meeting minutes\* are included in the meeting packet for informational purposes.



**X. Education and Public Outreach.**

**A. Environmental Initiative** has awarded the Shingle Creek Watershed Management Commission an Honorable Mention in recognition of its Biochar- and Iron-Enhanced Sand Filters Project. The 2019 awards will be celebrated on May 22, 2019 at the Nicollet Island Pavillion. Contact Diane Spector if you are interested in attending.

**B.** The next **West Metro Water Alliance (WMWA) meeting** is scheduled for 8:30 a.m., Tuesday, May 14, 2019, at Plymouth City Hall.

**XI. Grant Opportunities and Updates.** Staff provided verbal updates on the following:

**A. Becker Park.** A slide presentation showed the work underway.

**B. Bass and Pomerleau Lakes Alum application.** Treatment of Pomerleau Lake is set for Monday, May 13. Treatment of Bass Lake is set for Wednesday, May 15.

**C. Twin Lake Carp removal.** McCoy noted that his City has been receiving complaints that debris has been collecting around the fish barrier. Staff will follow-up.

**D. SRP Reduction project.**

**E. Biochar Enhanced Sand Filters** are now operational. This is the last year of the grant program. May be considered as part of the routine monitoring program in the future.

**XII. Communications.**

**A. April Communications Log.\*** No items required action.

**B. Letter\* from State Representative Kristin Robbins,** District 34A, congratulating Commission on Honorable Mention for the Environmental Initiative Award.

**C. Update\* from SOS re Chloride Legislation** which passed the Minnesota House today.

**D.** Spector reported that she met with the **Meadow Lake Association** on April 27. They are considering a lake draw-down to facilitate improvements to the lake and will meet with the City of New Hope on May 21.

**XIII. Other Business.**

**A.** The terms of representatives from **Champlin** and **Minneapolis** expired January 31, 2019. Staff have not received updated appointments as of this date.

**XIV. Adjournment.** There being no further business before the Commissions, the meetings were adjourned at 2:19 p.m.

Respectfully submitted,

A handwritten signature in black ink that reads "Judie A. Anderson".

Judie A. Anderson  
Recording Secretary  
JAA:tim

Z:\Shingle Creek\Meetings\Meetings 2019\05 Regular and Public Meeting Minutes.doc

June 5, 2019

**WEST MISSISSIPPI WATERSHED MANAGEMENT COMMISSION****PROJECT REVIEW WM2019-003: 610 Crossings 2<sup>nd</sup> Addition Regional Pond**

**Owner:** Opus Development Company LLC  
**Company:** 10350 Bren Road West  
**Address:** Minnetonka, MN

**Engineer:** Brady Busselman  
**Company:** Sambatek, Inc.  
**Address:** 14800 Whitewater Drive, Suite 300  
Minnetonka, MN 55343  
**Phone:** 763-476-6010  
**Fax:** 763-476-8532  
**Email:** bbusselman@sambatek.com

**Purpose:** Construction of approximately 960 linear feet of storm sewer, grading of a regional pond, and lowering of an existing culvert pipe. Construction of this stormwater infrastructure is in anticipation of development of the 18.56-acre site with up to 80% impervious. The site currently has no impervious area.

**Location:** NE quadrant of Highway 610 and Zane Ave., Brooklyn Park, MN (Figure 1).

- Exhibits:**
1. Project review application and project review fee of \$2,200, dated 4/10/19, received 4/16/19.
  2. Site plan, preliminary plat, grading, utility, erosion control, and landscaping plans dated 4/12/19, received 4/16/19.
  3. Hydrologic calculations by Sambatek, dated 3/3/2017, received 4/16/19.

- Findings:**
1. The proposed project is the construction of approximately 960 linear feet of storm sewer, grading of a regional pond, and lowering of an existing culvert pipe. Construction of this stormwater infrastructure is in anticipation of development of the 18.56-acre site with up to 80% impervious. The site currently has no impervious area. Following development, the site could have up to 14.85 acres of impervious area.
  2. The complete project application was received on 4/16/19. To comply with the 60-day review requirement, the Commission must approve or deny this project no later than the 6/13/19 meeting. Sixty calendar-days expires on 6/15/19.
  3. To comply with the Commission's water quality treatment requirement, the site must provide removal of 85% total suspended solids and 60% total phosphorus. Infiltrating 1.3 inches of runoff is considered sufficient to provide this level of treatment, according to Commission rules.

Runoff from the site is proposed to be routed to an infiltration basin in the southeast corner of the site. Impervious surface could consist of up to 640,174 square feet, generating 69,352 cubic feet of runoff during a 1.3-inch storm. The proposed infiltration basin has the capacity to infiltrate 75,988 cubic feet, which is more than the required volume. Further, water is routed from the infiltration basin into a MnDOT NURP pond, which will provide additional treatment. The applicant meets Commission water quality treatment requirements.

**WM 2019-003: 610 Crossings 2<sup>nd</sup> Addition Regional Pond**

4. Commission rules require that site runoff is limited to predevelopment rates for the 2-, 10-, and 100-year storm events. Runoff from the site is proposed to be routed to an infiltration basin in the southeast corner of the site. The applicant meets Commission rate control requirements (Table 1).

**Table 1. Runoff from site (cfs).**

Drainage Area	2-year event		10-year event		100-year event	
	Pre-	Post-	Pre-	Post-	Pre-	Post-
Entire site	2.8	0.1	10.5	6.5	33.6	25.5

5. Commission rules require the site to infiltrate 1.0 inch of runoff from new impervious area within 48 hours. The new impervious area on this site could be up to 14.7 acres, requiring infiltration of 69,352 cubic feet within 48 hours. The applicant proposes to route runoff to an infiltration basin in the southeast corner of the site that has the capacity to infiltrate the required volume within 48 hours. The applicant meets Commission volume control requirements.
6. The National Wetlands Inventory does not identify any wetlands on site. The applicant meets Commission wetland requirements.
7. There are no Public Waters on this site. The applicant meets Commission Public Waters requirements.
8. There is no floodplain on this site and there is at least five feet of freeboard between the infiltration basin's high-water level and the Highway 610 exit ramp. The applicant meets Commission floodplain requirements.
9. The erosion control plan includes a rock construction entrance, silt fence, rip rap at inlets, and native seed specified on the pond slopes. The erosion control plan meets Commission requirements.
10. A public hearing on the project was conducted on 4/12/17 as part of Planning Commission and City Council review of this project, meeting Commission public notice requirements.
11. A draft Operations & Maintenance (O&M) agreement between the applicant and the City of Brooklyn Park was provided.
12. A Project Review Fee of \$2,200 has been received.

**Recommendation:** Recommend approval with no conditions.

Wenck Associates, Inc.  
Engineers for the Commission

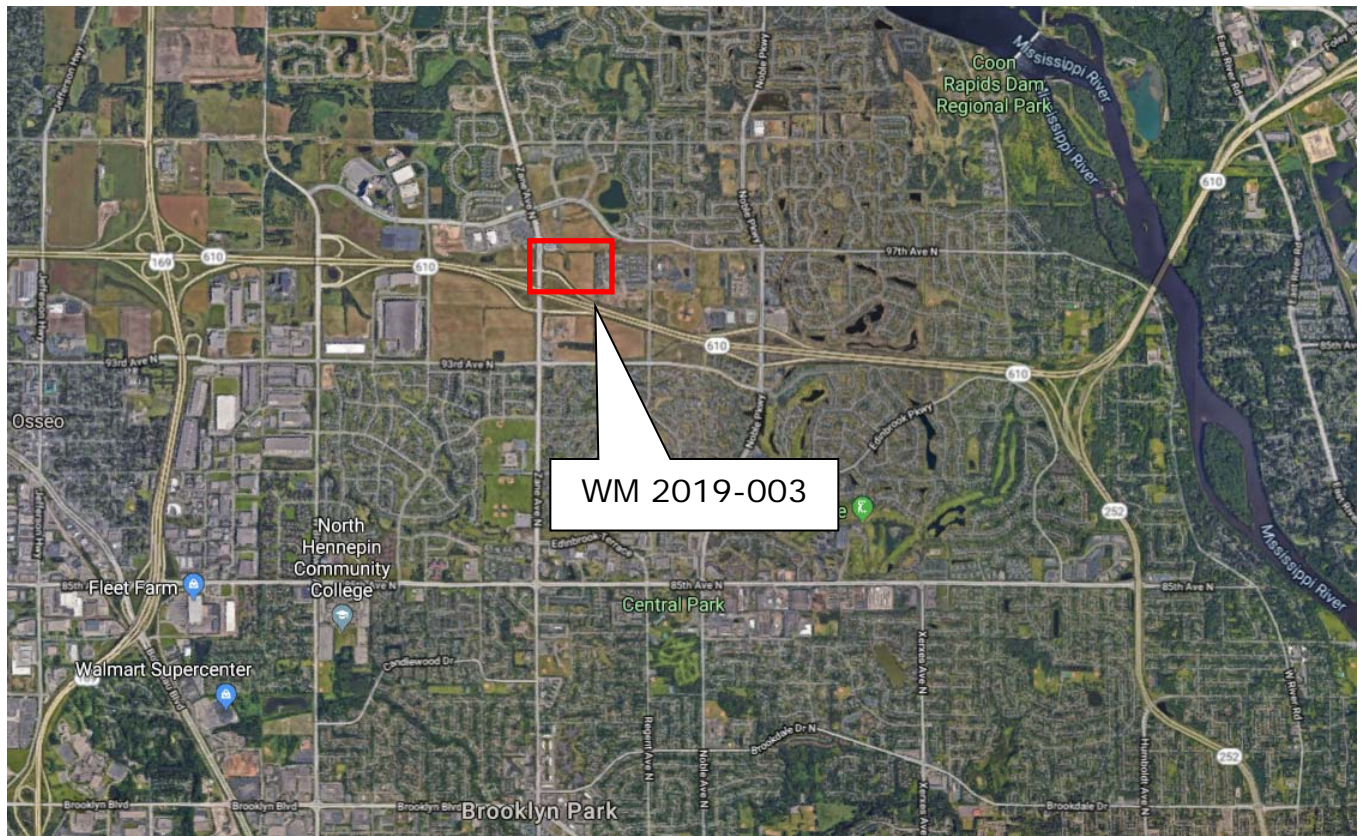
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Ed Matthiesen, P.E.

Date

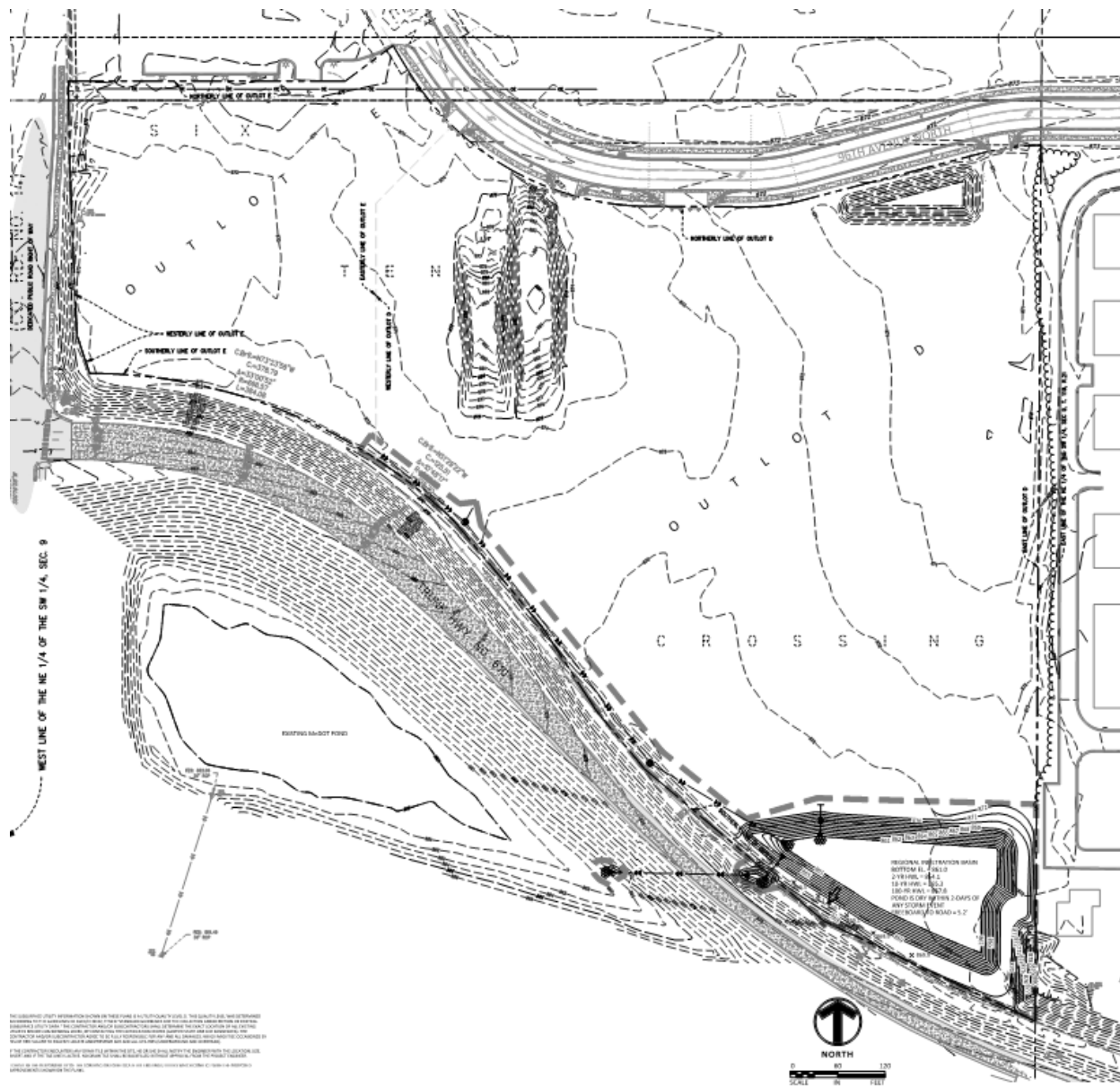
# WM 2019-003: 610 Crossings 2<sup>nd</sup> Addition Regional Pond

Figure 1. Site location.



# WM 2019-003: 610 Crossings 2<sup>nd</sup> Addition Regional Pond

## Figure 2. Site grading plan.



June 7, 2019 Revised

**WEST MISSISSIPPI WATERSHED MANAGEMENT COMMISSION****PROJECT REVIEW WM2019-004: TH169 & 101<sup>st</sup> Ave Interchange**

**Owner:** Jeff Holstein  
**Company:** City of Brooklyn Park  
**Address:** 5200 85<sup>th</sup> Avenue N  
Brooklyn Park, MN 55443

**Engineer:** Chris Trbojevich  
**Company:** SRF Consulting Group  
**Address:** 1 Carlson Parkway North, Suite 150  
Minneapolis, MN 55447  
**Phone:** 763-249-6781  
**Fax:** 866-440-6364  
**Email:** ctrbojevich@srfconsulting.com

**Purpose:** Construction of a bridge across Trunk Highway (TH) 169; construction of entrance and exit ramps/loops; reconstruction of 101<sup>st</sup> Ave from Jefferson Highway to approximately 2,000 feet east of TH 169. The total project size is 39.9 acres.

**Location:** Intersection of TH 169 and 101<sup>st</sup> Ave, Brooklyn Park, MN (**Figure 1**).

- Exhibits:**
1. Project review application and project review fee of \$1,100, dated 5/13/19, received 5/14/19.
  2. Site plan, grading, utility, erosion control, and landscaping plans (not dated), received 5/14/19 (**Figure 2**).
  3. Hydrologic calculations by SRF, dated 5/31/19, received 5/31/19.

- Findings:**
1. The proposed project is the construction of a bridge across Trunk Highway (TH) 169; construction of entrance and exit ramps/loops; reconstruction of 101<sup>st</sup> Ave from Jefferson Highway to 2,000 feet east of TH 169. The project will also include land and shoulder widening on TH 169 to accommodate the proposed entrance and exit ramps and loops. The site is 39.9 acres. Following development, the site will be 32 percent impervious with 12.7 acres of impervious surface, an increase of 5.7 acres.
  2. The complete project application was received on 5/14/19. To comply with the 60-day review requirement, the Commission must approve or deny this project no later than the 7/11/19 meeting. Sixty calendar-days expires on 7/13/19.
  2. To comply with the Commission's water quality treatment requirement, the site must provide ponding designed to NURP standards with dead storage volume equal to or greater than the volume of runoff from a 2.5" storm event, or BMPs providing a similar level of treatment - 85% TSS removal and 60% TP removal. Runoff from the site is proposed to be routed to several BMPs, including:
    - a wet detention basin and infiltration basin at the west end of the project (West Basin)
    - a wet detention basin and infiltration basin within the southbound TH 169 entrance loop (West Loop Basin)



- a wet detention basin and infiltration basin within the northbound TH 169 entrance loop (East Loop Basin)
- an infiltration basin adjacent to TH 169 between the northbound exit loop and northbound entrance ramp (East Infield Basin)
- an infiltration basin adjacent to the northbound entrance ramp to the east (Northeast Infield Basin)
- an infiltration swale along eastbound 101<sup>st</sup> Ave
- grass swales along northbound and southbound TH 169

The applicant meets Commission water quality treatment requirements.

3. Commission rules require that site runoff is limited to predevelopment rates for the 2-, 10-, and 100-year storm events. Runoff from the site is routed to several BMPs that slow runoff rate (see #2 above for a list of these BMPs). An XP-SWMM model was used to compare runoff rates at three drainage comparison points: the dual culverts under Highway 169, the weir at the northeast wetland, and the channel draining southeast from 101<sup>st</sup> Ave (**Figure 3**). Runoff is reduced from preexisting conditions to proposed conditions in all but one case, the 100-year event for the channel site. However, the rate increase is very small (6.25%), and it is not anticipated to have negative impacts. The applicant meets Commission rate control requirements (**Table 1**).

**Table 1. Runoff from site (cfs).**

Drainage Area	2-year event		10-year event		100-year event	
	Pre-	Post-	Pre-	Post-	Pre-	Post-
Dual Culverts	3.9	0.2	11.6	1.6	58.6	44.5
NE Wetland	0.0	0.0	0.0	0.0	22.5	7.5
Channel	0.0	0.0	7.6	1.5	27.2	28.9

4. Commission rules require the site to infiltrate 1.0 inch of runoff from new impervious area within 48 hours. The new impervious area on this site is 5.7 acres, requiring infiltration of 0.475 acre-feet within 48 hours. The applicant proposes to route runoff to several BMPs (see #2 above for a list of these BMPs) that has the capacity to infiltrate more than the required volume within 48 hours. The applicant meets Commission volume control requirements.
5. There are several wetlands on this site. The West Mississippi Watershed Management Commission is LGU for WCA administration in Brooklyn Park, and the Commission approved a wetland delineation for these wetlands in August of 2018. The applicant is proposing temporary and permanent impacts to these wetlands, but all impacts will be mitigated at 2:1 ratio through the purchase of wetland mitigation credits within the watershed. A Minnesota Wetland Conservation Act/ U.S. Army Corps of Engineers Joint Application Form is currently being prepared in order to approve the proposed impacts and mitigation strategies, and this application will be submitted to the Commission once complete. In addition, wetland buffers with a minimum of 20 feet in width and averaging 30 feet in width are provided in almost all cases. The only place in which the buffer requirement is not met is where 101<sup>st</sup> Avenue bisects a wetland, so adding buffer would mean filling the wetland (**Figure 4**). That said, to compensate for reduced buffer strip width, the applicant has sloped the sidewalk and trail along 101<sup>st</sup> Ave toward the roadway, rather than towards the wetland areas, so polluted runoff is

not routed to the wetland. The applicant meets Commission wetland requirements.

6. One DNR public water wetland is located on the project site (**Figure 4**). The proposed project is not anticipated to negatively impact this wetland. The applicant meets Commission Public Waters requirements.
7. There is no floodplain on this site. The low floor elevations of nearby buildings are at least two feet higher than the high water elevation of the detention ponds/infiltration basins according to Atlas 14 precipitation. The applicant meets Commission floodplain requirements.
8. The erosion control plan includes silt fence/biology along the perimeter of the disturbed area, silt fence/biolog surrounding basins, inlet protection, native seed on pond slopes, and rip rap at inlets. The erosion control plan meets Commission requirements.
9. A public hearing on the project was conducted on 4/22/19 as part of Planning Commission and City Council review of this project, meeting Commission public notice requirements.
10. A Project Review Fee of \$1,100 has been received.

**Recommendation:** Recommend approval without conditions.

Wenck Associates, Inc.  
Engineers for the Commission

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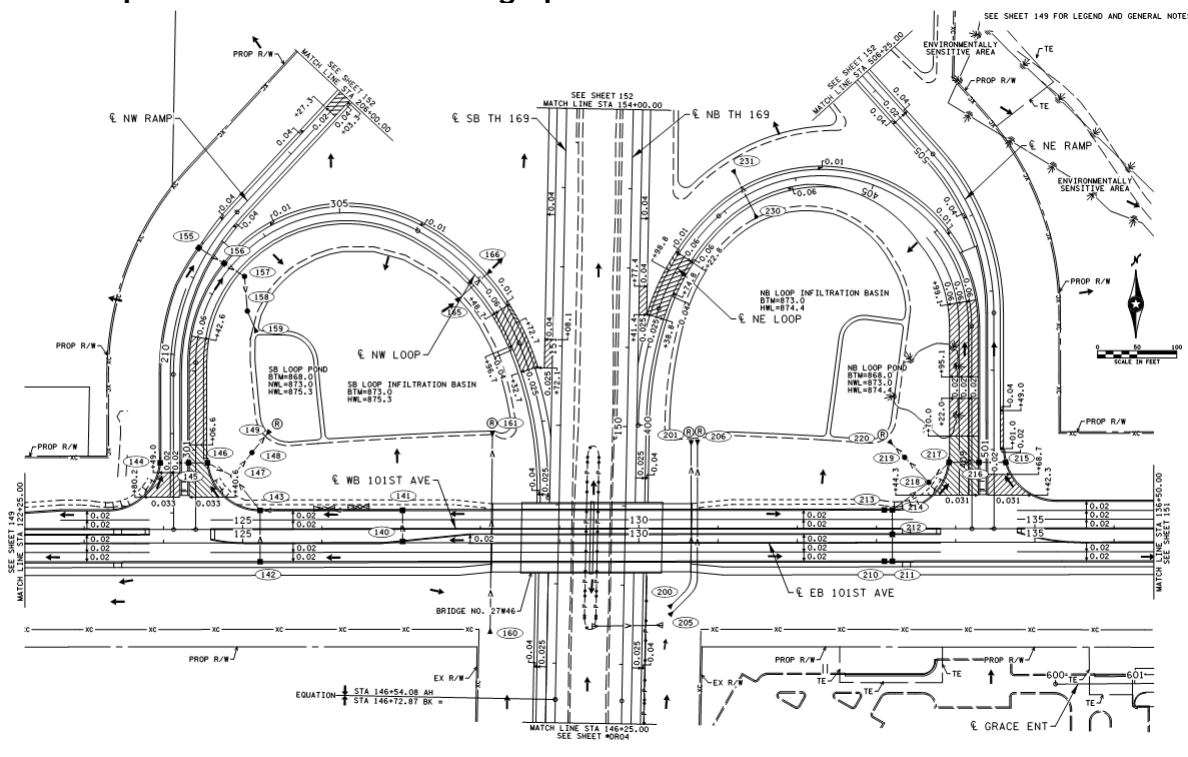
Ed Matthiesen, P.E.

Date

Figure 1. Site location.



Figure 2. A portion of the site drainage plan.



**Figure 3. Existing drainage map with each drainage comparison point represented as a blue star.**



**Figure 4. The DNR public water wetland on site. This wetland will have less than 20 feet of buffer on the sides adjacent to 101<sup>st</sup> Ave because creating 20 feet of buffer would necessitate filling the wetland. However, all stormwater runoff from 101<sup>st</sup> Ave and associated sidewalks/trails will be directed away from the wetland.**





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# Technical Memo

**To:** Shingle Creek WMO Commissioners

**From:** Ed Matthiesen, P.E.  
Diane Spector

**Date:** May 7, 2019

**Subject:** New Hope Cost Share Application

**Recommended  
Commission Action**

Review and approve the cost share request from New Hope, funded \$25,000 from Commission Cost Share funds and \$25,000 from BWSR Watershed Based Funding.

The City of New Hope has submitted a City Cost Share Program application of \$50,000 for an underground stormwater system in its Civic Center Park. With the Civic Center complex and park under reconstruction, this is a convenient and cost-effective time to retrofit BMPs to provide additional treatment of previously untreated areas.

The City proposes to construct an underground stormwater retention and treatment tank is proposed in the west portion of the site. The tank will filtrate runoff from a 7.4-acre area that includes portions of Zealand Ave and surrounding residential land. Annual load removal from events 1.5" or less is estimated to be about 4.5 pounds of TP and 1,100 pounds of TSS per year. There is currently no storm water treatment or storage in this area, which ultimately drains into the wetland located to the north of 45<sup>th</sup> Avenue North.

The TAC reviewed this request at its May 30, 2019 meeting and recommended its approval. Further, it recommended that \$25,000 be contributed from the Cost Share Fund and \$25,000 from the Watershed Based Funding received from BWSR. The estimated encumbered Cost Share Fund balance at the end of 2018 is \$40,753. The Commission certified \$100,000 for collection in 2019, making about \$140,750 available for City Cost Share projects. BWSR allocated \$68,129 to Shingle Creek for Cost Share projects, of which \$25,000 is already encumbered for half the cost of the previously-approved Brooklyn Center's brining equipment acquisition.

Staff recommends approval.

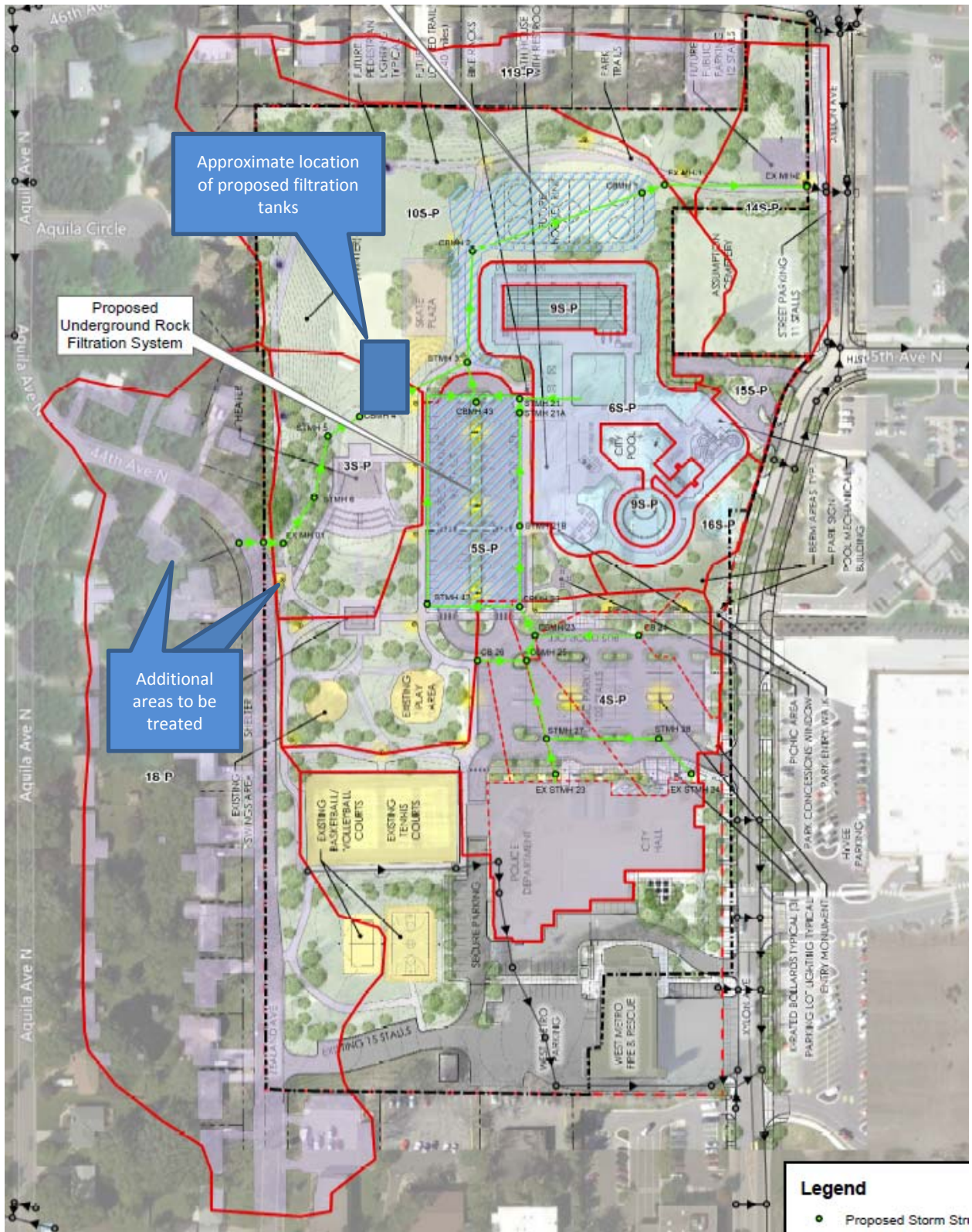
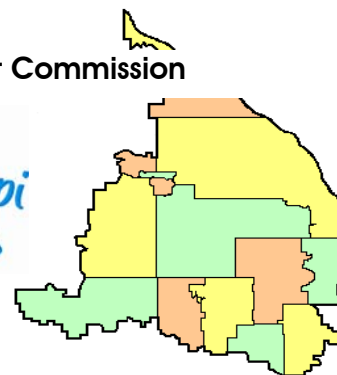


Figure 1. New Hope Civic Center campus, Xylon Avenue north of Rockford Road.



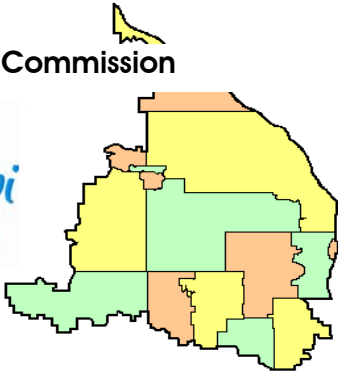
3235 Fernbrook Lane N • Plymouth, MN 55447  
 Tel: 763.553.1144 • Fax: 763.553.9326  
 Email: [judie@jass.biz](mailto:judie@jass.biz) • Website: [www.shinglecreek.org](http://www.shinglecreek.org)



**Shingle Creek and West Mississippi  
 Watershed Management Commissions  
 Cost-Share Program Guidelines  
 February 2015**

The Shingle Creek and West Mississippi Watershed Management Commissions will from time to time make funds available to its member cities to help fund the cost of Best Management Practices (BMPs) projects that cost less than \$100,000. The following are the guidelines for the award of cost-share grants from this program:

1. Projects must be for water quality improvement, and must be for improvement above and beyond what would be required to meet Commission rules. Only the cost of “upsizing” a BMP above and beyond is eligible.
2. Priority is given to projects identified in a subwatershed assessment or TMDL.
3. Projects should cost less than \$100,000; projects costing more than \$100,000 should be submitted to the CIP.
4. Commission will share in funding projects on a 1:1 basis.
5. The cost of land acquisition may be included as City match.
6. The minimum cost-share per project is \$10,000 and the maximum is \$50,000.
7. Projects must be reviewed by the Technical Advisory Committee (TAC) and recommended to the Commissions for funding.
8. The Commissions will call for projects in December of each year, with potential projects reviewed by the TAC at its end of January meeting.
9. Cost-share is on a reimbursable basis following completion of project.
10. The TAC has discretion on a case-by-case basis to consider and recommend to the Commissions projects that do not meet the letter of these guidelines, including projects submitted mid-year.
11. Unallocated funds will carry over from year to year and be maintained in a designated fund account.
12. The standard Commission/Member Cooperative Agreement will be executed prior to project construction.



3235 Fernbrook Lane N • Plymouth, MN 55447  
 Tel: 763.553.1144 • Fax: 763.553.9326  
 Email: [judie@iass.biz](mailto:judie@iass.biz) • Website: [www.shinglecreek.org](http://www.shinglecreek.org)

**Shingle Creek and West Mississippi  
 Watershed Management Commissions  
 Cost-Share Program Application  
 February 2015**

City:	New Hope
Contact Name:	Chris Long
Contact Phone:	651-492-7747
Contact Email:	chris.long@stantec.com
Project Name:	Civic Center Park – Underground Storm Water System
Total Project Cost:	\$108,000
Amount Requested:	\$50,000
Project Location:	4401 Xylon Avenue North, New Hope, MN

*1. Describe the BMP(s) proposed in your project. Describe the current condition and how the BMP(s) will reduce pollutant loading and/or runoff volume. Note the estimated annual load and volume reduction by parameter, if known, and how they were calculated. Attach figures showing project location and BMP details including drainage area to the BMP(s).*

An underground stormwater retention and treatment tank is proposed in the west portion of the site, adjacent to the proposed theater and skate park features. The tank is positioned inline with the storm sewer system and will treat runoff from a 7.4-acre area comprised of Zealand Ave and surrounding residential areas that drain to the project site. Water quality improvement will be provided by an isolator row within the tank, as well as a sump structure proposed immediately upstream. Annual sediment removal from these water quality features is expected to be 90% for storms of 1.5 inches and less. Treatment of 0.257 ac-ft of runoff from the contributing area is expected during this event. A 24.9 % runoff rate reduction is also achieved.

When the tank capacity is exceeded in larger storms, a weir-manhole structure will allow a portion of storm flows to bypass the tank and continue through the storm sewer system.



**MID's Calculations (additional detail is attached)**

Annual Runoff Volume Removed = 8.309 acre-ft

Percent Volume Removed = 0%

(Feature not intended for volume reduction given impermeable soils onsite)

Annual TSS Removed = 1106 lbs

Percent Annual TSS Removed = 90%

Annual P Removed = 4.68 lbs

Percent Annual P Removed = 69%

*2. If this request is for cost share in "upsizing" a BMP, explain how the upsize cost and benefit were computed.*

There is currently no storm water treatment or storage in this area, which ultimately drains into the wetland located to the north of 45<sup>th</sup> Avenue North. All calculations provided above are considered "upsizing" a BMP as there are currently no BMP's for this drainage.

*3. Show total project cost, amount of cost share requested, and the amount and source of matching funds.*

Total Project Cost: \$108,000

Cost Share Requested \$50,000

City Match: \$68,000

*4. What is the project schedule, when will work on the BMP(s) commence and when will work be completed?*

The project to install the underground storm system could be installed by Sunram Construction (Civic Center Park Site Work Contractor) in the summer and fall of 2019.

# Technical Memo



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**To:** Shingle Creek WMC Commissioners

**From:** Ed Matthiesen, P.E.      Jeff Strom  
Diane Spector                      Hagan Kaczmarek  
Tom Langer

**Date:** June 7, 2019

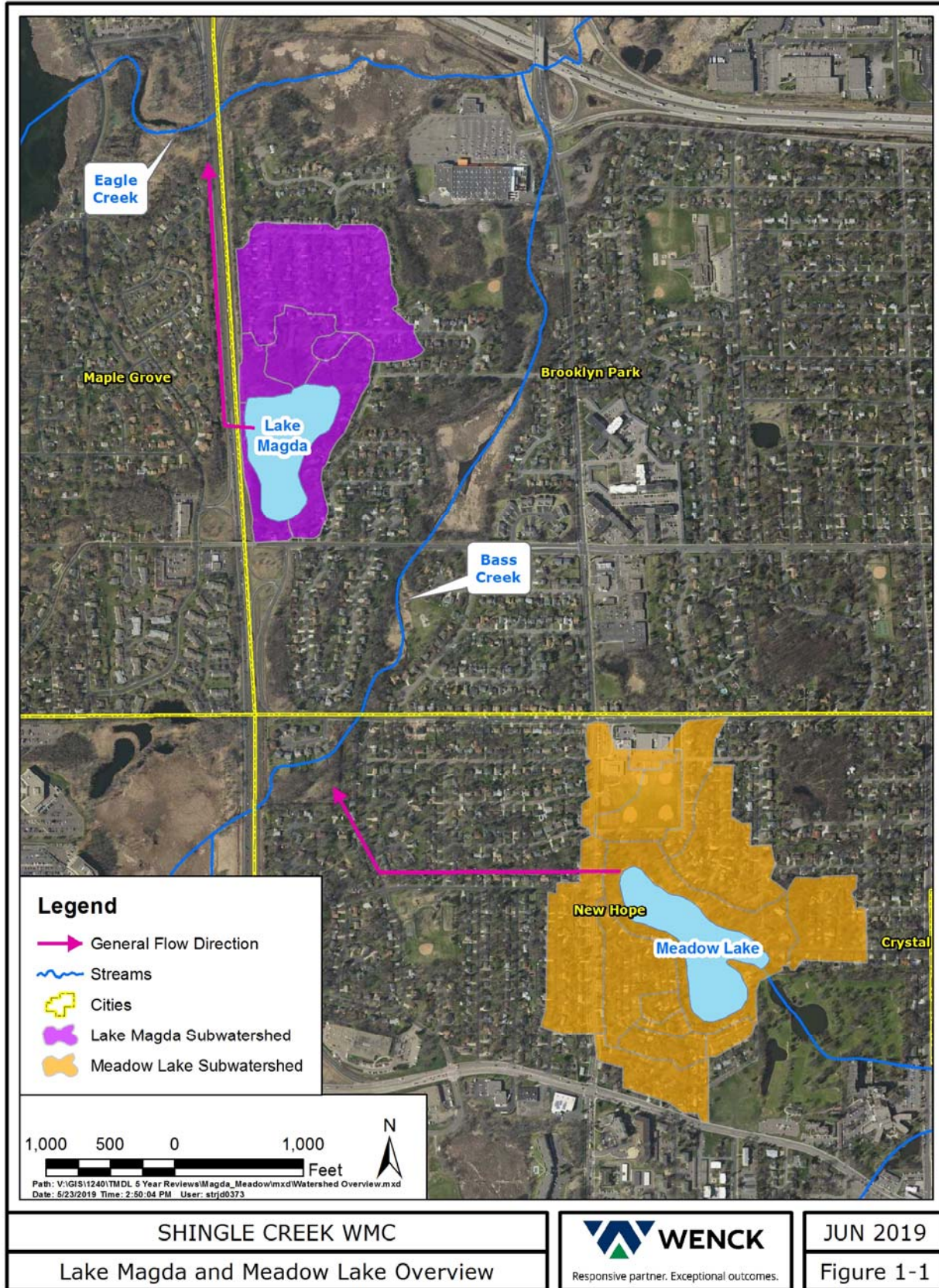
**Subject:** Magda and Meadow Lakes TMDL 5 Year Review

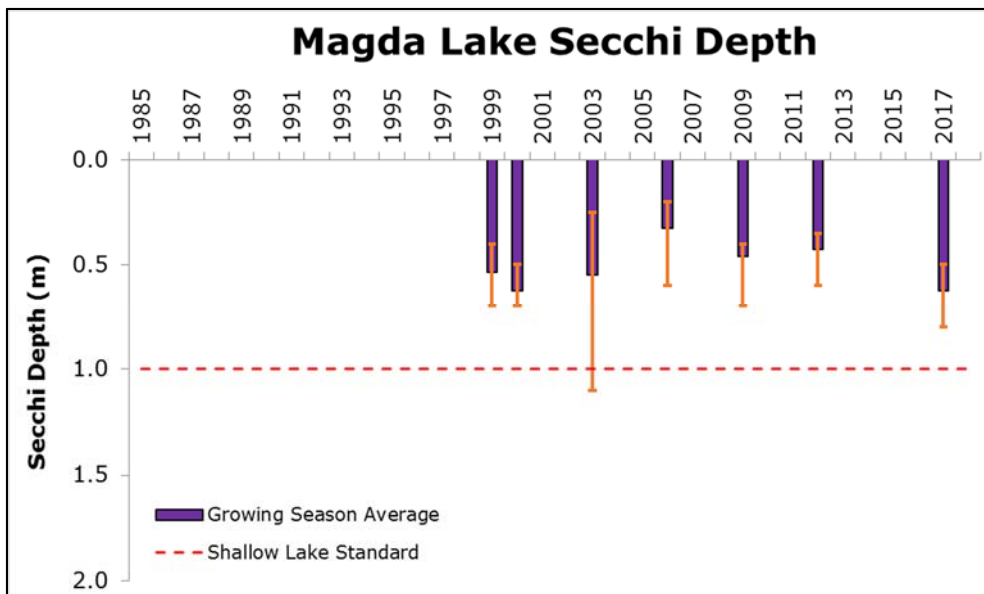
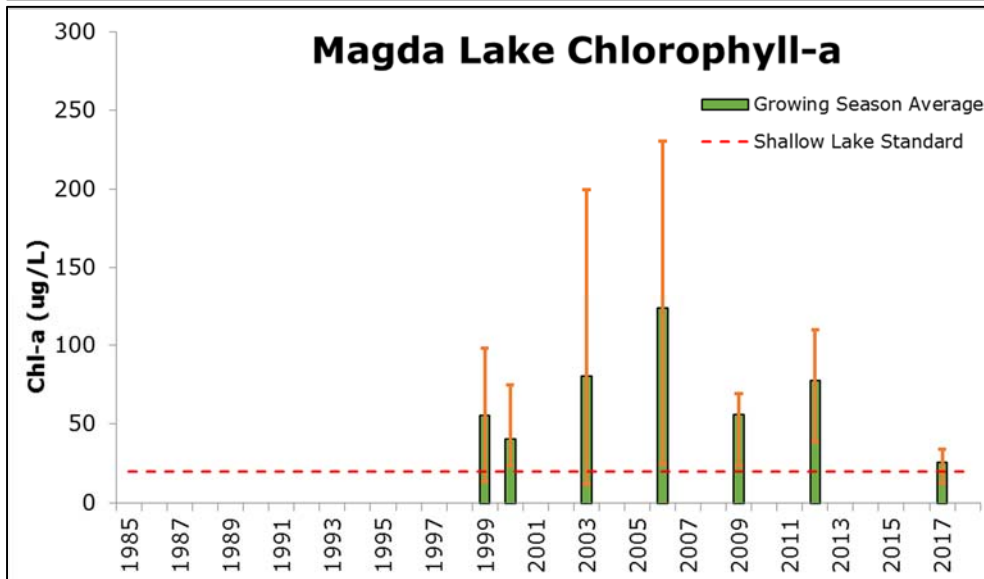
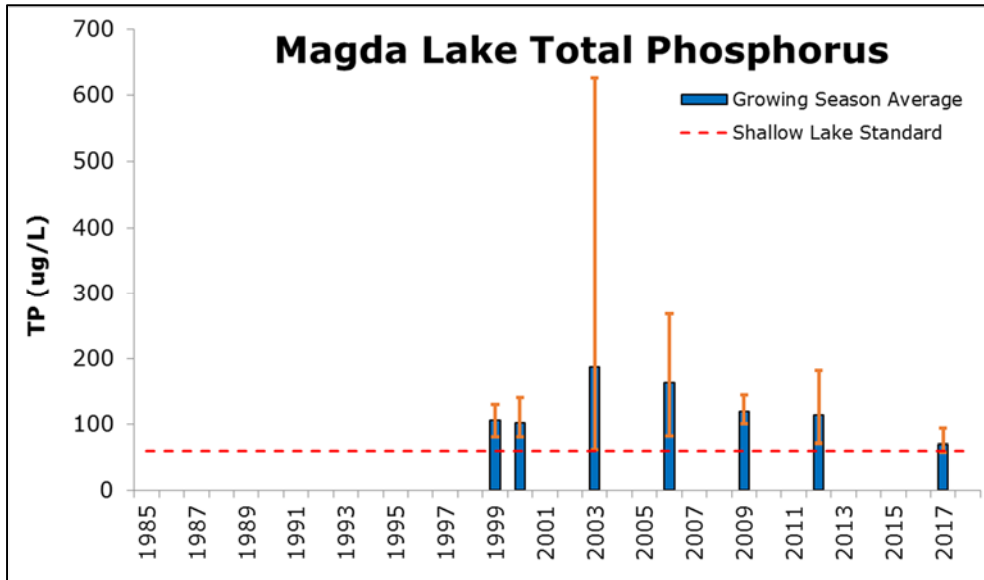
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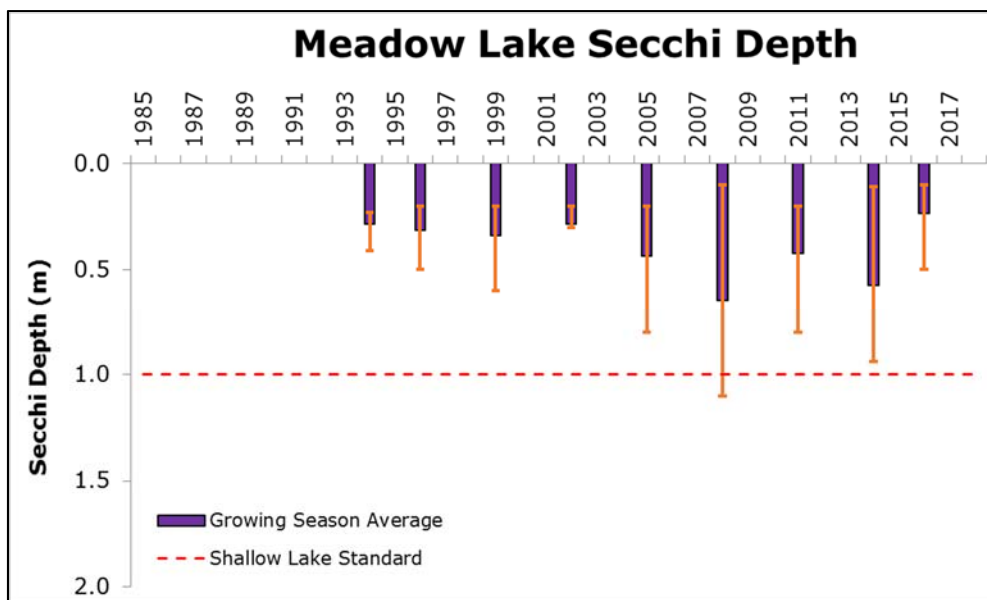
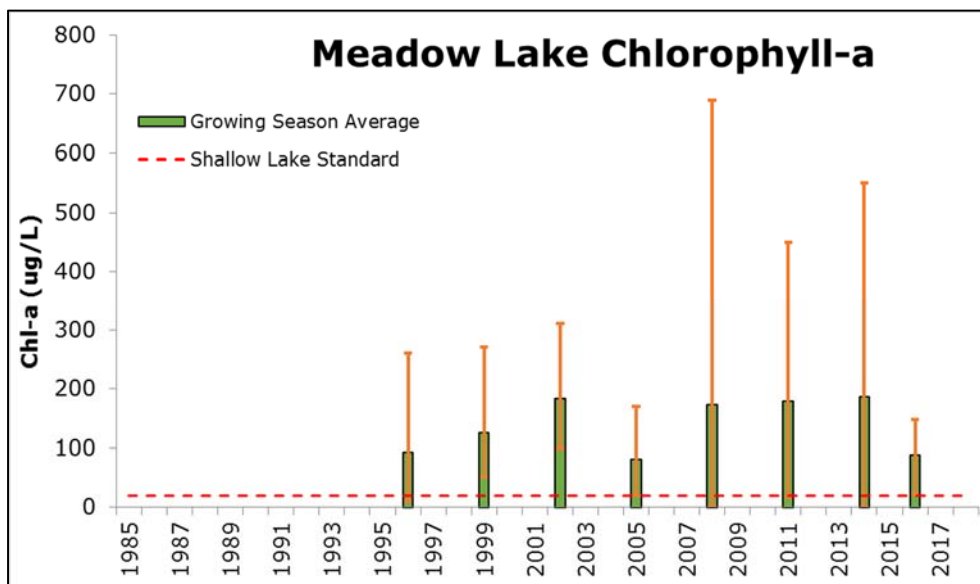
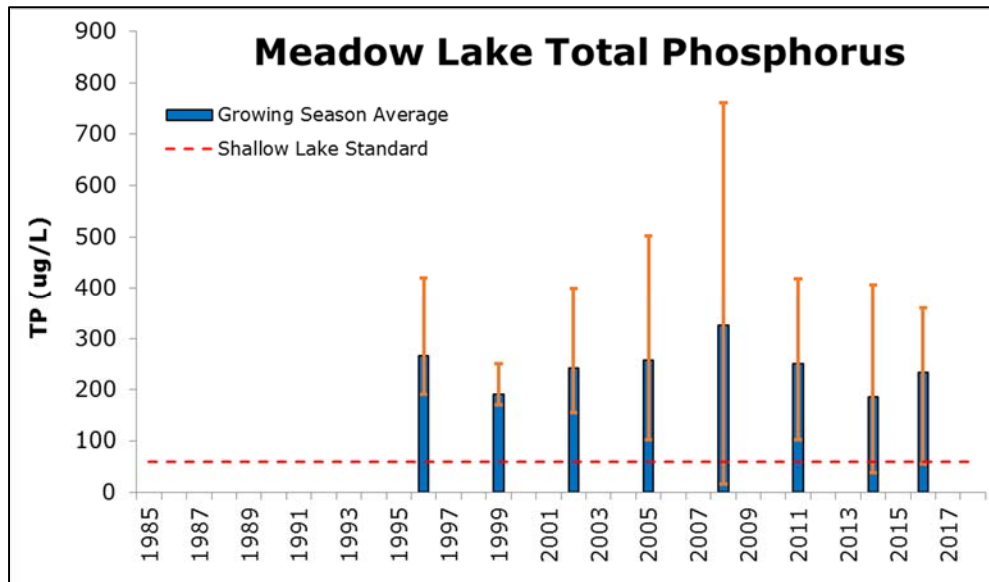
Staff have completed a draft of the Meadow and Magda Lakes TMDL 5 Year Review. Both of these lakes are small, shallow “neighborhood” lakes with small lakesheds (Figure 1-1). Both were designated Impaired Waters for excess nutrients in 2002 and TMDLs were completed in 2010. Lake Magda outlets to Eagle Creek through a channel on the west side of TH 169, while Meadow Lake outlets to Bass Creek through storm sewer. Since 2010 we have collected additional water quality, aquatic vegetation, fish, and sediment core data, and have updated the P8 and lake response models to include BMPs completed since that time. This is an overview of that report and recommendations for the coming 10 years. The full report is available online [here](#). The report findings have been reviewed with the Meadow Lake Association and City of New Hope staff.

**Lake Magda Overview.** Lake Magda is in Brooklyn Park and updated modeling shows it requires a 55% reduction in TP, mostly from the watershed. An estimated 5 of the of the required 20 pound reduction per year has been achieved, mainly through street sweeping. Sediment cores suggest internal loading from sediment is on the lower end, below the 25<sup>th</sup> percentile of all lakes in our database. Vegetation surveys for Lake Magda showed moderate species diversity. Submerged plant abundance would likely be higher if water clarity was better, particularly later in the season. Curly-leaf pondweed (CLP) was also abundant. Three fish species were observed during a 2017 assessment and the population was dominated by black crappie and black bullhead. The abundance of these species, combined with the lack of other species, is suggestive of a poor and imbalanced fish community. Water quality is variable but typically exceeds the standards for most of the growing season (see water quality figures).

**Meadow Lake Overview.** Meadow Lake is in New Hope and updated modeling shows it requires an 82% reduction in TP, both from the watershed and from internal load. An estimated 42 of the of the required 62 pound watershed reduction per year has been achieved through BMPs and street sweeping. Sediment cores suggest internal loading from sediment is on the high end, exceeding 75 percent of all lakes in our database. The 2016 vegetation surveys for Meadow Lake showed low species diversity (four species observed) and a high abundance of CLP. Only two fish species were observed during a 2017 assessment and the population was dominated by fathead minnow. In high densities, fathead minnow can have significant water quality impacts by feeding on zooplankton, secretion, and sediment resuspension. It is highly likely that efforts to eradicate the fish would likely have positive impacts on water quality and the vegetation community. Water quality is variable but typically exceeds the standards for most of the growing season (see water quality figures).







## Progress to Date

*Lake Magda.* Some implementation actions have been undertaken. TMDL recommended implementation actions for Magda and known progress:

- Continue monitoring the lake. *Ongoing*
- Continuously update the watershed hydrologic, hydraulic, and pollutant loading models. *Ongoing*
- Evaluate ways to refine street sweeping practices to maximize pollutant removal and implement these practices. *Streets are swept at least twice; additional sweeping as time is available.*
- Conduct aquatic vegetation, fish, phytoplankton, and zooplankton surveys. *Completed vegetation and fish surveys*
- Obtain more precise lake morphometry and lake sediment release rates. *Completed*
- Develop and implement an aquatic vegetation management plan. *Not yet completed*
- Encourage lakeshore property owners who have not yet done so to plant native buffers on their shoreline. *Unknown status- none observed*
- Increase education and outreach in the residential area to the north of the lake to encourage interest in implementing stormwater BMPs on their property. *Ongoing in general, no targeted outreach*
- Implement BMP and restoration demonstration projects as opportunities arise. *Unknown*
- Implement BMP retrofits with street reconstruction in the neighborhood to the north of the lake, which is expected by 2020. *Sump manholes installed during 2017 reconstruction.*
- Work with the DNR to restore a balanced fishery *Not yet completed*

**Table 1-1. Updated existing and allowable TP loads for Lake Magda.**

		Existing TP Load [lbs/yr]	Allowable TP Load [lbs/yr]	Estimated Load Reduction	
				lbs/yr	Percent
Wasteload	Watershed MS4	35.7	15.5	20.2	57%
Load	Atmospheric	2.6	2.6	0	0%
	Internal	13.6	5.8	7.8	57%
TOTAL LOAD		51.9	23.9	28.0	54%

**Table 1-2. Estimated watershed load reductions achieved to date.**

Type of BMP	Annual TP Load Reduction (lbs/yr)
Structural BMPs	1-2
Street Sweeping	4
Other	-
TOTAL	5-6

*Meadow Lake.* The City of New Hope and the Meadow Lake Association have been actively engaged in making improvements to Meadow Lake. TMDL recommended implementation actions for Meadow Lake and known progress:

- Continue monitoring the lake. *Ongoing*
- Continuously update the watershed SWMM and P8 models. *Ongoing*
- Evaluate ways to refine street sweeping practices to maximize pollutant removal. *The City has increased its street sweeping schedule, estimated the streets in the lakeshed are swept up to 15 times per year.*
- Conduct or update aquatic vegetation, fish, phytoplankton, and zooplankton surveys. *Completed vegetation and fish surveys.*
- Develop and implement an aquatic vegetation management plan. *Not yet completed.*
- Encourage lakeshore property owners to plant or widen native buffers on their shoreline. *Several homeowners have completed native plantings, and the Association manages an Adopt a Plot program for volunteer plots at Meadow Lake Park.*
- Implement BMP retrofits as opportunities such as street and utility reconstruction arise. *New Hope added three grit chambers, a sump manhole, and a large boulevard rain garden when streets were reconstructed.*
- Implement BMP and restoration demonstration projects as opportunities arise. *The Association manages an Adopt a Plot program where community members can install and maintain a share of the buffer at Meadow Lake Park. An Eagle Scout project also planted natives in the park.*
- Evaluate options for internal load control, such as a whole-lake drawdown. *In progress*
- Implement an internal load control project. *Not yet completed*

**Table 1-3. Updated existing and allowable TP loads for Meadow Lake.**

		Existing TP Load [lbs/yr]	Allowable TP Load [lbs/yr]	Estimated Load Reduction	
				lbs/yr	Percent
Wasteload	Watershed MS4	87.2	25.7	61.5	71%
Load	Atmospheric	2.8	2.8	0.0	0%
	Internal	117.7	7.7	110.0	93%
TOTAL LOAD		207.7	36.2	171.5	83%

**Table 1-2. Estimated watershed load reductions achieved to date.**

Type of BMP	Annual TP Load Reduction (lbs/yr)
Structural BMPs	24
Street Sweeping	18
Other	-
TOTAL	42

### Lake Magda Recommendations

- Reduce watershed loading to Lake Magda
  - Identify and implement BMP(s) in three contributing subwatersheds that discharge to the channel on the north end of lake. Modeling suggests these subwatersheds account for approximately 75% of the annual watershed load to the lake. Potential practices for these subwatersheds could include, but are not limited to:
    - Construct iron enhanced sand filter near the outfall of subwatershed S1247
    - Curb-cut raingardens near/above existing catch basins
    - Retrofitting catch basins with larger sumps, grit chambers, hydrodynamic separators, SAFL Baffles, etc.
    - Enhanced street sweeping schedule
  - Work with lakeshore owners to implement raingardens, rain barrels, slope stabilizations, shoreline restorations, and other practices throughout the three subwatersheds (Magda Direct NW, East, and Highway) draining directly to the lake
- Develop and implement balanced short- and long-term aquatic vegetation and fish management plan for Lake Magda.

### Meadow Lake Recommendations

- Reduce watershed loading to Meadow Lake
  - Continue promoting and working with property owners throughout watershed to identify and implement curb-cut raingardens near/above existing catch basins
  - Continue promoting Adopt-a-Drain program
  - Continue working with lakeshore owners on lakeshore restorations and native plantings
  - Continue enhanced street sweeping program throughout Meadow Lake subwatershed and document effectiveness (e.g. number of sweepings, amount of sediment removed)
  - Collect water quality samples, bathymetric surveys, sediment cores, and assess fish populations on New Hope Golf Course Ponds that are hydrologically connected to the lake to determine if these ponds are a potential source of TP to Meadow lake
- Reduce internal loading to Meadow Lake
  - Conduct water level drawdown(s) during late fall/winter to expose and consolidate sediment, promote winterkill of existing fish population, reduce CLP seedbank, and promote native vegetation growth
  - Conduct sediment treatment (e.g. aluminum sulfate (alum), Phoslock<sup>®</sup>, iron filings) to reduce phosphorus release from the sediment
  - Develop long-term plan to treat, manage, and monitor CLP and fish populations following water level drawdown(s) and sediment treatment



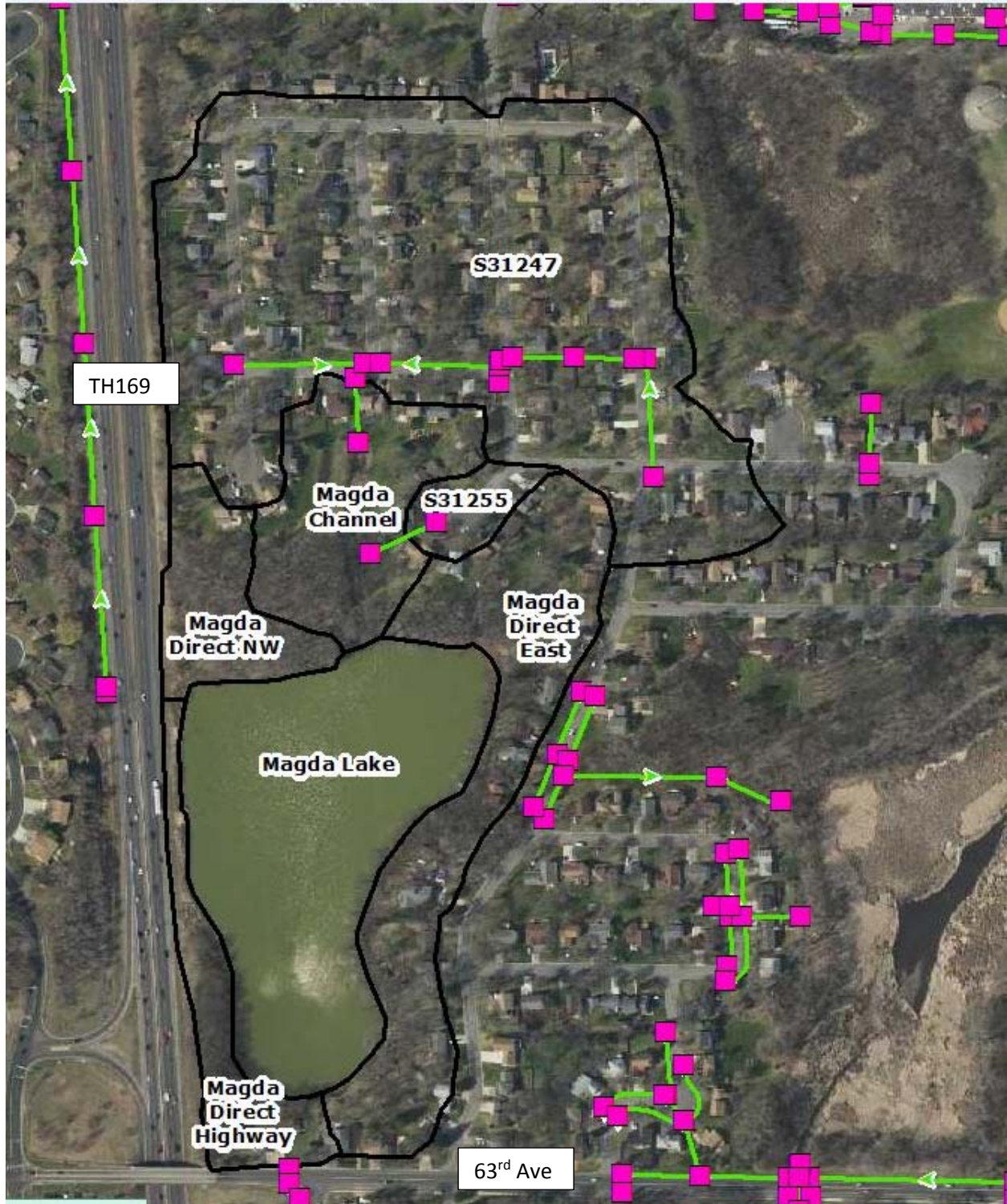


Figure 1-2. Lake Magda drainage area.

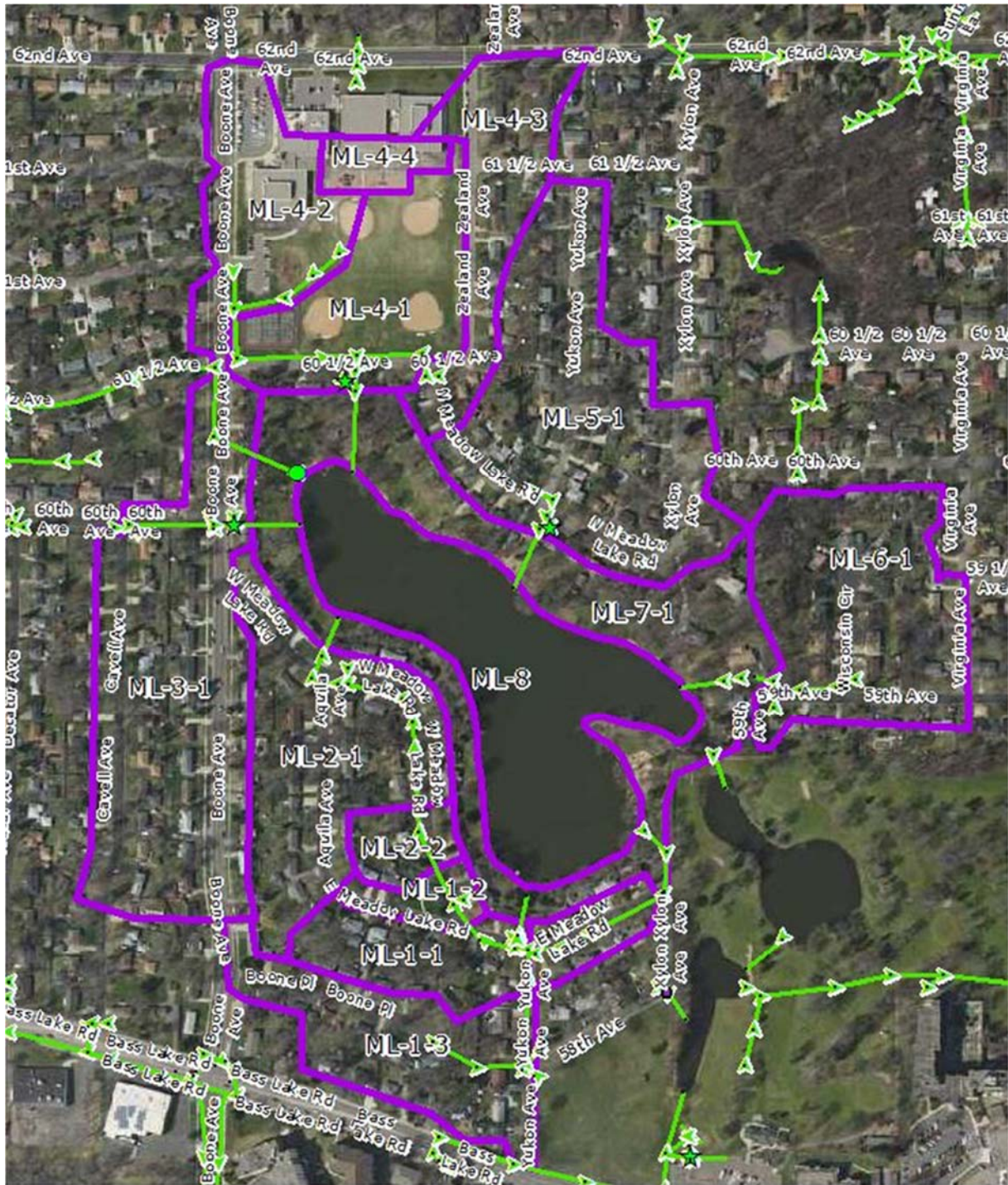


Figure 1-3. Meadow Lake drainage area.



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## Technical Memo

**To:** Shingle Creek WMO Commissioners

**From:** Ed Matthiesen, P.E. Jeff Strom  
Diane Spector

**Date:** May 7, 2019

**Subject:** Request from New Hope for Meadow Lake Management Plan

**Recommended  
Commission Action**

Direct staff to work with the City of New Hope to further define a Meadow Lake Management Plan.

Concurrent with the development of the Magda and Meadow Lakes TMDLs 5 Year Review, the Meadow Lake Association requested staff to provide an update on lake water quality to the Association's annual meeting on April 27, 2019. Diane attended and provided an overview, noting that even with the work that the City and property owners have accomplished in the watershed, there has been very little improvement to water quality in the lake. It continues to have poor water quality and is infested with curly-leaf pondweed and dominated by fathead minnows, which can have a negative impact on water quality.

She also noted that the lake sediments have a fairly high measured release rate, and that the technical staff's opinion remains unchanged that the best course of action to significantly improve Meadow Lake would be a lake drawdown to consolidate the loose sediment and kill off the curly-leaf pondweed and minnows, and a partial application of a chemical treatment such as alum to seal the sediments. When this was proposed at the time the TMDL was approved in 2010, there was little interest from the Association, which had a number of concerns about the practice and for the protection of aquatic life.

Since that time two conditions have changed: one, the persistence of water quality issues, which have not improved despite concerted efforts. And two, the Commission has now taken on responsibility for the cost of undertaking internal load projects and has been successful in obtaining grant funds. Diane provided examples of recent efforts such as Bass/Pomerleau and Crystal Lake, which are holistic lake management plans to address a wide range of issues at once. At the annual meeting many of the Association members expressed interest in pursuing a lake management plan for Meadow Lake. Subsequently, the Association board, City staff, and Commission staff met to talk through options.

As a result of that meeting, the City of New Hope has submitted a request (attached) that the Commission undertake a Lake Management Plan for Meadow Lake that would include a drawdown, chemical treatment, and aquatic and fish management to improve lake water quality and biotic integrity, as well as incorporate options and strategies for additional watershed load reductions. The City further requests that the Commission submit a Clean Water Fund grant application to help fund this project.

Staff's "back of the envelop" cost estimate of such a project, including technical services and water quality monitoring is around \$200,000. However, some work would be required to flesh that out more and to provide a better cost estimate for a grant application. Our recommendation is that if the Commission desires to move forward with the City's request that staff work with the City of New Hope staff and the Association to accomplish this and report back at the July meeting with proposed project parameters and cost. Typically the Clean Water Fund grant application period is around July 1-August 31 each year, so that would allow time for the Commission to discuss further and approve preparation of a grant application.

In addition, the Commission will need a future Minor Plan Amendment to revise the CIP to specify that one of the generic Lake Internal Load projects on the CIP be defined as the Meadow Lake Management Plan. The Commission may undertake that amendment at any time, however, Hennepin County has the final approval.



May 22, 2019

Diane Spector  
Shingle Creek Watershed Management Commission  
3235 Fernbrook Lane N  
Plymouth, MN 55447

SUBJECT: Request Watershed Grant Application

Dear Ms. Spector:

On behalf of the city of New Hope, I would like to formally request the watershed to develop a Lake Management Plan for Meadow Lake, and apply for a Clean Water Fund grant to assist in the potential drawdown and alum treatment of Meadow Lake.

The Meadow Lake Watershed Association received a presentation from the commission at their annual meeting in 2019. After the new watershed policies were explained to the watershed association, they approached the city indicating interest in an in-lake treatment that would be funded 100% by the Shingle Creek Watershed Management Commission. The city of New Hope is also in support of an in-lake treatment.

Both the city of New Hope and the Meadow Lake Watershed Association have completed numerous water quality projects and increased maintenance over the past five years. The city's sweeping program has greatly increased which has shown a positive effect in the amount of debris captured in the grit chambers and sump structures surrounding the lake. The Meadow Lake Watershed Association has completed numerous buffer projects and rain gardens in the area as well.

At this point, the next step is to address the internal loading of Meadow Lake. A drawdown and alum treatment would have a positive effect on the sediment loading, aquatic vegetation, and fish diversity of Meadow Lake.

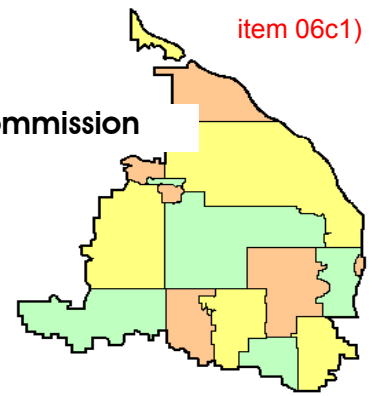
Please contact me at 763-531-5112 if you have any questions. Thank you.

Sincerely,

Kirk McDonald  
City Manager, City of New Hope

## CITY OF NEW HOPE

4401 Xylon Avenue North ♦ New Hope, Minnesota 55428-4898 ♦ [www.ci.new-hope.mn.us](http://www.ci.new-hope.mn.us)  
City Hall: 763-531-5100 ♦ Police (non-emergency): 763-531-5170 ♦ Public Works: 763-592-6777  
City Hall Fax: 763-531-5136 ♦ Police Fax: 763-531-5174 ♦ Public Works Fax: 763-592-6776



**MINUTES**  
May 30, 2019

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 8:34 a.m., Thursday, May 30, 2019, at Crystal City Hall, 4141 Douglas Drive North, Crystal, MN.

Present were: Andrew Hogg, Brooklyn Center; Mitchell Robinson, Brooklyn Park; Derek Asche, Maple Grove; Megan Hedstrom, New Hope; Ben Scharenbroich, Plymouth; Richard McCoy, Robbinsdale; Ed Matthiesen and Diane Spector, Wenck Associates, Inc.; and Judie Anderson, JASS.

Also present: Bernie Weber, New Hope; Tyler Johnson, Stantec, New Hope; Alex Larson, Plymouth; and Marta Roser, Robbinsdale.

Not represented: Champlin, Crystal, Minneapolis, and Osseo.

I. Motion by Asche, second by Scharenbroich to **approve the agenda\*** as revised. *Motion carried unanimously.*

II. Motion by Asche, second by Scharenbroich to **approve the minutes\*** of the April 25, 2019 meeting. *Motion carried unanimously.*

**III. 2020 Operating Budgets.\***

Staff queried how the Commissioners might explain future budgets to their cities as the Commissions seek to fund activities that were not in their purview when the member assessment cap was instituted in 2004. The increased activities of the Commissions, such as the Twin Lake Carp Project, will effectively put the member assessments above the self-imposed cap. In past years, the Commissions' success in securing grant funding for many of such projects has helped them to maintain member assessments at or below the cap. This scenario is not likely to continue as more projects are identified in addition to the "routine" activities of the Commissions.

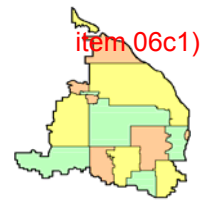
Staff was directed to prepare a draft 2021 budget that would include these innovative projects and activities.

**IV. Wetland Buffer Flexibility.\***

At the last TAC meeting there was some discussion about providing flexibility for wetland buffer widths where technical considerations make it difficult to meet the 20-foot wide minimum. The language below is from Rule I Buffer Strips, Provision 6.

**6. ALTERNATE BUFFER STRIPS.**

- (a) Because of unique physical characteristics of a specific parcel, narrower buffer strips may be necessary to allow a reasonable use of the parcel, based on an assessment of:
  - (1) The size of the parcel.
  - (2) Existing roads and utilities on the parcel.
  - (3) The percentage of the parcel covered by watercourses or wetlands.
  - (4) The configuration of the watercourses or wetlands on the parcel.



- (5) The quality of the affected watercourses and wetlands.
- (6) Any undue hardship that would arise from not allowing the alternative buffer strip.

The use of alternative buffer strips will be evaluated as part of the review of a stormwater management plan under these Rules. Where alternative buffer strip standards are approved, the width of the buffer strips shall be established by the Commission based on a minimum width of 10 feet. Alternative buffer strips must be in keeping with the spirit and intent of this Rule.

This language satisfies the concerns raised by the members.

#### **V. CIP Capital Equipment Language.\***

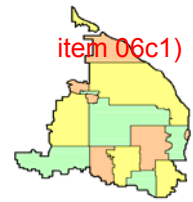
**A.** Staff's May 29, 2019 memo provides background information regarding CIPs (capital projects and programs). In recent years, volume and pollutant-loading BMPs have expanded to include nonstructural practices such as street sweeping, soil amendment, reforestation, native plantings, and - for reducing chloride from road salt - pre-wetting and brining. Nonstructural practices also include certain internal load reducing actions such as alum treatments, management of excessive rough fish populations, and control of invasive aquatic vegetation that is negatively influencing water quality and biotic integrity. These nonstructural practices may be as effective at reducing pollutant loading, mitigating runoff volumes, and enhancing biotic integrity as structural BMPs. However, it is unclear whether those nonstructural practices fit the meaning of "capital project" as defined in Minnesota Rules 8410, whereby BWSR establishes the rules by which it will interpret and enforce the statutes set forth in Chapter 103B governing Water Planning and Project Implementation.

While 103B.231 of the Statutes does not define "capital improvement," Rule 8410.0020 Subp. 3. states that "'Capital improvement'" means a **physical improvement** that has an extended useful life. A capital improvement is **not** directed toward **maintenance** of an in-place system during its life expectancy. (*Emphasis added.*)

This seems to be in conflict with Rule 8410.0105 Subp. 2. which states that "Each plan must consider the feasibility of implementing structural solutions for attaining the goals defined under part 8410.0080 that cannot be resolved by nonstructural, preventative actions. Each plan must include a table for a **capital improvement program that identifies structural and nonstructural alternatives** that would lessen capital expenditures and sets forth, by year, details of each contemplated capital improvement that includes the need, schedule, estimated cost, and funding source." (*Emphasis added.*)

The conflict is that a "capital improvement" is defined as a physical improvement - a structural solution - whereas a "capital improvement program" is defined as both structural and nonstructural solutions. At issue is whether the authority under §103B.251 to "...certify for payment by the county as provided in this section all or any part of the cost of a capital improvement contained in the capital improvement program of the plan" extends to nonstructural solutions.

**B.** The Shingle Creek Commission received a request from the City of Plymouth to add the purchase of a regenerative air sweeper to the CIP as a phosphorus and sediment load reduction BMP, and to share 25% of the cost of its purchase. The City commits to funding the remaining 75% from other sources and to staff and maintain the equipment. The sweeper would be used to perform more intensive street sweeping of the city, especially in the directly-connected untreated areas discharging directly to lakes, streams, and wetlands. Weekly sweeping with a regenerative air sweeper has been shown by the Center for Watershed Protection to reduce TSS loading by up to 31% and TP loading by up to 8%. The annual load of nutrient and sediment removal through street sweeping can often exceed the annual load removed by structural practices such as rain gardens or biofiltration basins.



Staff has been in discussions with the Commissions' attorney who has, in turn, consulted with the Hennepin County Attorney's office, Hennepin County Environment and Energy staff, and the Board of Water and Soil Resources (BWSR). Staff has also consulted with the Commissions' independent auditor. At issue:

1. Are there certain types of nonstructural practices that [members] can agree are clearly similar in nature to structural BMPs in that they are primarily load or volume-reducing practices and not ongoing maintenance?

2. Can [members] agree that these nonstructural practices may be included in capital improvement programs and could be considered for cost-share funding using the authority under §103B.251 for payment using the county's levy authority?

The TAC had previously discussed question 1 and agreed that, with certain qualifications and stipulations, some nonstructural practices could be so considered. Hennepin County and BWSR agree, and BWSR notes that the "capital improvement" definition in 8410 hasn't kept up with the advances in various technologies and practices. The auditor notes that there is no GASB standard that would limit how the Commissions define "capital improvement." BWSR, Hennepin County staff, and Hennepin County Attorney's office also agree that nonstructural practices that meet the conditions in #1 would be eligible for levy certification under §103B.251.

C. Neither the Commissions' Cost Share Policy for Capital Improvement Projects adopted in 2007 nor the subsequent Third Generation Plan defines "capital improvement" for the purposes of cost sharing by levy. It is clear in the guidance developed in implementing the policy that 1) funds may not be used for BMPs to meet Commission requirements; 2) funds may be used to "upsized" a BMP above and beyond those requirements; 3) maintenance projects are not eligible.

If the TAC desires to move forward with amending the Management Plan to revise the Cost Share Policy, some explicit definitions should be established, either in the Plan itself or in the guidance document. The following are some potential requirements for discussion:

1. Capital improvements must be for water quality or ecological integrity improvement, and must be for improvement above and beyond what would be required to meet Commission rules or common practice. Only the cost of "upsizing" a BMP above and beyond is eligible.

2. Routine maintenance activities are not eligible.

3. The effectiveness of the proposed nonstructural improvement must be supported by literature or academic/practitioner experience and documentation.

4. The applicant must agree to document the effectiveness of the BMP and report those results to the Commissions for at least five years.

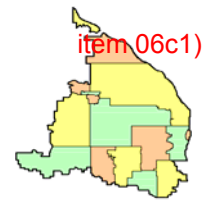
5. The standard Commission/Member Cooperative Agreement will be executed prior to BMP implementation.

Members directed Staff to begin developing a cost share policy relating to nonstructural practices along with a concomitant Minor Plan Amendment.

## **VI. New Hope Cost Share Application.\***

The Shingle Creek Commission has received a Cost-Share Program application for an Underground Storm Water System for the New Hope Civic Center Park. The City is proposing an underground stormwater retention and treatment tank for the west portion of the site, adjacent to the proposed theater and skate





park. The inline tank will treat runoff from a 7.4-acre area comprised of Zealand Avenue and surrounding residential areas that drain to the project site. The project cost is estimated to be \$108,000; the City is requesting \$50,000 cost-share from the Commission. It is Staff's recommendation that \$25,000 of that amount be taken from the Cost-Share Program and the other \$25,000 be taken from the BWSR Watershed-based Funding Grant.

Motion by Scharenbroich, second by Hogg to recommend to the Commission approval of this project based on Staff's recommendation. *Motion carried unanimously.*

**VII. Magda and Meadow Lakes TMDL 5-Year Review.\***

**A.** Staff have completed a draft of the Meadow and Magda Lakes TMDL 5-Year Review. Both of these lakes are small, shallow "neighborhood" lakes with small lakesheds. Both were designated Impaired Waters for excess nutrients in 2002 and TMDLs were completed in 2010. Lake Magda outlets to Eagle Creek through storm sewer, while Meadow Lake outlets to Bass Creek through storm sewer. Since 2010 Staff have collected additional water quality, aquatic vegetation, fish, and sediment core data, and have updated the P8 and lake response models to include BMPs completed since that time. Staff's May 23, 2019 memo provides an overview of that report and recommendations for the coming ten years.

**B. Lake Management Plan, Meadow Lake.\*** The Shingle Creek Commission has received a request from the City of New Hope to develop a lake management plan for Meadow Lake and to apply for a Clean Water Fund grant to assist in the funding of a potential drawdown and alum treatment for the lake. Estimated cost to develop the management plan is \$150,000 - \$200,000.

Motion by Hedstrom, second by Scharenbroich to recommend to the Commission approval of this request. *Motion carried unanimously.* The project would be added to the CIP to make it eligible for grant funding.

**VIII. Cedar Island Lake Subwatershed Assessment.\***

The City of Plymouth has made a request to the Shingle Creek Commission to perform a subwatershed assessment (SWA) for Cedar Island Lake. Data compiled from the 5-year TMDL review, which was completed in 2018, should facilitate development of the SWA.

Motion by Scharenbroich, second by Hedstrom to recommend to the Commission approval of this request up to \$15,000. *Motion carried unanimously.*

**IX. Other Business.**

**A.** Matthiesen provided an update of the **Becker Park** and **Twin Lake Carp** projects.

**B.** McCoy reported that Robbinsdale has received a DNR permit to **pump water out of Crystal Lake** into the Twin Lake chain to alleviate flooding conditions.

**C.** The **next meeting** of the Technical Advisory Committee is scheduled for 8:30 a.m., Friday, June 21, 2019, Crystal City Hall.

**D.** The meeting was adjourned at 9:53 a.m.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Judie A. Anderson'.

Judie A. Anderson/Recording Secretary



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# Technical Memo

**To:** Shingle Creek/West Mississippi WMO Commissioners

**From:** Ed Matthiesen, P.E.  
Diane Spector

**Date:** June 7, 2019

**Subject:** Grant Project Updates

**Recommended  
Commission Action**

Approve the payment of \$6,752.40 to Lake Management, Inc for year one curly-leaf pondweed treatment on Bass Lake.

## Twin Lake Carp

Staff accompanied the DNR in the aquatic vegetation survey and determined that because of the snowy and otherwise harsh winter there was a die-back of curly-leaf pondweed. The amount present in the lake did not require treatment this year.

Commission and Robbinsdale staff removed carp from Ryan Creek just upstream of the new fish barrier four times in May. We estimate that the biomass removed was about 3,800 pounds at a cost of about \$5,000. At this point we have removed about half the total estimated biomass of carp in the system, or about 44% of our goal of removing about 33,000 pounds of carp.

Lake water quality is also being monitored this season. The grant portion of this project ends 8/31/19. We will retain unspent levy funds in a segregated account to pay for future aquatic vegetation management and carp removals.

## Bass and Pomerleau Alum Project

The first dose of the alum applications occurred the week of May 13, 2019. All went smoothly and both lakes were done that week. Cable 12, CCX Media, did a short report on the project <https://ccxmedia.org/news/water-treatment-project-begins-on-two-plymouth-lakes/>.

The DNR was out on Bass observing the treatment and undertaking a curly-leaf pondweed delineation with Commission staff. They delineated a 20.4 acre area for treatment, which occurred on 5/23/19. Chair Andy Polzin authorized going forward with the treatment, which was done by Lake Management, Inc. An invoice for \$6,752.40 is attached and staff recommends approval.



**LAKE MANAGEMENT, Inc.**  
**10400 185th Street North**  
**Marine on St. Croix, MN**  
**55047**  
**651-433-3283-Voice**  
**651-433-5316-Fax**

item 0b-2

**Invoice**

Invoice Number:  
38900

Invoice Date:  
May 24, 2019

Page:  
1

**Sold To:**

Shingle Creek Watershed Mgt. Comm.  
 Thomas Langer  
 7500 Olson Memorial High-#300  
 Golden Valley, MN 55427

Amount Paid

Shingle Creek Water

*Return Upper Portion with Payment*

\*\*\*\*\*

Customer ID	Customer PO	Payment Terms	Sales Rep ID	Due Date
Shingle Creek		Net 30 Days		6/23/19

Description	Amount
5/23/19 - Bass Lake - Hennepin County - Application of Aquathol K by sub-surface injection for curlyleaf pondweed control - 20.4 acres @ \$331.00/acre	6,752.40

	Subtotal	6,752.40
	Sales Tax	
	Total Invoice Amount	6,752.40
Check No:	Payment Received	0.00
	<b>TOTAL</b>	<b>6,752.40</b>

Finance charge is 1 1/2% per month

**SHINGLE CREEK / WEST MISSISSIPPI WATERSHED MANAGEMENT COMMISSION  
MONTHLY COMMUNICATION LOG  
May 2019**

item 09a



Date	From	To	SC	WM	Description
5-3-19	Jacques Finley @ U of M	Ed Matthiesen	X	X	Pond data sharing
5-7-19	MPCA	SCWM WMC	X	X	Draft MS4 permit to review
5-8-19	Tim Olson @ Bolton & Menk	Ed M.		X	Coon Rapids Dam Regional Park Phase II
5-16-19	Karen Galles, Hennepin County	SCWM WMC	X	X	Request for extension to review minor plan amendment to allow time for Board action
5-17*19	Resident, Brooklyn Center	Diane Spector	X		Lives on Upper Twin on the inlet channel on the north side. Complaint of woody debris and other material floating down the channel from upstream and clogging his channel with muck. Referred to City.
5-20-19	Jessica Setter @ ERM	Ed Matthiesen	X		Project review for Centerpoint Energy directional drill under Shingle Creek in Brooklyn Park
5-20-19	Rich Harrison @ Metro Blooms	Ed Matthiesen	X		Autumn Ridge next phase in Brooklyn Park
5-21-19	Steve Johnston @ Elan Design Lab	Ed Matthiesen	X		Infiltration basin performance at SC2017-05 Edgewood Education Center in Brooklyn Park
5-21-19	David Knaeble @ Civil Site Group	Sarah Nalven.	X		Questions re 4600 Lake Rd. permit app
5-22-19	Ted McCaslin @ HRGreen	Ed Matthiesen	X	X	MCES repair in Brooklyn Park and Champlin
5-24-19	Brian Vlach @ TRPRD	Ed Matthiesen		X	Hwy 169 interchange and regional trail
5-24-19	Jim Curry @ Resident on Twin Lake	Ed Matthiesen	X		High water on Twin Lake
5-24-19	Scott Larson, Second Harvest Brooklyn Park	Website contact	X		Their property backs up to Shingle Creek, requesting information. (Replied but no response)
5-29-19	Chris Long Stantec for New Hope	Diane Spector	X		City Cost Share application for City Hall site improvements
5-29-19	Karen Galles, HCEE	Diane Spector	X		Request for information about Crystal Lake area BMPs completed since the TMDL 5 year review for background for the county board report regarding the minor plan amendment adding the Crystal Lake Mgmt .Plan..
5-30-19	David Knaeble @ Civil Site Group	Sarah N/Mehdi Harley		X	Question about stormwater pond to east of 8900 Wyoming Ave and whether they could discharge to it
5-31-19	Catherine Campos	Ed Matthiesen	X		High water on back yard near Upper Twin Lake.
6-4-19	Nick Ellering on Upper Twin	Diane Spector	X		Email reporting that he and neighbors have noted improved water clarity in Upper Twin this spring.



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SINCE 1913

**LIABILITY COVERAGE – WAIVER FORM**

**Members who obtain liability coverage through the League of Minnesota Cities Insurance Trust (LMCIT) must complete and return this form to LMCIT before the member’s effective date of coverage. Return completed form to your underwriter or email to [pstech@lmc.org](mailto:pstech@lmc.org).**

*The decision to waive or not waive the statutory tort limits must be made annually by the member’s governing body, in consultation with its attorney if necessary.*

Members who obtain liability coverage from LMCIT must decide whether to waive the statutory tort liability limits to the extent of the coverage purchased. The decision has the following effects:

- *If the member does not waive the statutory tort limits*, an individual claimant could recover no more than \$500,000 on any claim to which the statutory tort limits apply. The total all claimants could recover for a single occurrence to which the statutory tort limits apply would be limited to \$1,500,000. These statutory tort limits would apply regardless of whether the member purchases the optional LMCIT excess liability coverage.
- *If the member waives the statutory tort limits and does not purchase excess liability coverage*, a single claimant could recover up to \$2,000,000 for a single occurrence (under the waive option, the tort cap liability limits are only waived to the extent of the member’s liability coverage limits, and the LMCIT per occurrence limit is \$2,000,000). The total all claimants could recover for a single occurrence to which the statutory tort limits apply would also be limited to \$2,000,000, regardless of the number of claimants.
- *If the member waives the statutory tort limits and purchases excess liability coverage*, a single claimant could potentially recover an amount up to the limit of the coverage purchased. The total all claimants could recover for a single occurrence to which the statutory tort limits apply would also be limited to the amount of coverage purchased, regardless of the number of claimants.

Claims to which the statutory municipal tort limits do not apply are not affected by this decision.

LMCIT Member Name: Shingle Creek WMC

Check one:

The member **DOES NOT WAIVE** the monetary limits on municipal tort liability established by Minn. Stat. § 466.04.

The member **WAIVES** the monetary limits on municipal tort liability established by Minn. Stat. § 466.04, to the extent of the limits of the liability coverage obtained from LMCIT.

Date of member’s governing body meeting: 06-13-2019

Signature: \_\_\_\_\_ Position: \_\_\_\_\_



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**LIABILITY COVERAGE – WAIVER FORM**

Members who obtain liability coverage through the League of Minnesota Cities Insurance Trust (LMCIT) must complete and return this form to LMCIT before the member's effective date of coverage. Return completed form to your underwriter or email to [pstech@lmc.org](mailto:pstech@lmc.org).

*The decision to waive or not waive the statutory tort limits must be made annually by the member's governing body, in consultation with its attorney if necessary.*

Members who obtain liability coverage from LMCIT must decide whether to waive the statutory tort liability limits to the extent of the coverage purchased. The decision has the following effects:

- *If the member does not waive the statutory tort limits*, an individual claimant could recover no more than \$500,000 on any claim to which the statutory tort limits apply. The total all claimants could recover for a single occurrence to which the statutory tort limits apply would be limited to \$1,500,000. These statutory tort limits would apply regardless of whether the member purchases the optional LMCIT excess liability coverage.
- *If the member waives the statutory tort limits and does not purchase excess liability coverage*, a single claimant could recover up to \$2,000,000 for a single occurrence (under the waive option, the tort cap liability limits are only waived to the extent of the member's liability coverage limits, and the LMCIT per occurrence limit is \$2,000,000). The total all claimants could recover for a single occurrence to which the statutory tort limits apply would also be limited to \$2,000,000, regardless of the number of claimants.
- *If the member waives the statutory tort limits and purchases excess liability coverage*, a single claimant could potentially recover an amount up to the limit of the coverage purchased. The total all claimants could recover for a single occurrence to which the statutory tort limits apply would also be limited to the amount of coverage purchased, regardless of the number of claimants.

Claims to which the statutory municipal tort limits do not apply are not affected by this decision.

LMCIT Member Name: West Mississippi WMC

Check one:

The member **DOES NOT WAIVE** the monetary limits on municipal tort liability established by Minn. Stat. § 466.04.

The member **WAIVES** the monetary limits on municipal tort liability established by Minn. Stat. § 466.04, to the extent of the limits of the liability coverage obtained from LMCIT.

Date of member's governing body meeting: 06-13-2019

Signature: \_\_\_\_\_ Position: \_\_\_\_\_