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MINUTES Regular Meeting July 11, 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 12:47 p.m. on Thursday, July 11, 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; Bill Wills, New Hope; Harold E. Johnson, Osseo; Andy Polzin, Plymouth; Wayne Sicora, Robbinsdale; Ed Matthiesen and Sarah Nalven, Wenck Associates, Inc.; Troy Gilchrist, Kennedy & Graven; and Judie Anderson, JASS.

Not represented: Minneapolis.

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

Also present were: Mitch Robinson, Brooklyn Park; Todd Tuominen, Champlin; Mark Ray and Michelle LaPage, Crystal; Mark Lahtinen, Maple Grove; Megan Hedstrom and Jodi Taitt, New Hope; Leah Gifford, Katerina Meybaum, and Alex Larson, Plymouth; and Marta Roser, Robbinsdale.

II. Agendas and Minutes.

Motion by Willis, second by Jaeger to approve the revised **Shingle Creek agenda.*** *Motion carried unanimously.*

Motion by Johnson, second by Chesney to approve the revised **West Mississippi agenda.*** *Motion carried unanimously.*

Motion by Orred, second by Jaeger to approve the **minutes of the June regular meeting.*** *Motion carried unanimously*.

Motion by Butcher, second by Johnson to approve the **minutes of the June regular meeting.*** *Motion carried unanimously.*

III. Finances and Reports.

A. Motion by Orred, second by Jaeger to approve the **Shingle Creek July Treasurer's Report.*** *Motion carried unanimously.*



Motion by Orred, second by Roach to approve the **Shingle Creek July claims.*** Claims totaling \$72,779.18 were *approved by roll call vote:* ayes – Vlasin, Roach, Orred, Jaeger, Wills, Johnson, Polzin, and Sicora; nays – none; absent – Minneapolis.

B. Motion by Butcher, second by Chesney to approve the **West Mississippi July Treasurer's Report.*** *Motion carried unanimously*.

Motion by Jaeger, second by Johnson to approve the **West Mississippi July claims.*** Claims totaling \$16,417.40 were *approved by roll call vote:* ayes – Vlasin, Chesney, Butcher, Jaeger, and Johnson; nays – none.

IV. Open Forum.

A. Jaeger informed the Commissioners of an article in the July 11 issue of the *StarTribune, "Meet the scientists working to stop spread of zebra mussels in state."*

B. LaPage, Taitt, Larson, and Meybaum were introduced. LaPage and Taitt are residents in the watershed; Larson and Meybaum are interning at the City of Plymouth.

C. Roach announced his resignation from the Commission. He is moving out of the City of Brooklyn Park and will be replaced by a resident of Brooklyn Park per the city's requirements.

V. Project Reviews.

A. SC2019-009 Lake Road Apartments, Robbinsdale.* Demolition of an existing building and construction of a new apartment building with parking lot on 3.95 acres located at 4600 Lake Road. Following development, the site will be 50.6 percent impervious with 2.0 acres of impervious surface, an increase of 0.7 acres. A complete project review application was received on May 29, 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.

Runoff from the apartments and southern portion of the parking lot is proposed to be routed to an underground iron-enhanced sand filtration basin. Before entering the filtration basin, the water will pass through a 4' sump with a SAFL Baffle insert to provide pretreatment. Additionally, once in the basin, a drawdown riser will provide additional TSS removal. The runoff will then percolate 98 horizontal feet through the filter before exiting the basin. Runoff from the northern portion of the parking lot is proposed to be routed through a treatment filter manhole (outfitted with a Kraken membrane filter to remove 85% TSS and 72% TP at 0.45 cfs) before joining with the water exiting the filtration basin. Both subcatchments will ultimately drain to Lower Twin Lake, which is adjacent to the property. Runoff from the pool, patio, and lakeside trails is proposed to be treated via overland flow over amended topsoil before draining directly into the lake. A small amount of runoff from the eastern side of the site (subcatchment is 0.004 acres and is not proposed to be affected by construction) will be treated via overland flow and then drain to the adjacent property to the east. 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. The majority of runoff (runoff from 1.66 acres of impervious surface, including



the apartment buildings and the central parking lots) will be routed to an underground iron-enhanced sand filtration basin, which reduces runoff rates. The applicant meets Commission rate control requirements.

Commission rules also 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 2.0 acres, requiring infiltration of 7,260 CF within 48 hours. However, the high seasonal groundwater elevation onsite makes 3 feet of separation between an infiltration practice and groundwater impossible, so filtration of 7,260 CF is instead required. The applicant proposes to route runoff to an underground filtration basin and a treatment filter manhole that have the capacity to filtrate the required volume within 48 hours. The applicant meets Commission volume control requirements.

A wetland site investigation was performed on site on April 19, 2019, and the boundaries of two wetlands were delineated. The Commission is LGU for WCA administration in Robbinsdale and approved this delineation on May 30, 2019 (after boundary revision). Wetland buffers a minimum of 20 feet in width and averaging 30 feet in width are provided, although a firepit and gravel path are proposed inside the buffer. The applicant meets Commission wetland requirements.

Lower Twin Lake is a DNR Public Water on the southern edge of this site. Until recently, this lake exceeded state eutrophication standards and was on Minnesota's list of impaired waters. However, in 2014 the lake was delisted due to improved water quality. The proposed project is not anticipated to cause changes to the water quality on Lower Twin Lake. The applicant meets Commission Public Waters requirements.

There is FEMA 100-year floodplain on the southern edge of this site, adjacent to Lower Twin Lake. The applicant proposes 197.3 CY of floodplain fill on the site and 266.8 CY of floodplain cut on the site for a net increase of 69.5 CY of floodplain. The low floor elevation of the proposed building is 857.2 which is at least one foot higher than the FEMA 100-year floodplain elevation of 856.1. The floodplain cut is placed adjacent to an existing building offsite, however, the building has a low floor elevation of 857.8 which is greater than one foot higher than the FEMA 100-year floodplain elevation. The applicant meets Commission floodplain requirements.

The erosion control plan includes a rock construction entrance, perimeter silt fence/biolog, silt fence surrounding detention ponds/infiltration basins, inlet protection, rip rap at inlets, slope checks, erosion blankets provided on steep slopes, double row silt fence/biology surrounding wetlands and the lake, and native seed specified on the pond slopes. The erosion control plan meets Commission requirements.

A public hearing on the project will be conducted on July 19, 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 Robbinsdale was provided.

Motion by Orred, second by Sicora to advise the City of Robbinsdale that Project Review 2019-009 is approved subject to receipt of a copy of a completed O&M agreement between the applicant and the City for all stormwater facilities on the project site. (A draft agreement was provided with this application.) *Motion carried unanimously.*

B. WM2019-005: Data Recognition Center Addition, Brooklyn Park.* Demolition of existing parking lot and construction of building addition and parking on 10.7 acres located at 8900 Wyoming



Avenue. Following development, the site will be 49.3 percent impervious with 5.3 acres of impervious surface, an increase of 1.5 acres. A complete project review application was received June 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.

Runoff from the new parking lot and building (3.0 ac impervious surface on a 4.1 ac drainage area) is proposed to be routed to an infiltration basin in the northern portion of the site, which has the capacity to infiltrate 1.3 inches of runoff. Pretreatment for the infiltration basin will be provided by a sump with 6' depth and 6' diameter and a SAFL Baffle insert. Because the site is located in the high-risk area of a DWSMA (drinking water supply management area) the applicant proposes to place into the infiltration basin 24 inches of a 20% organic/80% sand soil mix. This will provide adequate water filtration prior to infiltration. The infiltration basin then drains into the pond to the east of the site, which will provide additional water quality benefit. The applicant meets Commission water quality treatment requirements.

Commission rules require that site runoff be limited to predevelopment rates for the 2-, 10-, and 100-year storm events. Runoff from the new 3.0 acres of impervious surface is proposed to be routed to an infiltration basin. Runoff from the basin will then be routed to a pond to the east of the site in the northern portion of the site. Runoff from the existing parking lot and building will be routed off site to Wyoming Avenue without treatment. Runoff from the southern subcatchment will be routed south offsite to 89th Ave without treatment. Runoff from the northern subcatchment will be routed north offsite to an existing low area. The applicant meets Commission rate control requirements

Commission rules also 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 3.0 acres, requiring infiltration of 10,890 CF within 48 hours. The applicant proposes to route runoff to an infiltration basin that has the capacity to infiltrate the provided volume within 48 hours. The applicant meets Commission volume control requirements.

The National Wetlands Inventory and the Hennepin County Wetlands Inventory identify multiple probable wetlands on the property. However, the construction limits do not overlap with these probable wetlands. The applicant meets Commission wetland requirements.

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

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

In a June 27, 2019 email to Mitch Robinson at the City of Brooklyn Park it was shown that a public hearing on the project is not required as the site is in a non-residential area. The applicant meets Commission public notice requirements.



Motion by Jaeger, second by Chesney to advise the City of Brooklyn Park that Project Review WM2019-005 is approved subject to the following two conditions:

1. Perform post-construction double ring infiltrometer test to verify 0.45 in/hr infiltration rate of basin.

2. Provide a completed O&M agreement between the applicant and the City for all stormwater facilities on the project site. (A draft agreement was provided with this application.)

Motion carried unanimously.

C. WM2019-006 Pemberly, Brooklyn Park.* Construction of a residential townhome development on 14.9 acres located at 5300 94th Avenue North. Following development, the site will be 41 percent impervious with 14.2 acres of impervious surface, an increase of 14.1 acres. A complete project review application was received June 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.

Runoff from the site is proposed to be routed through a series of three infiltration basins, ending with the largest basin in the southeast corner of the site. This basin then discharges into existing City storm sewer associated with Regent Avenue. Prior to entering each infiltration basin, runoff will be pretreated using three sumps of 4 ft. depth and 4 ft. diameter, each with 4 ft. SAFL Baffle inserts. Because the site is located in a Drinking Water Supply Management Area (DWSMA), the applicant proposes to add 3 inches of compost to the bottom of each infiltration basin and then till the top 12 inches of soil. This will provide adequate water filtration prior to infiltration. 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 a series of three infiltration basins, which slow the rate of runoff before discharging to the City storm sewer. The series of infiltration basins begins in the northwest portion of the site (9.2 acres total with 2.4 acres impervious surface), where runoff will be routed to an infiltration basin in the northwest corner of the site. Discharge from this basin, in addition to runoff from the northeast portion of the site (3.6 acres total with 1.3 acres of impervious), will drain to the infiltration basin located in the northeast corner of the site. The discharge from this northeast basin, in addition to discharge from two offsite infiltration basins and the remaining part of the site (10.4 total acres with 3.8 acres of impervious) will discharge to the infiltration basin in the southeast. 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. The new impervious area on this site is 6.0 acres, requiring infiltration of 0.49 acre-feet within 48 hours. The applicant proposes to route runoff through a series of infiltration basins which have the capacity to infiltrate the required volume, meeting the Commission volume control requirements.

The Hennepin County Wetlands Inventory identifies two potential wetlands on the site. One potential wetland is 7.27 acres with 4.86 acres on the site and the other is 0.15 acres, with just 0.03 acres on the site. Although Hennepin County identifies these areas as potential wetlands, it is evident that



these areas have been used recently as cultivated cropland. There are no jurisdictional 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 floodplain on this site. The low floor elevations of the buildings are at least two feet higher than the high-water elevation of the infiltration basins according to Atlas 14 precipitation. The applicant meets Commission floodplain requirements.

The erosion control plan includes a rock construction entrance, perimeter silt fence, silt fence surrounding infiltration basins, inlet protection, rip rap at inlets and outlets, rip rap and vegetation on emergency overflows, slope checks, and native seed specified on the pond slopes. The erosion control plan meets Commission requirements.

A public hearing on the project was conducted on July 10, 2019 as part of Planning Commission and City Council review of this project, meeting Commission public notice requirements.

Motion by Chesney, second by Johnson to advise the City of Brooklyn ParK that Project Review WM2019-006 is approved subject to the following two conditions:

1. Provide a complete O&M agreement between the applicant and the City of Brooklyn Park for all stormwater facilities on the project site. (A draft agreement has been provided.)

2. Demonstrate by post-construction double ring infiltrometer or witness test that the site can meet the design infiltration rates.

Motion carried unanimously.

VI. Watershed Management Plan - Minor Plan Amendment.*

The Commissions and the Technical Advisory Committee (TAC) have been in ongoing discussions regarding two possible amendments to the Watershed Management Plan and CIP.

The first amendment would revise the CIP cost sharing policy to include funding nonstructural Best Management Practices (BMPs) such as upgrading to regenerative air street sweepers. The second would be to specify that the 2020 generic Lake Internal Load project on the CIP will be the Meadow Lake Management Plan.

A proposed Minor Plan Amendment* was included in the meeting packet for consideration. The proposed Cost Share Policy for Capital Improvements had previously been provided to the Commissions' attorney, BWSR, and Hennepin County. To date, no comments have been received from those parties. Assuming there are no objections from them, Staff recommends proceeding with the Minor Plan Amendment process by setting August 8, 2019 as the public meeting at which the amendment will be heard and making the appropriate notifications.

The proposed minor plan revision is shown below as additions (<u>underlined</u>) or deletions (strike outs).

Section 4.3.7 and Appendix F of the Shingle Creek WMC Third Generation Plan are hereby revised as follows:

Option 1 - Cost Share Policy. For capital projects <u>improvements</u> that have been identified in a Commission-adopted or approved TMDL or management plan or as approved by the



Commissions for cost participation in accordance with the Commissions' Cost Share Policy for Capital Improvements. Projects Improvements constructed to meet Commission development or redevelopment requirements are not eligible for cost participation.

1. The Commission's share will be 25 percent of the final cost of the project <u>improvement</u>, with a minimum share of \$25,00050,000.

| Table 4.5. Shingle Creek WMC Third Generation Plan Implementation Plan is hereby revised as ollows:Action20182019202020212022 | | | | | | |
|--|------|------|------|------|------|---|
| Action | 2018 | 2019 | 2020 | 2021 | 2022 | ĺ |

| Action | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|------|------|--------------------|------|---------|
| Lake Internal Load Improvement Project | | | 200,000 | | 200,000 |
| -Commission Contribution | | | 200,000 | | 200,000 |
| -Local Contribution | | | θ | | 0 |
| | | | | | |
| Meadow Lake Management Plan | | | <u>300,000</u> | | |
| -Commission Contribution | | | 300,000 | | |
| -Local Contribution | | | <u>0</u> | | |

A. The Cost Share Policy for Capital Improvements* is a new document, but much of the proposed policy is already in place in memos and guidance documents and is how the Commissions have been operating to date. This is the first time those operating policies have been gathered into a formal policy. What is new is most of the second paragraph under Capital Improvements, and the effectiveness monitoring requirements in the guidelines section. The proposed Minor Plan amendment would modify the plan simply to state that the Commissions will implement the CIP using the Cost Share Policy.

It was suggested that Guideline 4 of the proposed Cost Share Policy be iterated in the Criteria section of the document as well.

B. Meadow Lake Management Plan. As the Commissions have done previously, the second part of the Minor Plan Amendment would add specificity to the generic 2020 Lake Internal Load project to be the proposed Meadow Lake Management Plan. While the levy for this project could not be certified until 2021, revising the CIP now will be beneficial for the upcoming Clean Water Fund grant application.

With the suggested revision to the proposed Cost Share Policy, motion by Wills, second by Sicora to approve the proposed Minor Plan Amendment and set the Commission's August 8, 2019 meeting as the public meeting to consider the amendment. *Motion carried, Vlasin voting nay.*

With the suggested revision to the proposed Cost Share Policy, motion by Jaeger, second by Chesney to approve the proposed Minor Plan Amendment and set the Commission's August 8, 2019 meeting as the public meeting to consider the amendment. *Motion carried, Vlasin voting nay.*

VII. Water Quality.

The next Technical Advisory Committee (TAC) meeting is scheduled for 8:30 a.m., Thursday, July



25, 2019, at Crystal City Hall. The June 21, 2019 TAC meeting minutes* are included in the meeting packet for informational purposes.

VIII. Education and Public Outreach.*

A. Watershed PREP and Education and Outreach Events. Educators have finished up spring classroom visits. The educators are finding that schools are tending to schedule them more in the fall semester than in the spring semester. A reminder that the educators are available to table at city and school events, contact Amy Juntunen at <u>amy@jass.biz</u>. The educators are still researching options to make a short, 3-5 minute promotional video for Watershed PREP for use both in marketing to schools in the four watersheds as well as informing other watershed organizations about the program.

B. Website/Social Media. The group will be reviewing the WMWA website to refresh and update content. Any input is appreciated. <u>westmetrowateralliance.org/</u>. The website Google Analytics for June 2019 are attached to Staff's memo,* as are the Facebook insights for the last 30 days for both Shingle Creek and WMWA and the WMWA Twitter metrics. Facebook Impressions are the numbers of times a post is viewed in a feed, Engagement is an action - a click, comment, share, or reaction.

C. Special Project Discussion. Each year the four watersheds budget \$8,000 to undertake a large project. The group continues to discuss purchasing a copy of the Blue Thumb native plant root puller display, which is extremely popular among both adults and youth. The displays educate users about one of the many features of native plants, their root lengths compared to turf grass and ornamental plants. This makes them ideal for stabilizing streambanks and lakeshores and for promoting infiltration by creating deep root channels. The display allows the user to pull out a string that is as long as the roots are deep.

D. WMWA is discussing reallocating money from the administrative and special projects budgets to contract with a **part-time coordinator** to provide enhanced general education and coordination across the four member watersheds. Some of the potential activities include coordinating chloride management education and outreach to private entities; restarting the lake association summit; coordinating with the Master Water Stewards in the area; and enhanced outreach to the media.

E. Blue Thumb is a valuable source of information, including educational materials, how-to guides, a plant finder tool, and more. <u>http://www.blue-thumb.org/public-resources/</u>

F. *Ten Things* Brochure. The brochure has been completed and printed and WMWA has received about 10,000 copies printed at no charge by Hennepin County. The brochure can be found at: <u>shinglecreek.org/uploads/5/7/7/6/57762663/2019 ten things final.pdf</u>. Copies can be requested from the administrative office. Brochures are also being distributed to member cities through their TAC representatives.

G. The **next WMWA meeting** is scheduled for 8:30 a.m., Tuesday, August 13, 2019, at Plymouth City Hall.

IX. Grant Opportunities and Updates. The Commissioners received updates* on the following:

A. Notice of deadline for **BWSR Clean Water Fund Competitive Grant applications*** - September 9, 2019.



The **Meadow Lake Management Plan*** would be eligible for this program. Preliminary estimate of the cost of the project is about \$270,000. The estimated grant request would be \$216,00; the Commission's match \$54,000. The project would run spring-fall 2020 through spring-fall 2023. The Technical Advisory Committee will discuss this project at its July meeting. Staff is requesting authorization to expend \$5,000 from the Closed Project Account to prepare the grant application and feasibility report for review at the August meeting.

Motion by Orred, second by Johnson to table this request pending determination that the application can be prepared with Closed Project funds. *Motion carried unanimously*.

Upon determination by Attorney Gilchrist that Closed Project funds can be used for this purpose, motion by Jaeger, second by Vlasin to remove this item from the table. *Motion carried unanimously.*

Motion by Wills, second by Vlasin to authorize Staff to prepare the grant application for the Meadow Lake Management Plan using up to \$5,000 from the Closed Project account. *Motion carried unanimously.*

B. The Commissioners received an update on the **Bass-Pomerleau Lakes alum treatment** which occurred on May 15. A copy of an article by Daniel Ackerman about the treatment appeared in MPR News, <u>https://www.mprnews.org/story/2019/07/05/algae-lake-chemical-treatment</u> and is included in the meeting packet.

C. The Section 319 grant-funded **SRP Reduction Project** is now underway. Nalven made a presentation at the meeting about the project purpose and details about the project design.

Wetlands that have received many decades of nutrient and sediment-rich runoff from agricultural and developed land uses are at risk of transforming from nutrient sinks to nutrient sources. The hydrology of these wetlands has also often been altered by inflow from increased runoff volumes and ditching for drainage and flood prevention. This can have the effect of alternately flooding and drying out the wetland soils, making them more susceptible to sediment nutrient release under anoxic conditions. The discharge from these altered wetlands is often high in SRP (soluable reactive phosphorus) and low in dissolved oxygen.

In the Shingle Creek watershed, where nearly all of the remaining wetlands are highly disturbed and altered, these high concentrations of SRP can negatively impact downstream waterbodies. In this watershed, a number of wetlands discharge into conveyances to the ten nutrient-impaired lakes. There are also several large wetlands through which flow Shingle Creek or its tributaries. Both Shingle Creek and its primary tributary, Bass Creek, are impaired streams for DO and biotic integrity.

This SRP Reduction Project targets two high-priority locations to test and implement SRP reduction filters -- the outlet of wetland 639W and the outlet of Cherokee Wetland in Bass Creek Park in Brooklyn Park. (Wetland 639W is located in the cities of Crystal, Brooklyn Park, and Brooklyn Center; the outlet in the city of Crystal).

Phase 1, the testing phase, will be at the Wetland 639W outlet site. The overflow outlet is a three-sided weir, the interior of which is filled with limestone rock. Flow over the weir filters down through the limestone and into a small channel that outlets back into the wetland below the primary



outlet weir. The limestone will be excavated from the weir box, which will be modified to provide three temporary chambers to test the three different media. Each chamber will be fitted with an outflow pipe to measure the volume of flow through each chamber and to allow for grab sampling for water quality.

In Phase 2 of the project at the Cherokee Wetland outlet site, the treatment device will be a constructed metal box containing the filter medium, placed directly in Bass Creek just downstream of the outlet in Bass Creek Park.

Nalven answered many questions and will keep the Commissioners and TAC members updated on the project.

X. Communications.

June Communications Log.* Matthiesen answered questions regarding the Highway 252 project. No items required action.

XI. Other Business.

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

XII. Adjournment. There being no further business before the Commissions, the joint meeting was adjourned at 2:28 p.m.

Respectfully submitted,

die Athanson

Judie A. Anderson Recording Secretary JAA:tim

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