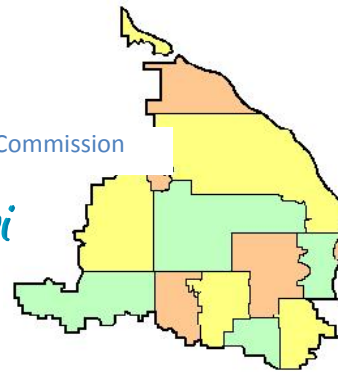


Watershed Management Commission



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MINUTES Regular Meeting September 13, 2018

(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, September 13, 2018, at the Clubhouse at Edinborough, USA, 8700 Edinbrook Crossing, Brooklyn Park, MN.

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

Not represented: Robbinsdale.

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

Not represented: Brooklyn Park.

Also present were: Andrew Hogg, Brooklyn Center; Mitch Robinson, Brooklyn Park; Todd Tuominen, Champlin; Mark Ray, Crystal; Denise Tingstad, Maple Grove; Robert Grant and Shawn Markham, New Hope; Ben Scharenbroich, Plymouth; and Richard McCoy and Marta Roser, Robbinsdale.

II. Agendas and Minutes.

Motion by Wills, second by Roach to approve the **Shingle Creek revised agenda**. * Motion carried unanimously.

Motion by Butcher, second by Jaeger to approve the **West Mississippi revised agenda**. * Motion carried unanimously.

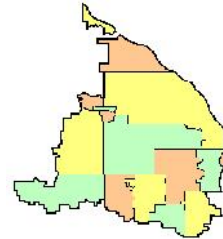
Motion by G. Anderson, second by Jaeger to approve the **minutes of the August regular meeting and public hearing**. * Motion carried unanimously.

Motion by Jaeger, second by Johnson to approve the **minutes of the August regular meeting and public hearing**. * Motion carried unanimously.

III. Finances and Reports.

A. Motion by Orred, second by G. Anderson to approve the **Shingle Creek September Treasurer's Report**. * Motion carried unanimously.

Motion by Orred, second by G. Anderson to approve the **Shingle Creek September claims**. * Claims totaling \$48,477.73 were approved by roll call vote: ayes – Mulla, Roach, Orred, Jaeger, G. Anderson, Wills, Johnson, and Polzin; nays – none; absent - Robbinsdale.



B. Motion by Jaeger, second by Johnson to approve the **West Mississippi September Treasurer's Report.*** *Motion carried unanimously.*

Motion by Jaeger, second by Johnson to approve the **West Mississippi September claims.*** Claims totaling \$9,069.28 were *approved by roll call vote: ayes – Mulla, Butcher, Jaeger, and Johnson; nays – none; absent – Brooklyn Park.*

IV. Open Forum.

It was announced that Derek Asche has resigned his position at the City of Plymouth and has taken a position at the City of Maple Grove. He will represent Maple Grove on the Technical Advisory Committee.

V. Project Reviews.

A. SC2018-012: Becker Park, Crystal.* Redevelopment of Becker Park, 5501 Douglas Drive North, including construction of a 72,000 SF underground infiltration chamber. The site is 9.3 acres and is 22 percent impervious with 2.09 acres of impervious surface. Following development, the site will be 16 percent impervious with only 1.52 acres of impervious surface. A complete project review application was received on September 6, 2018.

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 - 80-85% TSS removal and 50-60% TP removal. For example, infiltrating 1.3 inches of runoff 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.

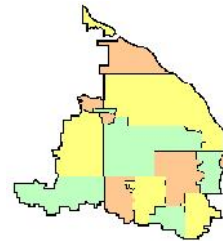
Runoff from the site (and from offsite) will be routed to an underground infiltration chamber. This chamber combined with the net reduction of impervious surface allows the applicant to meet Commission water quality treatment requirements.

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 an underground infiltration chamber, but will bypass the system and go directly to storm sewer if flows are too high. Total runoff rates and runoff volumes from the site decrease under proposed conditions during the 2-year, 10-year storm and 100-year storm, according to the HydroCAD model. In addition, runoff *volumes* decrease under all storm events. The applicant meets the Commission's rate control requirements.

Commission rules also require the site to infiltrate 1.0" of runoff from new impervious surface within 48 hours. However, there is no new impervious surface because the applicant proposes to reduce impervious surface from 2.09 acres to 1.52 acres. Nevertheless, the applicant proposes the installation of an underground infiltration chamber that will infiltrate 8.5, 9.7 and 10.3 acre-feet of runoff in 2-, 10- and 100-year storms, respectively. The applicant meets the Commission's volume control requirements.

The National Wetlands Inventory does not identify any wetlands on site. There are no Public Waters or floodplain on this site. However, during the infiltration chamber design process, there was some concern that infiltration could cause flooding to the basements of the Cedarwood Apartments, which are adjacent south of the infiltration system. To prevent any flooding of the Cedarwood Apartments, groundwater mounding under the infiltration system was modeled. After modeling, the applicant proposed to install drain tile in between the infiltration system and the apartment buildings to intercept any groundwater before it reached the apartment buildings. This drain tile would then be routed to manhole with two sump pumps. With the drain tile and sump pumps, and the basement low floor elevation at 869 feet, the model says there is no probability of flooding.

An erosion control plan was submitted with the project review application, and includes a rock construction entrance, perimeter silt fence, bio-roll and inlet protection. The applicant meets Commission erosion control requirements.



The City has held numerous public meetings about the Becker Park project, including meetings held at the park itself, meeting Commission public notice requirements.

According to an email correspondence between City of Crystal Engineer Mark Ray and Sarah Nalven of Wenck, the City of Crystal's Operations & Maintenance Plan for the underground infiltration chamber is to vacuum the header rows every 3-6 months, then adjust frequency of vacuuming depending on sediment levels. This Plan meets Commission O&M requirements.

Phase I and II Environmental Site Assessments (ESAs) were conducted on this site to detect any existing soil, soil vapor or groundwater impacts at the site. The Phase I ESA found that a dry cleaner had previously occupied the northeast corner of the project site. The Phase II ESA found perchloroethylene (PCE) in six of sixteen groundwater samples. However, all except one sample contained PCE at levels that were less than the regulatory standards for drinking water. The sample that contained PCE above the regulatory standard was located in the northeast corner of the site at 20-22 feet below ground surface (presumably where the dry cleaner had been) and had a PCE concentration of 4.7 ug/L; the Minnesota Pollution Control Agency's (MPCA's) Health Risk Limit (i.e., standard) for PCE is 4 ug/L. Based on the low concentrations of PCE in the groundwater, 1) PCE does not currently present a significant risk to potential receptors and 2) contaminant dispersion at concentrations of health concern is not likely after the planned stormwater infiltration system is installed. Further, the City of Crystal has applied to the MPCA's Voluntary Investigation & Cleanup (VIC) program to investigate and remediate any issues.

Motion by Orred, second by G. Anderson to advise the City of Crystal that Project Review SC2018-12 is approved with two conditions: (1) ensure that the HydroCAD model and plan set are consistent and (2) add sump pump details to the plan set. *Motion carried unanimously.*

B. SC2018-013: Northland IV, Brooklyn Park.* Construction of a 75,000 square foot office/warehouse building with parking lot and access roads and an associated stormwater pond on 8.15 acres located at 9200-75th Avenue. Following development, the site will be 52 percent impervious with 4.28 acres of impervious surface, an increase of 4.28 acres. A complete project application was received on August 31, 2018.

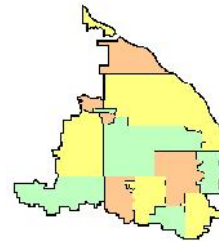
This site was part of a larger project review, SC96-18 Recovery Engineering. This project phase deviates from what was approved as part of SC96-18, necessitating a separate review.

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 - 80-85% TSS removal and 50-60% TP removal. For example, infiltrating 1.3-inches of runoff 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 1996 project created a NURP-designed stormwater basin in the southeast part of the development area to which that development and this proposed future phase were to be routed prior to discharge into a wetland on site. This new project instead routes some of the existing and new impervious surface to a new infiltration pond on the northeast part of the development area prior to discharge into the wetland. The discharge routed to the existing pond meets Commission water quality requirements. The new infiltration basin on the north end of the development was sized to provide infiltration of 1" of runoff, and between the infiltration pond and the wetland has the capacity to abstract 1.3" to meet the Commission's water quality requirement.

In addition, the applicant also proposes to route runoff from part of the developed site currently discharging directly into the wetland into the new infiltration basin, which will provide additional new treatment. Sump manholes are provided upstream of the existing pond and the proposed infiltration pond.

Commission rules require that site runoff is limited to predevelopment rates for the 2-, 10-, and 100-year storm events. Comparison of the 1996 pre-development rate to the 2018 post-development rate is not possible



because the 1996 modeling used TP40 and a curve number of 91 and the updated post-development Atlas 14 modeling assumed that the entire area was 100% impervious. However, the applicant proposes to create no more impervious area than was assumed in approved project review SC96-18, and the pond and infiltration basin are sized and designed appropriately for Atlas 14 events. Thus, it is Staff's recommendation that the applicant meets rate control requirements.

Commission rules require the site to infiltrate 1.0" of runoff from new impervious area within 48 hours. The new impervious area on this site is 4.28 acres, requiring infiltration of 15,543 CF within 48 hours. The new infiltration basin on the north end of the development was sized to provide infiltration of 1" of runoff. However, the applicant used an infiltration rate of 0.45 inches/hour, which is high for the Type C soils (sandy lean clay) the boring log indicates in that location. Applicant must demonstrate that the infiltration basin can meet the 0.45" infiltration rate.

The National Wetlands Inventory identifies wetland on the eastern half of the parcel. This wetland has previously been delineated and will not be disturbed. The applicant submitted an updated delineation in late 2017. The Commission acting as LGU for WCA administration for Brooklyn Park issued a No-Loss Determination in January 2018. However, the applicant is proposing a minor encroachment into the minimum 20 foot buffer to allow for the construction of a parking lot retaining wall. The encroachment extends for about 80 feet, and averages in width from a few feet to just under ten feet. The applicant has made a good faith effort to redesign the parking lot, removing some proposed parking to minimize the encroachment. The encroachment is necessary to meet the City's parking space standards. Adequate buffer is provided elsewhere on site to provide no-net loss. It is Staff's recommendation that the wetland buffer as proposed meets Commission requirements.

There are no Public Waters or floodplain on this site. The low floor elevation of the building is at least two feet higher than the high water elevation of the detention ponds and infiltration basin. An erosion control plan was submitted with the project review, and includes a rock construction entrance, perimeter silt fence, and native seed specified on the pond slopes. The erosion control plan meets Commission requirements.

No public hearings on the project have/will be conducted as part of City Council proceedings. To meet Commission public notice requirements, the applicant should notify the adjacent property owners by letter informing them that construction will be occurring and that drainage improvements will be made.

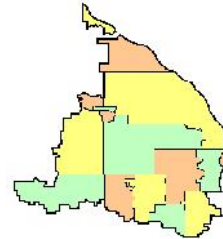
The Commissioners expressed concern regarding deposition of snow into the buffers and whether the pond has been adequately maintained and has sufficient storage capacity.

Motion by Roach, second by Orred to advise the City of Brooklyn Park that project review SC2018-13 is approved subject to the following conditions:

1. Provide written notification of the project to property owners within a 300-foot radius of the site.
2. Demonstrate by double ring infiltrometer or witness test that the site can meet the design infiltration rate of 0.45 inches/hour.
3. Provide an Operations and Maintenance Agreement acceptable to the City of Brooklyn Park.
4. Verify that the existing pond has been regularly maintained according to the previous Operations and Maintenance Agreement and that the design storage capacity has not been reduced by accumulated sediment. Perform maintenance as required to ensure the design storage capacity is available.

Motion carried unanimously.

C. On September 11, 2018, Jim Toulouse, Engineering Manager for the **Metro Blue Line Extension Project**, provided an email update* from Metropolitan Council Chair Alene Tchourumoff. She wrote that the Council will submit an updated New Starts application for the project to the Federal Transit Administration (FTA). This application is required for all projects nationally that are in the New Starts program and includes a summary of



achievements from the previous year's submittal, including updates to FTA's master template, current budget, management plans, and current detailed schedule. The FTA uses this information to rate projects based on a number of factors including ridership, economic development and congestion relief. Projects must have a "medium" rating to be considered for a federal grant. The Blue Line project currently has a medium-high rating, which is not expected to change.

Two things to note:

1. Updates on the third-party agreements, including the required co-location agreements with BNSF Railway. BNSF has been unwilling to negotiate and has continued to respond that they believe the project does not meet their long-term interests and they are not interested in negotiations at this time.
2. Updated schedule. Without an agreement with BNSF, the Council is not able to advance the project towards a full funding grant agreement and has revised the schedule to reflect the current reality:
 - a. October 2019 - execute critical third-party agreements, including BNSF
 - b. October 2019 - submit Full Funding Grant Agreement (FFGA) application
 - c. Q1, 2020 - issue Civil #1 construction invitation for bids
 - d. March 2020 - execute FFGA
 - e. May 2020 - award Civil #1 construction contract
 - f. 2020-2023 - heavy construction
 - g. 2024 - revenue service

VI. Watershed Management Plan.

A. The **City of Brooklyn Park*** has submitted its Local Surface Water Management Plan for Commission review and approval. Brooklyn Park has lands in both watersheds so both Commissions are required to review and consider the Plan for approval. The Plan was submitted August 6, 2018, and the 60-day review period extends through October 5, 2018. Metropolitan Council, which has 45 days to review and comment on the plan, has provided comments* to the Commissions.

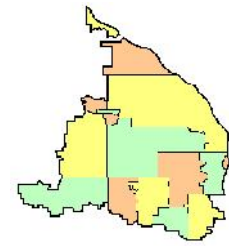
In general, the Plan meets most of the Commission and statutory requirements for local water management plans. However, the Plan needs to provide more specificity in its Implementation Plan, especially as it relates to actions the City intends to take over the ten-year period to address the several TMDLs, including Lake Magda nutrient TMDL, and Shingle Creek chloride, DO, biotic integrity, and *E. coli* TMDLs. The Plan should also explain the specific steps the City takes to ensure the Commissions' rules and standards are met for those development and redevelopment projects that the City reviews on behalf of the commissions.

Staff recommend that consideration of the Brooklyn Park Local Surface Water Management Plan be tabled pending the revisions noted in the table* accompanying Staff's memo, and that Brooklyn Park be asked to extend the review period to allow the revised Plan to be considered at the October 11, 2018 Commission meetings, or a later meeting if more time is required to make revisions.

Motion by Jaeger, second by G. Anderson to table consideration of the Brooklyn Park SWMP to a future meeting. Motion carried unanimously.

Motion by Butcher, second by Johnson to table consideration of the Brooklyn Park SWMP to a future meeting. Motion carried unanimously.

B. The **City of New Hope*** has also submitted its Local Surface Water Management Plan for Commission review and approval. The Plan was submitted August 8, 2018, and the 60-day review period extends through October 7, 2018. Metropolitan Council, which has 45 days to review and comment on the plan, has provided comments* to the Commissions.



In general, the Plan meets most of the Commission and statutory requirements for local water management plans. However, the Plan needs to acknowledge and include goals, policies, and actions relating to the Bass Creek chloride and Shingle Creek *E. coli* TMDLs. Other minor comments and comments from the Met Council are in the table* attached to Staff's memo. Staff recommend that New Hope's Local Surface Water Management Plan be approved pending the revisions noted in the table.

Motion by Jaeger, second by G. Anderson to approve the New Hope SWMP pending Staff's revisions. *Motion carried unanimously.*

VII. Water Quality.

Motion by Roach, second by Orred to approve the October 1, 2017 – September 30, 2019 **joint funding agreement with the USGS**. The Commission's share is \$7,600; USGS' share is \$6,906. The agreement is for the operation and maintenance of specific conductance and water temperature monitoring instrumentation on Shingle Creek at Queen Avenue in Minneapolis. *Motion carried unanimously.*

VIII. Education - West Metro Water Alliance (WMWA).*

A. WaterLinks. Subscribe to *WaterLinks* at westmetrowateralliance.org/contact.html. The next issue will be out in early October and feature autumn and winter-related content.

B. Education and Outreach Events. Educators are currently scheduling and making fall classroom visits. They are also available to table at city and school events. Contact Amy Juntunen at amy@jass.biz. The series of Resilient Yards workshops that WMWA sponsored around the four watersheds through Metro Blooms had 194 attendees. Thirty-four participants took advantage of WMWA's offer to split the \$100 cost of an onsite consultation. Several Farmers Markets in the watersheds have expressed willingness to host native plant sales through the Minnesota Native Landscaping's Pollinator Response Vehicle, but scheduling difficulties resulted in no sales being scheduled this year.

C. Ten Things Brochure.* WMWA is updating and refreshing the popular *Ten Things You Can Do* brochure that was first developed in 2009. The cities in the four watersheds use this brochure extensively and it is part of the fourth-grade curriculum of Watershed PREP. It is also widely reprinted statewide. Hennepin County provides the layout graphics and prints the brochures at no cost to the four watersheds and cities. The update would add an item about proper use of salt and deicers, refocus the Use Your Runoff item on water conservation and reuse, and consolidate the fertilizer and chemical products into a single item. Items 6-10 would remain the same. The text panel starting "Minnesota is known for its abundance of water resources" would be refocused around the tagline "We All Have Shoreline Property" and emphasize not only the link between an individual's property and water resources, but also the potential consequences for the 18 million people who obtain their drinking water from the Mississippi River.

D. Website/Social Media. Social media has been slow due to staff vacations. A short monitoring video will be posted soon. Website data and Facebook metrics* are attached to Staff's update.

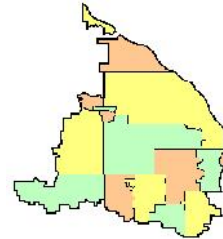
E. The **next WMWA meeting** is scheduled for 8:30 a.m., Tuesday, October 9, 2018, at Plymouth City Hall.

IX. Grant Opportunities and Updates.

A. FEMA Flood Modeling.* Staff have been in ongoing discussions to obtain DNR/FEMA approval of a workplan to complete updated flood mapping for Shingle Creek.

1. The initial work plan included surveying and mapping. The initial budget estimate of \$120,000 was rejected.

2. Staff worked with the DNR to take out surveying and mapping as well as refine some of the numbers based on expectations and was able to reduce the cost to \$73,236.



3. It was then learned from the DNR the budget that they had for the study area was around \$50,000. The DNR can reimburse the Commission \$50,000 if the Commission can supply additional funds towards the study. The DNR has also confirmed that it will be able to complete that work and supply the necessary data.

4. The DNR has subsequently reviewed and approved the final work plan* and has submitted to the Commission a contract agreeing to reimburse the Commission up to \$50,000 for completion of the work. The Commission's attorney has reviewed the contract. The work called out in the contract includes:

- a. Updating hydrology in EPA- SWMM using Atlas 14
- b. Updating creek hydraulics using HEC-RAS
- c. Creating floodway and floodplain shapefiles using HEC-RAS Mapper
- d. Creating Depth Grids using Arc-GIS
- e. Creating work maps showing new Special Flood Hazard Areas, cross-sections and

other information

To cover the estimated \$23,236 expense not covered by the DNR grant, the 2019 approved budget allocates \$20,000 from 2019 funds budgeted for subwatershed assessments and \$5,000 typically budgeted for contribution to the 4th generation plan account. **No work in the West Mississippi watershed is included in this grant contract.**

Motion by G. Anderson, second by Roach to approve Grant Contract 147076/3000140400 between the Commission and the Minnesota Department of Natural Resources as described above. *Motion carried unanimously.* Commissioners expressed concern that the work plan will include hydroconditioning, which Staff confirmed it does. Work can begin upon final execution of the contract by the DNR and will be completed by April 2020.

Motion by G. Anderson, second by Jaeger to adopt **Resolution 2018-03 Authorizing Acceptance of a Grant...for Improved Flood Risk Mapping.** * *Motion carried unanimously.*

B. Watershed-based Pilot Funding.

1. Staff submitted the SCWM Work Plan to BWSR on September 12, 2018. The awarded amount is \$103,571, with a required match of ten percent, and will be used to cost-share member cities installing voluntary stormwater BMPS.

2. Spector, Scharenbroich and Hogg provided an update on the **Hennepin County Chloride Steering Committee meeting** held earlier today. The Committee agreed upon tasks to be included in an RFP for services to facilitate focus groups of stakeholders to better understand training, information, and other needs and barriers.

X. Communications.

A. August Communications Log.* No items required action. Spector noted that the log does not show the amount of time spent on the Northland IV project.

B. Discussion will continue regarding the Commissions' **meeting site** when new information becomes available.

XI. Adjournment. There being no further business before the Commissions, the meetings were adjourned at 1:48 p.m.

Respectfully submitted,

Judie A. Anderson
Recording Secretary/JAA:tim