

## 2019 Work Plan in Review

Minnesota Rule 8410.0150 requires the Commission to submit to the Board of Water and Soil Resources a financial report, activity report and audit report for the preceding fiscal year. 8410.0150 Subp. 3 outlines the required content of the annual activity report. It includes an assessment of the previous year's annual work plan and development of a projected work plan for the following year.

The Commission's Third Generation Watershed Management Plan identifies issues, priorities and goals for the ten-year period 2015-2024.

### TECHNICAL

- Continue to review local development/redevelopment plans for conformance with the standards outlined in the Commission's Third Generation Plan. Review the current project review fee schedule for fiscal conformity. *Thirty-two projects, along with two carry-over projects, were reviewed by the Commission in 2019. (Appendix G.) At year-end the Technical Advisory Committee (TAC) was beginning its review of the current project review fee schedule in light of the fact that the Commission, in 2020, would no longer have available to it the services of the staff of the Hennepin County Department of Environment and Energy to review local development/redevelopment plans. The Commission does not have a permit program*  
*In August 2019 the Commission solicited proposals from organizations to serve as its technical advisor beginning January 1, 2020. The primary function of this position is to ensure that development plans comply with the Commission's Watershed Management Plan by reviewing submitted site development plans and designs to evaluate drainage, hydrologic and water quality requirements, erosion and sediment controls, shoreland and natural resource preservation issues, and compliance with the Wetland Conservation Act. Four proposals were received and reviewed by the Technical Advisory Committee and the Commission. Barr Engineering was chosen as the Commission's Technical Advisor for the year 2020.*
- Continue to serve as the local government unit (LGU) for administering the Wetland Conservation Act (WCA) for the City of Corcoran on three projects that were carried over as the City transitioned to becoming its own LGU for WCA. Costs associated with these projects will be billed back to the City. *Effective March 1, 2019, the Commission no longer serves as the LGU for WCA per Resolution 2019-01 adopted February 13, 2019. (Appendix N)*
- Complete the review of member communities' local water management plans. Under Rule 8410.0160, subp. 6, local plans were to be approved by the Commission by December 31, 2018. At 2018 year-end the plans for Champlin and Rogers were still under review. *The Commission approved Champlin's Surface Water Management Plan on January 9, 2019. In their letter dated July 8, 2019, Metropolitan Council advised the Commission that Rogers' plan fulfills the requirements for a local water management plan.*
- Continue to update the Special Flood Hazard Areas on the FEMA Floodplain maps located within the watershed into current modeling packages. The Federal Emergency Management Agency (FEMA) awarded the Minnesota Department of Natural Resources (MnDNR) a grant to update the Special Flood Hazard Areas in the Twin Cities HUC8 watershed. Pass-through grants were

provided so that WMOs can complete this work. The total budget for this project in Elm Creek is \$92,772.45 and does not require a local match. The term of the contract extends into the year 2020. *In 2018, the Commission chose to undertake this work through their technical consultant, Hennepin County Department of Environment and Energy. Because of County personnel changes, the contract for this study was mutually terminated by the DNR and the Commission. In 2019, the Commission chose Barr Engineering to provide these same services at the same contract cost.*

## MONITORING

- Continue to partner with the Three Rivers Park District (TRPD) to share in the costs of conducting lake and stream monitoring in the watershed. Under a five-year cooperative agreement approved in 2018 TRPD will be responsible for monitoring three of twelve sampling stations every year for continuous flow and monitor water quality nutrient data upon request from the Commission. TRPD will also be responsible for monitoring four of fifteen lakes in the Elm Creek watershed annually plus other specific lakes that have been approved for monitoring by the Commission. In addition, under the cooperative agreement, the Commission and the Park District will provide financial support to assist the monitoring efforts of the USGS stream gauging station on Elm Creek within the Elm Creek Park Reserve. *In 2019 Three Rivers Park District monitored four stream sites including EC77 (Elm Creek at 77th Avenue); EC81 (Elm Creek at County Road 81); DC (Diamond Creek within the Elm Creek Park Reserve); and RT (Rush Creek at Territorial Road). Continuous flow was collected in open channel morphology that requires the development of a stage-discharge rating curve at each sampling site. TRPD took manual flow measurements at various stream depths to create the rating curves and estimate the flow. No nutrient data was collected in 2019.*

*The Park District also monitored water quality at Diamond, Fish, Rice and Weaver lakes. The water quality samples were collected at the surface for all four lakes and were analyzed for total phosphorus, soluble reactive phosphorus, total nitrogen, and chlorophyll-a. Since Fish and Weaver Lake stratify during the summer, water samples were also collected at the middle (top of hypolimnion) and bottom (1-m from bottom) and were analyzed for total phosphorus and soluble reactive phosphorus.*

*Point intercept aquatic vegetation surveys were conducted on Diamond and Fish Lakes to assess the plant community in 2019.*

*Results of the 2019 TRPD monitoring are detailed in Appendix H (streams) and Appendix J (lakes).*

- Fund the monitoring of one lake through Metropolitan Council's Citizen Assisted Monitoring Program (CAMP). *The Commission was unable to identify a citizen volunteer; thus, no lakes were monitored under the auspices of CAMP in 2019.*
- Continue to operate the monitoring station in Champlin in cooperation with the United States Geological Survey (USGS). *During Water/Fiscal Year 2019, USGS continued to operate the stream gage and water-quality monitoring station 05287890, Elm Creek near Champlin. During this period, the county bridge immediately upstream of the gage was removed and replaced so, in addition to routine monitoring, additional work was performed. This included coordinating with*

construction and utility crews to ensure continuity of gage operation and relocation of water sensor and water-quality intake lines. The bridge replacement also caused physical changes to the stream channel's cross-section that nullified the relationship between stream level (stage) and discharge that is required to compute daily streamflow rates at the station. Consequently, real-time stage data were available, but discharge data were not displayed for most of the year.

Field visits were increased for direct measurements of stage and discharge (11 total, normally 6-9 are made per year) so observations over the range of stage that occurred could be collected to more quickly develop a revised stage-discharge relation (or rating) needed to compute the discharge record since bridge replacement. That record is currently being analyzed. Although the Water Year 2019 discharge record for Elm Creek currently is less certain than other stations in Minnesota due to rating re-development, records from nearby gages in the metro and southern Minnesota suggest that WY2019 could be among the highest annual streamflow on record.

Water-quality samples were collected monthly and during runoff events. A total of 12 monthly samples and 8 flow-weighted composite samples of the increasing flows of runoff were collected. Samples are analyzed for Total Phosphorus, Dissolved Phosphorus, Total Ammonia plus Organic Nitrogen, Dissolved Ammonia Nitrogen, Dissolved Nitrite plus Nitrate Nitrogen, Total Suspended Solids, Volatile Suspended Solids, Oxygen Demand, Dissolved Chloride, Water Temperature, Specific Conductance, pH, and Dissolved Oxygen. Provisional results of these analyses are available online at: [https://nwis.waterdata.usgs.gov/mn/nwis/qwdata/?site\\_no=05287890&agency\\_cd=USGS&inventory\\_output=0&rdb\\_inventory\\_output=file&begin\\_date=2018-10-01&end\\_date=2019-09-30&qw\\_attributes=0&format=rdb&qw\\_sample\\_wide=wide&date\\_format=YYYY-MM-DD](https://nwis.waterdata.usgs.gov/mn/nwis/qwdata/?site_no=05287890&agency_cd=USGS&inventory_output=0&rdb_inventory_output=file&begin_date=2018-10-01&end_date=2019-09-30&qw_attributes=0&format=rdb&qw_sample_wide=wide&date_format=YYYY-MM-DD). Appendix I provides more detailed information about the 2019 USGS monitoring.

- Participate in the MN Wetland Health Evaluation Program (WHEP) with four wetlands in 2019. Adult volunteers monitored five sites as part of the WHEP program in 2019 – (EC-1) Blundell Restoration, (EC-2) Bulduc Restoration, and (EC-3) Bulduc wetland, all in the City of Rogers; (EC-4) Cedar Hollow, Plymouth; and (EC-5) Northwest Greenway, also in Plymouth. See Appendix K for results of the WHEP monitoring.

#### **EDUCATION AND PUBLIC OUTREACH**

- Promote river stewardship through Hennepin County's RiverWatch program with three sites in 2019. The three sites monitored by student volunteers were Rush Creek on the west side of 101st Lane (RC-1b) and Rush Creek on the east side of 101st Lane (RC-1a) in Maple Grove; and Elm Creek at Peony Lane behind Wayzata High School in Plymouth (EC-2). RiverWatch monitoring is more fully described in Appendix L.
- Continue as a member of the West Metro Water Alliance (WMWA). Continued to support the WMWA Educator Program and promoted the Watershed PREP program to reach every 4th grade science class in the watershed. Appendix M shows the number of schools and students who participated in the program. Chairman Doug Baines and Plymouth Alternate Commissioner Catherine Cesnik attended the monthly WMWA meetings to represent the Commission.
- Co-sponsor Rain Garden Workshops in conjunction with WMWA as part of the Commission's Education and Public Outreach Program. WMWA sponsored Resilient Yards and Healthy Soils

*workshops in Champlin on April 4 and Plymouth on May 2, 2019. The workshops were presented by Metro Blooms. (Appendix M.)*

- Continue as a member of Blue Thumb and WaterShed Partners and a partner in the NEMO (Nonpoint Education for Municipal Officials) program. *These memberships were renewed in 2019 with Staff regularly attending Blue Thumb and WaterShed Partner meetings.*
- Continue to work in partnership with the University of Minnesota's agriculture specialist to help build relationships with the agricultural community in the watershed in order to achieve TMDL load reductions. *This is an ongoing activity. BMPs are undertaken as opportunities are identified and grant-funding assistance is available.*
- Work with the Hennepin County Rural Conservation Specialist. Assist landowners in identifying BMPs for implementation throughout the watershed. *The Rural Conservation Specialist assisted cities as they worked to incorporate the Commission's Recommended Livestock Management Policy into their own ordinances/policies. She assisted landowners to identify BMPs for implementation as part of the Rush Creek Subwatershed Assessment and in other areas of the watershed. She also developed a subwatershed assessment cost share application form and criteria by which applications will be evaluated.*
- Continue to populate and maintain the Commission's website [www.elmcreekwatershed.org](http://www.elmcreekwatershed.org) to provide news to residents, students, developers and other individuals interested in the water resources of the watershed. *Using the tool Weebly, continued to update and enhance the website, adding links to other websites as well as to other useful information. In 2019, there were 2,800 visitors that resulted in 4,100 individual sessions. The number of sessions per user was 1.22; the average session duration was 1:28. Fifty-nine percent of visitors entered the website directly, 39% of visitors came through "referrals" from other websites like Hennepin County, member cities, WMWA, and other local watersheds, and two percent came to the site through Facebook. Visitors came to the site through search engines like Google, Yahoo, and Bing.*

#### **PROJECTS AND CAPITAL IMPROVEMENTS**

- Seek grant funding to assist with the costs associated with projects identified on the Commission's Capital Improvement Program (CIP). Adopt Minor Plan Amendment to support proposed CIPs and CIP updates. *The annual call for CIPs went out to the cities, requesting them to provide updates to the projects already included on the Commission's CIP as well to inform the Commission of new projects that they would like to have considered for inclusion on the CIP. Proposed CIPs and CIP updates were reviewed for inclusion on the Commission's CIP by the Technical Advisory Committee (TAC) and their recommendation forwarded to the Commission. This activity necessitated a Minor Plan Amendment to the Commission's Third Generation Watershed Management Plan to add three new projects, remove one project, and shift the timing or the funding of six existing projects. A public meeting was held on May 8, 2019, to hear the proposed amendment, which was adopted by the Commission on that date. (Resolution 2019-02, Appendix N). Additional funding toward CIP projects was received from watershed-based funds provided by the Board of Water and Soil Resources from Clean Water Legacy grant money.*

- Continue to support City-sponsored projects using the ad valorem funding mechanism. Conduct public hearing for identified projects. *On September 11, 2019 the Commission conducted a public hearing on five improvement projects. (One project was subsequently withdrawn.) The Commission adopted Resolution 2019-03 (Appendix N) certifying for payment by Hennepin County of the Commission's share of the cost of four projects totaling \$295,138. On October 22, 2019, the Hennepin County Board approved the Commission's request to fund the following projects:*
  - (1) Phase 3 of the Rush Creek Main Stem Stream Stabilization project in Maple Grove;*
  - (2) Hickory Drive Stormwater Improvement project in Medina;*
  - (3) Downtown Regional Stormwater Pond project in Corcoran; and*
  - (4) Phase IV of the Elm Creek Stream Restoration project in Champlin.*
- Undertake high priority projects identified in the Rush Creek Headwaters Subwatershed Assessment. *In 2017 an Open House was held for property owners living in the Corcoran portion of the Study Area. The folks who attended the Open House shared information about known problems, issues, and observations about conditions in their area. Wenck Associates and the Core Team reviewed this information as they moved forward with the assessment. A final report was published in July 2018, identifying high priority projects, along with their cost-benefit, across the Study Area.*

*As a follow-up, 200 letters were sent to residents identified in the Rush Creek SWA as having livestock, erosion issues, and those residents who came to the open house and indicated interest in the project. From that mailing, 22 site visits were completed. Of those, two residents opted to utilize resources provided by Commission staff to complete projects on their own.*

*By mid-2019 four projects were awaiting staff review/cost estimate approvals for contracting; three other projects were not put under contract because residents were happy to pay for them on their own with staff technical assistance and further guidance; three projects were pending cooperation from neighbors (necessary for the project to effectively be completed); and five site visits were pending. Staff will also work with Environmental Health (Hennepin) on a septic project to target failing systems in the area. (MPCA approached Staff about this project.)*
- Complete Phase IV of the Elm Creek Stream Restoration Project in Champlin. In 2018, under the auspices of the Board of Water and Soil Resources (BWSR) Watershed-Based funding pilot program, the Commission was a recipient of \$134,486 to fund this project. Phase IV will also be funded through the ad valorem taxing process.) *In 2019, the City of Champlin hired WSB Consulting Services to survey and design the Elm Creek Stream Restoration Project. At year-end, the Phase IV reaches have been surveyed and mapped. The design and the development plans are expected through the spring of 2020, with the intent of bidding the project in October 2020. Upon approval of plans and bids the project is expected to be constructed during winter of 2020-2021.*

*The City of Champlin has secured funding via the City of Champlin and Elm Creek WMC CIP's in the amount of \$55,000 and \$150,000 respectively, totaling \$205,000 of local funding. Additional funds secured include \$134,486 from the BWSR Watershed-Based funding program. The LCCMR has approved a \$500,000 Grant for this project, which is expected to be approved in May 2020 as part of the 2020 Legislative Budget.*

*The Watershed-Based pilot program extends through December 31, 2020.*

*In December 2019 BWSR met with a group comprised of representatives of each of the groups of stakeholders to try to come to a consensus recommendation on how to fund future projects under this program.*

*Background: The purpose of Watershed-based Implementation Funding is to supplement existing funding to accelerate clean water activities (practices, projects, and programs) toward advancing Minnesota's water resources goals through prioritized and targeted cost-effective actions with measurable water quality results.*

*2018-2019 Biennium: A pilot program to reallocate a portion of the Clean Water Legacy funds from a competitive funding model towards a more systematic Clean Water Funding model was adopted for 2019 in Hennepin County. This was based on a working group of representatives of the 11 watersheds in the county and subsequent meetings that identified funding options for the \$1,018,000 allocated to Hennepin County watersheds for state fiscal years 2018 and 2019. For this pilot program it was a consensus of the partnership to proceed with; 1) setting aside \$101,800 (ten percent) for chloride management and 2) allocating the remaining balance (\$916,200) to WMO's based on 50% land area and 50% tax base. The Elm Creek allocation was \$134,486 which was budgeted to Champlin's Phase IV Elm Creek Restoration Project.*

*2020-2021 Biennium: For the new biennium, BWSR decided to allocate the funds based on major watershed divides. Elm Creek is in the Mississippi West Major Watershed (MWW) which will be allocated \$874,153. A partnership must be developed consisting of at least one representative from each watershed district, watershed management organization, soil and water conservation district, county and at least two municipalities within the WMW. The partnership will coordinate development of a watershed-based budget for submittal to BWSR for approval. Funds become available July 1, 2020. Grants from these funds will expire December 31, 2023*

- *Conduct a second alum treatment as part of the Internal Phosphorus Loading Control Project on Fish Lake. The second alum application for Fish Lake was completed in early August of 2019. There was approximately 95,000 gallons of alum applied to 120 acres of the lake (792 gallons/acre) from August 5 through August 8, 2019. This was similar to the dosage that was applied for the first application (40 g/m<sup>2</sup>) in 2017. The two alum applications completed the dosage rate of 80 g/m<sup>2</sup> that was recommended to achieve the water quality standards for Fish Lake. The in-lake water quality monitoring for 2018 and 2019 indicated the alum treatment was effective at improving water quality conditions for Fish Lake. The in-lake water quality achieved the state water quality standards for phosphorus throughout the entire growing season (May through September) in which the average phosphorus concentrations were 27 µg/L in 2018 and 24 µg/L in 2019. The hypolimnetic phosphorus concentrations were also the lowest recorded since monitoring has occurred, which suggests that the alum was effective at reducing the sediment release of phosphorus during anoxic conditions. A final report has been submitted to the Board of Water and Soil Resources and can be viewed on the Commission's website.*
- *Support the City of Maple Grove and its partners as they undertake a subwatershed assessment for that portion of Fish Lake within the Elm Creek watershed.*



- Prioritize subwatershed assessment applications received in the first round of SWA Cost Share Applications.
- \*\*\*Minnesota's New Buffer Initiative requires public waters in the state - lakes, rivers and streams - to be surrounded by vegetated buffers 50-feet wide (on average) and public ditches to have 16.5-foot wide buffers as well. Buffers were required to be installed on public waters by November 2017 and on public drainage systems by November 2018. *Buffer review was completed for Corcoran, Rogers, and Medina in 2019. Those parcels found to be non-compliant were sent to the state for enforcement, and the landowners notified by US Mail of that action. Hennepin County staff will work with those residents who are subject to enforcement actions at the request of BWSR, but will otherwise await findings.*

#### ADMINISTRATIVE

- Adopt a 2020 operating budget. *At its June 12, 2019 regular meeting, the Elm Creek Watershed Management Commission approved a 2020 operating budget totaling \$1,012,505. The budget is based in part on the projected costs found in the Implementation section of the Commission's Third Generation Watershed Management Plan and includes Capital Improvement Projects totaling \$448,935. To fund the 2020 operating budget the Commission approved an increase in member assessments to \$237,300, a 2.99% increase over the 2019 assessments. (Appendix E)*
- Conduct the biennial solicitation of interest proposals for administrative, legal, technical and wetland consultants. *Pursuant to Minnesota Statute 103B.227.subd. 5., a solicitation of interest proposals was published in the January 14, 2019 issue of the State Register. (Appendix D) Two responses to provide technical support, three responses to provide wetland consultant support, and one response each for legal and administrative support were received. The Commission voted to retain the current consultants for 2019-2020, although, with Hennepin County choosing not to continue as the Technical Advisor, the Commission chose Barr Engineering to continue with these duties in 2020.*
- Publish an annual activity report summarizing the Commission's yearly activities and financial reporting. *The 2018 Annual Activity Report was accepted by the Commission on April 10, 2019 and uploaded to the Commission's website by the April 30, 2019 statutory deadline.*

