

April 11, 2019

Representatives
Pioneer-Sarah Creek Watershed
Management Commission
Hennepin County, Minnesota

The meeting packet for this meeting may be found on the Commission's website: http://www.pioneersarahcreek.org/minutes-meeting-packets.html

Dear Representatives:

A regular meeting of the Pioneer-Sarah Creek Watershed Management Commission will be held Thursday, April 18, 2019, at 6:00 p.m., at the Discovery Center, 5050 Independence Street, Maple Plain, MN.

A light supper will be served. RSVPs are requested so that the appropriate amount of food is available. At the time of your response, please let us know if you will be eating supper with us.

In order to ensure a quorum for this meeting, please telephone 763.553.1144 or email me at judie@jass.biz to indicate if you or your Alternate will be attending. It is your responsibility to ascertain that your community will be represented at this meeting.

Regards,

Judie A. Anderson Administrator

JAA:tim

cc: Alternates

Jim Kujawa, Kirsten Barta, HCEE Joel Jamnik, Attorney Brian Vlach, TRPD City Clerks MPCA
Met Council BWSR
official newspapers DNR

Ed Matthiesen, Diane Spector, Wenck Assocs

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REGULAR MEETING AGENDA
April 18, 2019 • 6:00 pm
Maple Plain City Hall @ The Discovery Center
5050 Independence Street, Maple Plain

The meeting packet can be found on the Commission's website: http://pioneersarahcreek.org/pages/Meetings/

- 1. Call to Order.
- 2. Approve Agenda.*
- 3. Consent Agenda.
 - a. March meeting minutes.*
 - b. Monthly Claims/Treasurers Report.*
- 4. Open forum.
- 5. Action Items.
 - a. 2019 Projected Work Plan.*
 - b. Final Draft 2018 Annual Activity Report.*
 - c. Maple Plain Comprehensive Plan.*
- 6. Old Business.
- 7. New Business.
 - Preliminary 2020 Operating Budget.
- 8. Watershed Management Plan.
- 9. Staff Report.*
- 10. Education.
- 11. Grant Opportunities.
- 12. Communications.
- 13. Commissioner Reports.
- 14. Other Business.
- 15. Adjournment. (Next scheduled meeting: May 16, 2019).

* in meeting packet

** available at meeting

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REGULAR MEETING MINUTES March 21, 2019

1. CALL TO ORDER. A regular meeting of the Pioneer-Sarah Creek Watershed Management Commission was called to order at 6:02 p.m., Thursday, March 21, 2019, by Chair Joe Baker at Maple Plain City Hall, 5050 Independence Street, Maple Plain, MN.

Present: Mike Hoekstra, Greenfield; Joe Baker, Independence; John Fay, Maple Plain; Mike McLaughlin,

Medina; John Tschumperlin, Minnetrista; Karen Galles, James Kujawa and Kirsten Barta, Hennepin County Environment and Energy (HCEE); Brian Vlach, Three Rivers Park District

(TRPD); and Amy Juntunen, JASS.

Also present: Scott Johnson, Medina.

2. AGENDA. Motion by Fay, second by McLaughlin to approve the agenda with the change that the next meeting is scheduled for April 18. *Motion carried unanimously.*

- CONSENT AGENDA. Motion by McLaughlin, second by Tschumperlin to approve the Consent Agenda:
 - a. February Regular Meeting Minutes.*
 - **b.** March Monthly Claims/Treasurer's Report.* Claims total \$4,951.02.

Motion carried unanimously.

4. OPEN FORUM.

Karen Galles, HCEE, discussed the retirement of Kujawa and **HCEE's changing role** with the Commission. As of January 1, 2020, HCEE will no longer be providing engineering services to the Commission for project reviews or WCA. HCEE will be realigning its role to serve as a soil and water conservation district (SWCD) to develop implementation projects identified in SWAs, especially working with private landowners and grant opportunities. HCEE is in the process of hiring a new Rural Conservationist at this time. The County also expects to have a staff person attend TAC meetings, but the Commission will need its own representative on the TAC as well.

The Commission has served as the WCA LGU for the cities of Greenfield, Loretto and Maple Plain. The Commission has discussed discontinuing this service for all cities, meaning those cities would need to hire their own consultants to provide those services. The Commission could continue that service but would need to charge costs for acting as LGU back to the cities, so it would not be advantageous to the cities to funnel WCA work through the Commission. It is recommended that Greenfield, Loretto and Maple Plain adjust their fee schedules to cover the WCA costs.

Due to this change, the cost for technical services will be increasing for the Commission. Currently, about half of the annual engineering invoice is for WCA services. Kujawa's hourly rate for project reviews was \$75/hour. A private firm is likely to charge \$150-\$200/hour for the same services. In addition, the County did not bill the Commission for time spent on the phone with city staff and residents. The Commission should be prepared for an increase to the engineering line item on its budget. The Commission may also look at adjusting its fee schedule for project reviews to help cover the additional costs.

Staff will contact the County for a breakdown of Kujawa's hours to use in planning the 2020 budget.

- 5. ACTION ITEMS.
- 6. OLD BUSINESS.
 - a. Commission 2019 appointments have not been received from Maple Plain. Fay noted he had

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^{*}Included in meeting packet.



Minutes March 21, 2019 Page 2

asked his City Administrator to forward the appointment to the JASS office.

b. 2018 Work Plan in Review.* Motion by Baker, second by McLaughlin to approve the 2018 Work Plan in Review. *Motion carried unanimously.*

7. NEW BUSINESS.

- a. 2019 Projected Work Plan.* Commissioners were asked to provide comments to JASS by March 29. A reminder will be sent to Commission members on March 27. The work plan must be approved at the April meeting because it is part of the 2018 Annual Activity Report which is due to BWSR by April 30, 2019.
- **b.** Preliminary Draft 2018 Annual Activity Report.* Comments or changes regarding the Annual Report were requested to be received in the JASS office by April 4. Edits to the Annual Report, including the Work Plan, will be shown in a different color at the April meeting for ease of review.
- c. Lake Report Cards.* The Commission contracts with TRPD to monitor five sentinel lakes annually. The sentinel lakes are Lake Independence, Lake Sarah, Little Long Lake, and both basins of Whaletail Lake. The north basin of Whaletail is defined as a shallow lake, while the others are defined as deep lakes. Shallow and deep lakes have slightly different parameters for meeting state standards. In 2018, TRPD also monitored Lake Ardmore, Half Moon Lake, Spurzem Lake, and Lake Rebecca.

The lake report cards detail the size of the watershed, bathymetry, and annual monitoring results compared to the state standards for total phosphorus, chlorophyll A, and Secchi disk transparency. All data is averaged annually to determine a letter grade for lake water quality. Vlach reviewed the report cards and answered Commissioner questions.

Tschumperlin and Baker noted that they would be interested in joining TRPD staff during a monitoring trip to learn the process.

Staff will post the report cards to the Commission website as well as a link to the TRPD site which contains more scientific data and information for the public. TRPD has not yet completed that web page.

8. WATERSHED MANAGEMENT PLAN.

- **a. Maple Plain.** Staff is reviewing Maple Plain's Plan and expects to have a recommendation at the April meeting.
- **9. STAFF REPORT.*** Kujawa is working with Medina city staff on the Ardmore SWA project slated for 2019 using watershed-based funding from BWSR. After further review, the pond cleanout portion of the project was estimated to reduce only 0.2lbs of phosphorus at a cost of \$40,000. An iron-enhanced sand filter for the pond or additional channel restoration may be considered. Staff will need to update the project work plan and receive approval of those changes from BWSR before moving forward with the project.

10. EDUCATION.

Juntunen reviewed the upcoming **2019 Water Summit*** hosted by the Freshwater Society on May 9-10 at the Science Museum of Minnesota. Suggested audience includes water resource staff, planners, landscape designers, local decision-makers, lake and river association members, citizen volunteers, and other environmental advocates concerned about water protection. The Commission education budget can cover the cost for Commissioners to attend.

11. GRANT OPPORTUNITIES.

12. COMMUNICATIONS.

a. Lake Independence Carp Abundance Estimate.* The study estimates a carp biomass of 114kg/hectare. The threshold for ecological impacts to lakes is 100kg/hectare. An additional study will be performed in 2019 to ensure the estimate is accurate prior to implementation efforts as the current level is not high enough to interest a commercial fisherman in performing removal. PIT tags on fish showed 33 of 88 tagged carp moving downstream from the lake to the Pagenkopf station and four moving into Lake Ardmore, though that station's data loggers were not working 24/7. Only one fish moved through the County Road 19 station.

Greenfield • Independence • Loretto • Maple Plain • Medina • Minnetrista





- **b.** Lake Independence Zebra Mussel Survey.* The DNR published a report on zebra mussels in Lake Independence in 2015 and 2016. A summary completed by TRPD is included for 2017-2018. Population has seen significant increases in three of the seven areas monitored (stations 5, 6, and 7). TRPD is specifically monitoring areas with substrate for the mussels to attach to. Eleven of twelve collector plates have no mussels, while one plate did have one mussel. Population increases may have been slowed because Lake Independence has blue-green algae, while the mussels prefer green algae. As the population expands, changes in water quality can be expected as they consume algae, most noticeably improved water clarity.
- 13. COMMISSIONER REPORTS.
- 14. OTHER BUSINESS.
- **a.** Fay noted the Orono Rotary is hosting a **2019 Party in the Park** at Maple Plain. Fay will provide JASS with information regarding the event.
 - **b.** The **next regular meeting** is scheduled for April 18, 2019.
- **15. ADJOURNMENT.** There being no further business, motion by McLaughlin, second by Hoekstra to adjourn. *Motion carried unanimously.* The meeting was adjourned at 7:59. p.m.

Respectfully submitted,

Amy^l/A. Juntunen, Recording Secretary

AAJ:tim

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Pioneer-Sarah Creek Watershed Income Statement Compared with Budget For the Three Months Ending March 31, 2019

	Cı	arrent Month	Year to Date	Year to Date	Year to Date
		Actual	Actual	Budget	Variance
Revenues					
Member Dues	\$	0.00 \$	100,000.00	\$ 100,000.00	0.00
Project Review Fees		0.00	0.00	1,000.00	(1,000.00)
CIP Income		0.00	28,000.00	28,000.00	0.00
Grant-FY19 WS-Based Funding		0.00	29,159.00	0.00	29,159.00
WCA Adm Fees		0.00	0.00	124.99	(124.99)
Interest and Dividend Income		0.00	2,096.25	392.50	1,703.75
Total Revenues		0.00	159,255.25	129,517.49	29,737.76
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Expenses					
Administrative Expense		3,611.62	6,025.64	9,000.00	2,974.36
Adm-Project Reviews		14.00	59.09	187.50	128.41
Adm-CIP Mgmt		0.00	158.49	750.00	591.51
WCA - Admin/Legal Expenses		0.00	0.00	75.00	75.00
Adm - Tech Support		0.00	0.00	137.50	137.50
Legal Expense		0.00	46.50	124.99	78.49
Insurance		0.00	257.00	0.00	(257.00)
Website		133.20	186.75	450.00	263.25
Adm - General Programs		0.00	0.00	124.99	124.99
Education		556.00	556.00	1,125.00	569.00
Capital Improvement Project		0.00	0.00	7,000.00	7,000.00
CIP Baker Ravine		636.20	636.20	0.00	(636.20)
					_
Total Expenses		4,951.02	7,925.67	18,974.98	11,049.31
Net Income	(\$	4,951.02) \$	151,329.58	\$ 110,542.51	40,787.07

ASSETS

Current Assets Cash-Checking-USbank Cash-4M Fund	(\$	16,951.02) 646,701.80		
Accounts Receivable		43,791.77		
Total Assets			\$	673,542.55
LIABILITIES AND CAPITAL				
Total Liabilities				0.00
Capital				
Next Generation Plan Fund	\$	25,000.00		
Retained Surplus		236,129.70		
CIP Fund		95,505.51		
Grant Fund-Baker Ravine		165,577.76		
Net Income		151,329.58	_	
Total Capital				673,542.55
Total Liabilities & Capital			\$	673,542.55

Pioneer-Sarah Creek Watershed Cash Disbursements Journal

For the Period From Apr 1, 2019 to Apr 30, 2019

Filter Criteria includes: Report order is by Date. Report is printed in Detail Format.

Date	Check #	Account ID	Line Description	Debit Amount	Credit Amount
4/12/19	1533	51100	Administration	1,013.34	
		51100	Meeting-Related	1,119.60	
		51100	Bookkeeping / Audit Prep	339.46	
		51100	Annual Budget	374.40	
		51100	Annual Report	1,496.15	
		51400	Website	15.00	
		51120	Project Reviews	5.00	
		10100	Judie Anderson's Secretarial Service		4,362.95
					4
	Total			4,362.95	4,362.95

4/12/2019 at 9:35 AM Page: 1



Pioneer-Sarah Creek Watershed Management Commission 3235 Fernbrook Lane Plymouth, MN 55447

3235 Fernbrook Lane Plymouth MN 55447

April 12, 2019

General Administration					Total Project Area
Administrative		55.00	0.000		
Administrative	11.28	60.00	676.800		
Administrative - offiste		70.00	0.000		
Office Support	3,50	60.00	210.000		
Public storage	1.00	93.88	93.880		
Data Processing/File Mgmt		55.00	0.000		
Reimbursable Expense	32.66	1.00	32.660	1,013.340	Administration
Mosting pools to attendance Minutes and Mosting	follow up				
Meeting packets, attendance, Minutes and Meeting Administrative	0.58	55.00	31.900		
	9.84	60.00	590.400		
Administrative		70.00	268.100		
Admin - Offsite	3,83 229,20	1.00	229.200	1,119.600	Meeting related activitie
Reimbursable Expense	229,20	1.00	229.200	1,119.600	weeting related activitit
Bookkeeping					
Bookkeeping		55.00	0.000		
Bookkeeping, budget, audit requests	1.42	60.00	85.200		
Treasurer's Reports	0.50	60.00	30.000		
Audit Prep	1.42	55.00	78.100		Bookkeeping/TRs
Audit Prep	2.08	60.00	124.800		Bookkeeping/TRs
Reimbursable Expense	21.36	1.00	21.360	339.460	Audit Prep
Annual Budget					
Administrative		55.00	0.000		
Administrative	6.24	60.00	374.400		
Administrative - offsite		65.00	0.000		
Reimbursable Expense		1.00	0.000	374.400	Annual Budget/ Work Plans
Annual Report/Work Plans					TOTAL TURIO
Secretarial		55.00	0.000		
Administrative	23.47	60.00	1,408.200		•
Reimbursable Expense	87.95	1.00	87.950	1,496.15	Annual Report
Website					
Weebly hosting - 1 year		1.00	0.000		
Pages, links, uploads		55.00	0.000		
Administrative	0.25	60.00	15.000	15.000	Website
Administrative	0.25	00.00	10.000	10.000	VVCDSRC
Project Reviews					
Administrative		55.00	0.000		
Administrative		60.00	0.000		
File Management/Archiving		50.00	0.000		
Reimbursable Expense	5.00	1.00	5.000	5.000	Project Reviews
·					•

4,362.950 4,362.950



3235 Fernbrook Lane Plymouth, MN 55447 (763) 553-1144 Fax: (763) 553-9326

March 14, 2019

April 12, 2019

To: Pioneer-Sarah Creek Commissioners

Fr: Judie Anderson

Re: 2019 Projected Work Plan

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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 2018 Work Plan accomplishments were accepted at the March 21, 2019 meeting.

The Commission's Third Generation Watershed Management Plan identifies issues, priorities and goals for the six-year period 2015-2020. As a reminder, they are enumerated beginning on page 4 of this memo. Those goals that have not been pursued are shown in red. Staff recommends that action regarding these goals be seriously considered.

Following is a projected work plan for 2019. Review and comments are requested by March 29, 2019 so that they can be incorporated into the 2018 Annual Activity Report.

2019 Work Plan

A. ONGOING TECHNICAL AND ADMINISTRATIVE PROGRAMS

- 1. Continue to review local development/redevelopment plans for conformance with the standards outlined in the Commission's Third Generation Watershed Management Plan.
 - **a.** Maintain the current flood profile of the creeks and their tributaries.
 - **b.** Maintain the post-development 2-year, 10-year, and 100-year peak rate of runoff at predevelopment level for the critical duration precipitation event.
 - **c.** Maintain the post-development annual runoff volume at pre-development volume.
 - **d.** Prevent the loss of floodplain storage below the established 100-year elevation.
- **2.** Discontinue serving as the local government unit (LGU) for administering the Wetland Conservation Act (WCA) for the member cities effective January 1, 2020.
- **3.** Adopt a 2020 operating budget.
 - **a.** Search for grant and other funds to supplement the regular budget.
 - **b.** Fund a capital improvement program to share in the cost of projects.
- c. Budget for the expense of undertaking a Major Plan Amendment to extend the term of the Third Generation Plan.

- **4.** Continue to respond to recommendations included in the Board of Water and Soil Resources 2018 Level II Review and Assessment of the Commission's Progress toward its Third Generation Plan Objectives report.
- **a.** Develop and implement a training plan for board members. *The Commissioner handbook will be updated and training will resume in 2019.*
 - **b.** Make water quality data and trends easily accessible to the public.
- **c.** Evaluate progress for the implementation of plan actions at a minimum of every two years, making sure to measure outcomes, not just outputs. Report on progress toward achieving resource improvement.
- 5. Conduct the biennial solicitation of interest proposals for administrative, legal, technical and wetland consultants.
- 6. Publish a 2018 Annual Activity Report summarizing the Commission's yearly activities and financial reporting.
- **7.** Draft a 2019 Work Plan.

B. WATER QUALITY AND QUANTITY

- **1.** Support the Commission's management goals for water quality. Continue to make progress to improve the lakes and streams in the watershed as well as protect those that are not impaired.
- **a.** Improve water clarity in the impaired waters by 10% over the average of the previous ten years by 2023.
 - **b.** Maintain or improve water quality in the lakes and streams with no identified impairments.
- **2.** Foster implementation of BMPs in the watershed through technical and financial assistance.
- **a.** Utilize the services of the University of Minnesota's agriculture specialist and Hennepin County's Rural Conservationist to promote, educate, and facilitate best management practices to target audiences.
 - **b.** Identify projects eligible for the Hennepin County Natural Resources Grant program.
- 3. Operate a monitoring program sufficient to characterize water quantity and quality and biotic integrity in the watershed and evaluate progress toward TMDL goals. Partner with Three Rivers Park District (TRPD) to conduct water quality monitoring in the watershed. Bring stream and lake monitoring efforts into line with monitoring program outlined in the Third Generation Watershed Plan.
- **a.** Partner with Three Rivers Park District (TRPD) to conduct bi-weekly water quality monitoring of "sentinel lakes" Independence, Sarah, and Little Long, along with both basins of Whaletail.
- **b.** Partner with Three Rivers Park District (TRPD) to conduct flow and water quality monitoring at selected sites on Pioneer Creek and Sarah Creek, along with possible water quality and flow monitoring at up to two additional sites.
- **c.** Participate in Metropolitan Council's Citizen Assisted Monitoring Program (CAMP). The Commission has budgeted funds to monitor one lake in 2019.
- **4.** Support watershed residents and organizations as issues arise, providing general, technical and financial assistance where appropriate.

C. EDUCATION

1. Annually evaluate the proposed Education and Outreach program and establish education and outreach activities for the coming year, including goals and strategies identified in the WRAPS study. These later activities

could be identified through a collaboration of the Technical Advisory Committee TAC) and the Citizen Advisory Committee (CAC). A number of implementation strategies are identified in the Commission's Education and Outreach Plan found in Appendix E of the Third Generation Management Plan.

- **a.** Activate a CAC to begin this process, which is noted as one of the Commission's high priorities in its Management Plan.
- **b.** Convene the CAC as necessary, at least once annually, to make recommendations on education and outreach actions and assist the Commission with implementation. jb
- **2.** Educate Commissioners, member City Councils and Planning Commissions about watershed and water resources management. Sponsor watershed and water resources training opportunities such as NEMO (Nonpoint Education for Municipal Officials).
- **3.** Continue membership in WaterShed Partners, a coalition of more than 70 public, private and nonprofit organizations in the Twin Cities Metro area promoting public understanding that inspires people to act to protect water in their watershed through educational projects, networking, and resource sharing. Take a more active role in its activities.
- **4.** Participate with collaborative groups to pool resources to undertake activities in a cost-effective manner, promote interagency cooperation and collaboration, and promote consistency of messages. Use the Commission's, member cities', and educational partners' websites and newsletters, social media, co-ops, local newspapers and cable TV to disseminate education materials to all stakeholders about actions they can take to protect and improve water quality.
- **5.** Continue to maintain the Commission's website and Facebook page to provide news to residents of the watershed.
- **6.** Provide opportunities for the public to learn about and participate in water quality activities. Enhance education opportunities for youth. Provide opportunities for bridge-building between stakeholders.
- **a.** Promote river stewardship through the River Watch program. Encourage participation by local school students and their teachers. Funding for monitoring one site is included in the 2018 budget.
- **b.** Work in partnership with Hennepin County's Agriculture Specialist to help build relationships with the agricultural community in the watershed in order to encourage TMDL implementation.
- **c.** Working in partnership with the Hennepin County Rural Conservationist, continue to work with landowners, writing county cost-share grants to help owners become compliant with the MN Buffer Law.

D. STUDIES, PROJECTS AND CIPS.

- 1. Continue to support member cities as they identify studies and projects which benefit both the cities and the watershed.
- 2. Continue to identify Watershed-wide TMDL implementation projects.
- **3.** Prioritize BMPs identified in the Dance Hall Creek Subwatershed Retrofit Assessment for implementation or further study. Continue to network with landowners to gain impetus toward completion of projects.
- **4.** Under a joint powers agreement with the Three Rivers Park District, complete Curly-leaf Pondweed turion surveys in Lake Sarah during a five-year control program, complete annual aquatic plant surveys in Lake Sarah to monitor the response of native macrophytes to the CLP control program, and complete annual water quality monitoring to determine the effectiveness of the CLPW control program in reducing phosphorus loading to the lake.

- **5.** Convene the Technical Advisory Committee for the purpose of receiving CIP applications from the member communities, reviewing them for validity, and recommendation to the Commission for incorporation on the Third Generation Plan CIP.
- **a.** Prioritize capital projects in anticipation of funding during the next round of the Watershedbased Funding Project.

E. PLANNING

- 1. 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. This process will be completed with the review of Maple Plain's local plan in 2019.
- **2.** Budget for the expense of writing the Fourth Generation Plan, due in 2020, if a Major Plan Amendment to the Third Generation Plan is not approved by BWSR.

PRIORITIES

- Educate the Commissioners and member City Councils and Planning Commissions about watershed and water resources management.
- 2. Undertake a monitoring program to monitor water quality trends and to track progress toward meeting TMDLs.
- 3. Partner with member cities and other parties to conduct subwatershed assessments and other studies to identify feasible and cost-effective Best Management Practices to protect and improve water quality.

GOALS

A. Water Quantity.

- Maintain the post-development 2-year, 10-year, and 100-year peak rate of runoff at pre-development level for the critical duration precipitation event.
- 2. Maintain the post-development annual runoff volume at pre-development volume.
- 3. Prevent the loss of floodplain storage below the established 100-year elevation.

Actions:

- a. The Commission shall maintain Rules and Standards requiring development and redevelopment meeting certain criteria to meet runoff rate control and runoff volume and infiltration requirements.
- b. Landlocked depressions that presently do not have a defined outlet and do not typically overflow may only be allowed a positive outlet provided the downstream impacts are addressed and the plan is approved by the Commission.
- c. The Commission encourages the use of Low Impact Design techniques to reduce runoff rates and volumes, erosion and sedimentation, and pollutant loading.
- d. Member cities shall adopt local controls and local stormwater management plans that are at least as stringent as the Commission Water Quantity goals and policies and the Commission Rules and Standards.
- e. The Commission requires a plan review by the local permitting authority for development or redevelopment if any part of the development is within or affects a 100-year floodplain
- f. The Commission shall maintain Rules and Standards requiring development and redevelopment affecting the 100-year floodplain to meet Commission compensatory storage, low flow elevation, and timing requirements.
- g. Member cities shall adopt a floodplain ordinance and any other required local controls, and local stormwater management plans that are at least as stringent as the Commission Floodplain goals and policies and the Commission Rules and Standards.

B. Water Quality

The TMDLs completed for Lake Independence and Lake Sarah established nutrient load reductions necessary to improve water quality in those lakes. The WRAPS study currently underway will establish additional water quality improvement and protection goals for the other lakes and streams in the watershed. The Third Generation goals for water quality are focused on making progress to improve the lakes and streams in the watershed as well as protect unimpaired waters. The goals are aggressive; some of them will require much dedication and effort and public and private resources to achieve. However, public input received for this Plan, the TMDLs, and other

sources show that achieving a high standard of water quality is a priority for the public as well as required by state statute, and the Implementation Plan includes a number of actions to help meet these goals.

Actions.

- a. The Commission adopts as water quality goals the standards for Class 2b waters in the North Central Hardwood Forest ecoregion as set forth in MN rules7050.0222.
- b. The Commission will undertake a routine lake and stream monitoring program to assess progress toward meeting these goals.
- c. The Commission shall maintain Rules and Standards requiring development and redevelopment meeting certain criteria to meet water quality requirements.
- d. The Commission shall maintain Rules and Standards requiring development and redevelopment meeting certain criteria to meet erosion control requirements.
- e. The Commission will develop and implement a program to provide technical and financial assistance to the member cities in identifying appropriate and cost-effective Best Management Practices to reduce nutrient and sediment load to lakes and streams.
- f. The Commission will work in partnership with other organizations and agencies to pursue grant and other funding to implement improvement projects and feasibility studies.
- g. The Commission shall update implementation plans and this Plan as necessary following TMDL/WRAPS completion and progress reviews.
- h. Member cities shall adopt local controls and local stormwater management plans that are at least as stringent as Commission Water Quality goals and policies and the Commission Rules and Standards.
- i. The Commission will develop and publish a model manure management ordinance within six months of this Plan's adoption. Member cities shall then have one year to adopt a manure management ordinance using the model ordinance for guidance, or to adopt other standards and practices that will accomplish the objective of reducing phosphorus loading from new livestock operations.

C. Groundwater

The Commission has undertaken limited groundwater management activities in the past, primarily by encouraging projects requiring project review to infiltrate a portion of runoff. Over the past decade cities that rely on groundwater for drinking water have worked with the Minnesota Department of Health to adopt wellhead protection plans and to implement policies and official controls to protect drinking water sources. In the Third Generation Plan, the Commission has adopted a new infiltration requirement for new development and redevelopment to promote groundwater recharge and reduce runoff.

- Promote groundwater recharge by requiring abstraction/infiltration of runoff from new development and redevelopment.
- 2. Protect groundwater quality by incorporating wellhead protection study results into development and redevelopment Rules and Standards.

Actions

- a. The Commission shall maintain Rules and Standards requiring development and redevelopment meeting certain criteria to meet infiltration requirements.
- b. Member cities shall adopt local controls and local stormwater management plans that are at least as stringent as Commission Groundwater goals and policies and the Commission Rules and Standards.
- c. The Commission will partner with the DNR, USGS, MDH, and other agencies to educate the member cities and watershed community officials about groundwater issues and their relation to stormwater management and surface water quality.
- d. The Commission shall develop and maintain a map showing the wellhead protection zones within its boundaries upon completion of a local wellhead protection plan for use in determining vulnerable areas that should be exempted from infiltration.
- e. The Commission will develop and implement a program to provide technical and financial assistance to the member cities in identifying appropriate and cost-effective Best Management Practices to increase infiltration and groundwater recharge and reduce stormwater runoff.

D. Wetlands

The Commission's primary tool for managing wetlands is the Wetland Conservation Act (WCA). The Commission serves as the Local Government Unit (LGU) for WCA administration in Greenfield, Loretto and Maple Plain and the other three member cities administer WCA themselves. The Commission requires submittal of a functions and values assessment using the latest version of MnRAM whenever an applicant proposes wetland impacts.

- 1. Preserve the existing functions and values of wetlands within the watershed.
- 2. Promote wetland the enhancement or restoration of wetlands in the watershed.

Actions

a. The Commission shall maintain Rules and Standards requiring development and redevelopment meeting certain criteria to provide buffers adjacent to wetlands, lakes, and streams.

- b. Member cities shall adopt local controls and local stormwater management plans that are at least as stringent as Commission Wetland goals and policies and the Commission Rules and Standards.
- c. The Commission shall act as the Local Government Unit (LGU) for the Wetland Conservation act for those communities that choose to so designate.
- d. Developers must complete a wetland delineation by a wetland professional to identify the location and extent of any wetlands present within the development site.
- e. For any development or redevelopment proposing impacts to any wetlands in the watershed, a functions and values assessment using the most recent version of the MnRAM protocol must be completed and submitted to the Commission and to the respective LGU.
- f. Before consideration or approval of a wetland replacement plan or use of wetland banking credits, the Commission shall ensure that the applicant has exhausted all possibilities to avoid and minimize adverse wetland impacts according to the sequencing requirements of the Wetland Conservation Act. The order of descending priority for the location of replacement wetland, including the use of wetland banking credits, is as follows: 1) On-site; 2) Within the same subwatershed; 3) Within the Pioneer-Sarah Creek watershed; 4) Within Hennepin County; and 5) Outside the Pioneer-Sarah Creek watershed within Major Watershed Number 18 or Major Watershed Number 19.

E. Drainage Systems

Pioneer Creek between Highway 12 and Watertown Road and several lateral ditches, including parts of Robina Creek, are under the ditch authority of Hennepin County as County Ditch #19. The County also is ditch authority for County Ditch #9 connecting and outletting Lake Schwauppauff, Schendel Lake, and Hafften Lake in the northern watershed; and Judicial Ditch #20, which includes part of Deer Creek and several laterals, and Pioneer Creek downstream of Ox Yoke Lake. The primary Third Generation activity related to drainage systems is to periodically review the advantages and disadvantages of ditch authority and to reconsider jurisdiction.

1. Continue current Hennepin County jurisdiction over county ditches in the watershed.

Actions

a. Periodically reconsider the appropriate jurisdiction over the county ditches in the watershed

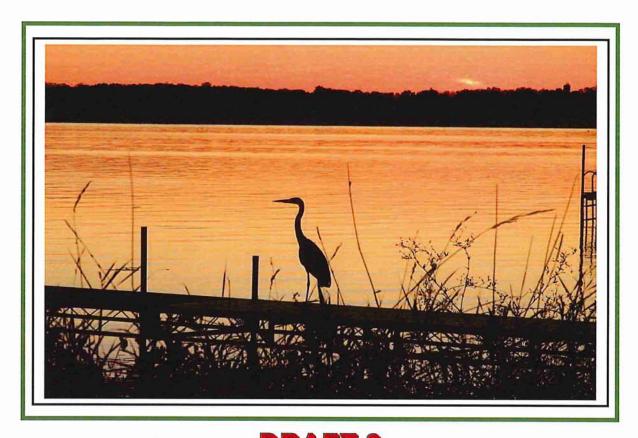
F. Operations and Programming

These goals guide the routine programs and operations of the Commission, and include the education and outreach program; maintenance of rules and standards; the annual monitoring program; and programs and activities to stay abreast of changing standards and requirements, search for grant and other funds to supplement the regular budget, and operate a capital improvement program and share in the cost of projects.

- 1. Identify and operate within a sustainable funding level that is affordable to member cities.
- 2. Foster implementation of TMDL and other implementation projects by sharing in their cost and proactively seeking grant funds.
- 3. Operate a public education and outreach program prioritizing elected and appointed officials education and building better understanding between all stakeholders.
- Operate a monitoring program sufficient to characterize water quantity and quality and biotic integrity in the watershed and to evaluate progress toward TMDL goals.
- Maintain rules and standards for development and redevelopment that are consistent with local and regional TMDLs, federal guidelines, source water and wellhead protection requirements, nondegradation, and ecosystem management goals.
- 6. Serve as a technical resource for member cities.

Actions

- a. Annually review the budget and Capital Improvement Program and convene a professional Technical Advisory Committee to identify and prioritize projects.
- b. Convene Citizen Advisory Committees as necessary to advise the Commission and to assist in program development and implementation.
- c. Prepare and implement an annual monitoring plan and provide annual reporting.
- d. According to the schedules set forth in TMDL Implementation Plans and WRAPS studies, every five years evaluate progress toward meeting those water quality goals, and adjust the Implementation Plans as necessary to achieve progress.
- e. Periodically review the development rules and standards for adequacy and make revisions as necessary.
- f. Coordinate water resources management between the Commission, Three Rivers Park District, and the member cities.



DRAFT 22018 Activity Report



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This report was prepared for the Pioneer-Sarah Creek Watershed Management Commission by JASS, Inc.

Questions regarding this report should be directed to JASS, 763.553.1144 or judie@jass.biz

We gratefully acknowledge the assistance of:

James Kujawa, Kirsten Barta and Mary Karius, Hennepin County Dept. of Environment and Energy
Brian Vlach and Amy Timm, Three Rivers Park District
Brian Johnson, Metropolitan Council

Cover Photograph: Lake Independence Barbara Zadeh

ANNUAL ACTIVITY REPORT

This annual activity report has been prepared by the Pioneer-Sarah Creek
Watershed Management Commission in accordance with the annual
reporting requirements of Minnesota Rules Chapter 8410.0150, Subps. 2 and 3.
It summarizes the activities undertaken by the Commission during calendar year 2018.

PIONEER-SARAH CREEK WATERSHED MANAGEMENT COMMISSION

The Commission was established to protect and manage the natural resources of the Pioneer and Sarah Creek watersheds. It is a joint powers watershed organization formed as required under MN Statutes 103B.201-103B.255 and MN Rules Chapter 8410. A Board of Commissioners comprised of representatives appointed by the member communities was established as the governing body of the Commission. Its membership is comprised of the cities of Greenfield, Independence, Loretto, Maple Plain, Medina, and Minnetrista. The table in *Appendix 1* shows the names of the Commissioners appointed to serve in 2018.

MEETINGS

The Commission meets on the third Thursday of the month at Maple Plain City Hall. The meetings are open to the public and visitors are welcome. Meeting notices, agendas, and approved minutes are posted on the Commission's website, www.pioneersarahcreek.org.

STAFF AND CONSULTANTS

The Commission has no employees. Independent consultants perform technical, legal, administrative, and wetland services for the Commission and are selected biannually. The current staff and consultants are also listed in *Appendix 1*.

THE WATERSHED

Located entirely within western Hennepin County, the Pioneer-Sarah Creek watershed covers approximately 70.5 square miles and includes the watersheds of Pioneer Creek and Sarah Creek. The Crow River demarcates most of the northern boundary. Portions or all of the six member cities are within the legal boundaries of the Pioneer-Sarah Creek watershed and are listed in Table 1. A map of the watershed can be viewed on the next page.

WATERSHED MANAGEMENT PLAN

The Commission's Third Generation Watershed Management Plan was approved by the Board of Water and Soil Resources (BWSR) for a period of six years on January 28, 2015. The Commission adopted the Plan on May 21, 2015.

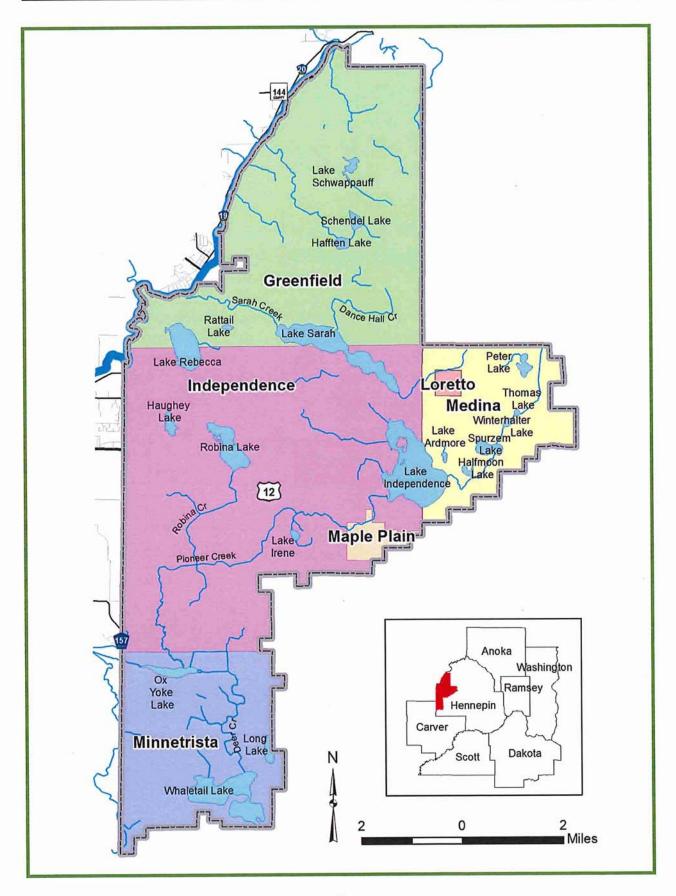


Table 1
Area of Members within the Pioneer-Sarah Creek Watershed

Local Government Unit	Area Within Watershed (Square Miles)	Percent of Watershed	
Greenfield	21.5	30.5%	
Independence	29.7	42.1%	
Loretto	0.3	0.4%	
Maple Plain	0.8	1.1%	
Medina	7.5	10.7%	
Minnetrista	10.7	15.2%	
TOTAL:	70.5	100.0%	

During development of the Plan, the Commission identified the following priorities to guide water resources planning and management functions:

- Educate the Commissioners and member City Councils and Planning Commissions regarding watershed and water resources management.
- Undertake a monitoring program to monitor water quality trends and to track progress toward meeting TMDLs.
- Partner with member cities and other parties to conduct subwatershed assessments and other studies to identify feasible and cost-effective Best Management Practices (BMPs) to protect and improve water quality.

On November 19, 2015, the Commission amended its Third Generation Watershed Management Plan to adopt a revision to the plan amendment process to conform to 2015 revisions to MN Rules 8410. In part, the revisions will allow the Commission to modify the CIP with only minimal need for plan amendments.

On July 20, 2017 the Commission adopted a second Minor Plan Amendment to revise the costs associated with project IN-2 Hydrologic Restorations on the Pioneer-Sarah Creek 2015 Capital Improvement Program (CIP). The revision would update the estimated costs of the design and construction phases of the Baker Campground Ravine project.

On June 21, 2018 the Commission amended its Third Generation Plan to revise the CIP to remove twenty projects that have already been completed or will not move forward, to update the estimated costs/timing of three projects, to group nine projects into the category *Watershedwide Ongoing Opportunity-Based Projects*, and to add ten new projects.

LOCAL PLANS

Local water management plans adopted by member cities pursuant to Minnesota Statutes, Section 103B.235 shall be consistent with the Commission's Third Generation Watershed Management Plan. Local plans must comply with MN Statutes, Section 103B.235 and MN Rules 8410 regarding local

plan content. (*Appendix 2*). At year-end the Commission had reviewed and approved the local surface water plans of the cities of Loretto, Medina, and Minnetrista. The plans for Independence and Maple Plain were under review on December 31. Responses to Staff's comments on Greenfield's Local Plan were received January 9. 2019.

2018 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 six-year period 2015-2020. Following is a summary of the work undertaken by the Pioneer-Sarah Creek Watershed Management Commission in 2018 to meet the goals, objectives and projected work plan outlined in its 2017 *Annual Report*. The projected Work Plan was approved at the Commission's April 19, 2018 meeting. (*** indicates activities undertaken in 2018 but not included in the 2018 Work Plan.)

A. ONGOING TECHNICAL AND ADMINISTRATIVE PROGRAMS

- 1. Continue to review local development/redevelopment plans for conformance with the standards outlined in the Commission's Third Generation Watershed Management Plan. Those standards include:
 - a. Maintain the current flood profile of the creeks and their tributaries.
- **b.** Maintain the post-development 2-year, 10-year, and 100-year peak rate of runoff at pre-development level for the critical duration precipitation event.
- c. Maintain the post-development annual runoff volume at pre-development volume.
 - d. Prevent the loss of floodplain storage below the established 100-year elevation.

The Commission reviewed eighteen plans for conformance with its standards in 2018. Twelve of the projects reviewed were in the city of Greenfield, four in Independence, and one each in Loretto and Medina. (Appendix 3)

2. Continue to serve as the local government unit (LGU) for administering the Wetland Conservation Act (WCA) for the cities of Greenfield, Loretto and Maple Plain. Preserve the existing functions and values of wetlands within the watershed. Promote enhancement or restoration of wetlands in the watershed.

In 2018 the Commission's technical staff assisted approximately 35 landowners/ agency/developer contacts with wetland-related questions. On behalf of the Commission they reviewed the following types of wetland applications: eight wetland boundary/type; three no-loss, exemptions, three sequencing, and two wetland replacement plans. Wetland impacts totaled 14,301 SF; wetland replacement totaled 28,602 SF. Two WCA violations were investigated and resolved. The Commission was involved in five Technical Evaluation Panels (TEPs) throughout the watershed. The Commission does not have a wetland banking program.

- Adopt a 2019 operating budget.
 - a. Search for grant and other funds to supplement the regular budget.

Supported the Lake Sarah Improvement Association's application for a Hennepin County AIS Prevention grant for its innovative approach to AIS education and raising personal accountability for the prevention of the spreading of AIS. See Section D. below for more information regarding grant-funded projects.

b. Operate a capital improvement program and share in the cost of projects.

On June 21, 2018 the Commission approved an operating budget totaling \$134,070, with a total assessment to the membership of \$128,000, a zero increase over 2018. The 2017 audit showed a carry-over of \$74,464 to help fund future CIPs.

4. Conduct a Level II Review and Assessment of the Commission's Progress toward its Third Generation Plan Objectives as part of the Board of Water and Soil Resources (BWSR) Performance Review and Assistance Program (PRAP).

In the summer of 2018, the Commission underwent a BWSR Level II Performance Review. The review contained three specific recommendations to enhance the Commission's service and its delivery of effective water and related land resource management. Briefly, they are:

- a. Develop and implement a training plan for board members. This training will resume in 2019.
- b. Make water quality data and trends easily accessible to the public. The website will be updated to make information about water quality trends in area lakes available in-easy-to-understand and accessible formats. Future annual reports will also contain information on water quality trends.
- c. Evaluate progress for the implementation of plan actions at a minimum of every two years. BWSR noted that the goals in the Commission's current water management plan are related to resource outcomes. However, efforts to measure the effects of projects on those resources are not apparent. The Commission should evaluate progress at a minimum of every two years as required in rule, make sure to measure outcomes, not just outputs, and report on progress toward achieving resource improvement. Future Work Plans will endeavor to fulfill this recommendation.
- **5.** Publish a 2017 Annual Activity Report summarizing the Commission's yearly activities and financial reporting.

The 2017 Annual Activity Report was approved by the Commission at their April 19, 2018 meeting and submitted to BWSR by the April 30 statutory deadline.

6. Draft a 2018 Work Plan.

The Commission's 2018 Work Plan was also approved at the Commission's April 19, 2018 meeting.

B. WATER QUALITY AND QUANTITY

 Support the Commission's management goals for water quality. Continue to make progress to improve the lakes and streams in the watershed as well as protect those that are not impaired.

The MPCA notified the Commission that Lake Rebecca was delisted from the impaired water's list for excessive nutrients in 2018.

- a. Improve water clarity in the impaired waters by 10% over the average of the previous ten years by 2023.
- **b.** Maintain or improve water quality in the lakes and streams with no identified impairments.

No waters in the Pioneer-Sarah Creek watershed were added to the impaired waters list in 2018.

2. Foster implementation of BMPs in the watershed through technical and financial assistance.

Utilized the auspices of the University of Minnesota's agriculture specialist and Hennepin County's Rural Conservationist to promote, educate, and facilitate best management practices to target audiences such as owners of small animal operations and lakeshore residents. Sought grants such as the Hennepin County Good Steward and Opportunity Grants to assist recipients with the costs of installing implementation practices.

Although the Commission regulates new development projects submitted by the member communities, city, county and commission staff received numerous calls and enquiries throughout the year where water quality and habitat restoration improvement assistance are requested. Most are followed through by the landowner, but not quantified or recorded by the staff. BMPs anywhere from a simple pollinator-friendly garden to an extensive manure/pasture management system for 2 or 3 horses, are undertaken with minimal assistance from staff and without a final determination of the water quality benefits derived from them.

- 3. Operate a monitoring program sufficient to characterize water quantity and quality and biotic integrity in the watershed and evaluate progress toward TMDL goals. Partner with Three Rivers Park District (TRPD) to conduct water quality monitoring in the watershed. Bring stream and lake monitoring efforts into line with the monitoring program outlined in the Third Generation Watershed Plan.
- a. Partner with Three Rivers Park District (TRPD) to conduct bi-weekly water quality monitoring of "sentinel lakes" Independence, Sarah, and Little Long, along with both basins of Whaletail.

These five lakes were monitored in 2018. They are all classified as "deep" lakes with the exception of Whaletail North, which is classified as a "shallow" lake. The water quality parameters that were collected at the surface for all of the lakes included total phosphorus, soluble reactive phosphorus, total nitrogen and chlor-

ophyll-a. Samples were also collected at the top of the hypolimnion and 1-m from the bottom for analysis of total phosphorus and soluble reactive phosphorus for those lakes classified as "deep" lakes. Results of the monitoring program are cited on "Lake Report Cards," included in Appendix 4 and posted on the Commission's website.

b. Partner with Three Rivers Park District (TRPD) to conduct flow and water quality monitoring on Pioneer Creek at Copeland Road and Sarah Creek at County Road 92, along with possible water quality and flow monitoring at up to two additional sites.

The stream sites monitored for continuous flow in 2018 were Sarah Creek at Highway 92, Pioneer Creek at Pagenkopf, and Pioneer Creek at Copeland. No water quality data was collected at these sites. However, two sites were monitored for continuous flow and water quality on a stream that flows into Lake Rebecca. These sites were located on a stream (designated as Rebecca North) that outlets on the east side of Lake Rebecca. There was one sampling site located at the channel inlet as water enters Lake Rebecca Park Reserve and another where water flows through an outlet prior to entering Lake Rebecca. These sites were intended to determine the amount of nutrient loading attributed to the watershed outside of Lake Rebecca Park Reserve and the amount of total nutrient loading entering Lake Rebecca through the channel. It was assumed that the difference between the two monitoring sites were representative of the nutrient loading attributed to the Lake Rebecca Park Reserve. (Appendix 5)

c. Participate in Metropolitan Council's Citizen Assisted Monitoring Program (CAMP). The Commission budgeted funds to monitor one lake in 2018.

Hafften Lake was monitored through the CAMP program in 2018. The 2018 CAMP report will be available in spring 2019 at https://metrocouncil.org/Wastewater-Water/Services/Water-Quality-Management/Lake-Monitoring-Analysis.aspx

d. *** A survey/study was conducted on Lake Independence to estimate the carp biomass/abundance relative to the threshold biomass that may cause ecological damage, and determine major spawning/migration routes of carp from Lake Independence into adjacent lakes. Lake Independence carp biomass and abundance was estimated using mark-recapture catch per unit effort data from boat electrofishing surveys. Carp captured from the boat electrofishing surveys were implanted with passive integrated transponder (PIT) tags and released to monitor their movement. PIT antenna data logger stations were installed at all major inlets and outlets for Lake Independence to detect the passage/movement of PIT-tagged carp. Lakes that have excessive carp biomass and abundance above the ecological threshold of 100 kg/ha can have degraded water quality and negative impacts on the submersed aquatic plant community.

C. EDUCATION

1. Annually evaluate the proposed Education and Outreach program and establish

education and outreach activities for the coming year, including goals and strategies identified in the WRAPS STUDY. These latter activities could be identified through a collaboration of the Technical Advisory Committee TAC) and the Citizen Advisory Committee (CAC). A number of implementation strategies are identified in the Commission's Education and Outreach Plan found in Appendix E of the Third Generation Management Plan.

This evaluation did not occur in 2018. The Commission does, at its regular monthly meetings, welcome and encourage citizens to speak to issues, concerns and other interests during the Open Forum portion of the meeting. The Commission values this input and responds as appropriate.

2. Educate Commissioners, member City Councils and Planning Commissions about watershed and water resources management. Sponsor watershed and water resources training opportunities such as NEMO (Nonpoint Education for Municipal Officials).

NEMO activities were not scheduled in 2018. The Commission will continue to be involved in NEMO whenever programs and activities become available.

3. Become a member of WaterShed Partners, a coalition of more than 70 public, private and nonprofit organizations in the Twin Cities Metro area promoting public understanding that inspires people to act to protect water in their watershed through educational projects, networking, and resource sharing.

The Commission became a member of WaterShed Partners in 2018. Administrative Staff regularly attends their meetings and brings forward information to the Commission regarding their activities and educational projects. Resources are shared on the Commission's website and on their Facebook page.

4. Convene Citizen Advisory Committee (CAC) as necessary to make recommendations on education and outreach actions and assist the Commission with implementation.

The CAC was not convened in 2018.

5. Participate with collaborative groups to pool resources to undertake activities in a cost-effective manner, promote interagency cooperation and collaboration, and promote consistency of messages. Use the Commission's, member cities', and educational partners' websites and newsletters, social media, co-ops, local newspapers and cable TV to disseminate educational materials to all stakeholders about actions they can take to protect and improve water quality.

The WaterShed Partner website, http://cleanwatermn.org/about-us/, describes opportunities to protect the environment - Clean up dog poop, Adopt-a-Drain, Autumn raingarden maintenance tips, Tips to protect local waterways from runoff pollution, Organic lawn care, Salt tip card, Green up your lawn not lakes and rivers, and many more.

6. Continue to maintain the Commission's website to provide news to residents of the watershed. Maintain the Commission Facebook page.

In 2018 <u>www.pioneersarahcreek.org</u> had 1200 users for 1600 sessions. In the first month of 2019 those numbers were 130 and 151, respectively. In the final month

of 2018, the Facebook page posted 18 likes, 68 reaches and 16 engagements.

- **7.** Provide opportunities for the public to learn about and participate in water quality activities. Enhance education opportunities for youth. Provide opportunities for bridge-building between stakeholders.
- a. Promote river stewardship through the River Watch program. Encourage participation by local school students and their teachers. Funding for monitoring one site was included in the 2018 budget.

No sites were monitored as part of the River Watch program in 2018. However, three sites were included in WHEP (the Wetland Health Evaluation Program). They were PS-1, the Loretto Treatment Pond downstream from the new Loretto wastewater treatment facility; PS-2, the Selstad wetland that feeds into Lake Independence; and PS-8, the Dance Hall Creek wetland located at the end of the creek just before it flows into Lake Sarah. (Appendix 6)

For more information about the RiverWatch and WHEP programs, contact Mary Karius, Hennepin County Environment and Energy, Mary.Karius@hennepin.us.

b. Work with Boy Scouts for conservation hours, dependent on appropriate environmental projects being identified.

This task was not pursued due to risk and safety issues.

c. 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 encourage TMDL implementation.

As an example, one project provided assistance to a landowner in creating a horse manure composting system that makes manure handling more convenient and less time consuming. This manure storage and composting facility conserves valuable fertility for their pasture and hay fields and prevents those nutrients from leaching to groundwater and running off to the adjacent creek.

d. Working in partnership with the Hennepin County Rural Conservationist, continue to work with landowners, writing county cost-share grants to help owners become compliant with the MN Buffer Law.

The deadline for compliance passed in late 2017. Land owners who did not respond to the County or did not get their property into compliance were referred to BWSR for enforcement. The MN Buffer Law requires Staff to check each parcel in the County at least once every three years and spot check up to 15% of parcels. Hennepin County has opted to section the County into thirds and check 1/3 each year. Those residents chosen for a spot check will be notified by letter.

In 2019, review and inspections will take place in the Pioneer-Sarah Creek watershed in the cities of Independence, Greenfield, Loretto, Maple Plain, Medina, and parts of Minnetrista.

D. STUDIES, PROJECTS AND CIPS.

1. Continue to support member cities as they identify studies and projects which benefit both the cities and the watershed.

Submitted FY20-21 Biennial Budget Request (BBR) to the Board of Water and Soil Resources. Among projects identified on the BBR are carp population control chain of lakes; feedlot BMPs; Dancehall Creek SWA-identified implementation projects; SWAs for Hafften, Schendel, Schwauppauff Lakes drainage basin; Tomahawk Trail wetland external load reduction; Ardmore neighborhood projects; and Lake Independence alum treatment.

2. Continue to identify Watershed-wide TMDL implementation projects. Seek grant funding to assist with the costs associated with those projects.

Sought grant funding assistance for the Baker Park Reserve Campground Ravine Stabilization project. Received funding in the amount of \$416,000 through a BWSR Clean Water Fund grant and \$59,500 through the Hennepin County Natural Resources Opportunity Grant program. Local partners (the cities of Independence and Medina, Three Rivers Park District, and the Lake Independence Citizens Association [LICA]) are providing \$34,000. The Commission's share of this \$520,000 project is \$10,500.

3. Prioritize BMPs identified in the Dance Hall Creek Subwatershed Retrofit Assessment for implementation or further study.

In 2016 the City of Greenfield sent letters to the Dance Hall Creek landowners requesting their cooperation in beginning the implementation phase of the SWA. While no responses were forthcoming, the City and the Commission continue to make personal contacts to further this process.

4. Cost-share with the Lake Sarah Improvement Association (LSIA) to complete a round of curly-leaf pondweed (CLPW) treatment in 2018.

In 2018 the Commission entered into a joint powers agreement with the Three Rivers Park District to complete curly-leaf pondweed turion surveys, annual aquatic plant surveys and annual water quality monitoring to determine the effectiveness of the CLPW control program to reduce phosphorus loading to the lake. The parties will coordinate with LSIA to develop and implement a CLPW control strategy per the Lake Sarah TMDL Implementation Plan. The Commission's cost-share is 25%, not to exceed \$8,000 annually.

- 5. *** Enter into Joint Powers Agreement with the cities of Independence and Medina, and the Three Rivers Park District to facilitate the improvement of Lake Independence through the implementation of Phase I of the Baker Park Campground Ravine Stabilization project.
- **6.** Convene the Technical Advisory Committee (TAC) for the purpose of receiving CIP applications from the member communities, reviewing them for validity, and recommendation to the Commission for incorporation on the Third Generation Plan CIP.

Additions, revisions and deletions were made to the Commission's Capital Improvement Program at the TAC's April and May meetings. The TAC's recommendations were approved by the Commission at their May meeting.

- a. Update CIP in anticipation of the PRAP.
- **b.** Seek grant funding to assist with the costs associated with projects identified on the Commission's CIP.

Applied for, and received BWSR Competitive Grant funding in the amount of \$416,00 for the Baker Park Reserve Campground Ravine Stabilization project.

c. Prioritize capital projects in anticipation of funding during the initial round of the Watershed-based Funding Pilot Project.

The Commission identified three projects recommended in the Lake Ardmore Subwatershed Assessment for funding by the BWSR Watershed-based Funding Pilot Project. Those projects were 1) Project SS1, Stream Stabilization - stabilize 70 feet of stream bank in channel between Lakes Ardmore and Independence; 2) Project SR1, Shoreline Restoration - stabilize 160 feet of shoreline at boat launch; and 3) Project PD3, Pond Excavation - enlarge existing stormwater pond to provide additional treatment for urban runoff. Total cost of these projects is \$74,062.00. Grant funding under the pilot project totals \$58,317.

E. PLANNING

1. When requested, assist member cities to develop their local water plans. Review plans for compliance with the Third Generation Plan. Revisions to Minnesota Rules 8410 state that all cities and towns in the seven-county metropolitan area must complete and adopt their local water plans between January 1, 2017 and December 31, 2018.

At year-end the local plans from the cities of Loretto, Medina and Minnetrista had been approved and the plans from Greenfield, Independence and Maple Plain were under review by Commission Staff.

2. Budget for the expense of writing the Fourth Generation Plan, due in 2020. Development should begin in late 2018.

The 2017 Audit includes \$25,000 set aside for next generation plan expense.

FINANCIAL REPORTING

Appendix 7 includes the Commission's approved budget for 2018. The Commission's Joint Powers Agreement provides that each member community contributes toward the annual operating budget based on its share of the total market value of all property within the watershed. The 2018 assessments to the members are also found in *Appendix 7*.

A \$133,770 operating budget was approved by the Commission for 2018. \$5,500 was projected as proceeds from application fees, \$270 from interest income, and \$128,000 as assessments to members.

The Pioneer-Sarah Creek Watershed Management Commission maintains a checking account at US Bank for current expenses and rolls uncommitted monies to its account in the 4M Fund, the Minnesota Municipal Money Market Fund.

An amendment of Minnesota Rules, Chapter 8410 became effective on July 13, 2015. One of the revisions to the Rules extends the annual audit due date to 180 days after the end of the fiscal year, in the case of the Pioneer-Sarah Creek Commission, to June 30, 2019. The 2018 Audit Report, which is being prepared by Johnson & Company, Ltd., Certified Public Accountants, will be included in the Commission's 2019 Annual Activity Report. Since the 2017 Audit was included in the 2017 Annual Activity Report, no audit report will be included in this report.

The Commission follows Rule 54 of the Government Accounting Standard Board (GASB) to report Fund Balances. The fund balance classifications include:

- Nonspendable amounts that are not in a spendable form. The Commission does not have any items that fit this category.
- ≡ Restricted amounts constrained to specific purposes by their providers. One example would be ad valorem levy funds received from the County for capital improvement projects. The unused portion of these funds must be set aside in a restricted account for similar projects. Another example would be BWSR Legacy Grant proceeds where the funds are received prior to the onset of a project and where any unused portion must be returned to the grantor.
- ≡ Committed amounts constrained to specific purposes by the Commission itself. An example would be residual funds carried over from one year to the next for Studies, Project Identification and Subwatershed Assessments.
- ≡ Assigned amounts the Commission intends to use for specific purposes. Most line items in the Commission's Operating Budget fall under this category.
- ≡ Unassigned amounts that are available for any purpose. These amounts are reported only in the general fund.

Amounts paid by the Commission per the 2018 Audit will be categorized as General Engineering, General Administration, Education, Programs, Projects, or Capital Projects.

2019 PROJECTED WORK PLAN

Following is the projected work plan for 2019 as approved by the Commission at its April 18, 2019 meeting.

A. ONGOING TECHNICAL AND ADMINISTRATIVE PROGRAMS

- 1. Continue to review local development/redevelopment plans for conformance with the standards outlined in the Commission's Third Generation Watershed Management Plan.
 - Maintain the current flood profile of the creeks and their tributaries.
- **b.** Maintain the post-development 2-year, 10-year, and 100-year peak rate of runoff at pre-development level for the critical duration precipitation event.
- c. Maintain the post-development annual runoff volume at pre-development volume.

- d. Prevent the loss of floodplain storage below the established 100-year elevation.
- Discontinue serving as the local government unit (LGU) for administering the
 Wetland Conservation Act (WCA) for the member cities effective January 1, 2020.
 - 3. Adopt a 2020 operating budget.
 - a. Search for grant and other funds to supplement the regular budget.
 - b. Fund a capital improvement program to share in the cost of projects.
- **c.** Budget for the expense of undertaking a Major Plan Amendment to extend the term of the Third Generation Plan.
- 4. Continue to respond to recommendations included in the Board of Water and Soil Resources 2018 Level II Review and Assessment of the Commission's Progress toward its Third Generation Plan Objectives report.
- a. Develop and implement a training plan for board members. The Commissioner handbook will be updated and training will resume in 2019.
 - b. Make water quality data and trends easily accessible to the public.
- c. Evaluate progress for the implementation of plan actions at a minimum of every two years, making sure to measure outcomes, not just outputs. Report on progress toward achieving resource improvement.
- 5. Conduct the biennial solicitation of interest proposals for administrative, legal, technical and wetland consultants.
- **6.** Publish a 2018 Annual Activity Report summarizing the Commission's yearly activities and financial reporting.
 - 7. Draft a 2019 Work Plan.

B. WATER QUALITY AND QUANTITY

- 1. Support the Commission's management goals for water quality. Continue to make progress to improve the lakes and streams in the watershed as well as protect those that are not impaired.
- a. Improve water clarity in the impaired waters by 10% over the average of the previous ten years by 2023.
- **b.** Maintain or improve water quality in the lakes and streams with no identified impairments.
- **2.** Foster implementation of BMPs in the watershed through technical and financial assistance.
- a. Utilize the services of the University of Minnesota's agriculture specialist and Hennepin County's Rural Conservationist to promote, educate, and facilitate best management practices to target audiences.

- **b.** Identify projects eligible for the Hennepin County Natural Resources Grant program.
- 3. Operate a monitoring program sufficient to characterize water quantity and quality and biotic integrity in the watershed and evaluate progress toward TMDL goals. Partner with Three Rivers Park District (TRPD) to conduct water quality monitoring in the watershed. Bring stream and lake monitoring efforts into line with monitoring program outlined in the Third Generation Watershed Plan.
- a. Partner with TRPD to conduct bi-weekly water quality monitoring of "sentinel lakes" Independence, Sarah, and Little Long, along with both basins of Whaletail.
- **b.** Partner with the Park District to conduct flow and water quality monitoring at selected sites on Pioneer Creek and Sarah Creek, along with possible water quality and flow monitoring at up to two additional sites.
- c. Participate in Metropolitan Council's Citizen Assisted Monitoring Program (CAMP). The Commission has budgeted funds to monitor one lake in 2019.
- **4.** Support watershed residents and organizations as issues arise, providing general, technical, and financial assistance where appropriate.

C. EDUCATION

- 1. Annually evaluate the proposed Education and Outreach program and establish education and outreach activities for the coming year, including goals and strategies identified in the WRAPS study. These later activities could be identified through a collaboration of the Technical Advisory Committee TAC) and the Citizen Advisory Committee (CAC). A number of implementation strategies are identified in the Commission's Education and Outreach Plan found in Appendix E of the Third Generation Management Plan.
- a. Activate a CAC to begin this process, which is noted as one of the Commission's high priorities in its Management Plan.
- **b.** Convene the CAC as necessary, at least once annually, to make recommendations on education and outreach actions and assist the Commission with implementation.
- 2. Educate Commissioners, member City Councils and Planning Commissions about watershed and water resources management. Sponsor watershed and water resources training opportunities such as NEMO (Nonpoint Education for Municipal Officials).
- 3. Continue membership in WaterShed Partners, a coalition of more than 70 public, private and nonprofit organizations in the Twin Cities Metro area promoting public understanding that inspires people to act to protect water in their watershed through educational projects, networking, and resource sharing. Take a more active role in its activities.
- 4. Participate with collaborative groups to pool resources to undertake activities in a cost-effective manner, promote interagency cooperation and collaboration, and promote consistency of messages. Use the Commission's, member cities', and educational partners' websites

and newsletters, social media, co-ops, local newspapers and cable TV to disseminate education materials to all stakeholders about actions they can take to protect and improve water quality.

- 5. Continue to maintain the Commission's website and Facebook page to provide news to residents of the watershed.
- **6.** Provide opportunities for the public to learn about and participate in water quality activities. Enhance education opportunities for youth. Provide opportunities for bridge-building between stakeholders.
- a. Promote river stewardship through the River Watch program. Encourage participation by local school students and their teachers. Funding for monitoring one site is included in the 2018 budget.
- **b.** Work in partnership with Hennepin County's Agriculture Specialist to help build relationships with the agricultural community in the watershed in order to encourage TMDL implementation.
- c. Working in partnership with the Hennepin County Rural Conservationist, continue to work with landowners, writing county cost-share grants to help owners become compliant with the MN Buffer Law.

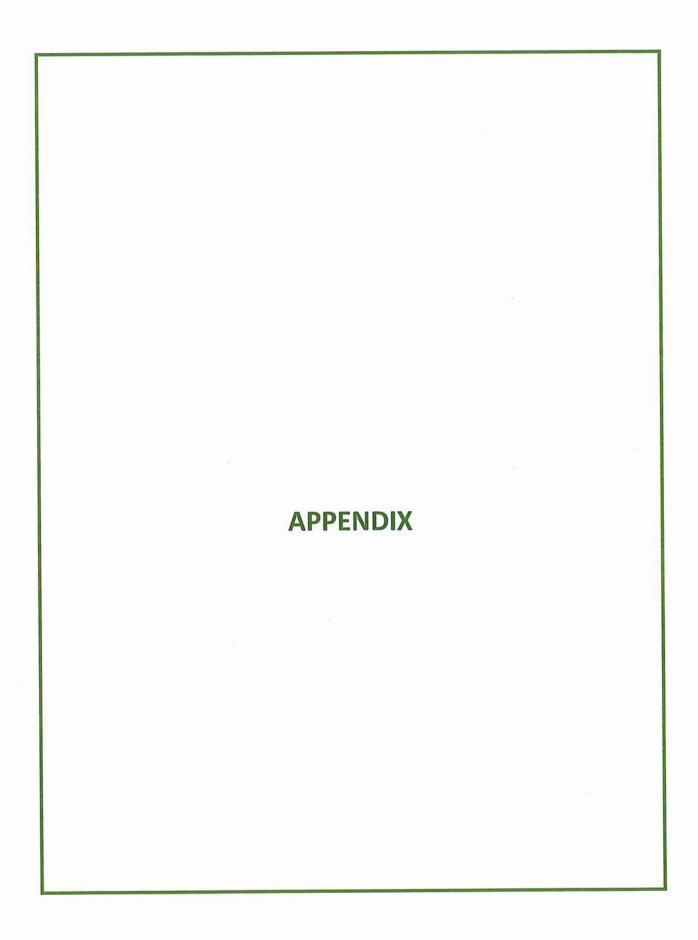
D. STUDIES, PROJECTS AND CIPS.

- 1. Continue to support member cities as they identify studies and projects which benefit both the cities and the watershed.
 - 2. Continue to identify Watershed-wide TMDL implementation projects.
- 3. Prioritize BMPs identified in the Dance Hall Creek Subwatershed Retrofit Assessment for implementation or further study. Continue to network with landowners to gain impetus toward completion of projects.
- 4. Under a joint powers agreement with the Three Rivers Park District, complete Curly-leaf Pondweed turion surveys in Lake Sarah during a five-year control program, complete annual aquatic plant surveys in Lake Sarah to monitor the response of native macrophytes to the CLP control program, and complete annual water quality monitoring to determine the effectiveness of the CLPW control program in reducing phosphorus loading to the lake.
- 5. Convene the Technical Advisory Committee (TAC) for the purpose of receiving CIP applications from the member communities, reviewing them for validity, and recommendation to the Commission for incorporation on the Third Generation Plan CIP.
- a. Prioritize capital projects in anticipation of funding during the next round of the Watershed-based Funding Project.

E. PLANNING

1. 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.

This process will be completed with the review of Maple Plain's local plan in 2019.
 Budget for the expense of writing the Fourth Generation Plan, due in 2020, if a Major Plan Amendment to the Third Generation Plan is not approved by BWSR.



Member

Greenfield

Independence

Loretto

201	.8 Commissioners	
Represented by Tom Cook 7738 Commerce Circle Greenfield, MN 55373	Responsibility Treasurer Excomm	Phone/E-mail 763.477.4263 tomdebcook@msn.com
Joe Baker 5580 Lake Sarah Heights Drive Independence, MN 55357	Chair Excomm	612.868.8702 joebaker149@gmail.com
Brenda Daniels 150 Meadow Drive Loretto, MN 55357	Secretary Excomm	brenda199962@yahoo.com
John Fay 5819 Three Oaks Avenue Maple Plain, MN 55359	Vice Chair Excomm	763.213.3271 jarrfay@mchsi.com

Medina

Maple Plain

Mike McLaughlin 2887 Lakeshore

Avenue

Maple Plain, MN 55359

612.819.1655

mclaughlin110@gmail.com

Minnetrista

John Tschumperlin 7575 Susan Lane Mound, MN 55364 612.791.1114

jtschumperlin@ci.minnetrista.mn.us

	3	2018 Consultants	
Member James Kujawa Kirsten Barta	Represented by Hennepin County Dept. of Environment and Energy 701 Fourth Ave S, Suite 700 Minneapolis, MN 55415	Responsibility Professional TAC Professional TAC	Phone/E-mail 612.348.7338 james.kujawa@hennepin.us
Karl Hakanson	Hennepin County Extension Educator - Agriculture Urban Research & Outreach- Engagement Ctr 2001 Plymouth Avenue North Minneapolis, MN 55411	Professional TAC Professional TAC	612.624.7948
Brian Vlach	Three Rivers Park District 12615 County Road 9 Plymouth, MN 55441	Professional TAC	763-694-7846 Brian.Vlach@ThreeRiversParks.org
Ed Matthiesen	Wenck Associates 7500 Highway 55 Suite 300 Golden Valley, MN 55427	Professional TAC	763.252.6851 ematthiesen@wenck.com
Judie Anderson Amy Juntunen	JASS 3235 Fernbrook Lane Plymouth, MN 55447	Professional TAC Admin Support	763.553.1144 judie@jass.biz amy@jass.biz

		2018 Consultants	
Member	Represented by	Responsibility	Phone/E-mail
James Kujawa	Hennepin County Dept. of	Technical Advisor	612.348.7338
sarca s	Env. and Energy	TAC	James.Kujawa@hennpin.us
	701 Fourth Ave S, Suite 700		
Kirsten Barta	Minneapolis, MN 55415	Rural Conservation	612.543.3373
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		Specialist	Kirsten.barta@hennepin.us
Judie Anderson	JASS	Administrator	763.553.1144
	3235 Fernbrook Lane	Deputy Treasurer	judie@jass.biz
Amy Juntunen	Plymouth, MN 55447	Excomm, TAC	amy@jass.biz
Joel Jamnik	Campbell Knutson PA Grand Oak Office	Legal Counsel	651.234.6219
	Center I 860 Blue Gentian Road Suite 290		jjamnik@ck-law.com
	Eagan, MN 55121		
2.3	Three Rivers Park		762 604 7046
Brian Vlach	District	Water Quality	763.694.7846 Bvlach@threeriversparkdistrict.org
	12615 County Road 9 Plymouth, MN 55441	TAC	BVIACTI@ till een versparkuistrict.org
Johnson & Co., Ltd.	3255 Fernbrook Lane	Auditor	952.525.9500
	Plymouth, MN 55447		
Unnamed		Wetland monitoring	

Local Water Management Plan Requirements

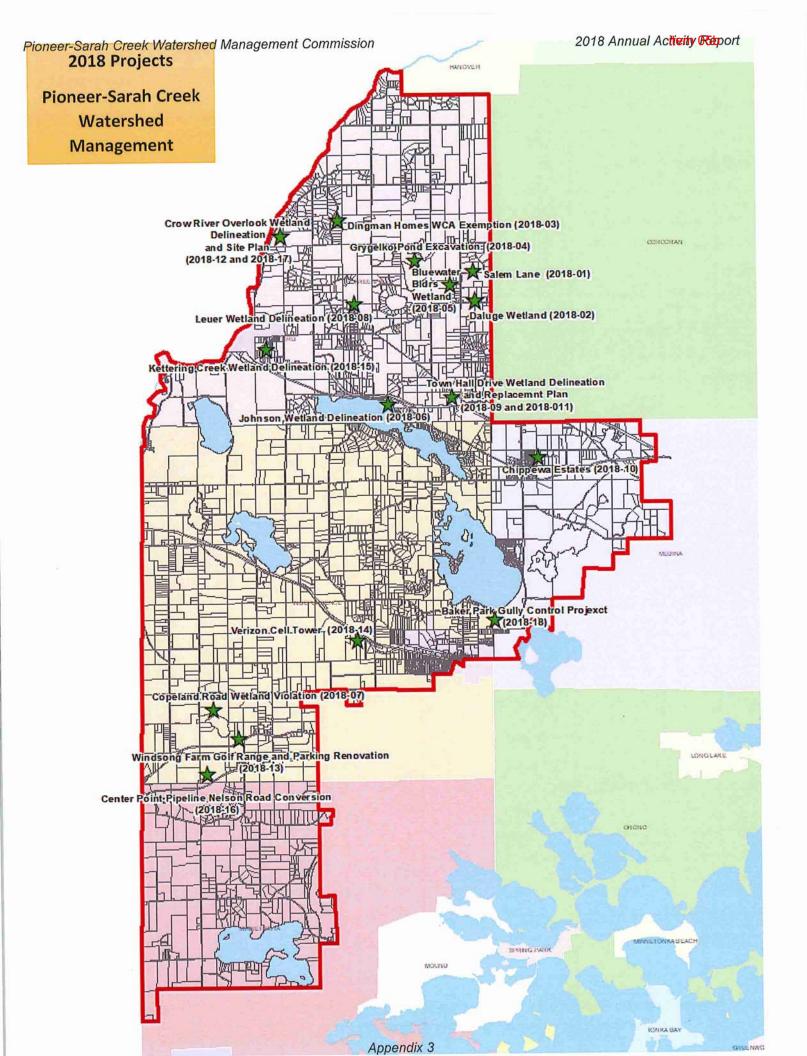
Local water management plans adopted by member cities pursuant to Minnesota Statutes, Section 103B.235 shall be consistent with the Commission's Third Generation Watershed Management Plan. Local plans must comply with MN Statutes, Section 103B.235 and MN Rules 8410 regarding local plan content.

- Update the existing and proposed physical environment and land use. Information from
 previous plans that has not changed may be referenced and summarized but does not have
 to be repeated. Local plans may adopt sections of the Commission's Plan's Inventory and
 Condition Assessment by reference unless the city has more recent information, such as
 revised figures and data.
- Explain how the goals and policies, and rules and standards in the Commission's Plan will be implemented at the local level, including any necessary modifications of local ordinances, policies, and practices and specifically addressing adoption and enforcement of a manure management ordinance.
- Show how the member city will take action to achieve the load reductions and other actions identified in and agreed to in TMDL Implementation Plans and the WRAPS study, including identifying known upcoming projects including street or highway reconstruction projects that will provide opportunities to include load and volume reduction BMPs.
- Show how the member city will, through an executed and recorded maintenance and inspection agreement, inspect or cause to be inspected and documented at least every five years privately owned permanent BMPs installed to meet the goals and policies and rules and standards of the Commission's Plan, and the actions the member city will take to assure that the BMPs are maintained and operated as designed.
- Update existing or potential water resource related problems and identify nonstructural, programmatic, and structural solutions, including those program elements detailed in MN Rules 8410.0100, Subp. 1-6.
- Summarize the estimated cost of implementation and analyze the member city's ability to finance the recommended actions.
- Set forth an implementation program including a description of adoption or amendment of
 official controls and local policies necessary to implement the Rules and Standards;
 programs; policies; and a capital improvement plan.

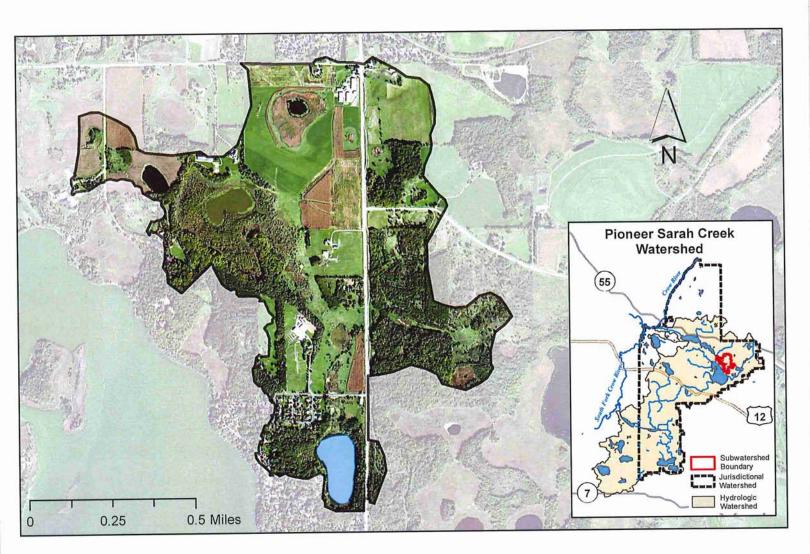
Pioneer-Sarah Creek Watershed Management Commission

2018 Project Reviews

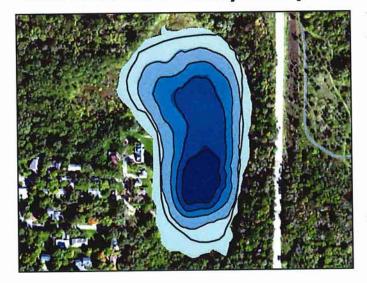
					Revie	Reviewed for		(pro	Rate Control (cfs) (pre- and post-development)	l (cfs) elopment)	Net Chang Control (pre- ar develo	Net Change Nutrient Control (lbs./yr) (pre- and post- development)		Net change	auge
Project No.	Project Name	CIFY	Rule D Stormwater	Rule E Erosion Control	Rule F Floodplain	Rule G Wetland Rule H Bridge/ Culvert	Griesering Gule i Buffers	2-yr Pre vs Post		10-yr 100-yr Pre vs Post		TP load #/yr TSS load #/yr Abstraction reduction (c.f.)	Abstraction (c.f.)	Filtration/bi ofiltration (c.f.)	Runoff Volume (af / yr)
2018-01	Salem Lane	Greenfield													
2018-02W	Warren DaLuge Wetland Violation	Greenfield				•									
2018-03W	8664 Whisper Creek Trail	Greenfield				•									
2018-04W	Grygelko Wetland Enhancement	Greenfield				•									
2018-05W	Bluewater Builders Wetland Delineation PID#2411924130004	Greenfield													
2018-06W	Johnson Wetland Delineation	Greenfield													
2018-07W	810 Copeland Road Violation	Independence													
2018-08W	Leuer Wetland Delineation	Greenfield													
2018-09W	Town Hall Drive Wetland Delineation	Greenfield													
2018-10	Chippewa Estates	Loretto	•	•				2.8/1.2	.2 4.8/2.0	9.1/5.7	0.4	106		2,210	
2018-11W	Hilary Driveway Access	Greenfield				•		-							
2018-12W	7770 Woodland Trail Wetland Delineation	Greenfield													
2018-13	Windsong Farm Golf Club Range, Parking Renovation	Independence	•					6.8/3.3	3.3 14.5/8.4	.4 27.8/20.9	9 4.2	944		6,972	
2018-14	VzW MIN MORIA	Independence		•											
2018-15W	Kettering Creek Wetland Delineation	Greenfield				•									
2018-16	Nelson Road Conversion	Independence		•		-	-		+	+	4				
2018-17	Crow River Overlook	Greenfield	•	•				0 14.0/4.0	4.0 29.7/15.3	.3 98.0/42.4	79.7	4,310	-		
		Medina	•		•	•		no change	nge no change	ge no change	134	289,222	no change		



Lake Ardmore Watershed Map



Lake Ardmore Bathymetry

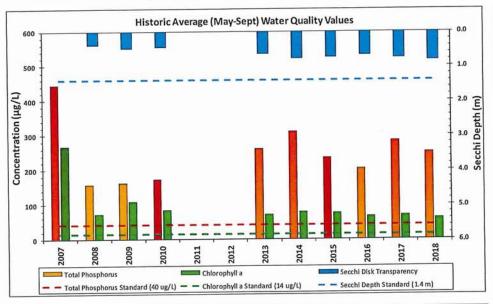


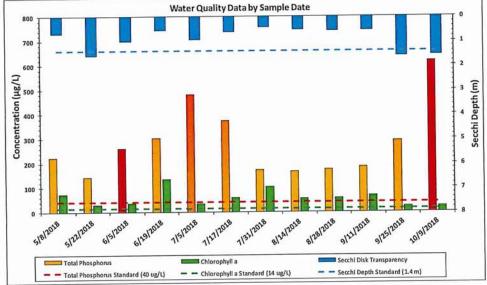
Lake and Watershed Characteristics

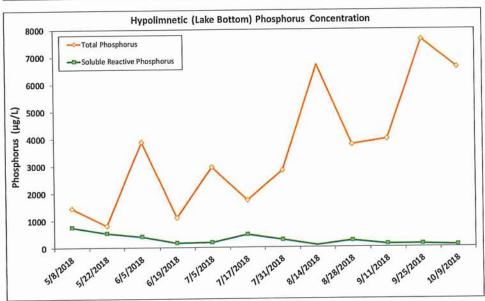
27015300 DNR# 514 Acres Watershed Area 13.5 Acres Lake Area 75% Percent Littoral Area 9.4 ft. Average Depth 24.4 ft. Maximum Depth 38:1 Watershed Area: Lake Area Needs Assessment Impairment Classification Deep Lake Classification

Water Resource Department Map Created: 11/24/2017 Revised Date: 12/4/2017







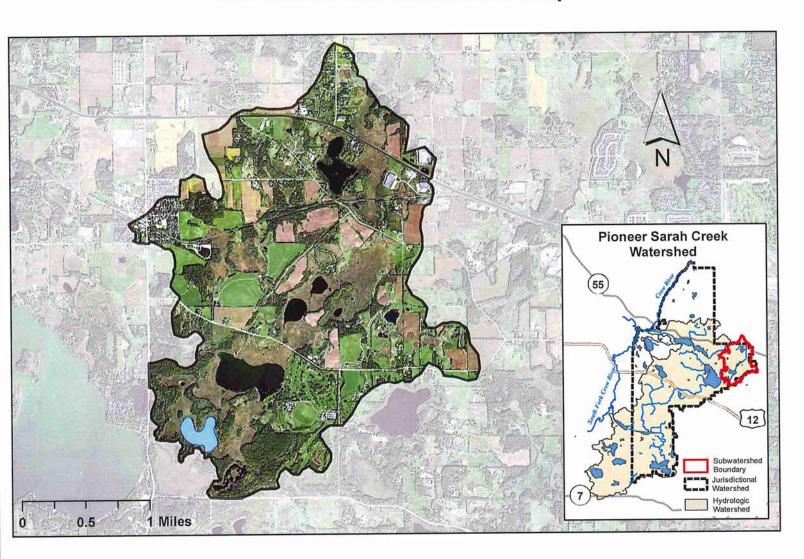


Year	TP	Chl- a	Secchi	Avg Grade
2007	F	F	F	F
2008	F	D	F	F
2009	F	F	F	F
2010	F	F	F	F
2011				
2012				
2013	F	D	E	F
2014	F	F	D	F
2015	F	D	D	D-
2016	F	D	F	F
2017	F	D	D	D-
2018	F	D	D	D-
MPCA Standard	С	В	С	C+

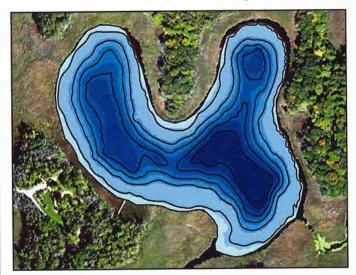
Met Council Grading System for Lake Water Quality



Half Moon Lake Watershed Map



Half Moon Lake Bathymetry

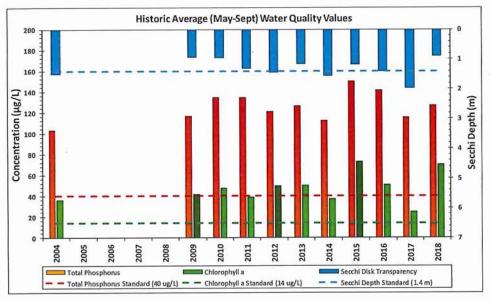


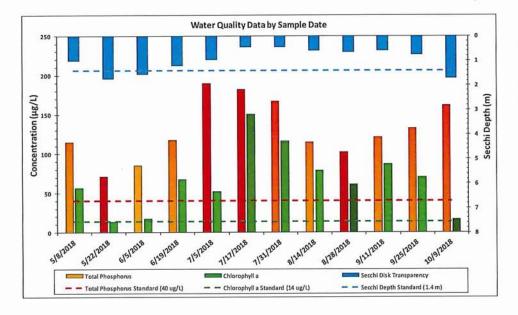
Lake and Watershed Characteristics

DNR #	27015200
Watershed Area	3,258 Acres
Lake Area	31.1 Acres
Percent Littoral Area	11%
Average Depth	13.4 ft.
Maximum Depth	30.3 ft.
Watershed Area:Lake Area	104.7:1
Impairment Classification	Proposed 2016
Classification	Deep Lake

Water Resource Department Map Created: 11/24/2017 Revised Date: 12/6/2017

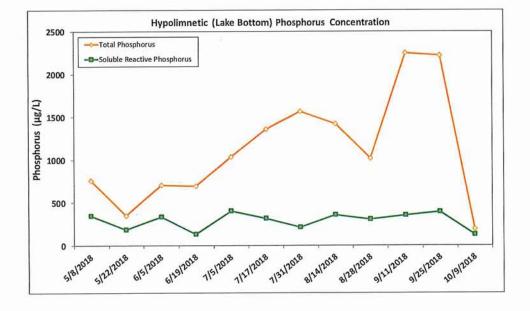






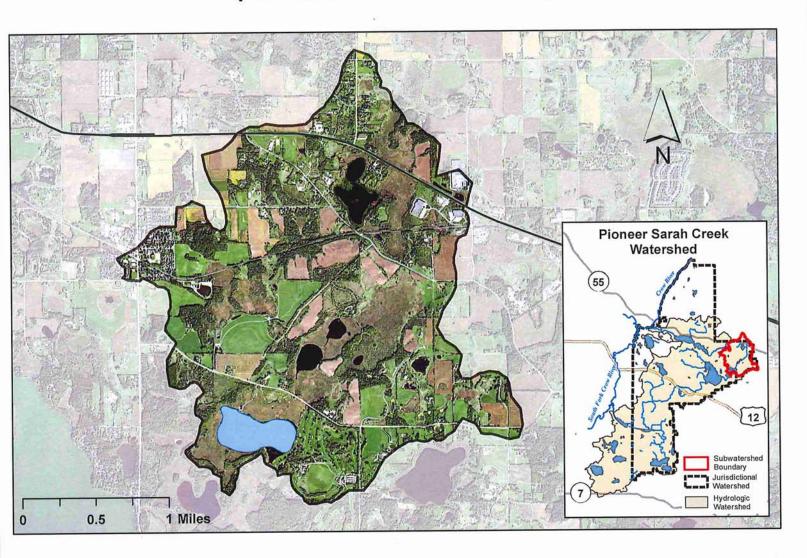
Half Moo	Half Moon Lake Water Quality Report Card						
Year	TP	Chl- a	Secchi	Avg Grade			
2004	D	С	С	C-			
2005							
2006							
2007							
2008							
2009	D	С	D	D+			
2010	D	С	D	D+			
2011	D	С	С	C-			
2012	D	D	С	D+			
2013	D	D	D	D			
2014	D	С	С	C-			
2015	D	D	D	D			
2016	D	D	С	D+			
2017	D	С	· C	C-			
2018	D	D	D	D			
MPCA Standard	С	В	С	C+			

Met Council Grading System for Lake Water Quality

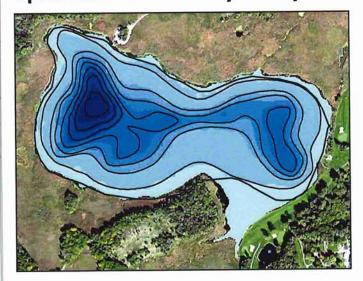




Spurzem Lake Watershed Map



Spurzem Lake Bathymetry

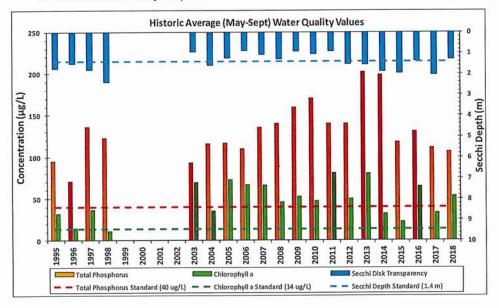


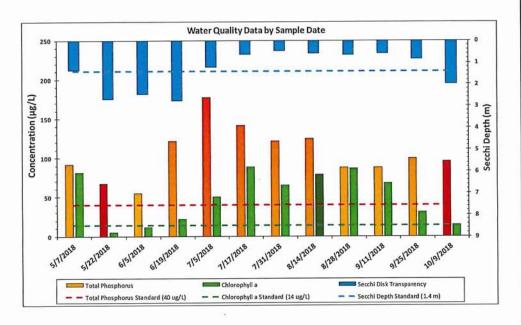
Lake and Watershed Characteristics

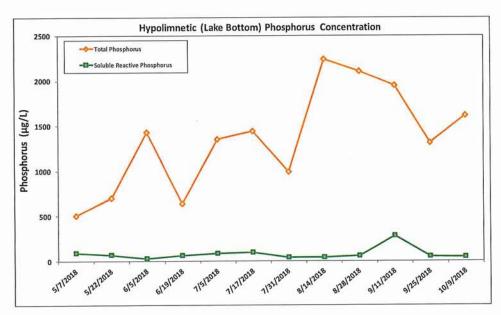
DNR#	27014900
Watershed Area	2,915 Acres
Lake Area	78.6 Acres
Percent Littoral Area	70%
Average Depth	11.1 ft.
Maximum Depth	37.4 ft.
Watershed Area:Lake Area	37.1:1
Impairment Classification	Excess Nutrients 2008
Classification	Deep Lake

Water Resource Department Map Created: 11/24/2017 Revised Date: 12/4/2017







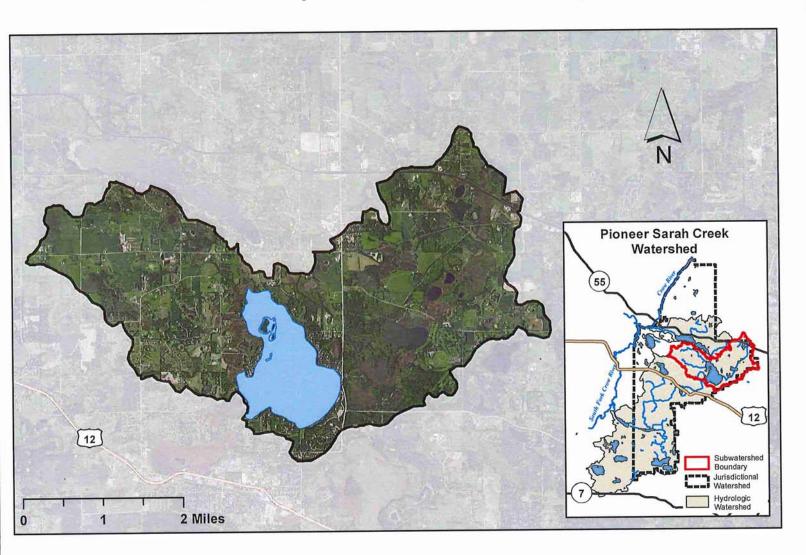


Spurzem Lake Water Quality					
	Re	port C	ard		
Year	TP	Chl -a	Secchi	Avg Grade	
1995	D	С	С	C-	
1996	D	В	С	С	
1997	D	С	С	C-	
1998	D	В	В	C+	
1999					
2000					
2001					
2002					
2003	D	D	D	D	
2004	D	С	С	C-	
2005	D	D	С	D+	
2006	D	D	D	D	
2007	D	D	D	D	
2008	D	С	С	C-	
2009	F	D	D	D-	
2010	F	С	D	D	
2011	D	F	D	D-	
2012	D	D	С	D+	
2013	F	F	С	D-	
2014	F	С	С	D+	
2015	D	С	С	C-	
2016	D	D	С	D+	
2017	D	С	С	C-	
2018	D	D	С	D+	
MPCA Standard	С	В	С	C+	

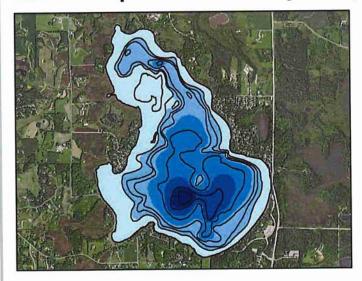
Met Council Grading System for Lake Water Quality



Lake Independence Watershed Map



Lake Independence Bathymetry

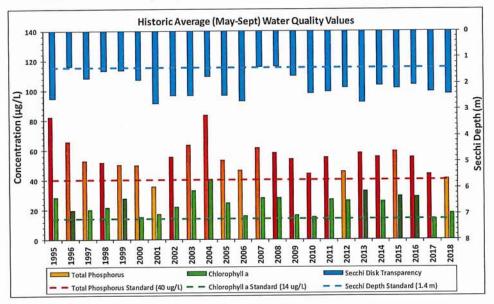


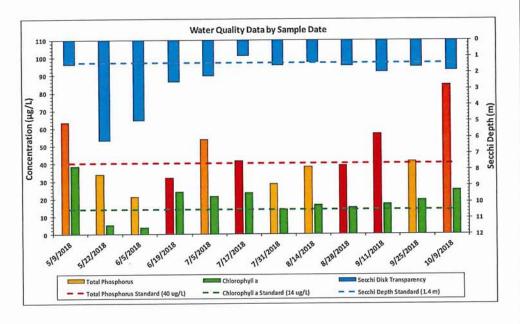
Lake and Watershed Characteristics

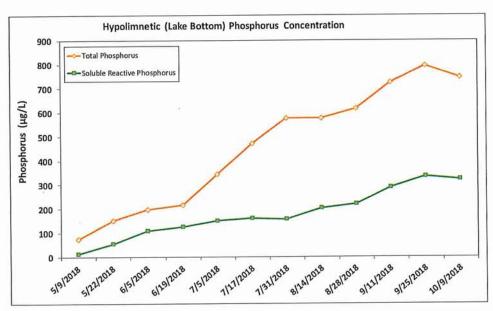
DNR #	27017600
Watershed Area	7,632 Acres
Lake Area	832 Acres
Percent Littoral Area	51%
Average Depth	15.9 ft.
Maximum Depth	58 ft.
Watershed Area:Lake Area	9.2:1
Impairment Classification	Excess Nutirents 2002
Classification	Deep Lake

Water Resource Department Map Created: 11/24/2017 Revised Date: 12/18/2018







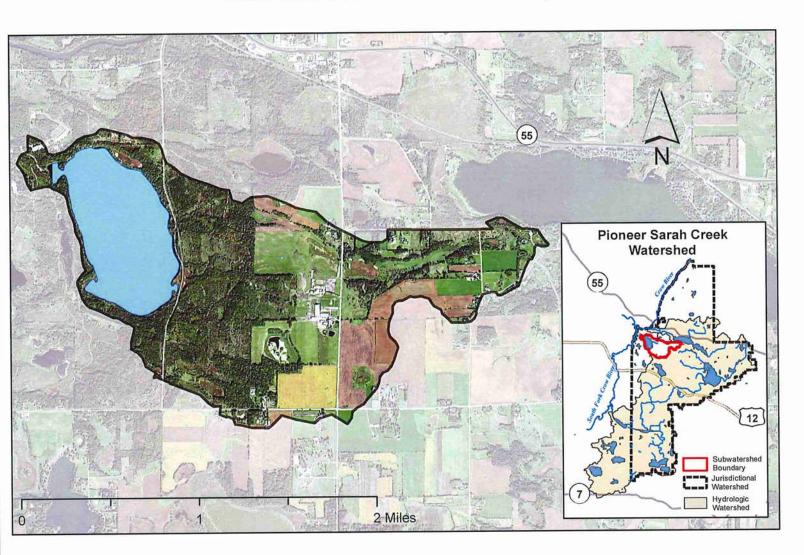


Lake Independence Water Quality Report Card					
Year	TP	Chl-	Secchi	Avg Grade	
1995	D	С	В	С	
1996	С	В	С	C+	
1997	С	В	С	C+	
1998	С	С	С	С	
1999	С	С	С	С	
2000	С	В	С	C+	
2001	С	В	В	B-	
2002	С	С	В	C+	
2003	С	С	В	C+	
2004	D	С	С	C-	
2005	С	С	В	C+	
2006	C C	В	В	B-	
2007	С	С	С	С	
2008	С	С	С	С	
2009	С	В	С	C+	
2010	С	В	В	B-	
2011	С	С	В	C+	
2012	С	С	С	С	
2013	C C C C C C C	С	В	C+	
2014	С	С	С	С	
2015	С	С	С	С	
2016	С	С	C	С	
2017	С	В	В	B-	
2018	С	В	В	B-	
MPCA Standard	С	В	С	C+	

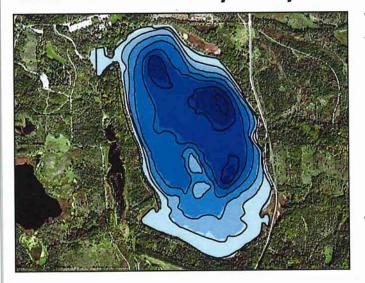
Met Council Grading System for Lake Water Quality



Lake Rebecca Watershed Map



Lake Rebecca Bathymetry

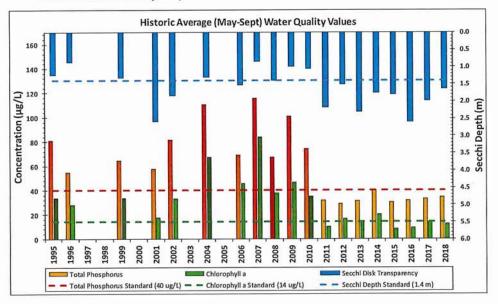


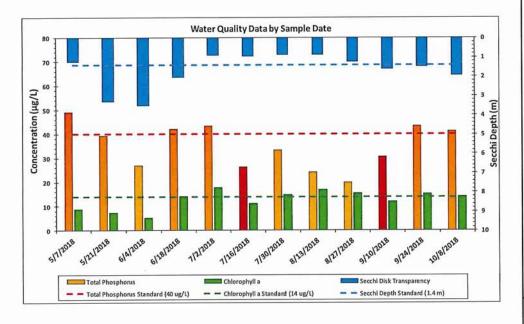
Lake and Watershed Characteristics

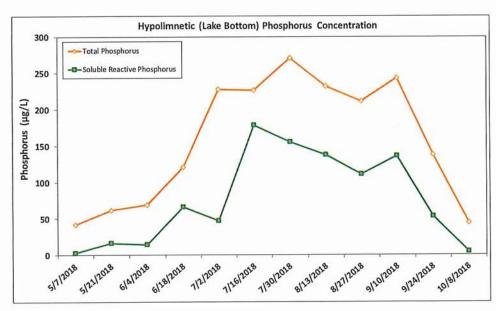
27019200 DNR# 1,277 Acres Watershed Area 261 Acres Lake Area 50% Percent Littoral Area 14.4 ft. Average Depth 31.1 ft. Maximum Depth 4.9:1 Watershed Area:Lake Area Excess Nutrients 2008 Impairment Classification Deep Lake Classification

Water Resource Department Map Created: 11/24/2017 Revised Date: 12/4/2017







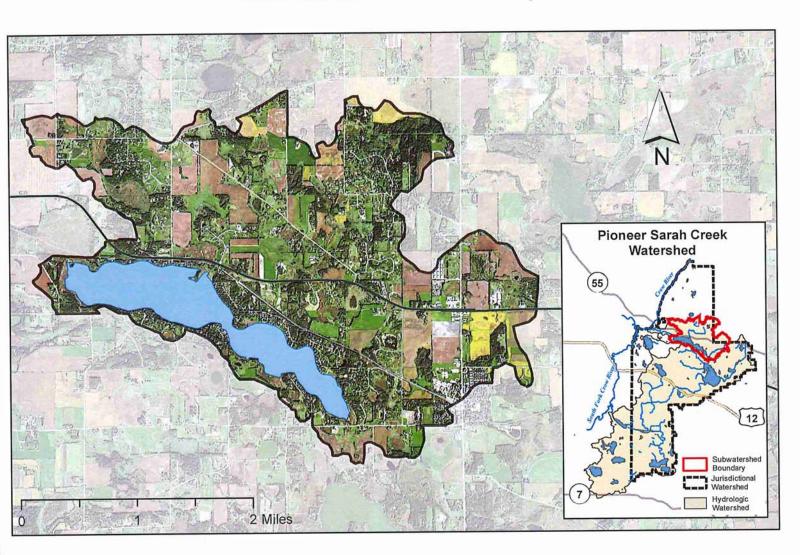


Lake Rebecca Water Quality Report Card						
Year	TP	Chl-	Secchi	Avg Grade		
1995	D	С	С	C-		
1996	С	С	D	C-		
1997						
1998						
1999	С	С	С	С		
2000						
2001	С	В	В	B-		
2002	D	С	С	C-		
2003						
2004	D	D	С	D+		
2005						
2006	D	С	С	C-		
2007	D	F	D	D-		
2008	С	С	С	С		
2009	D	С	D	D+		
2010	D	С	D	D+		
2011	В	В	С	B-		
2012	В	В	С	B-		
2013	В	В	В	В		
2014	С	С	С	С		
2015	В	Α	С	В		
2016	В	Α	В	B+		
2017	С	В	С	C+		
2018	С	В	С	C+		
MPCA Standard	С	В	С	C+		

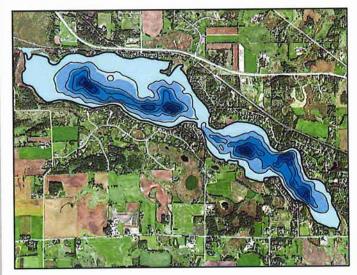
Met Council Grading System for Lake Water Quality



Lake Sarah Watershed Map



Lake Sarah Bathymetry

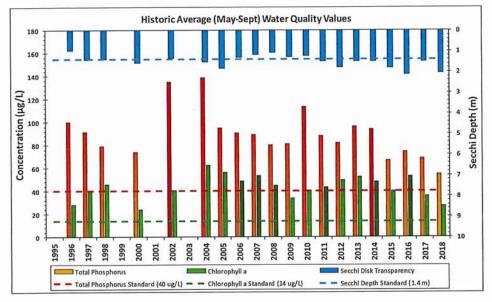


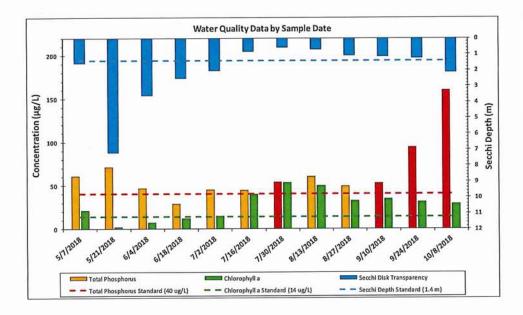
Lake and Watershed Characteristics

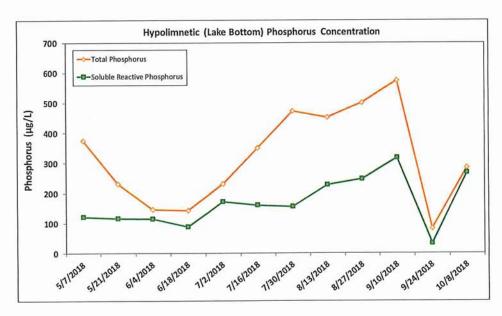
27019100 DNR# 4,519 Acres Watershed Area 536 Acres Lake Area 61% Percent Littoral Area 13.7 ft. Average Depth Maximum Depth 49.9 ft. 8.4:1 Watershed Area: Lake Area Excess Nutrients 2006 Impairment Classification Deep Lake Classification

Water Resource Department Map Created: 11/24/2017 Revised Date: 12/4/2017







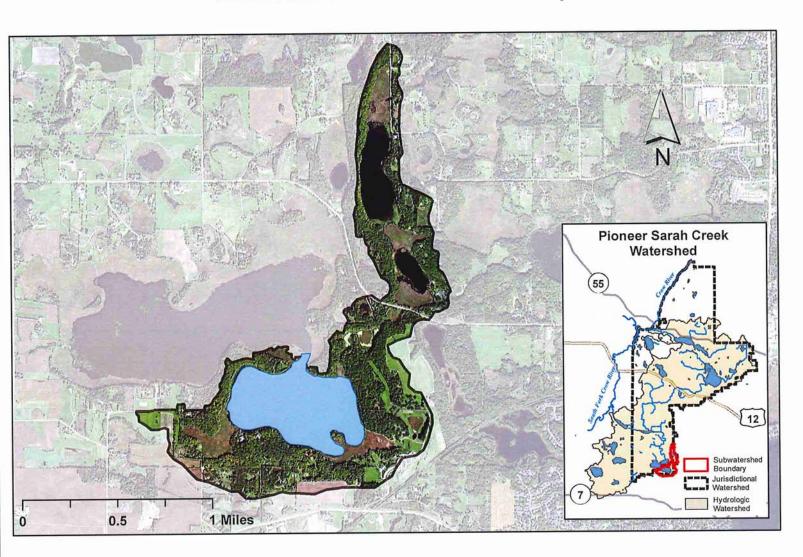


Lake Sarah Water Quality Report Card						
Year	TP	Chl- a	Secchi	Avg Grade		
1995						
1996	D	С	D	D+		
1997	D	С	С	C-		
1998	D	С	С	C-		
1999						
2000	D	С	С	C-		
2001						
2002	D	С	С	C-		
2003						
2004	D	D	С	D+		
2005	D	D	С	D+		
2006	D	D	С	D+		
2007	D	D	D	D.		
2008	D	С	D	D+		
2009	D	С	С	C-		
2010	D	С	С	C-		
2011	D	С	С	C-		
2012	D	D	С	D+		
2013	D	D	С	D+		
2014	D	D	С	D+		
2015	С	С	С	С		
2016	D	D	С	D+		
2017	D	С	С	C-		
2018	С	С	С	С		
MPCA Standard	С	В	С	C+		

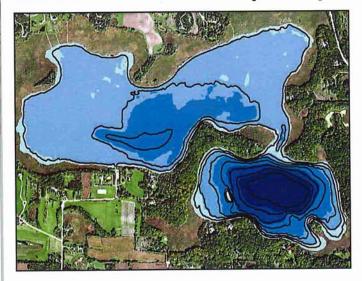
Met Council Grading System for Lake Water Quality



Whaletail South Watershed Map



Whaletail South Bathymetry

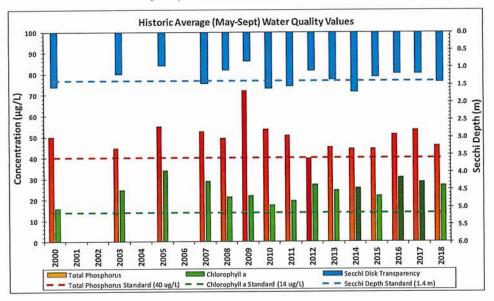


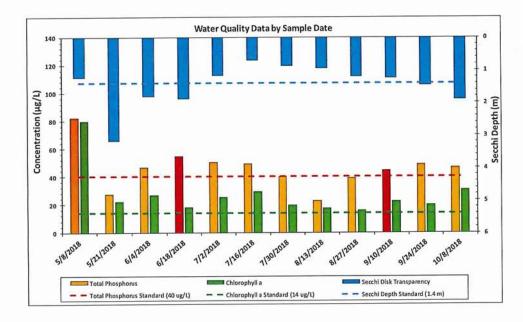
Lake and Watershed Characteristics

27018402 DNR# 661 Acres Watershed Area 156 Acres Lake Area 66% Percent Littoral Area 12.1 ft. Average Depth 23.3 ft. Maximum Depth 4.2:1 Watershed Area: Lake Area Proposed 2016 Impairment Classification Provisional Deep Lake Classification

Water Resource Department Map Created: 11/24/2017 Revised Date: 12/6/2017

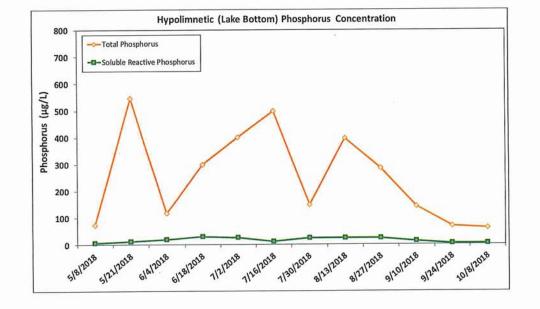






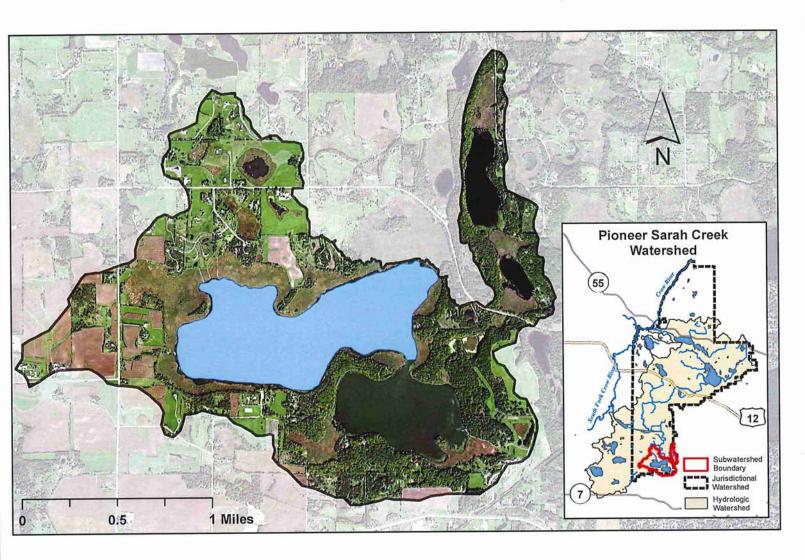
Whaletail South Water Quality Report Card							
Year	TP	Chl- a	Secchi	Avg Grade			
2000	С	В	С	C+			
2001							
2002							
2003	С	С	С	С			
2004							
2005	С	С	D	C-			
2006							
2007	С	С	С	С			
2008	С	С	D	C-			
2009	D	С	D	D+			
2010	С	В	С	C+			
2011	C C C	В	С	C+			
2012	С	С	D	C-			
2013		С	С	С			
2014	С	С	С	С			
2015	С	С	С	С			
2016	С	С	D	C-			
2017	С	С	D	C-			
2018	С	С	С	С			
MPCA Standard	С	В	С	C+			

Met Council Grading System for Lake Water Quality

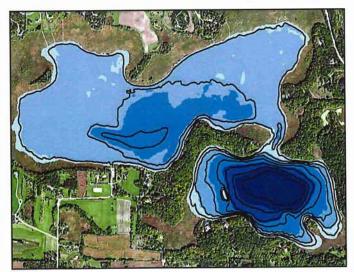




Whaletail North Watershed Map



Whaletail North Bathymetry

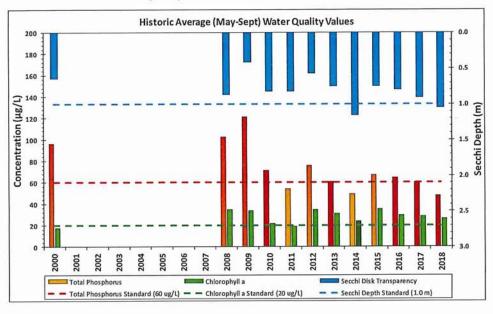


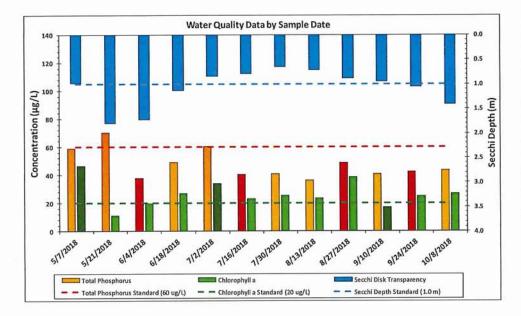
Lake and Watershed Characteristics

27018401 DNR# 1,585 Acres Watershed Area 370 Acres Lake Area 100% Percent Littoral Area Average Depth 5.2 ft. 10.3 ft. Maximum Depth 4.3:1 Watershed Area:Lake Area Proposed 2016 Impairment Classification Provisional Shallow Lake Classification

Water Resource Department Map Created: 11/24/2017 Revised Date: 12/6/2017

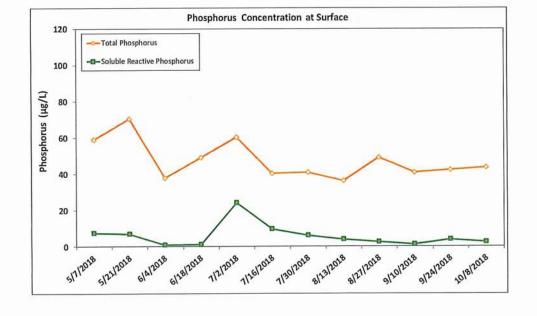






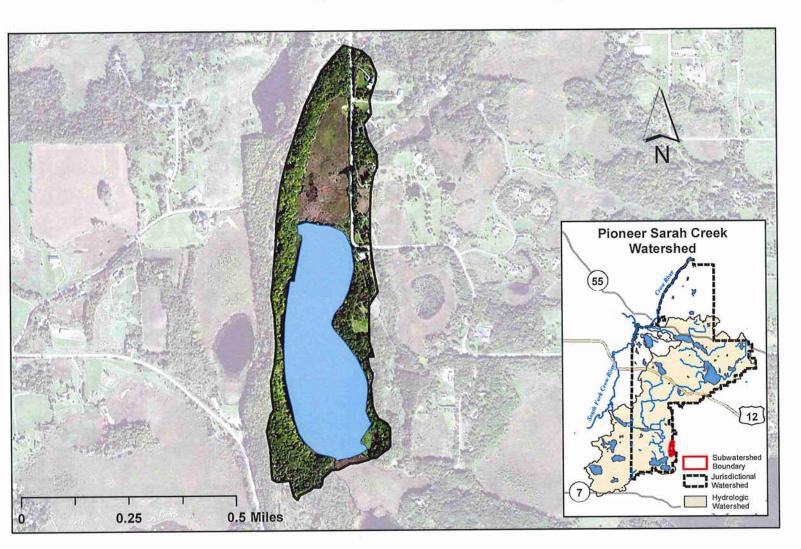
Whaletail North Water Quality Report Card						
Year	TP	Chl-	Secchi	Avg Grade		
2000	D	В	F	D+		
2001						
2002						
2003		-				
2004						
2005						
2006						
2007						
2008	D	С	D	D+		
2009	D	С	F	D		
2010	D	С	D	D+		
2011	С	В	D	С		
2012	D	С	F	D		
2013	С	С	D	C-		
2014	С	С	D	C-		
2015	C C	С	D	C-		
2016	С	С	D	C-		
2017	С	С	D	C-		
2018	С	С	D	C-		
MPCA Standard	С	С	D	С		

Met Council Grading System for Lake Water Quality





Little Long Lake Watershed Map



Little Long Lake Bathymetry

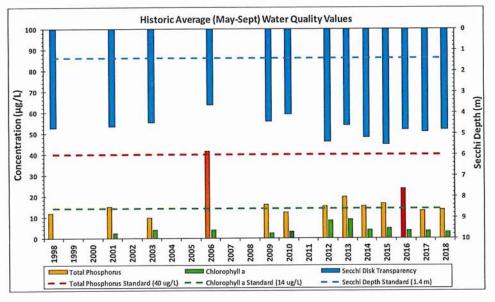


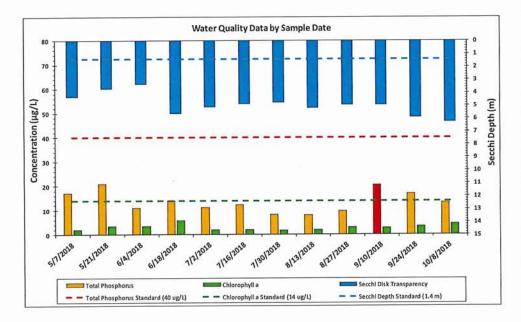
27017900 DNR# 92 Acres Watershed Area 53.5 Acres Lake Area 40% Percent Littoral Area 27.8 ft. Average Depth 80.5 ft. Maximum Depth 1.7:1 Watershed Area: Lake Area None Impairment Classification Deep Lake Classification

Lake and Watershed Characteristics

Water Resource Department Map Created: 11/24/2017 Revised Date: 12/4/2017

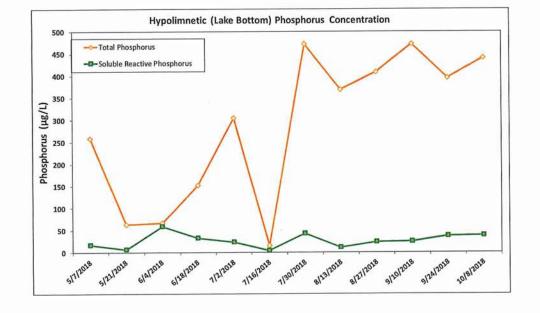






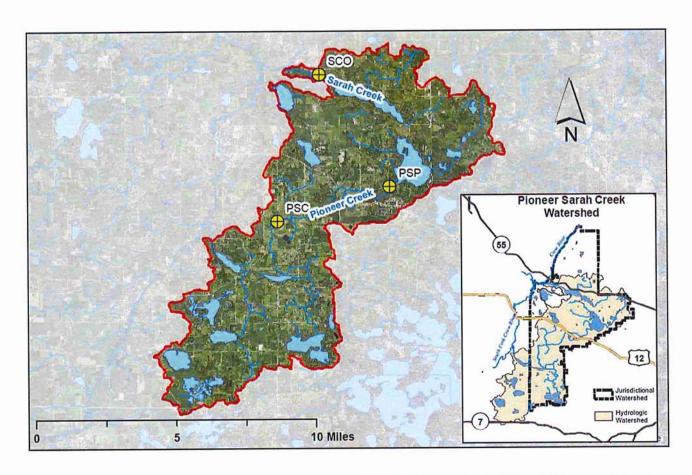
Little Long	Lake	Water Card	Quality	Report	
Year	TP	Chl- a	Secchi	Avg Grade	
1998	Α	Α	Α	Α	
1999					
2000					
2001	Α	Α	Α	Α	
2002					
2003	Α	Α	Α	Α	
2004					
2005					
2006	С	Α	Α	B+	
2007					
2008					
2009	Α	Α	Α	Α	
2010	Α	Α	Α	Α	
2011					
2012	Α	Α	Α	Α	
2013	Α	Α	Α	Α	
2014	Α	Α	Α	Α	
2015	Α	Α	Α	Α	
2016	В	Α	Α	A-	
2017	Α	Α	Α	Α	
2018	Α	Α	А	Α	
MPCA Standard	С	В	С	C+	

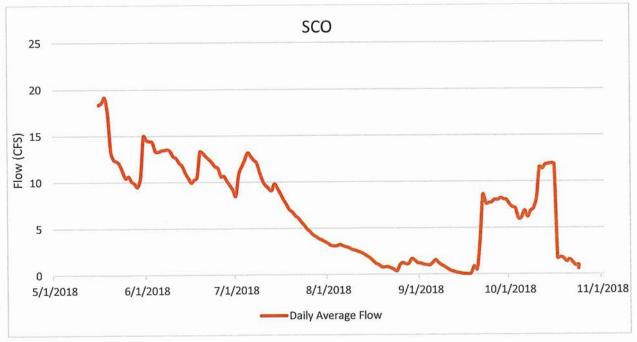
Met Council Grading System for Lake Water Quality

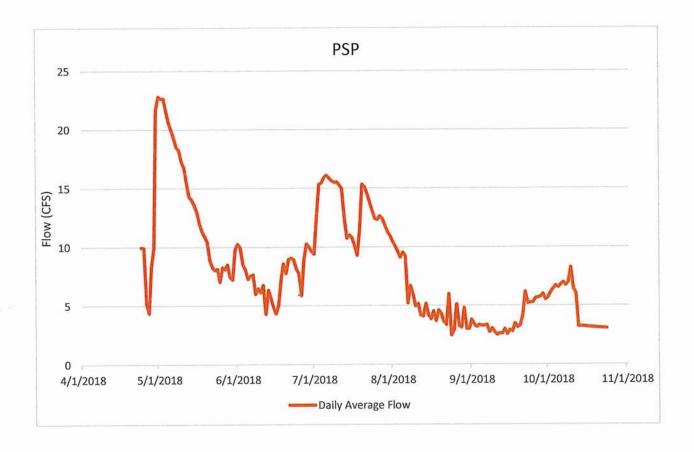


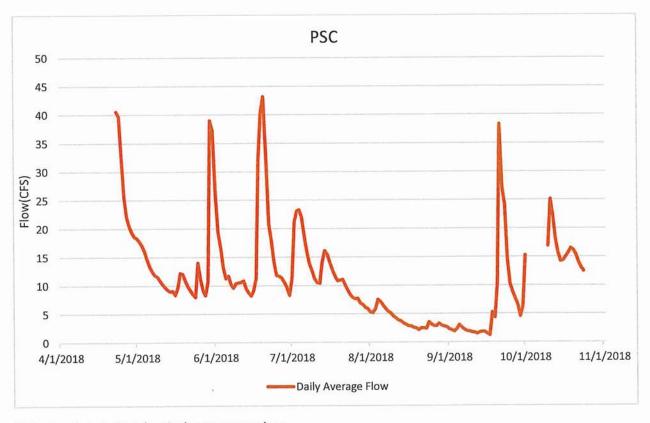


Pioneer/Sarah Creek Stream monitoring - 2018









*Missing data in October is due to power loss

Hennepin County

Wetland Health Evaluation Program 2018



The Wetland Health Evaluation Program (WHEP) is a citizen volunteer wetland monitoring program that is focused on educating the public on wetland ecology and quality issues; as well as, providing local governments with wetland planning information.

WHEP is currently active in Dakota and Hennepin counties, with a number of cities sponsoring local monitoring teams. The MPCA was instrumental in developing the WHEP sampling invertebrate and Citizen Plant Wetland Assessment Guide, which were adapted from the depressional wetland Indicies of Biological Integrity (IBI).

In 2018, 129 volunteers donated more than 1400 hours of their time to monitor area wetlands. According to the Independent Sector, the value of volunteer time in Minnesota is \$24.69 per hour. Our volunteers contributed more than \$34,566.00 to monitor, protect and advocate for our wetlands in Hennepin County.

For the past two decades, WHEP has provided a great opportunity for Hennepin County residents to connect with the wetlands in their communities and become advocates for their sustainability. Watershed management organizations and cities contract with Hennepin County to administer volunteer water quality monitoring programs. WHEP is designed to collect data and provide hands-on environmental education experiences for volunteers. The volunteers use protocols approved by the Minnesota Pollution Control Agency to gather a variety of organisms. Their presence or absence can indicate a possible change in water quality. This biological data is often used to assess the long-term health of water and is complimentary to chemical analysis and other data used to determine water quality.

The data collected is primarily used by watershed management organizations and cities. Some organizations use the data to communicate to residents about the health of their local water resource. Some organizations have used the data to identify or track impacts of restoration efforts. They may also use the data as a historic catalog of specific organisms that have been collected and identified. For example, the county's program has data going back 17 years on Minnehaha Creek. In many cases, organizations use the data to fulfill the education requirement for storm water management plans.





		Invertebrate Score	Vegetation Score
PS-1 Loretto	The State of MN owns this property. It has several types of ecologically significant habitat in and surrounding it. This site has a large watershed and is downstream from the new Loretto wastewater treatment facility. The data will help us to compare to what we would expect to see discharged from the treatment ponds and what we do see.	5	13
Treatment Pond		Poor	Poor
PS-2 Selstad Wetland	This site is part of a large watershed that feeds into Lake Independence. We are monitoring what is flowing off the land into the lake. The data will be used in watershed planning to target goal project areas and in our continued monitoring of the larger lakes in the watershed.	5 Poor	11 Poor
PS-3 Dance Hall Creek	This site is at the end of Dance Hall Creek just before it flows into the lake. The Subwatershed is being closely monitored after the assessment was completed. We will begin implementing projects and data will be used to give a baseline and later for comparison to show TMDL progress and potential sources of nutrients in the lake.	9	15
Wetland		Poor	Poor

DATA KEY

These metrics were developed by staff from the Minnesota Pollution Control Agency and are used in all wetland assessments as part of the Wetland Health Evaluation Program.

INVERTEBRATES

Kinds of Leeches

The # of Leeches present in the sample; number is higher in healthier wetlands.

Kinds of Odonata

This measures the number of dragonflies and damselflies in a sample. This number is higher in healthier wetlands.

ETSD

This metric adds the number of mayfly larvae (Ephemeroptera), caddisfly larvae(Trichoptera), dragonfly presence (D), and fingernail clam presence (Sphaeriidae). This collection is sensitive to pollution.

Kinds of Snails

This measures the number of Snails TYPES in the wetland. The higher the number the better quality wetland.

Total Invertebrate Taxa

The total number of invertebrate taxa is the strongest indicators of health in a wetland. This is an overall inventory of invertebrates, the higher the number the better diversity.

VEGETATION

Vascular Genera

This measures the richness or number of different kinds of vascular plants.

Nonvascular Genera

This measures the richness or number of different kinds of nonvascular plants such as mosses, liverworts and lichens.

Grasslike Genera

This measures the richness of a specific type of vascular plants including grasses, sedges and related genera.

Carex Cover

This measures the extent of coverage by member of the genus Carex or sedges. Abundance increases in healthier wetlands.

Utricularia Presence

Bladdorwort is a group of carnivorous plants that feed on macroinvertebrates. Its presence suggests a good condition.

Aquatic Guild

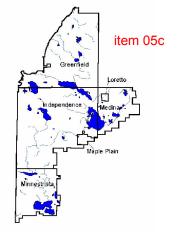
This metric measures the richness of the aquatic plants which tends to decrease as human disturbance increases.

Persistent Litter

This measures the abundance of certain plants whose leaves and stems decompose very slowly. The greater abundance means more nutrients are tied up in undecomposed plants. This will increase with increased disturbance.

2017-2019 Operating Budgets							
	Actual	2017	2018	2019			
	2017	Budget	Budget	Budget			
Revenues							
	\$	\$	\$	\$			
Member Dues	105,700.00	105,700.00	100,000.00	100,000.00			
Project Review Fees	3,150.00	5,000.00	5,000.00	4,000.00			
CIP Income	28,000.00	28,000.00	28,000.00	28,000.00			
WRAPP Income	10,593.01	0.00					
WCA Escrow Earned	8,566.44	0.00					
WCA Adm Fees	850.00	500.00	500.00	500.00			
Interest and Dividend Income	2,034.11	41.00	270.00	1,570.00			
Total Revenues	158,893.56	139,241.00	133,770.00	134,070.00			
Expenses	#1 #2						
Engineering/Consulting	15,636.85	23,000.00	23,600.00	24,190.00			
Administrative Expense	32,082.35	36,000.00	36,000.00	36,000.00			
Adm-Project Reviews	552.18	1,000.00	1,000.00	750.00			
Adm-CIP Mgmt	1,575.70	0.00	0.00	3,000.00			
WCA - Admin/Legal Expenses	160.06	500.00	500.00	300.00			
Adm - Tech Support	454.64	750.00	750.00	550.00			
Legal Expense	106.46	500.00	500.00	500.00			
Audit Expense	4,000.00	4,080.00	4,150.00	4,500.00			
Insurance	2,982.00	3,370.00	3,500.00	3,500.00			
Website	1,103.40	2,240.00	2,240.00	1,800.00			
Adm - General Programs	0.00	500.00	500.00	500.00			
TAC Meetings	696.29	4,000.00	4,000.00	3,000.00			
Lakes Monitoring - TRPD	3,700.00	3,703.00	5,180.00	8,100.00			
Lakes Monitoring - CAMP	550.00	576.00	550.00	760.00			
Stream Monitoring	6,120.00	10,802.00	7,600.00	7,120.00			
Education	920.75	6,120.00	6,120.00	4,500.00			
Education-Events	0.00	500.00	500.00	500.00			
Invertebrate Monitoring	0.00	1,500.00	1,000.00	500.00			
Grant Writing	0.00	1,100.00	1,000.00	1,000.00			
Plan Amendment	190.67	1,000.00	900.00	1,000.00			
Third Gen - Admin	593.33	0.00	0.00.00	_,			
Special Projects	0.00	5,000.00	6,000.00	4,000.00			
WRAPP	2,630.95	0.00	0,000.00	1,000.00			
Capital Improvement Project	8,767.17	33,000.00	28,180.00	28,000.00			
Greenfield Central Park	3,500.00	0.00	20,100.00	20,000.00			
Total Expenses	86,322.80	139,241.00	133,770.00	134,070.00			
Total Expenses		100,11100	2007. 70.00	20 .,07 0.00			
	\$	\$	\$	\$			
Net Income	72,570.76	0.00	0.00	0.00			

	2017-20	019 Member	Assessme	ents		
		Increase in	2017 Op Budget		Increase over Prev Year	
2017	2016 Market Value PSC Basin	MV over Prev Year	%age	Amount	%age	Amount
Greenfield	394,071,759	5.00%	29.12%	38,929.51	3.85%	1,442.2
Independence	510,583,968	1.09%	37.73%	50,439.50	-0.01%	(5.77
Loretto	54,109,610	5.41%	4.00%	5,345.37	4.26%	218.4
Maple Plain	105,529,093	7.65%	7.80%	10,424.99	6.47%	633.9
Medina	152,170,132	2.63%	11.24%	15,032.56	1.51%	223.8
Minnetrista	136,940,498	1.84%	10.12%	13,528.06	0.72%	97.3
TOTALS	1,353,405,060	3.12%	100.00%	133,700.00	1.99%	2,610.0
NES WAYER AND		Increase in	2010	On Burdent		Duni Van
2010	2017 Market Value	MV over Prev	%age	Op Budget Amount	%age	over Prev Year Amount
2018	PSC Basin	Year				
Greenfield	418,807,770	6.28%	29.25%	37,440.16	-3.83%	(1,489.3
Independence	537,355,542	5.24%	37.53%	48,037.98	-4.76%	(2,401.5
Loretto	55,695,940	2.93%	3.89%	4,979.05	-6.85%	(366.3
Maple Plain	109,218,243	3.50%	7.63%	9,763.78	-6.34%	(661.2
Medina	158,506,367	4.16%	11.07%	14,170.00	-5.74%	(862.5
Minnetrista	152,231,289	11.17%	10.63%	13,609.02	0.60%	80.
TOTALS	1,431,815,151	5.79%	100.00%	128,000.00	-4.26%	(5,700.0
		Increase in	2019 Op Budget		Increase over Prev Yea	
2019	2018 Market Value PSC Basin	MV over Prev Year	%age	Amount	%age	Amount
Greenfield	368,183,516	-12.09%	25.49%	32,625.08	12.86%	(4,815.0
Independence	558,624,135	3.96%	38.67%	49,500.20	3.04%	1,462.
Loretto	61,598,085	10.60%	4.26%	5,458.26	9.62%	479.
Maple Plain	118,116,948	8.15%	8.18%	10,466.45	7.20%	702.
Medina	167,463,487	5.65%	11.59%	14,839.09	4.72%	669.
Minnetrista	170,530,950	12.02%	11.81%	15,110.91	11.04%	1,501.
TOTALS	1,444,517,121	0.89%	100.00%	128,000.00	0.00%	0.0



DATE: APRIL 5, 2019

TO PIONEER-SARAH CREEK WATERSHED COMMISSION

FROM: JIM KUJAWA

RE: CITY OF MAPLE PLAIN DRAFT 2040 COMPREHENSIVE PLAN REVIEW

Background

Commission staff reviews member Community Storm Water Management Plans for conformance with the Commission's third Generation Stormwater Management Plan. The review focuses on the requirements of the communities as outlined in MS 103B.231 and .235. Updates to the local stormwater management plans are expected to include:

- Updated land use, hydrologic, and hydraulic data, and existing or potential water resource related problems that may have changed since the last LWMP.
- An explanation of how the member city will help to implement the actions set forth in the Commission's Plan, including specifically addressing adoption and enforcement of a manure management ordinance.
- Show how the member city will take action to achieve the load reductions and other actions identified in and agreed to in TMDL Implementation Plans.
- Updated Implementation Plan identifying the specific structural, nonstructural, and programmatic solutions to the problems and issues identified in the LWMP.
- Set forth an implementation program including a description of adoption or amendment of official
 controls and local policies necessary to implement the Rules and Standards; programs; policies; a capital
 improvement plan; and estimates of cost and funding mechanisms.

Information

Staff received the Maple Plain's 2040 Comprehensive Plan on December 31, 2018.

Based on staff's review of the Maple Plain 2040 Comprehensive Plans Stormwater Management sections, we find the plan to be well thought out and comprehensive. The goals and policies in section 7 of the plan state that in areas under PSCWMD jurisdiction the City adopts by reference all PSCWMD rules and regulations. The plan adopts the Commissions goals for stormwater rate controls, floodplain management, volume controls, nutrient controls, erosion controls, sediment controls, wetland management and stream management. In addition, the plan addresses the requirements listed above.

We offer the following minor comments and recommendations to help improve this plan and its implementation.

- 1) Section 8.2, Implementation Projects table. We recommend activities 2, 3, 4 and 6 be provide to the PSWMC for inclusion in its CIP list of projects.
- 2) Section 8.3 Funding. The PSCWMC has a separate CIP budget item available to its member communities. This would be a potential funding option in this section.

Action

Based on staffs review, we feel the plan meets the intent and requirements of the PSCWMC and MN Statutes and recommend the Commission approve the Maple Plain 2040 Comprehensive Plan.

JCK

MEMORANDUM

TO: Pioneer-Sarah Creek Watershed Management Commission

FROM: James Kujawa and Kirsten Barta, Hennepin County Dept. of Environment and Energy

DATE: April 11, 2019 SUBJECT: Staff Report

- 1. **2016-05 Proto Labs Parking Lot Expansion, Maple Plain.** The Commission approved this project contingent upon three conditions. One condition remains open receipt of an Operation and Maintenance agreement on the biofiltration basin per Staff findings dated September 6, 2016. The agreement has been signed but remains to be recorded on the property title.
- 2. 2017-03 Equestrian Facility (Bel Farms) Independence. This is a 16.5 acre rural residential parcel located approximately 500 feet north of the intersection of CR6 and Nelson Road. The owner is proposing to construct a new garage/apartment, horse stall barn, indoor arena, outdoor arena, six grass and four sand paddocks for horses. Because this project disturbs greater than 1.0 acre and creates 3.1 acres of additional impervious area, it triggers the Commission's review for Rules D and E. Staff provided grading and erosion control approval contingent upon (1) the applicant assuming the risk and responsibility for any changes to the site plans necessary for final Commission approval and (2) the City of Independence approving a grading permit. In September 2017 the Commission approved the Stormwater Management Plan contingent upon receipt of an approved long-term pond/basin O&M plan between the landowner and City, to be recorded on the land title. No new information has been received.
- 3. 2017-05 Ostberg Equestrian Facility, Independence. This is a 40-acre agriculture parcel located just southwest of the intersections of CSAH 6 and Game Farm Road. The owner is proposing to construct a new home, two garages, a horse stall barn, indoor arena, outdoor ring, eight horse paddocks and an access drive off of CSAH 6. The project will disturb 7 acres during construction and create 1.69 acres of new impervious areas. Because this project disturbs more than 1.0 acre and creates 1.7 acres of additional impervious area, it triggers the Commission's review for Rules D and E. There are also two wetlands that have been delineated on this site, so the Commission wetland buffer requirements (Rule I) are triggered. The project was approved by the Commission at their November 2017 meeting contingent upon receipt of an approved long-term pond/basin O&M plan between the landowner and the City, to be recorded on the land title. This information has not yet been received.
- 4. 2018-02W Warren DaLuge Wetland Violation, Greenfield. Staff met with DaLuge and came to an agreement for him to voluntarily remove any fill placed in the wetland on his farmstead by December 1, 2017.As of February 8 the work had not started. Staff requested a restoration order be issued for compliance by June 15, 2018. The order was sent by certified mail. Staff stopped at the site in March and found the dirt material has been removed from the wetland. He is in compliance with the Wetland Conservation Act. This item will be removed from the report.
- **2018-010 Chippewa Estates, Loretto.** This is a 1.54-acre parcel located in the far northeast corner of Loretto on Chippewa Road. The project is proposing to subdivide the lot into four single family residential lots and triggers the Commission's review for Rules D and E. The applicant has requested administrative approval from Staff to begin grading the site. Staff provided this approval contingent upon the City of Loretto issuing a grading permit and that the applicant understands they assume all risks associated with changes that may be necessary for final Commission approvals. At their August 16, 2018 meeting, the Commission approved Staff findings with three conditions regarding the operations and maintenance plan, sequencing, and retrofitting of the pond.

It is Staff's understanding that the City chose not to expand their existing regional pond to accommodate this site's stormwater, so the back and side yard filter system will be installed per the site plans. Hence, the only remaining item necessary for final approval is the Operation and Maintenance agreement on the stormwater system. If the City chooses not to maintain the filter system, the applicant must provide an O&M maintenance plan that is acceptable to the City and the Commission and must be recorded on the title to the property.

- 2018-017 Crow River Overlook, Greenfield. This is a 42-acre agriculture parcel located on CR 10 just north of 84th Avenue. Approximately 38 acres is east of CR 10, and 4 acres is located west of CR 10 along the Crow River. The applicant proposes to subdivide the property into an 8 large lot residential development. Lot sizes will range from 2.85 acres up to 10.1 acres. One cul-de-sac street will be constructed for access to the lots, with one street platted for future access to the property east of this project. One additional outlot will remain on the west side of CR 10. This project will be reviewed for Rules D, E, F and I. A complete application was received on October 15. Staff findings of January 16, 2019 were approved by the Commission at their January 17, 2019 meeting. Approval was contingent upon (1) an Operation and Maintenance agreement with city or HOA, (2) planting and seeding plans for the biofiltration basins and buffer areas that fall into the cropland areas that require seeding and (3) typical emergency overflow details noted on the plans. No new information has been received.
- 7. 2019-01 Ox Yoke Circle Reconstruction, Minnetrista. This project is a basic mill and overlay project with minor grading involving a slight adjustment to the road profile. It triggers the Commission's review for Rule E, Grading and Erosion Controls. Although it is shown in the FEMA floodplain on the FEMA overlay, the MN DNR has approved a flood elevation of 926.0 vs the FEMA elevation of 930.0. Per the MN DNR accepted revision for the Base Flood Elevation (BFE) at 926.0, the roadway will be out of the floodplain of Pioneer Creek and will not fall under the Commission's review threshold for that rule. Per the Commission's guidelines, Staff has the authority to review and decide on grading and erosion control reviews. If available, an updated review will be provided as an information item in the Commission's packet.

LOCAL WATER PLANS

Per the amended MN Rule 8410.0105, subp. 9, and 8410.0160, subp. 6, Local Water Plans must be prepared by metropolitan cities and towns and must become part of their local comprehensive plans. They must be revised essentially once every ten years in alignment with the local comprehensive plan schedule. A municipality has two years prior to its local comprehensive plan being due to adopt its local water plan. The next local comprehensive plans are due December 31, 2018; thus all cities and towns in the seven-county metropolitan area must complete and adopt their local plans between January 1, 2017 and December 31, 2018.

Local plans from the cities of Loretto and Medina were approved in 2017; Minnetrista's on October 18, 2018; and Greenfield's at the February 14, 2019 meeting.

Independence's Local SWMP was reviewed at the February 2019 meeting. The comments approved by the Commission were submitted to the City in March.

The Maple Plain local water plans were submitted on December 31, 2018. Staff recommends approval of the Maple Plain SWMP (see memo in this month's packet)

RURAL CONSERVATIONIST UPDATES

The Buffer Law requirements going forward require staff to check each parcel in the county at least once every three years and spot check up to 15% of parcels. Hennepin has opted to section the county into thirds and check 1/3 each year, beginning in 2019. Those residents chosen to have a spot check done will be notified by letter. For 2019, review and inspections will take place in the western-most 1/3 of the County as indicated on the map. This will cover Independence, Greenfield, Loretto, Maple Plain, parts of Minnetrista, Medina, Corcoran, Rogers, and part of Orono.

Hennepin Transportation staff are presently evaluating culverts on County Roads 6, 26, 90, and 92 to make repairs and correct erosion issues. This will benefit Pioneer Creek directly as well as several streams/wetlands flowing into Lakes Independence, Sarah, Minnetonka, Whaletail, and Robina.

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