



2019 Activity Report



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

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Cover Photograph:
Baker Park Sunset
(unknown contributor)

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 2019.

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 2019.

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 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.

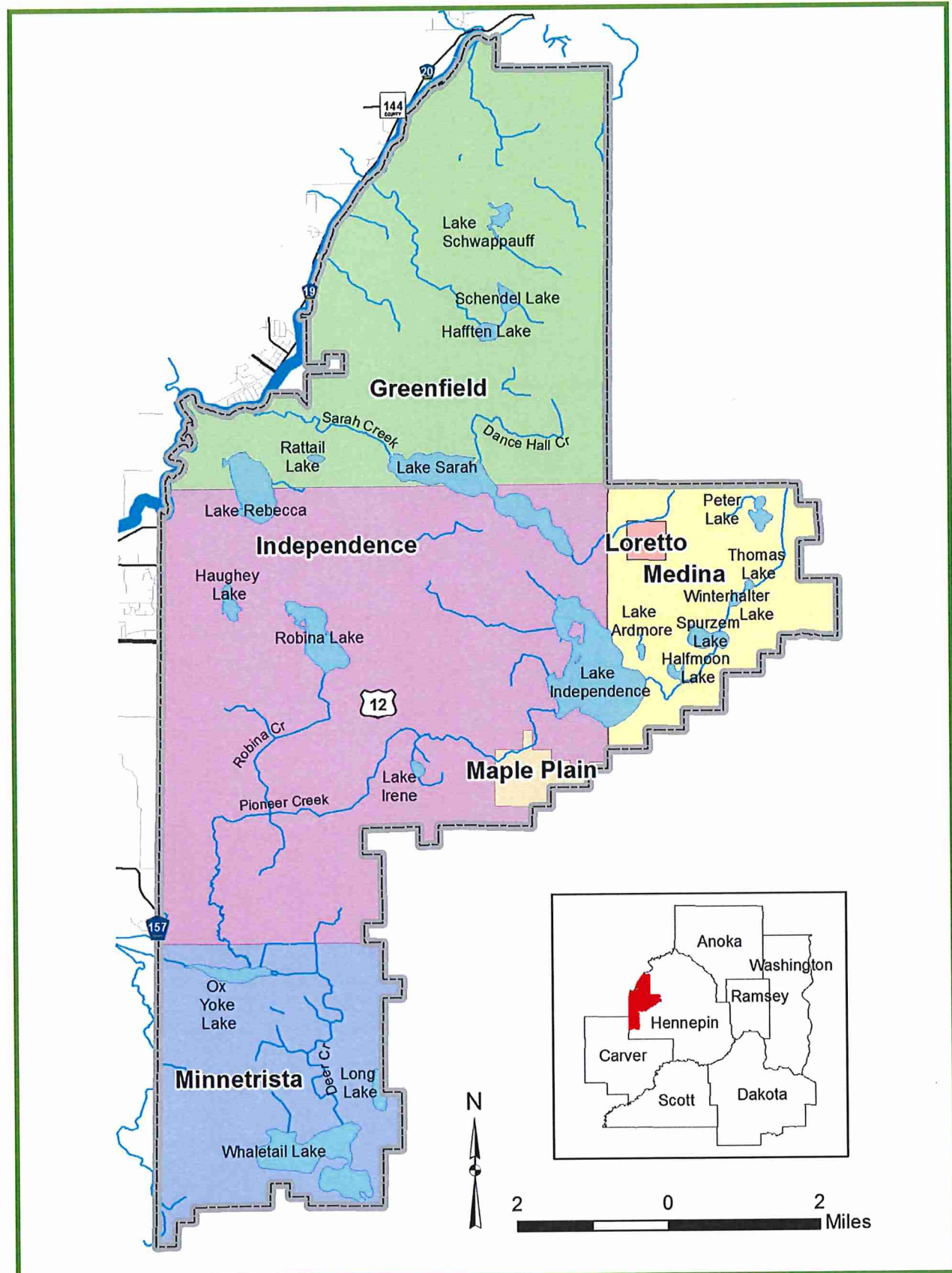


Table 1
Area of Members within the Pioneer-Sarah Creek Watershed

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%
Minnetrasta	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. At year-end the Commission had reviewed and approved the local surface water plans of all of the member cities.

2019 WORK PLAN IN REVIEW

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

The Commission's Third Generation 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 2019 to meet the goals, objectives and projected work plan outlined in its 2018 *Annual Report*. The projected Work Plan was approved at the Commission's April 19, 2018 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.

- *The Commission reviewed nine plans for conformance with its standards in 2019. Four of the projects reviewed were in the city of Greenfield, two in Independence, and one each in Maple Plain, Medina and Minnetrista. (Appendix 2)*

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 2019 the Commission's technical staff assisted approximately 40 landowners/agency/developer contacts with wetland-related questions. On behalf of the Commission they reviewed the following types of wetland applications: three wetland boundary/type; two no-loss, exemptions, one sequencing, and one wetland replacement plans. Wetland impacts totaled 3,913 SF (approved); wetland replacement totaled 7,826 SF (approved). Three WCA violations were investigated and resolved. The Commission was involved in six Technical Evaluation Panels (TEPs). The Commission does not have a wetland banking program.*

- *The cities of Greenfield, Loretto and Maple Plain will take on the LGU role on January 1, 2020. Resolution 2019-01 relinquishing the Commission's role as LGU for WCA was approved by the Commission at their August 15, 2019 meeting.*

3. Adopt a 2020 operating budget.

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

- *See Section D. for more information regarding grant-funded projects.*

- b. Fund a capital improvement program to share in the cost of projects.

- *On April 18, 2019 the Commission approved a 2020 operating budget totaling \$176,820, with a total assessment to the membership of \$131,800, a three percent increase over 2019. The 2018 audit showed a carry-over of \$95,506 to help fund future CIPs. (Appendix 3)*

c. Budget for the expense of undertaking a Major Plan Amendment to extend the term of the Third Generation Plan.

- *\$10,000 was budgeted for this purpose.*

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.

- *Staff began updating the Commissioner handbook in 2019 and training will resume in 2020.*

b. Make water quality data and trends easily accessible to the public.

- *Reports similar to Lake Report Cards are being developed by Three Rivers Park District and will be made available on the Commission website.*

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.

- *Report this information in the annual activity reports.*

5. Draft a 2019 Work Plan.

- *The Commission's 2019 Work Plan was approved at the Commission's April 18, 2019 meeting.*

6. Publish a 2018 Annual Activity Report summarizing the Commission's yearly activities and financial reporting.

- *The 2018 Annual Activity Report was approved by the Commission at their April 18, 2019 meeting and submitted to BWSR by the April 30 statutory deadline.*

7. Conduct the biennial solicitation of interest proposals for administrative, legal, technical and wetland consultants.

- *Pursuant to Minnesota Statute 103B.227.subd. 5., a solicitation of interest proposals was published in the January 14, 2019 issue of the State Register. Three responses to provide technical support, three responses to provide wetland consultant support, and one response each for legal and administrative support were received. The Commission voted to retain the current consultants for 2019-2020. (See page 14 for a 2020 update.)*

B. WATER QUALITY AND QUANTITY

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

- *In 2018 the MPCA notified the Commission that Lake Rebecca was delisted from the impaired water's list for excessive nutrients in 2018. Lake Rebecca continued to meet the state water quality standards in 2019.*

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.

- *There were no waters in the Pioneer-Sarah Creek watershed added to the impaired waters list in 2019.*

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.

- *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. Provided information and collaborated with member communities on MPCA, DNR and Hennepin County grant opportunities 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. Staff estimate they field over 150 calls/year from watershed residents, answering questions on various water resource-related topics. Approximately 10-15 residents in the watershed were assisted through this process.*

b. Identify projects eligible for the Hennepin County Natural Resources Grant program.

- *This is an on-going process the Commission provides to its member communities and land-owners. Projects are identified through subwatershed assessments and other various efforts.*

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 TRPD to conduct bi-weekly water quality monitoring of “sentinel lakes” (Independence, Sarah, Little Long, and both basins of Whaletail.)

- *These five sentinel lakes were monitored in 2019. Other non-sentinel lakes that were monitored in 2019 included Ardmore, Spurzem, and Half Moon. All of these lakes are 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 chlorophyll-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 the “deep lakes.” Results of the monitoring program are cited on “Lake Report Cards,” which are included in Appendix 4 and which will be posted to the Commission’s website.*

- *TRPD continued to assess Lake Independence carp abundance/biomass and carp movement for the Lake Independence tributaries in 2019. The population/biomass assessment will be used to determine whether carp removal efforts are necessary for Lake Independence. The tributary movement assessment is being used to identify future carp barrier locations. A carp barrier has been proposed for the Ardmore channel to prohibit carp migration/movement between Ardmore Lake and Lake Independence. Concept draft design plans for the Ardmore channel carp barrier have been completed. It is anticipated that construction of a carp barrier within the Ardmore channel as a CIP project will be constructed in 2020.*

- *The Park District also conducted a Zebra Mussel Survey on Lake Independence in 2019. Populations seem to have decreased from last year. Reasons for the population decline are unknown, but may be related to the amount of blue-green algae in the lake.*

b. Partner with Three Rivers 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. (Appendix 5)

- *The stream sites that were monitored for continuous flow in 2019 included Sarah Creek at Highway 92 and Pioneer Creek at Pagenkopf. The Pioneer Creek at Copeland site was not monitored due to flooding conditions that persisted the entire year. No water quality data was collected at the stream monitoring sites. However, two sites were monitored for continuous flow and water quality on streams that flow into Lake Independence. These stream sites were located on tributaries that outlet on the west side of Lake Independence and were intended to determine the watershed nutrient loading into Lake Independence.*

c. Participate in Metropolitan Council’s Citizen Assisted Monitoring Program (CAMP). The Commission has budgeted funds to monitor one lake in 2019.

- *Hafften Lake was monitored through the CAMP program in 2019. The 2019 CAMP report will be available in spring 2020 at <https://metro council.org/WastewaterWater/Services/Water-Quality-Management/Lake-Monitoring-Analysis.aspx>*

4. Support watershed residents and organizations as issues arise, providing general, technical and financial assistance where appropriate.

- *The Commission budgeted \$5,000 for this purpose. In 2019, \$950.15 was utilized toward these efforts.*

- *The Zuhrah Shrine Horsemen sent a letter to the City of Independence regarding a large wetland on their property, flooding, and infringement on their land. They are requesting the City and the Commission to perform a study to identify solutions to this problem. A meeting was scheduled for early in 2020 to explore solutions to the wetland flooding with a goal of providing the facility with more predictable pasturing and feeding conditions year-to-year, while also benefitting natural resources.*

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.

- *This evaluation did not occur in 2019. At its regular monthly meetings, the Commission welcomes and encourages citizens to speak to issues, concerns and other interests during Open Forum. The Commission values their input and responds appropriately.*

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 2019. The Commission will continue to be involved in NEMO whenever programs and activities become available.*

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.

- *Administrative staff regularly attended their meetings and brought forward information to the Commission regarding their activities and educational projects. Resources were shared on the Commission's website and on their Facebook page.*

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.

- *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. In 2019 WaterShed Partners initiated a new program and associated website, www.adopt-a-drain.org. The program encourages residents to adopt and map their nearest storm drain. Participants can also record the amount of debris cleaned out of the storm drain to capture the amount of stormwater pollution prevented by the program.

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

● *In 2019 PioneerSarahCreek.org had 1300 users for 1800 sessions. In the first month of 2020 those numbers were 148 and 184, respectively. In the final month of 2019 the Facebook page posted 19 likes, 13 reaches and 18 engagements.*

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.

● *While funding for monitoring one site was included in the 2019 budget, no volunteers were identified to perform River Watch monitoring in 2019.*

● *However, two sites were included in 2019 WHEP (the Wetland Health Evaluation Program). They were PS-2, the Selstad wetland that feeds into Lake Independence; and PS-3, the Dance Hall Creek wetland located at the end of the creek just before it flows into Lake Sarah. (Appendix 6)*

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.

● *This is an ongoing effort with the County's Department of Environment and Energy and the University of Minnesota's Extension Office. Both assist agricultural communities in implementing best management practices within our watershed. Both work with and participate in the Commission's goals to protect and enhance the watershed's natural resources while encouraging productive and profitable agriculture enterprises.*

c. Working in partnership with the Hennepin County Rural Conservationist, continue to work with landowners to help them become compliant with the MN Buffer Law.

● *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 sectioned the County into thirds and will check 1/3 each year. In 2019, review and inspections took place in the Pioneer-Sarah Creek watershed in the cities of Independence, Greenfield, Loretto, Maple Plain, Medina, and parts of Minnetrista. Those residents chosen for a spot check were notified by letter.*

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.

- *In 2019 the Commission selected for implementation the Lake Ardmore Neighborhood Projects, including channel stabilization and a fish barrier, to be funded by BWSR's pilot Watershed-Based Funding program. Construction of the project will occur in 2020.*
- *The Baker Park Reserve Campground Ravine Stabilization is a project scheduled for construction in 2019. This project will stabilize a 2,200-foot channel that was severely eroded and identified as a significant source of sediment (300 tons/yr) and phosphorus loading (277 lbs/yr) flowing to Lake Independence. In 2019, the project began construction in November, and was considered approximately 30% completed by the end of December. It is anticipated that the average phosphorus loads to Lake Independence would be reduced by an estimated 134 pounds per year after completion. This reduction would account for 15% of the total watershed phosphorus load reductions required in the TMDL to meet state water quality standards. The project is a collaborative partnership among several different agencies. Supplemental funding was provided by grants from the Clean Water Legacy Fund (\$416,000) and Hennepin County (\$59,500), along with contributions from the Pioneer-Sarah Creek Commission (\$10,500), Three Rivers Park District (\$10,500), the cities of Medina (\$10,500) and Independence (\$10,500), and LICA (\$2500). The project is scheduled to be completed by mid-February of 2020.*
- *The Lake Sarah Improvement Association (LSIA) was awarded a Hennepin County grant to raise awareness of lake users, beginning with lakeshore resident education on AIS (aquatic invasive species) prevention and expanding to other users. The program closes with a personal pledge from participants to understand and adhere to AIS prevention measures. The grant is capped at \$20,000. Additional inspections at the public access to ensure the CD3 station is used and maintained is part of the grant. Data gathered from this program will be available to the public and other organizations.*
- *Hennepin County mailed postcards to landowners to inquire about conservation needs and interests. Approximately 313 responses were received. Postcards went out to agricultural producers, residents living on large lots with a few animals and some acres, and residents living in the rural portion of the county pulled from tax rolls. Staff reached out to those who responded and offered scores of technical advice, connected interested parties to additional resources, and made site visits as needed. Several cost share projects are in process as a result of this project, and a couple of septic systems will also be replaced using the MDA low interest loan program. Given the amount of rain in the past years, drainage and wetlands were popular topics and the buzz around pollinators also had a lot of residents asking about BWSR's Lawn 2 Legumes program and the University of Minnesota's Bee Lab resources.*
- *Plans continue to move forward on the City of Loretto's connection to the Met Council Environmental System (MCES), a regional wastewater system. Funding options and grants were pursued in 2019, with construction scheduled to begin in 2020. The*

state legislature approved a \$400,000 grant to assist Loretto with this project. This is in addition to the Point Source Implementation Grant (PSIG) program through which the city is eligible for grants. Loretto gifted the City of Greenfield with 15 extra connections that will service lakeshore properties on Lake Sarah, taking them off septic systems.

2. Continue to identify Watershed-wide TMDL implementation projects.

● *This is an ongoing effort by all the partners in the Commission. The Baker Park and Lake Ardmore projects both reduce the amounts of phosphorus and sediment going to Lake Independence. The Commission didn't identify any new projects in 2019, but is implementing those projects already identified.*

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.

● *Continue to pursue projects in this subwatershed as opportunities become available. Work with Hennepin County, the City of Greenfield, and future property owners on potential projects and restoration of the old Leuer parcel that was recently legally statutorily subdivided without the Commission's review or requirements.*

4. Under a joint powers agreement with the Three Rivers Park District, complete Curly-leaf Pondweed (CLPW) 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 CLPW control program, and complete annual water quality monitoring to determine the effectiveness of the CLPW control program in reducing phosphorus loading to the lake.

● *This past year (2019) was the second year of the 5-year joint powers agreement between the Commission and Three Rivers Park District to control curly-leaf pondweed on Lake Sarah. The Park District conducted aquatic vegetation point-intercept surveys (spring and fall), completed curly-leaf pondweed turion surveys, and bi-weekly water quality monitoring to determine the effectiveness of the CLPW control program to reduce phosphorus loading to the lake. The parties have been coordinating with the Lake Sarah Improvement Association 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. 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.

● *This process did not occur in 2019, however, TAC meetings are scheduled for 2020 as part of the development of the Fourth Generation Watershed Plan.*

● *Applied for, and received BWSR Competitive Grant funding in the amount of \$416,000 for the Baker Park Reserve Campground Ravine Stabilization project. The first annual*

progress report on the project was received by the Commission at their February 21, 2019 meeting. Construction began in October after the campground was closed and is expected to be completed by March 2020.

a. Prioritize capital projects in anticipation of funding during the next round of the Watershed-based Funding 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 totaled \$58,317.*

- *The feasibility study for Project PD3 determined the amount of phosphorus reductions from a clean out and expansion would be insignificant for the costs (<0.2 lbs/phosphorus vs ~\$45,000 cost). The Commission and the City of Medina agreed to pursue a carp barrier between Lake Independence and Lake Ardmore in substitution for project PD3. The feasibility and costs associated with the barrier were determined to be beneficial to both lakes. The Ardmore project work plan was updated to reflect this change.*

- *For the next biennium, BWSR's watershed-based funding will be distributed by major watershed instead of by county as it was for the pilot program. Pioneer-Sarah Creek falls within two major watersheds, the North Fork Crow and South Fork Crow. Meetings between the organizations involved will need to occur to determine how the funds will be distributed among the organizations. The total for the North Fork Crow watershed is \$91,000 and South Fork Crow is \$330,000.*

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.

- *By that date the local plans from the cities of Loretto, Medina and Minnetrista had been approved. The plans from the cities of Greenfield and Independence were approved by the Commission on February 21, 2019, and the local plan from Maple Plain was approved on April 18, 2019.*

2. Budget for the expense of writing the Fourth Generation Plan, due in 2020, if a Major Plan Amendment (MPA) to the Third Generation Plan is not approved by BWSR.

- *BWSR declined to allow the Commission to go forward with an MPA to update the Commission's Third Generation Plan. At their October 17, 2019 meeting the Commission chose Wenck Associates to develop its Fourth Generation Plan. The 2018 Audit shows \$25,000 set aside for this expense.*

FINANCIAL REPORTING

Appendix 3 includes the Commission's approved budget for 2019. 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 2019 assessments to the members are also found in *Appendix 3*.

A \$134,070 operating budget was approved by the Commission for 2019. \$4,500 was projected as proceeds from application fees, \$1,570 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, 2020. The 2018 Audit Report, which was prepared by Johnson & Company, Ltd., Certified Public Accountants, is included in this report (*Appendix 3*).

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 are categorized as follows:

General engineering	14,356
General administration	45,782
Education	1,707
Programs	13,330
Projects	53,992
Capital projects	
Total	<u>\$129,167</u>

2020 PROJECTED WORK PLAN

Following is the projected work plan for 2020 as approved by the Commission at its March 16, 2020 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.
 - 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.
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 2021 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.
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 is being updated and training will occur in 2020.*
 - b. Make water quality data and trends easily accessible to the public *by posting this information on the website.*
 - 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. *Include this information in future annual activity reports.*
5. Conduct the biennial solicitation of interest proposals for administrative, legal, technical and wetland consultants. The biennial solicitation will occur in January 2021.

With Hennepin County choosing not to continue as the Commission's primary Technical Advisor, in August 2019 the Commission solicited proposals from interested entities to serve in that role beginning January 1, 2020. The primary function of this position is to ensure that development plans comply with the Commission's Watershed Management Plan by reviewing submitted site development plans and designs to evaluate drainage, hydrologic and water quality requirements, erosion and sediment controls, shoreland and natural resource preservation issues, and compliance with the Wetland Conservation Act. Proposals were solicited from six consulting

firms; four responded. Following a special meeting in September, the Commission at its October 17, 2019 meeting chose Hakanson-Anderson as the Commission's Technical Advisor for the year 2020.

6. Publish a 2019 Annual Activity Report summarizing the Commission's yearly activities and financial reporting.

7. Draft a 2020 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 Best Management Practices (BMPs) in the watershed through technical and financial assistance.

a. Utilize the services of Hennepin County's Rural Conservationist and their partners (e.g., University of Minnesota's Agriculture Specialist) to promote, educate, and facilitate BMPs to target audiences, including direct and general outreach to identify and coordinate additional project implementation.

b. Identify projects eligible for the Hennepin County Natural Resources Good Steward Grant and Opportunity Grant programs.

c. Identify projects eligible for MN Clean Water Fund Grants and apply for one grant in 2020 to implement remaining projects from subwatershed assessments.

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 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. The 2020 budget allows for the monitoring of five lakes.

b. Partner with the Park District to conduct flow and water quality monitoring at two selected sites on Pioneer Creek and Sarah Creek. *There will also be water quality and flow monitoring at two additional sites that flow into Lake Independence.* The 2020 budget allows the monitoring of four 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. *Review and make more realistic and feasible these strategies during the development of the Fourth Generation Plan. \$4,500 is included in the budget for education and educational events.*

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).

a. Hennepin County and/or partners will provide monthly presentations to Board members during their meeting to update them on relevant topics and opportunities for program and project implementation.

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 WaterShed Partner activities. *Encourage Loretto and Maple Plain to participate in WaterShed Partners' Adopt-A-Drain program.*

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. \$1,800 is included in the 2020 budget for this purpose.

6. Provide opportunities for the public to learn about and participate in water quality activities. Seek 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 two sites is included in the 2020 budget.

b. Work in partnership with Hennepin County's Rural Conservationist 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,

assist landowners to help them maintain compliance with the MN Buffer Law.

d. In coordination with Hennepin County and Three Rivers Park District, host up to two open houses annually to educate citizens on the Commission's functions and what project opportunities are available on their individual properties.

e. Work with Hennepin County to develop content-specific outreach materials related to the following topics:

- 1) Improving and maintaining soil health (includes cover crops)
- 2) Farm practices to maintain profitability while protecting water resources
- 3) Manure management
- 4) Financial resources for structural agricultural practices to protect water resources
- 5) Wetland rules and regulations
- 6) Opportunities for practices on lands under jurisdiction of the buffer law
- 7) Other general rural and urban outreach

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.

- a. The Lake Ardmore Neighborhood Projects will be constructed in 2020.
- b. The Ardmore Channel Carp Barrier will be installed in 2020 to prevent carp movement between Ardmore Lake and Lake Independence.
- c. The Baker Park Reserve Campground Ravine Stabilization project is scheduled to be completed by mid-February 2020.
- d. Hennepin County will continue to respond to its 2019 postcard mailing to landowners in the watershed.
- e. Plans continue to move forward on the City of Loretto's connection to the Met Council Environmental System (MCES), a regional wastewater system. Construction is scheduled to begin in 2020.

2. Coordinate with Hennepin County to complete one new subwatershed assessment in 2020 to identify additional project opportunities upstream of either Lake Sarah or Lake Independence. Spurzem Creek Watershed is proposed.

3. Complete any remaining feasibility analyses to construct outstanding 2019 and 2020 CIP projects (as shown in CIP spreadsheet dated April 2018):

- a. Wetland Restoration 18 (Sarah-Independence SWA)
- b. JB Gully Stabilization (Sarah-Independence SWA)

- c. Wetland Restoration 91 (Sarah-Independence SWA)
 - d. Wetland Restoration 105 (Sarah-Independence SWA)
 - e. Seasonal Pond 77 (Sarah-Independence SWA)
 - f. Wetland Restoration 2 (Dance Hall Creek SWA)
4. Continue to identify upland and aquatic Watershed-wide TMDL implementation projects.
5. Prioritize BMPs identified in previously completed subwatershed assessments for implementation or further feasibility study. Continue to network with landowners to gain impetus toward completion of projects. *Continue to pursue projects in these subwatersheds as opportunities become available.* Work with Hennepin County, the City of Greenfield, and future property owners on potential projects and restoration of the old Leuer parcel.
6. 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 CLPW control program, and complete annual water quality monitoring to determine the effectiveness of the program in reducing phosphorus loading to the lake. 2020 is the third year of the second five-year JPA between the Commission and the Park District.
7. Annually 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 Fourth Generation Plan CIP. The TAC will meet as part of the Fourth Generation Plan development process to add new and update current projects on the Capital Improvement Plan.
- a. Prioritize capital projects in anticipation of funding during the next round of the Watershed-based Funding Project. For the next biennium, BWSR's watershed-based funding will be distributed by major watershed instead of by county as it was for the pilot program. Pioneer-Sarah Creek falls within two major watersheds, the North Fork Crow and South Fork Crow. Meetings between the organizations involved will need to occur to determine how the funds will be distributed among the organizations. The total for the North Fork Crow watershed is \$91,000 and South Fork Crow is \$330,000.
 - b. Consider a study for the Spurzem Chain once Loretto's wastewater treatment plant is closed and remediated.
8. Investigate providing cost-share assistance to landowners for implementation of projects that address erosion and reduce sediment and nutrient loading. State cost share funds, administered by Hennepin County, provides for reimbursement of up to 75% of the cost to construct a BMP.
9. Partner with the DNR, USGS, MDH, and other agencies to educate the member cities and watershed community officials about groundwater issues and their relationship to stormwater management and surface water quality.

a. 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.

b. 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.

E. PLANNING

1. Develop and approve the Fourth Generation Watershed Management Plan, due in 2020. The Fourth Generation Plan will establish updated goals and policies for the lakes, streams, and wetlands in the watershed as well as set forth priorities for action for the period 2021-2030. These include actions to protect and improve water quality in watershed lakes and streams, as well as preserve wetlands in the watershed.

a. The Commission will hold two to four Technical Advisory Committee (TAC) meetings over the first six months and is charged with helping to develop the Commission's Capital Improvement Plan.

b. The Commission will remain inclusive of citizen input about problems, issues, and needs in the watershed, and feedback on how the Commission should prioritize its actions and focus its resources. The Commission will also be responsive to citizens' valuable insight on education and outreach needs and opportunities. Commission may not utilize a formal CAC as part of the 4th Generation Planning process, namely because there are not enough knowledgeable citizens willing to volunteer for this committee. We will always welcome community input and will invite the public to review and comment on the Fourth Generation Plan. After the Plan is completed, the Commission is open to the concept of a CAC if we have knowledgeable citizens willing to become involved.

2. Develop a strategy for determining how to use metro watershed-based dollars allocated to the watershed.

APPENDIX

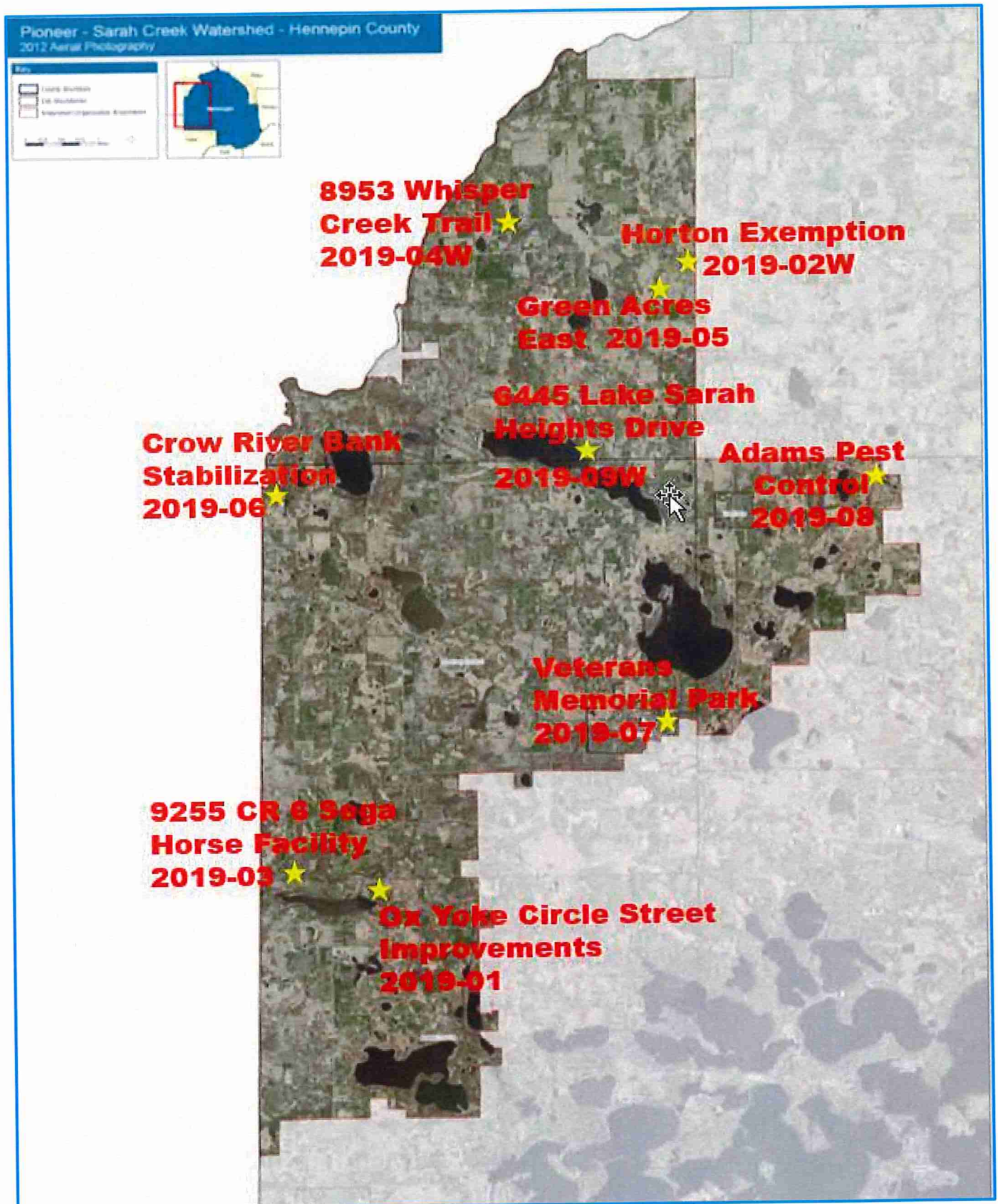
2019 Commissioners

Member	Represented by	Responsibility	Phone/E-mail
Greenfield	Mike Hoekstra 7060 State Highway 55 Greenfield, MN 55373		612.418.9674 mhoekstra@ci.greenfield.mn.us
Independence	Joe Baker 5580 Lake Sarah Heights Dr Independence, MN 55357	Chair Excomm	612.868.8702 joebaker149@gmail.com
Loretto	Brenda Daniels 150 Meadow Drive Loretto, MN 55357	Secretary Excomm	brenda199962@yahoo.com
Maple Plain	John Fay 5819 Three Oaks Avenue Maple Plain, MN 55359	Vice Chair Excomm	763.213.3271 jarrfay@mchsi.com
Medina	Mike McLaughlin 2887 Lakeshore Ave Maple Plain, MN 55359		612.819.1655 mclaughlin110@gmail.com
Minnetrista	John Tschumperlin 7575 Susan Lane Mound, MN 55364	Treasurer Excomm	612.791.1114 jtschumperlin@ci.minnetrista.mn.us

2019 Consultants

Name	Affiliation	Responsibility	Phone/Email
James Kujawa	Hennepin County Dept. of Env. and Energy	Technical Advisor TAC	612.348.7338 James.Kujawa@hennpin.us
Kirsten Barta	701 Fourth Ave S, Suite 700 Minneapolis, MN 55415	Rural Conservation Specialist	612.543.3373 Kirsten.barta@hennepin.us
Judie Anderson Amy Juntunen Beverly Love	JASS 3235 Fernbrook Lane Plymouth, MN 55447	Administrator Deputy Treasurer Excomm, TAC	763.553.1144 judie@jass.biz amy@jass.biz beverly@jass.biz
Joel Jamnik	Campbell Knutson PA Grand Oak Office Center I 860 Blue Gentian Road #290 Eagan, MN 55121	Legal Counsel	651.234.6219 jjamnik@ck-law.com
Brian Vlach	Three Rivers Park District 12615 County Road 9 Plymouth, MN 55441	Water Quality TAC	763.694.7846 Bvlach@threeriversparkdistrict.org
Johnson & Co., Ltd.	3255 Fernbrook Lane Plymouth, MN 55447	Auditor	952.525.9500
Ed Matthiesen	Wenck Associates 7500 Highway 55 Suite 300 Golden Valley, MN 55427	Professional TAC	763.252.6851 ematthiesen@wenck.com

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Appendix 3
FINANCIAL REPORTS

Pioneer-Sarah Creek Watershed Management Commission
2019-2020 Approved Budgets

	2019 Budget	2020 Budget	
Revenues			
Member Dues	\$ 100,000.00	\$ 103,800.00	
Project Review Fees	4,000.00	6,000.00	
CIP Income	28,000.00	28,000.00	
WCA Adm Fees	500.00	0.00	
Interest and Dividend Income	1,570.00	9,000.00	
Total Revenues	<u>134,070.00</u>	<u>146,800.00</u>	
Expenses			
Engineering/Consulting	24,190.00	47,000.00	
Administrative Expense	36,000.00	36,000.00	
Adm-Project Reviews	750.00	1,000.00	
Adm-CIP Mgmt	3,000.00	2,500.00	
WCA - Admin/Legal Expenses	300.00	0.00	
Adm - Tech Support	550.00	800.00	
Legal Expense	500.00	500.00	
Audit Expense	4,500.00	4,500.00	
Insurance	3,500.00	3,100.00	
Website	1,800.00	1,800.00	
Adm - General Programs	500.00	0.00	
TAC Meetings	3,000.00	3,000.00	
Lakes Monitoring - TRPD	8,100.00	8,100.00	(5 Lakes)
Lakes Monitoring - CAMP	760.00	1,520.00	
Stream Monitoring	7,120.00	9,500.00	Increasing from 3 sites to 4,
Education	4,500.00	4,000.00	
Education-Events	500.00	500.00	
Invertebrate Monitoring	500.00	1,000.00	
Grant Writing	1,000.00	1,000.00	
Plan Amendment	1,000.00	10,000.00	To Extend 3rd Gen Plan
Third Gen - Admin	0.00	1,000.00	
Special Projects	4,000.00	2,000.00	
Fourth Gen Plan	0.00	10,000.00	To total \$75,000 by 2025
Capital Improvement Project	28,000.00	28,000.00	
Total Expenses	<u>134,070.00</u>	<u>176,820.00</u>	
Net Income	<u>\$ 0.00</u>	<u>(\$ 30,020.00)</u>	

Commit entire "retained surplus" to CIP fund
Set Dues at 103K + CIP

Pioneer-Sarah Creek Watershed Management Commission
2019-2020 Member Assessments

2019	2018 Market Value PSC Basin	Increase in MV over Prev Year	2019 Op Budget		Increase over Prev Year	
			%age	Amount	%age	Amount
Greenfield	368,183,516	-12.09%	25.49%	32,625.08	-12.86%	(4,815.08)
Independence	558,624,135	3.96%	38.67%	49,500.20	3.04%	1,462.22
Loretto	61,598,085	10.60%	4.26%	5,458.26	9.62%	479.21
Maple Plain	118,116,948	8.15%	8.18%	10,466.45	7.20%	702.67
Medina	167,463,487	5.65%	11.59%	14,839.09	4.72%	669.10
Minnetrista	170,530,950	12.02%	11.81%	15,110.91	11.04%	1,501.88
TOTALS	1,444,517,121	0.89%	100.00%	128,000.00	0.00%	0.00
2020	2019 Market Value PSC Basin	Increase in MV over Prev Year	2020 Op Budget		Increase over Prev Year	
			%age	Amount	%age	Amount
Greenfield	387,408,426	5.22%	25.78%	33,972.21	4.13%	1,347.12
Independence	577,654,920	3.41%	38.43%	50,655.10	2.33%	1,154.90
Loretto	64,646,640	4.95%	4.30%	5,668.92	3.86%	210.66
Maple Plain	124,712,551	5.58%	8.30%	10,936.16	4.49%	469.71
Medina	173,159,976	3.40%	11.52%	15,184.56	2.33%	345.47
Minnetrista	175,423,480	15.23%	11.67%	15,383.05	1.80%	272.14
TOTALS	1,503,005,993	4.05%	100.00%	131,800.00	2.97%	3,800.00

PIONEER-SARAH CREEK WATERSHED
MANAGEMENT COMMISSION

Financial Statements and
Supplemental Information
For the Year Ended
December 31, 2018

Pioneer-Sarah Creek Watershed Management Commission

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Thomas J. Oplitz, CPA, CVA
Bridget K. McKelvey, CPA, MBT, CVA
Thomas D. Johnson, CPA
Thomas A. Barber, CPA

MEMBER
American Institute of Certified Public Accountants
Minnesota Society of Certified Public Accountants
Private Companies Practice Section of
American Institute of Certified Public Accountants

Dwaine C. Johnson (Retired)
Lisa M. Roden, CPA, MST
Brad R. Cohrs, CPA

INDEPENDENT AUDITORS' REPORT

Commissioners
Pioneer-Sarah Creek Watershed Management Commission
Plymouth, Minnesota

Report on the Financial Statements

We have audited the accompanying financial statements of the governmental activities and major fund of the Pioneer-Sarah Creek Watershed Management Commission (the Commission), as of and for the year ended December 31, 2018, and the related notes to the financial statements, which collectively comprise the Commission's basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

The Commission's management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the Commission's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a reasonable basis for our audit opinion.

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the respective financial position of the governmental activities and major fund of the Commission as of December 31, 2018, the respective changes in the financial position thereof, and the budgetary comparison for the General Fund for the year then ended in accordance with accounting principles generally accepted in the United States of America.



Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that Management's Discussion and Analysis (MD&A) be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. The Commission has not presented the MD&A that accounting principles generally accepted in the United States of America have determined necessary to supplement, although not required to be part of, the basic financial statements.

Prior Year Comparative Information

We have previously audited the Commission's financial statements for the year ended December 31, 2017 and, in our report dated April 19, 2018, we expressed an unqualified opinion on the financial statements of the governmental activities and major fund. The financial statements include prior year partial comparative information, which does not include all of the information required in a presentation in conformity with accounting principles generally accepted in the United States of America. Accordingly, such information should be read in conjunction with the Commission's financial statements for the year ended December 31, 2017, from which such information was derived.

Other Reporting

We have also issued our report dated June 20, 2019, on our consideration of the Commission's internal control over financial reporting and our tests of its compliance with certain provisions of laws, regulations, contracts and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the internal control over financial reporting or on compliance.

Johnson & Company Ltd.

June 20, 2019

BASIC FINANCIAL STATEMENTS

Pioneer-Sarah Creek Watershed Management Commission

Statement of Net Position and
Governmental Fund Balance Sheet

As of December 31, 2018

(with Partial Comparative Actual Amounts as of December 31, 2017)

	Governmental Activities	
	2018	2017
Assets		
Cash and investments	\$ 375,540	\$ 311,180
Restricted cash	165,577	-
Total assets	<u>\$ 541,117</u>	<u>\$ 311,180</u>
Liabilities and Fund Balances/Net Position		
Liabilities	\$ 18,904	\$ 17,063
Accounts payable	165,577	-
Unearned revenue	184,481	17,063
Total liabilities		
Fund balances/net position		
Assigned fund balances/net position	95,506	74,464
Assigned for capital improvement projects	25,000	25,000
Assigned for fourth generation plan	120,506	99,464
Total assigned funds		
Unrestricted/unassigned fund balances/net position	236,130	194,653
Total assigned or unrestricted fund balances/net position	<u>356,636</u>	<u>294,117</u>
Total fund balances/net position	<u>356,636</u>	<u>294,117</u>
Total liabilities and fund balances/net position	<u>\$ 541,117</u>	<u>\$ 311,180</u>

Pioneer-Sarah Creek Watershed Management Commission

Statement of Activities and
Governmental Fund Revenues, Expenditures, and
Changes in Fund Balances/Net Position
Budget and Actual

Year Ended December 31, 2018

(with Partial Comparative Actual Amounts for the Year Ended December 31, 2017)

	Governmental Activities			
	2018			2017
	Original and Final Budget	(Audited)	Over (Under)	(Audited)
Revenue				
Member assessments	\$ 128,000	\$ 128,000	\$ -	\$ 133,700
Charges for services - project and wetland review fees	5,500	8,450	2,950	4,000
Grants	-	42,423	42,423	-
Reimbursements	-	4,593	4,593	19,159
Interest income	270	8,220	7,950	2,034
Total revenue	133,770	191,686	57,916	158,893
Expenditures				
Current				
Administration	44,990	38,066	(6,924)	36,625
Education	7,620	1,707	(5,913)	921
Insurance	3,500	2,618	(882)	2,982
Professional fees	4,650	4,124	(526)	4,106
Technical support	23,600	14,356	(9,244)	15,636
Water monitoring	13,330	13,330	-	10,370
Watershed programs	7,000	-	(7,000)	6,131
Watershed plan	900	974	74	784
Capital outlay				
Improvement projects	28,180	53,992	25,812	8,767
Total expenditures	133,770	129,167	(4,603)	86,322
Net change in fund balances/net position	\$ -	62,519	\$ 62,519	72,571
Net fund balances/net position				
Beginning of year		294,117		221,546
End of year		\$ 356,636		\$ 294,117

Pioneer-Sarah Creek Watershed Management Commission

Notes to Financial Statements
December 31, 2018

NOTE 1 - SIGNIFICANT ACCOUNTING POLICIES

Organization

The Pioneer-Sarah Creek Watershed Management Commission is formed under a Joint Powers Agreement, as amended according to Minnesota Statutes Sections 103B.201 through 103B.255 and Minnesota Rules Chapter 8410 relating to Metropolitan Area Local Water Management and its reporting requirements. Pioneer-Sarah Creek Watershed Management Commission was established in October, 1984 to protect and manage the natural resources of the Pioneer-Sarah Creek Watershed.

The Commission is considered a governmental unit, but is not a component unit of any of its members. As a governmental unit, the Commission is exempt from federal and state income taxes.

Reporting Entity

A joint venture is a legal entity resulting from a contractual agreement that is owned, operated, or governed by two or more participants as a separate and specific activity subject to joint control, in which the participants retain either an ongoing financial interest or an ongoing financial responsibility. The Commission is considered a joint venture.

As required by accounting principles generally accepted in the United States of America, these financial statements include the Commission (the primary government) and its component units. Component units are legally separate entities for which the primary government is financially accountable, or for which the exclusion of the component unit would render the financial statements of the primary government misleading. The criteria used to determine if the primary government is financially accountable for a component unit include whether or not the primary government appoints the voting majority of the potential component's unit board, is able to impose its will on the potential component unit, is in a relationship of financial benefit or burden with the potential component unit, or is fiscally depended upon by the potential component unit. Based on these criteria, there are no component units required to be included in the Commission's financial statements.

Government-Wide and Fund Financial Statement Presentation

The government-wide financial statements (the Statement of Net Position and the Statement of Activities) report information about the reporting government as a whole. These statements include all the financial activities of the Commission. The Statement of Activities demonstrates the degree to which the direct expenses of a given function are offset by program revenues. Direct expenses are those that are clearly identifiable with a specific function or segment. Program revenues include charges to customers or applicants who purchase, use, or directly benefit from goods, services, or privileges provided by a given function or segment, and grants or contributions that are restricted to meeting the operational or capital requirements of a particular function or segment. Other internally directed revenues are reported instead as general revenues.

Pioneer-Sarah Creek Watershed Management Commission

Notes to Financial Statements (continued)
December 31, 2018

NOTE 1 - SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Measurement Focus, Basis of Accounting and Financial Statement Presentation

The government-wide financial statements are reported using the economic resources measurement focus and the accrual basis of accounting. Revenues are recorded when earned and expenses are recorded when a liability is incurred, regardless of the timing of related cash flows. Property taxes are recognized as revenues in the year for which they are levied. Grants and similar items are recognized as revenue as soon as eligibility requirements imposed by the provider have been met.

Governmental fund financial statements are reported using the current financial resources measurement focus and the modified accrual basis of accounting. Revenues are recognized as soon as they are both measurable and available. Revenues are considered to be available when they are collectible within the current period or soon enough thereafter to pay liabilities of the current period. For this purpose, the Commission considers revenues to be available if they are collected within 60 days of the end of the current fiscal period. Expenditures generally are recorded when a liability is incurred, as under accrual accounting.

Fund Financial Statement Presentation

The accounts of the Commission are organized on the basis of funds, each of which is considered a separate accounting entity. The operations of each fund are accounted for with a separate set of self-balancing accounts that comprise its assets, liabilities, fund equity, revenue, expenditures, additions, and deductions. Resources are allocated to, and accounted for in individual funds based on the purposes for which they are to be spent and the means by which spending activities are controlled. The resources of the Commission are accounted for in one fund:

- **General Fund (Governmental Fund Type)** - This fund is used to receive dues and miscellaneous items which may be disbursed for any and all purposes authorized by the bylaws of the Commission.

Typically, separate fund financial statements are provided for Governmental Funds. However, due to the simplicity of the Commission's operation, the Governmental Fund financial statements have been combined with the Government-Wide statements.

Budgets

The amounts shown in the financial statements as "budget" represent the budget amounts based on the modified accrual basis of accounting. A budget for the General Fund is adopted annually by the Commission. Appropriations lapse at year-end. Budgetary control is at the fund level.

Pioneer-Sarah Creek Watershed Management Commission

Notes to Financial Statements (continued)
December 31, 2018

NOTE 1 - SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Use of Estimates

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Members' Contributions

Members' contributions are calculated based on the member's share of the taxable market value of all real property within the watershed to the total market value of all real property in the watershed.

Capital Assets

The Commission follows the policy of expensing any supplies or small equipment at the time of purchase. The Commission currently has no capitalized assets.

Risk Management

The Commission is exposed to various risks of loss related to torts: theft of, damage to, and destruction of assets; error and omissions; and natural disasters. The Commission participates in the League of Minnesota Cities Insurance Trust (LMCIT), a public entity risk pool for its general property, casualty, and other miscellaneous insurance coverages. LMCIT operates as a common risk management and insurance program for a large number of cities in Minnesota. The Commission pays an annual premium to LMCIT for insurance coverage. The LMCIT agreement provides that the trust will be self-sustaining through member premiums and will reinsure through commercial companies for claims in excess of certain limits. Settled claims have not exceeded this commercial coverage in any of the past three years. There were no significant reductions in insurance coverage during the year ended December 31, 2018.

Receivables

The Commission utilizes an allowance for uncollectible accounts to value its receivables; however, the Commission had no receivables as of December 31, 2018 and 2017.

Pioneer-Sarah Creek Watershed Management Commission

Notes to Financial Statements (continued)
December 31, 2018

NOTE 1 - SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Net Position

In the government-wide financial statements, net position represents the difference between assets, deferred outflows of resources, liabilities, and deferred inflows of resources. Net position is displayed in three components:

Net Investment in Capital Assets - Consists of capital assets, net of accumulated depreciation, reduced by any outstanding debt attributable to acquire capital assets.

Restricted Net Position - Consists of net position restricted when there are limitations imposed on their use through external restrictions imposed by creditors, grantors, or laws or regulations of other governments.

Unrestricted Net Position - All other net position that do not meet the definition of "restricted" or "net investment in capital assets."

The Commission applies restricted resources first when an expense is incurred for which both restricted and unrestricted resources are available.

Prior Period Comparative Financial Information/Reclassification

The basic financial statements include certain prior year partial comparative information in total but not at the level of detail required for a presentation in conformity with accounting principles generally accepted in the United States of America. Accordingly, such information should be read in conjunction with the Commission's financial statements for the year ended December 31, 2017, from which the summarized information was derived. Also, certain amounts presented in the prior year data may have been reclassified in order to be consistent with the current year's presentation.

Unearned Revenue

The Commission recognizes grant revenue as it becomes eligible to receive the grant. If the grant has restrictions that have not been satisfied, the revenue is deferred until the Commission has satisfied them.

In 2018, the Commission was awarded a grant of \$416,000 from the Board of Water and Soil Resources to fund the achievement of phosphorus watershed load reductions on Lake Independence. The Commission was also awarded a Hennepin County Opportunity Grant of \$59,500 to fund this project. Total project costs are expected to be \$520,000. The Commission, the City of Independence, the City of Medina and the Three Rivers Park District will each fund \$10,500. The Lake Independence Citizens Association will fund \$2,500.

As of December 31, 2018 the Commission had received \$208,000 of grant money and incurred \$42,423 of direct project costs. Unearned revenue was \$165,577 as of December 31, 2018.

Pioneer-Sarah Creek Watershed Management Commission

Notes to Financial Statements (continued)
December 31, 2018

NOTE 2 - ASSETS, LIABILITIES AND NET POSITION

A. Deposits

In accordance with applicable Minnesota Statutes, the Commission maintains a checking account authorized by the Commission.

The following is considered the most significant risk associated with deposits:

Custodial Credit Risk - In the case of deposits, this is the risk that in the event of a bank failure, the Commission's deposits may be lost.

Minnesota Statutes require that all deposits be protected by federal deposit insurance, corporate surety bond, or collateral. The market value of collateral pledged must equal 110 percent of the deposits not covered by federal deposit insurance or corporate surety bonds. Authorized collateral includes treasury bills, notes, and bonds; issues of U.S. government agencies; general obligations rated "A" or better; revenue obligations rated "AA" or better; irrevocable standard letters of credit issued by the Federal Home Loan Bank; and certificates of deposit. Minnesota Statutes require that securities pledged as collateral be held in safekeeping in a restricted account at the Federal Reserve Bank or in an account at a trust department of a commercial bank or other financial institution that is not owned or controlled by the financial institution furnishing the collateral. The Commission has no additional deposit policies addressing custodial credit risk.

At year-end, the Commission had no funds held in its bank account. All funds were transferred to their 4M Fund investment account. (see below)

B. Investments

At December 31, 2018 and 2017, the Commission held \$541,117 and \$311,180 (approximate cost and fair value), respectively, in investments with PMA Financial Network in Minnesota 4M Funds Holdings.

The 4M fund is an external investment pool not registered with the Securities Exchange Commission (SEC) that follows the same regulatory rules of the SEC under rule 2a7. The 4M Fund is a customized cash management and investment program for Minnesota public funds that is allowable under Minnesota Statutes. The fair value of the position in the pool is the same as the value of the pool shares.

Investments are subject to various risks, the following of which are considered the most significant:

Custodial Credit Risk - For investments, this is the risk that in the event of a failure of the counterparty to an investment transaction (typically a broker-dealer) the Commission would not be able to recover the value of its investments or collateral securities that are in the possession of an outside party. The Commission does not have a formal investment policy addressing this risk, but typically limits its exposure by purchasing insured or registered investments, or by the control of who holds the securities.

Pioneer-Sarah Creek Watershed Management Commission

Notes to Financial Statements (continued)
December 31, 2018

NOTE 2 - ASSETS, LIABILITIES AND NET POSITION (CONTINUED)

Credit Risk - This is the risk that an issuer or other counterparty to an investment will not fulfill its obligations. Minnesota Statutes limit the Commission's investments to direct obligations or obligations guaranteed by the United States or its agencies; shares of investment companies registered under the Federal Investment Company Act of 1940 that receive the highest credit rating, are rated in one of the two highest rating categories by a statistical rating agency, and all of the investments have a final maturity of 13 months or less; general obligations rated "A" or better; revenue obligations rated "AA" or better; general obligations of the Minnesota Housing Finance Agency rated "A" or better; bankers' acceptances of United States banks eligible for purchase by the Federal Reserve System; commercial paper issued by United States corporations or their Canadian subsidiaries, rated of the highest quality category by at least two nationally recognized rating agencies, and maturing in 270 days or less; Guaranteed Investment Contracts guaranteed by a United States commercial bank, domestic branch of a foreign bank, or a United States insurance company, and with a credit quality in one of the top two highest categories; repurchase or reverse purchase agreements and securities lending agreements with financial institutions qualified as a "depository" by the government entity, with banks that are members of the Federal Reserve System with capitalization exceeding \$10,000,000; that are a primary reporting dealer in U.S. government securities to the Federal Reserve Bank of New York; or certain Minnesota securities broker-dealers. The Commission's investment policies do not further address credit risk.

Concentration Risk - This is the risk associated with investing a significant portion of the Commission's investment (considered 5 percent or more) in the securities of a single issuer, excluding U.S. guaranteed investments (such as treasuries), investment pools, and mutual funds. The Commission does not have an investment policy limiting the concentration of investments.

Interest Rate Risk - This is the risk of potential variability in the fair value of fixed rate investments resulting from changes in interest rates (the longer the period for which an interest rate is fixed, the greater the risk). The Commission does not have an investment policy limiting the duration of investments.

Pioneer-Sarah Creek Watershed Management Commission

Notes to Financial Statements (continued)
December 31, 2018

NOTE 3 - FUND BALANCE CLASSIFICATIONS

The following fund balance classifications describe the relative strength of the spending constraints placed on the purposes for which resources can be used:

- **Nonspendable** - amounts that are not in spendable form (such as inventory) or are required to be maintained intact;
- **Restricted** - amounts constrained to specific purposes by their providers (such as grantors, bondholders, and higher levels of government, through constitutional provisions, or by enabling legislation;
- **Committed** - amounts constrained to specific purposes by a government itself, using its highest level of decision-making authority; to be reported as committed, amounts cannot be used for any other purpose unless the government takes the same highest level action to remove or change the constraint;
- **Assigned** - amounts a government intends to use for a specific purpose; intent can be expressed by the governing body or by an official or body to which the governing body delegates the authority;
- **Unassigned** - amounts that are available for any purpose; these amounts are reported only in the general fund.

The Commission establishes (and modifies or rescinds) fund balance commitments by passage of an ordinance or resolution. This is typically done through adoption and amendment of the budget. A fund balance commitment is further indicated in the budget document as a designation or commitment of the fund. Assigned fund balance is established by the Commission through adoption or amendment of the budget as intended for specific purpose.

Pioneer-Sarah Creek Watershed Management Commission

Notes to Financial Statements (continued)
December 31, 2018

NOTE 4 - MEMBERS' ASSESSMENTS

Dues received from members were as follows:

	Year Ended December 31			
	2018		2017	
	Amount	Percentage	Amount	Percentage
Greenfield	\$ 37,440	29.25 %	\$ 38,930	29.12 %
Independence	48,038	37.53	50,439	37.73
Loretto	4,979	3.89	5,345	4.00
Maple Plain	9,764	7.63	10,425	7.80
Medina	14,170	11.07	15,033	11.24
Minnetrista	13,609	10.62	13,528	10.11
	<u>\$ 128,000</u>	<u>100.00 %</u>	<u>\$ 133,700</u>	<u>100.00 %</u>

OTHER REQUIRED REPORTS

Thomas J. Opitz, CPA, CVA
Bridget K. McKelvey, CPA, MBT, CVA
Thomas D. Johnson, CPA
Thomas A. Barber, CPA

MEMBER
American Institute of Certified Public Accountants
Minnesota Society of Certified Public Accountants
Private Companies Practice Section of
American Institute of Certified Public Accountants

Dwaine C. Johnson (Retired)
Lisa M. Roden, CPA, MST
Brad R. Cohrs, CPA

INDEPENDENT AUDITORS' REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS

Board of Directors
Pioneer-Sarah Creek Watershed Management Commission
Plymouth, MN

We have audited, in accordance with the auditing standards generally accepted in the United States of America, the financial statements of the governmental activities and the major fund of the Pioneer-Sarah Creek Watershed Management Commission (the Commission) as of and for the year ended December 31, 2018, and the related notes to the financial statements, which collectively comprise the Commission's basic financial statements, and have issued our report thereon dated June 20, 2019.

Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered the Commission's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Commission's internal control. Accordingly, we do not express an opinion on the effectiveness of the Commission's internal control.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A *material weakness* is a deficiency, or combination of deficiencies, in internal control such that there is a reasonable possibility that material misstatement of the financial statements will not be prevented, or detected and corrected on a timely basis. A *significant deficiency* is a deficiency, or combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies and therefore, material weaknesses or significant deficiencies may exist that were not identified. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses, as defined above. However, material weaknesses may exist that have not been identified. We did identify the following deficiencies in internal control that we consider to be significant deficiencies:

Because of the limited size of your office staff, your organization has limited segregation of duties. A good system of internal accounting control contemplates an adequate segregation of duties so that no one individual handles a transaction from inception to completion. While we recognize that your organization is not large enough to permit an adequate segregation of duties in all respects, it is important that you be aware of the condition.



Compliance and Other Matters

As part of obtaining reasonable assurance about whether the Commission's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion.

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the result of that testing, and not to provide an opinion on the effectiveness of the entity's internal control or on compliance. Accordingly, this communication is not suitable for any other purpose.

Johnson & Company, Ltd.

June 20, 2019

Thomas J. Oplitz, CPA, CVA
Bridget K. McKelvey, CPA, MBT, CVA
Thomas D. Johnson, CPA
Thomas A. Barber, CPA

MEMBER
American Institute of Certified Public Accountants
Minnesota Society of Certified Public Accountants
Private Companies Practice Section of
American Institute of Certified Public Accountants

Dwaine C. Johnson (Retired)
Lisa M. Roden, CPA, MST
Brad R. Cohrs, CPA

INDEPENDENT AUDITORS' REPORT ON MINNESOTA LEGAL COMPLIANCE

Board of Directors
Pioneer-Sarah Creek Watershed Management Commission
Plymouth, Minnesota

We have audited, in accordance with auditing standards generally accepted in the United States of America, the financial statements of the governmental activities and major fund of the Pioneer-Sarah Creek Watershed Management Commission (the Commission) as of and for the year ended December 31, 2018, and the related notes to the financial statements, which collectively comprise the Commission's basic financial statements, and have issued our report thereon dated June 20, 2019.

MINNESOTA LEGAL COMPLIANCE

The *Minnesota Legal Compliance Audit Guide for Other Political Subdivisions*, promulgated by the State Auditor pursuant to Minn. Stat. 6.65, contains six categories of compliance to be tested: contracting and bidding, deposits and investments, conflicts of interest, claims and disbursements, miscellaneous provisions, and tax increment financing. Our audit considered all of the applicable listed categories, except that we did not test for compliance in tax increment financing, because the Commission does not utilize tax increment financing.

In connection with our audit, nothing came to our attention that caused us to believe that the Commission failed to comply with the provisions of the *Minnesota Legal Compliance Audit Guide for Other Political Subdivisions*. However, our audit was not directed primarily toward obtaining knowledge of such noncompliance. Accordingly, had we performed additional procedures, other matters may have come to our attention regarding the Commission's noncompliance with the above referenced provisions.

PURPOSE OF THIS REPORT

This report is intended solely for the information and use of those charged with governance and management of the Pioneer-Sarah Creek Watershed Management Commission and the State Auditor and is not intended to be and should not be used by anyone other than these specified parties.

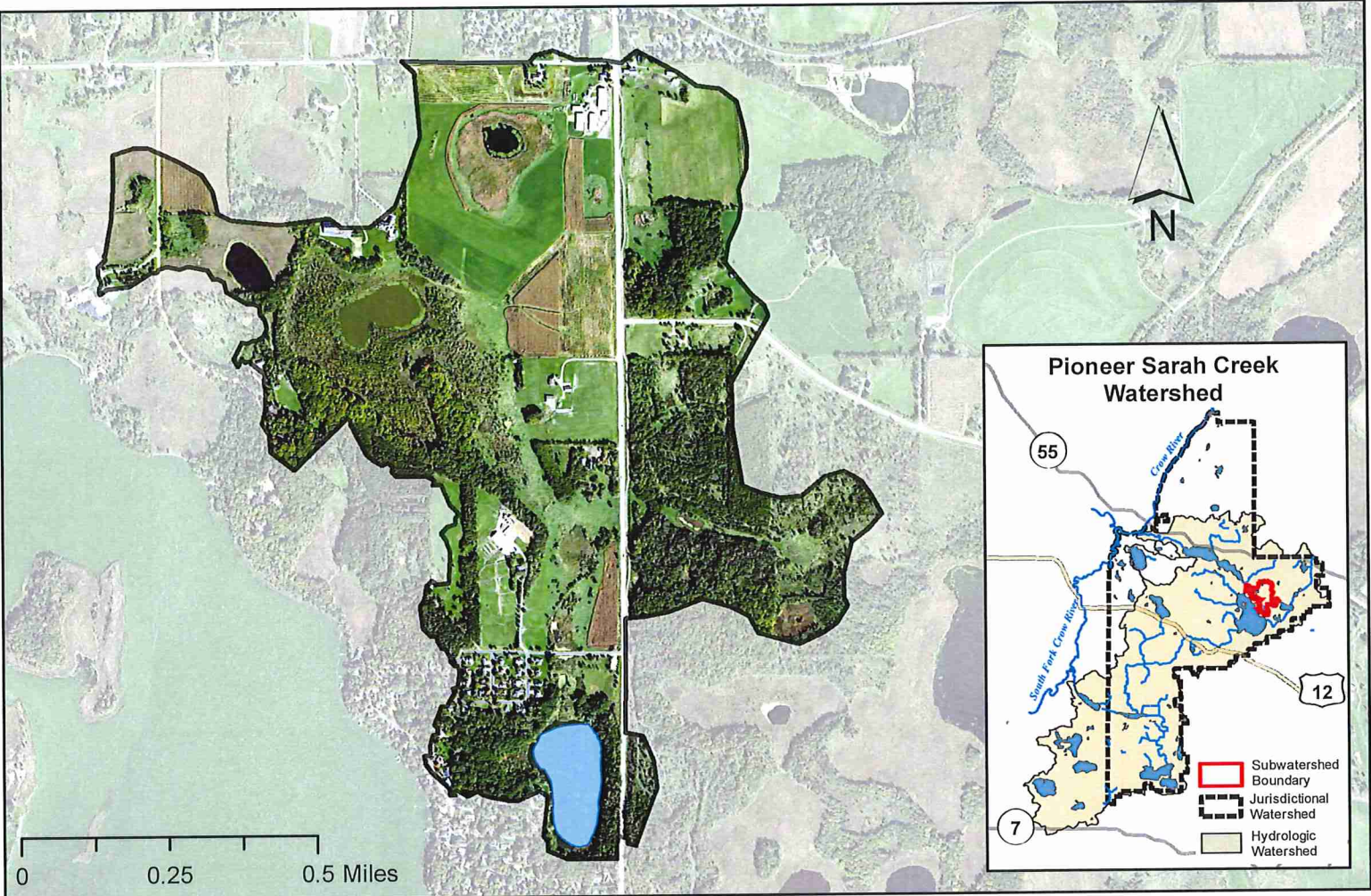
June 20, 2019

Johnson + Company, Ltd.



Appendix 4
LAKE REPORT CARDS

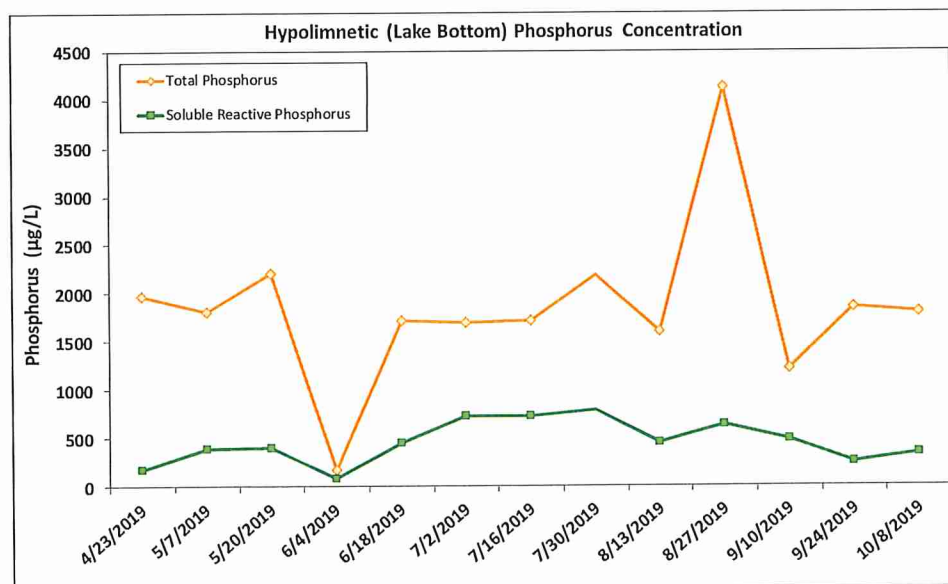
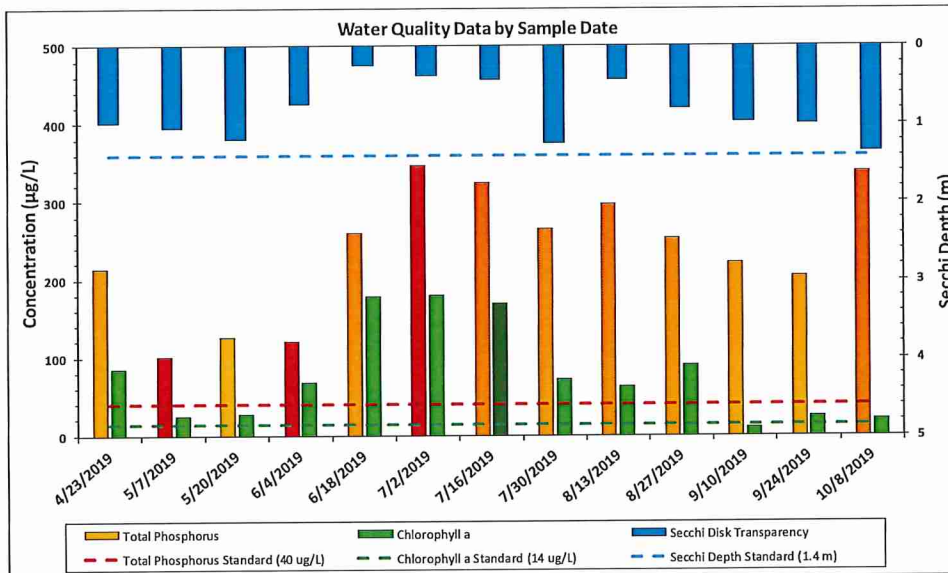
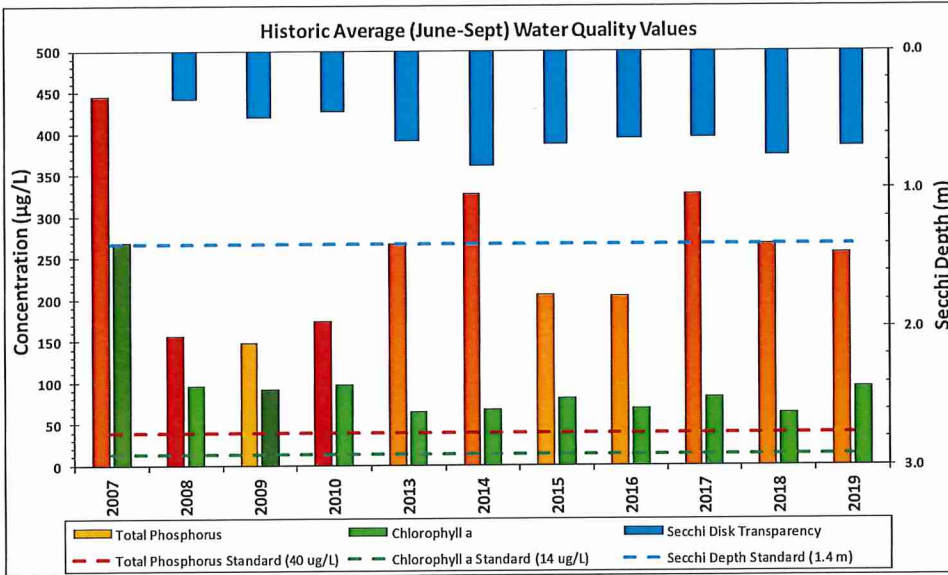
Lake Ardmore Watershed Map



Lake Ardmore Bathymetry



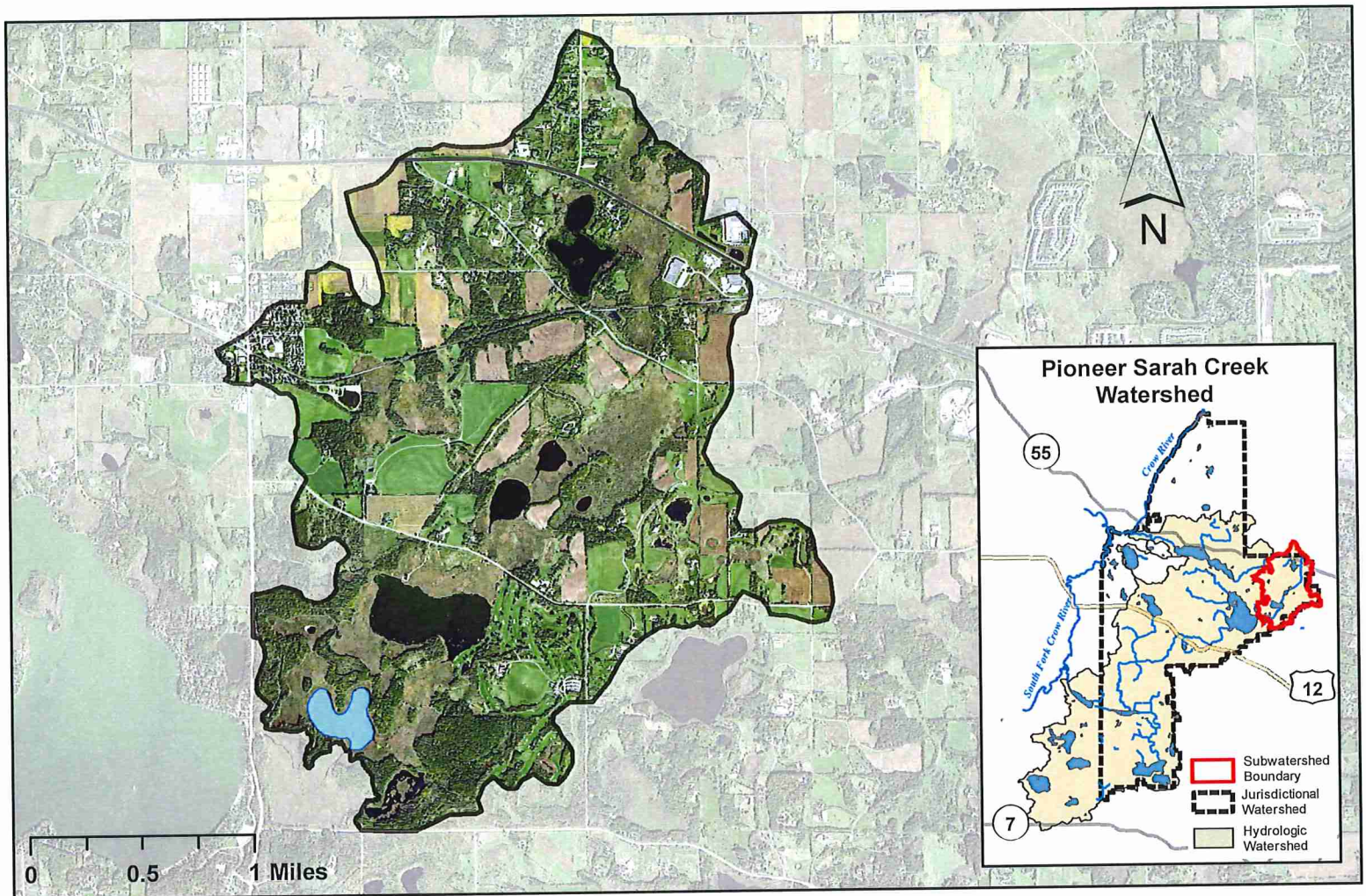
Lake and Watershed Characteristics	
DNR #	27015300
Watershed Area	514 Acres
Lake Area	13.5 Acres
Percent Littoral Area	75%
Average Depth	9.4 ft.
Maximum Depth	24.4 ft.
Watershed Area:Lake Area	38:1
Impairment Classification	Needs Assessment
Classification	Deep Lake



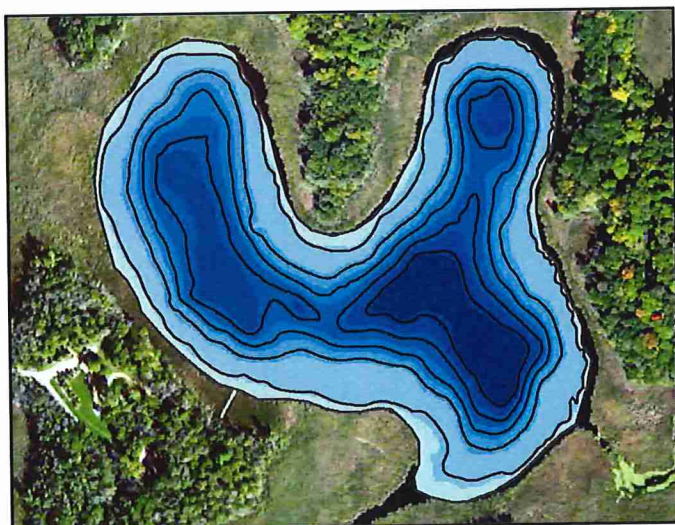
Ardmore Water Quality Report Card				
Year	TP	Chl-a	Secchi	Avg Grade
2007	F		F	F
2008	F	F	F	F
2009	F	F	F	F
2010	F	F	F	F
2013	D	F	F	D
2014	D	D	D-	D
2015	F	F	F	F
2016	D	F	F	D
2017	F	F	F	F
2018	D	D	D-	D
2019	F	F	F	F
MPCA Standard	C	B	C	C+

Met Council Grading System for Lake Water Quality

Half Moon Lake Watershed Map

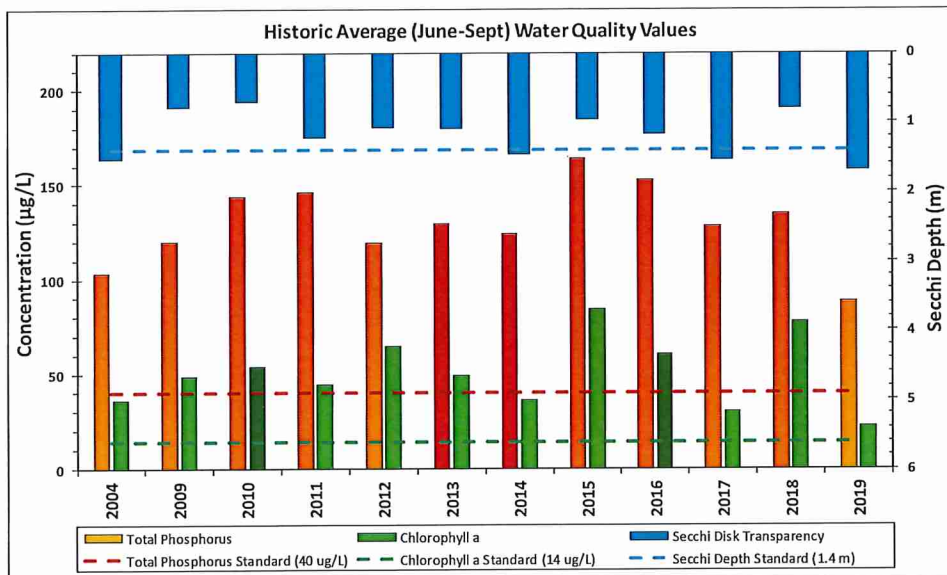


Half Moon Lake Bathymetry



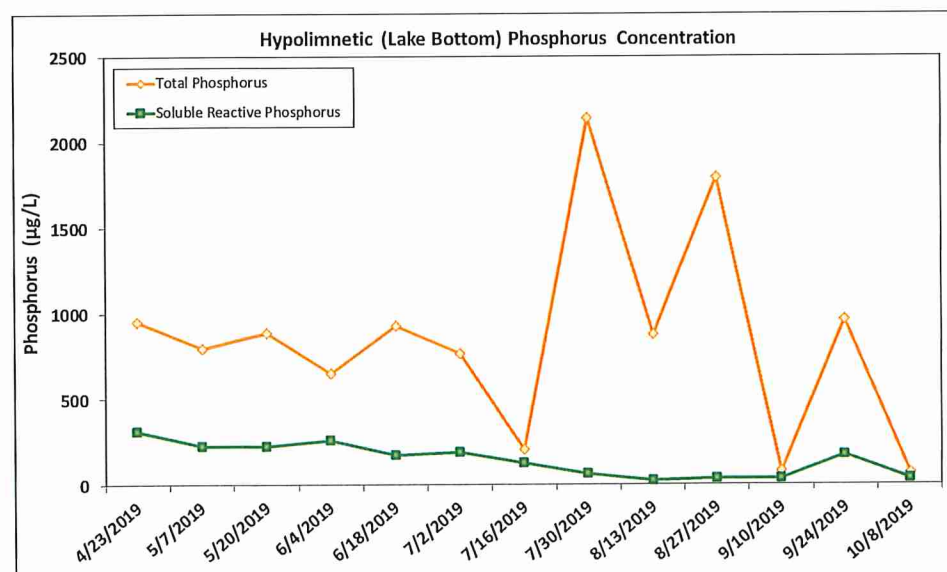
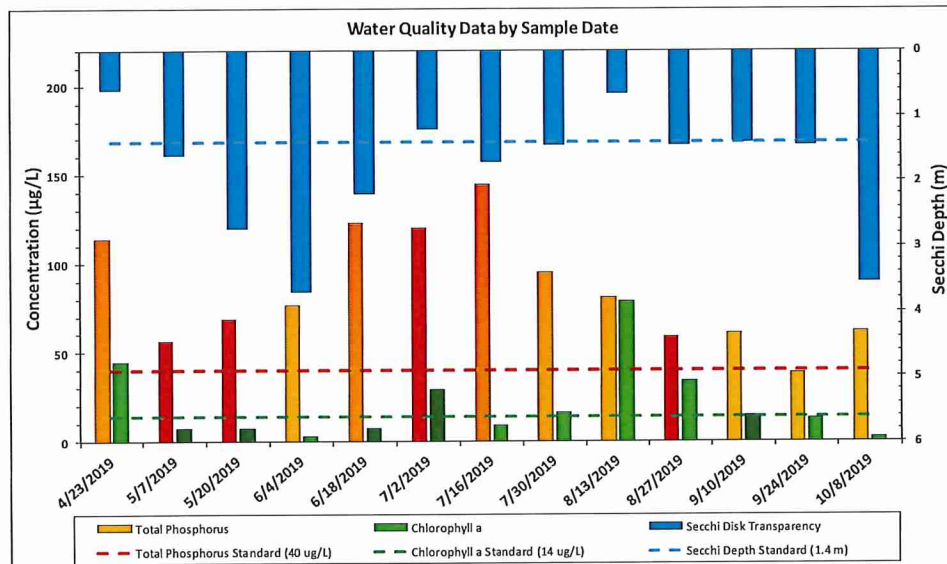
Lake and Watershed Characteristics

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



Half Moon Lake Water Quality Report Card				
Year	TP	Chl-a	Secchi	Avg Grade
2004	D	C	C	C-
2009	D	D	D	D
2010	D	D	D	D
2011	D	C	C	C-
2012	D	D	D	D
2013	D	D	D	D
2014	D	C	C	C-
2015	F	F	D	F
2016	D	D	D	D
2017	D	C	C	C-
2018	D	F	D	D-
2019	D	C	C	C-
MPCA Standard	C	B	C	C+

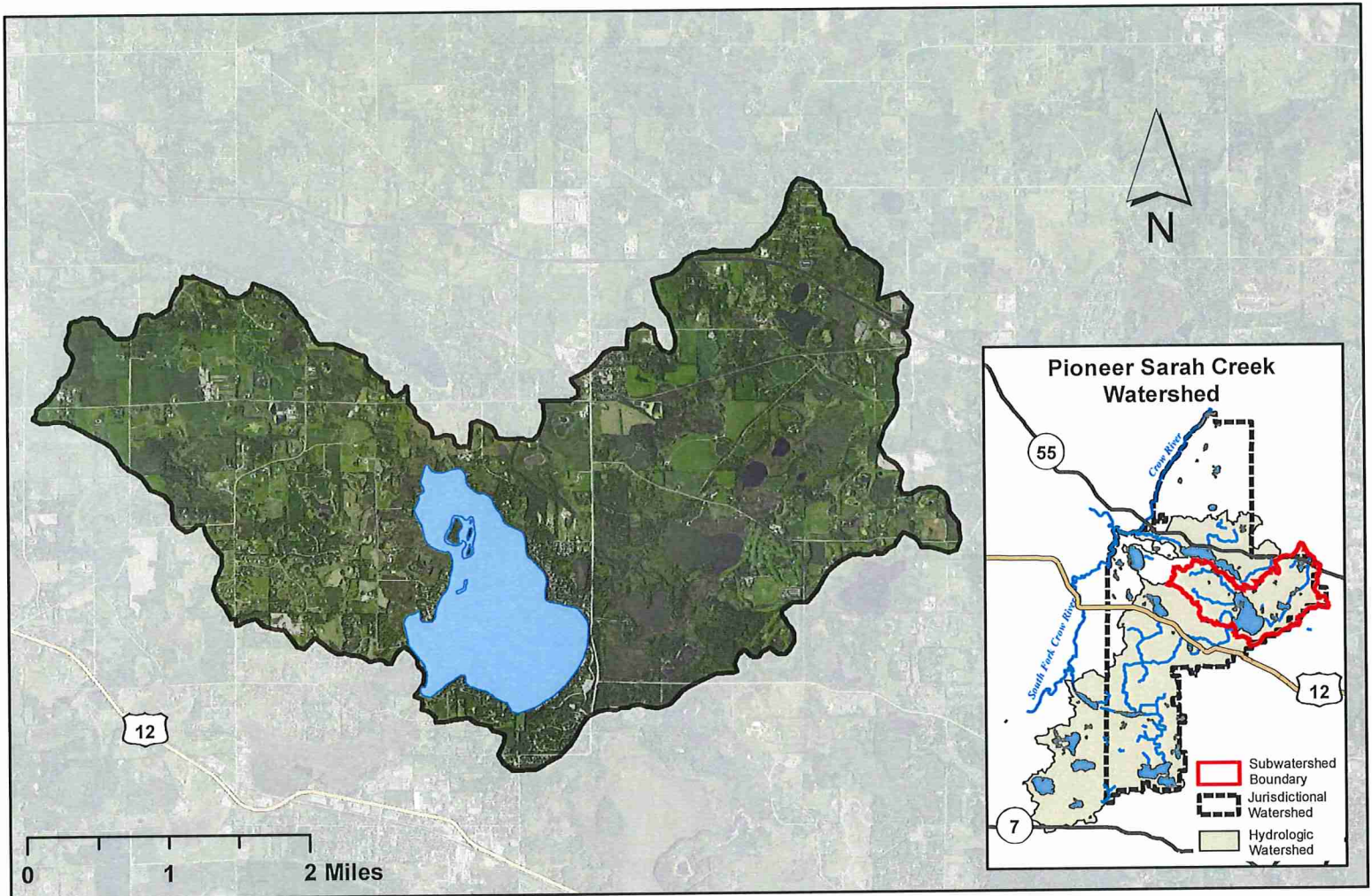
Met Council Grading System for Lake Water Quality



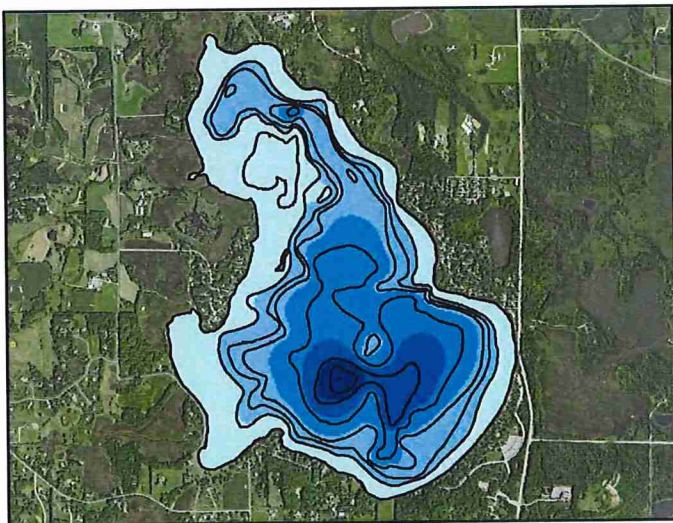
Division of Water Resources

January 2020

Lake Independence Watershed Map

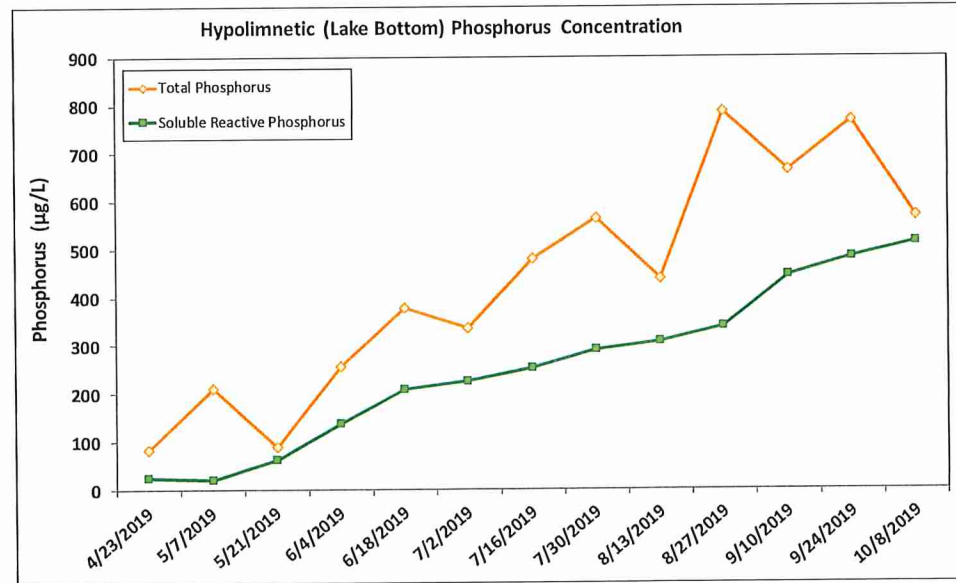
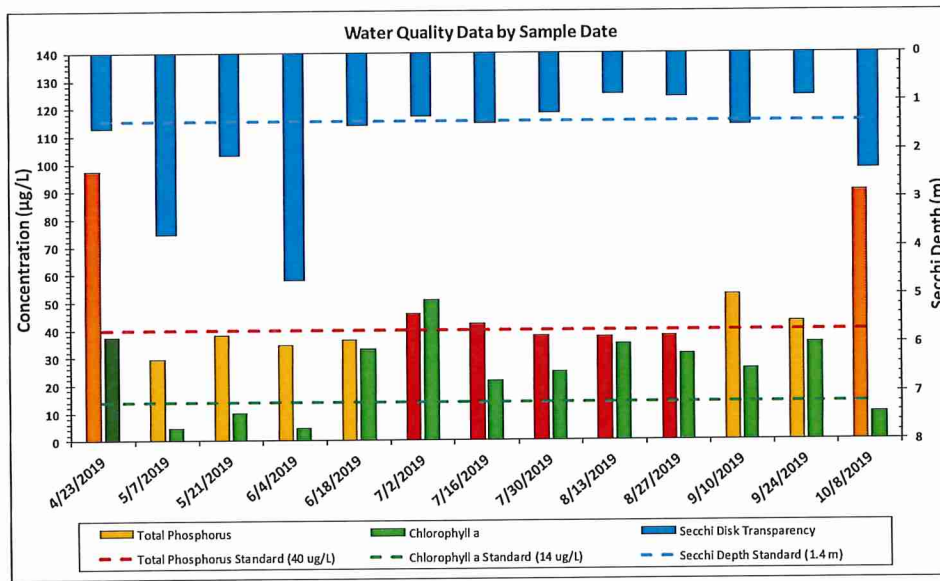
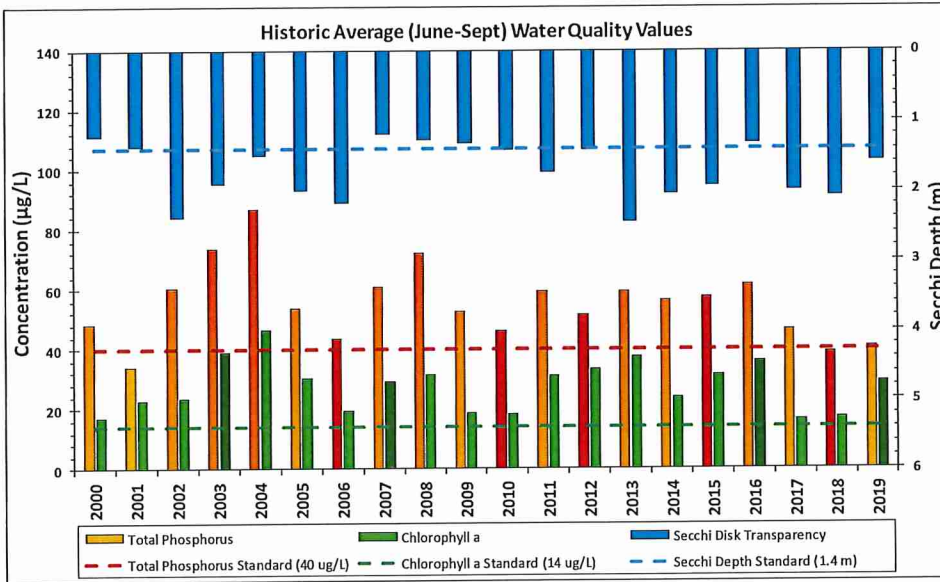


Lake Independence Bathymetry



Lake and Watershed Characteristics

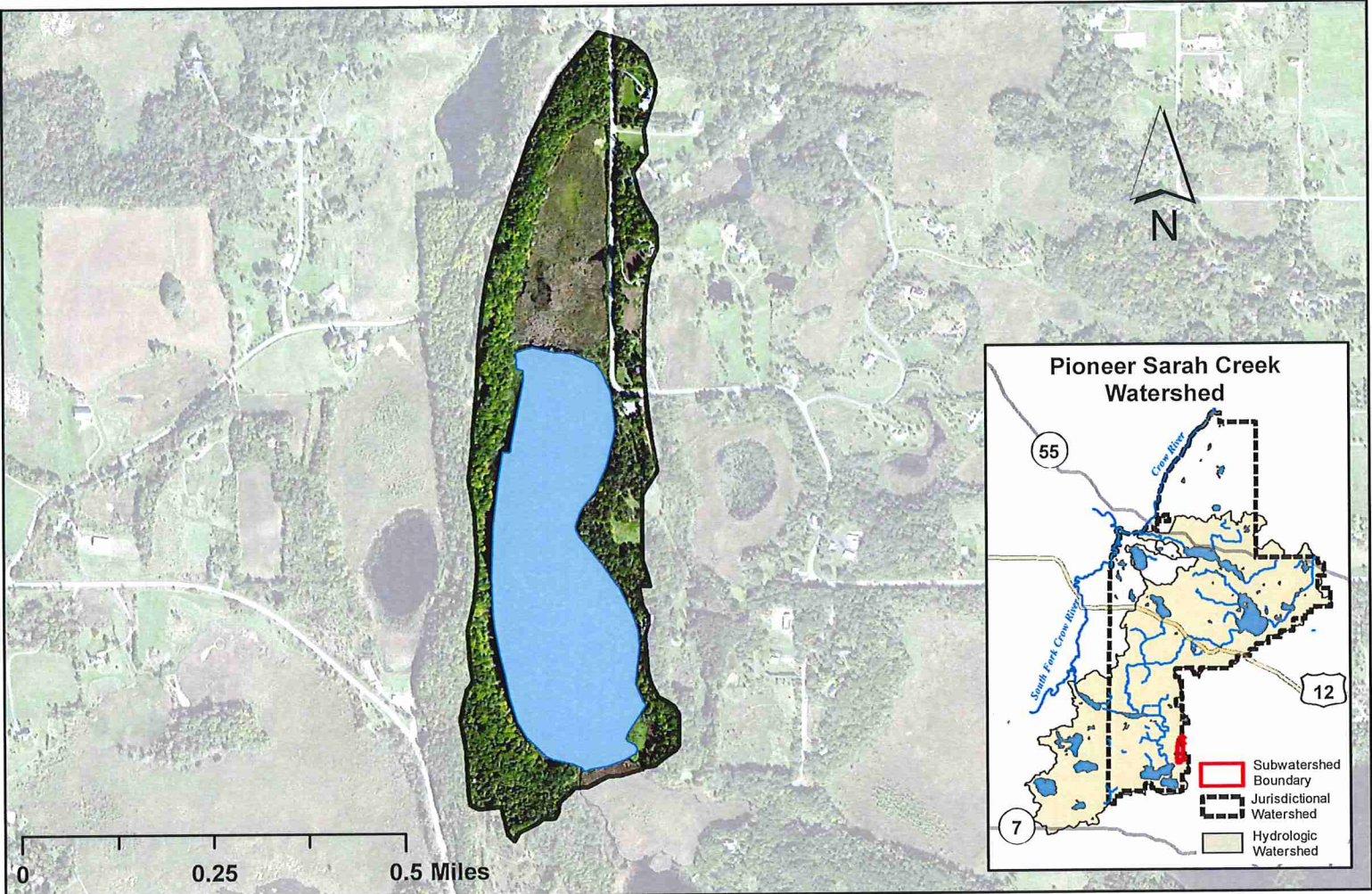
DNR #	27017600
Watershed Area	7,632 Acres
Lake Area	832 Acres
Percent Littoral Area	51%
Average Depth	15.9 ft.
Maximum Depth	58 ft.
Watershed Area:Lake Area	9.2:1
Impairment Classification	Excess Nutrients 2002
Classification	Deep Lake



Lake Independence Water Quality Report Card				
Year	TP	Chl-a	Secchi	Avg Grade
2000	C	B	C	C+
2001	C	C	C	C
2002	C	C	B	C+
2003	D	C	C	C-
2004	D	C	C	C-
2005	C	C	C	C
2006	C	B	C	C+
2007	C	C	D	C-
2008	D	C	C	C-
2009	C	B	C	C+
2010	C	B	C	C+
2011	C	C	C	C
2012	C	C	C	C
2013	C	C	B	C+
2014	C	C	C	C
2015	C	C	C	C
2016	C	C	C	C
2017	C	B	C	C+
2018	C	B	C	C+
2019	C	C	C	C
MPCA Standard	C	B	C	C+

Met Council Grading System for Lake Water Quality

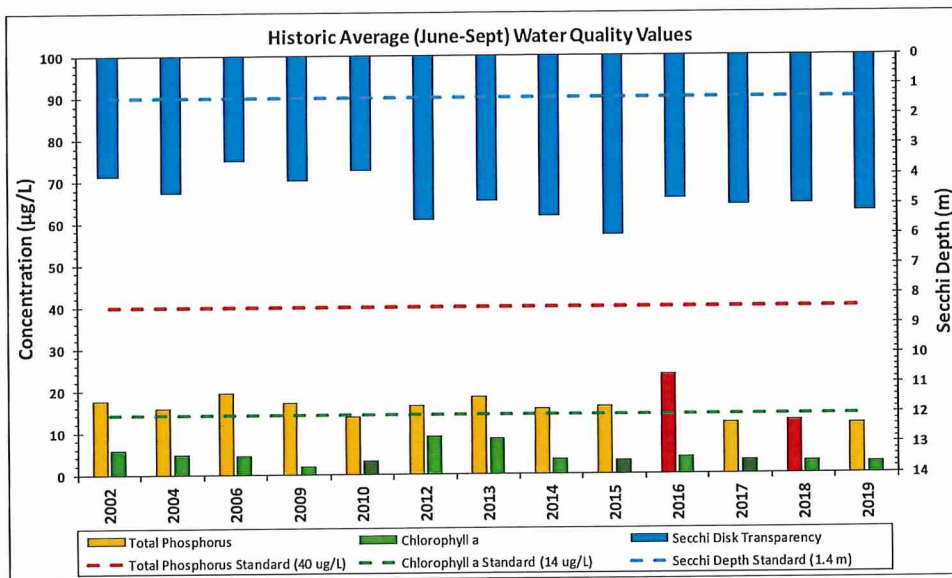
Little Long Lake Watershed Map



Little Long Lake Bathymetry

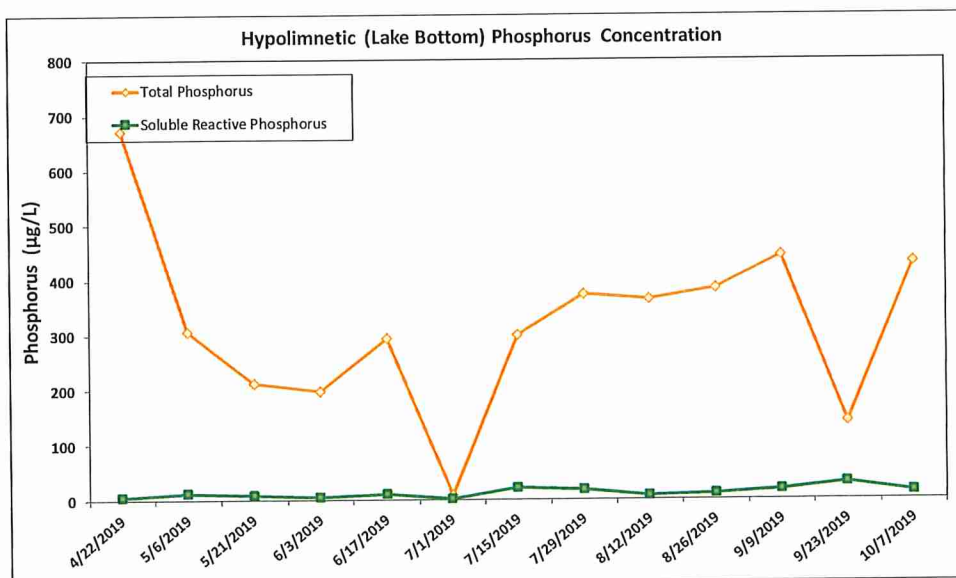
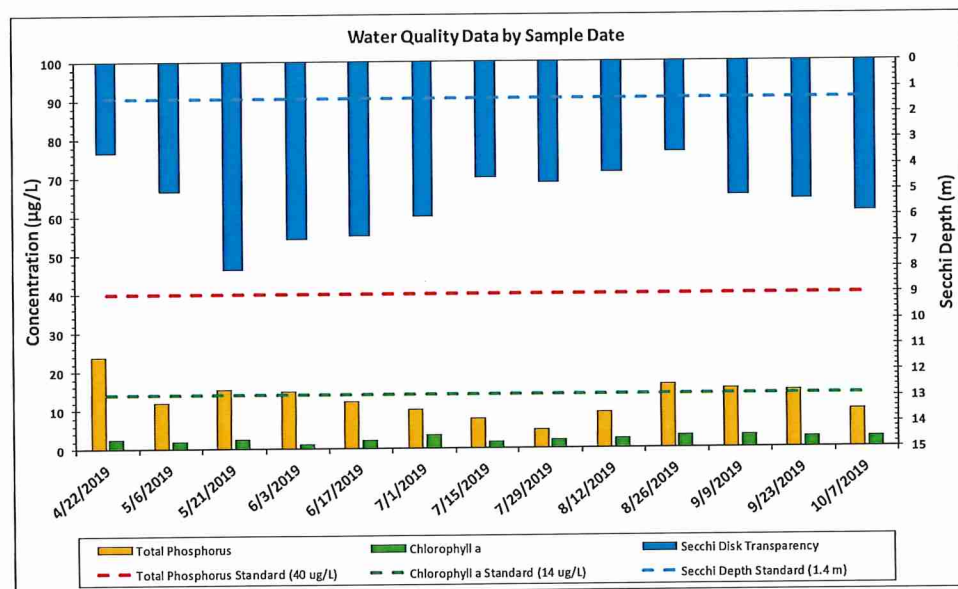


Lake and Watershed Characteristics	
DNR #	27017900
Watershed Area	92 Acres
Lake Area	53.5 Acres
Percent Littoral Area	40%
Average Depth	27.8 ft.
Maximum Depth	80.5 ft.
Watershed Area:Lake Area	1.7:1
Impairment Classification	None
Classification	Deep Lake

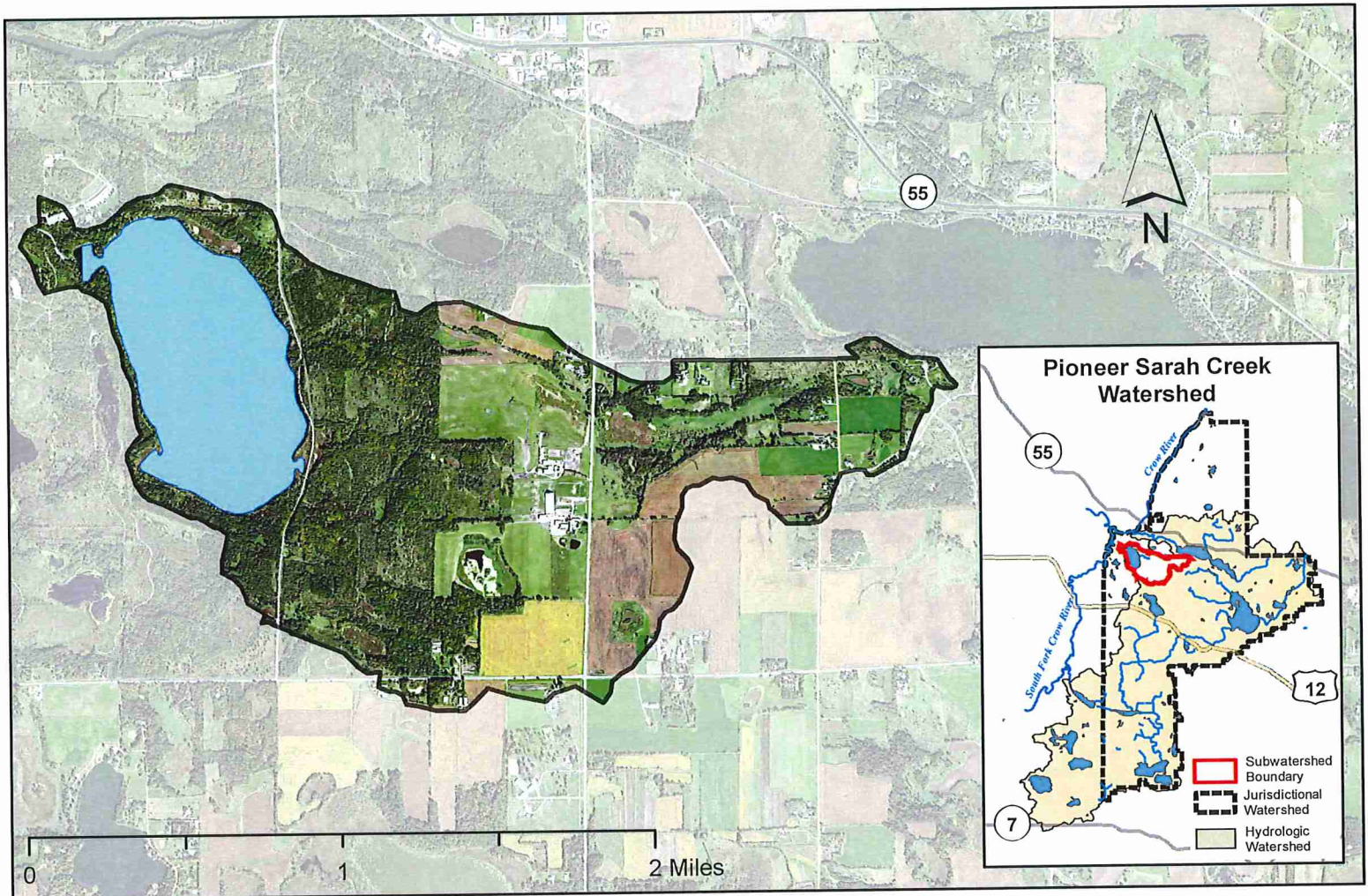


Little Long Lake Water Quality Report Card				
Year	TP	Chl-a	Secchi	Avg Grade
2002	A	A	A	A
2004	A	A	A	A
2006	A	A	A	A
2009	A	A	A	A
2010	A	A	A	A
2012	A	A	A	A
2013	A	A	A	A
2014	A	A	A	A
2015	A	A	A	A
2016	B	A	A	A-
2017	A	A	A	A
2018	A	A	A	A
2019	A	A	A	A
MPCA Standard	C	B	C	C+

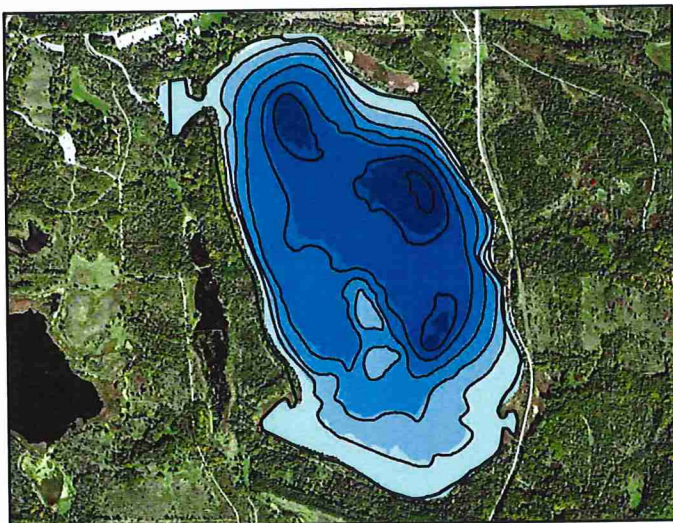
Met Council Grading System for Lake Water Quality



Lake Rebecca Watershed Map

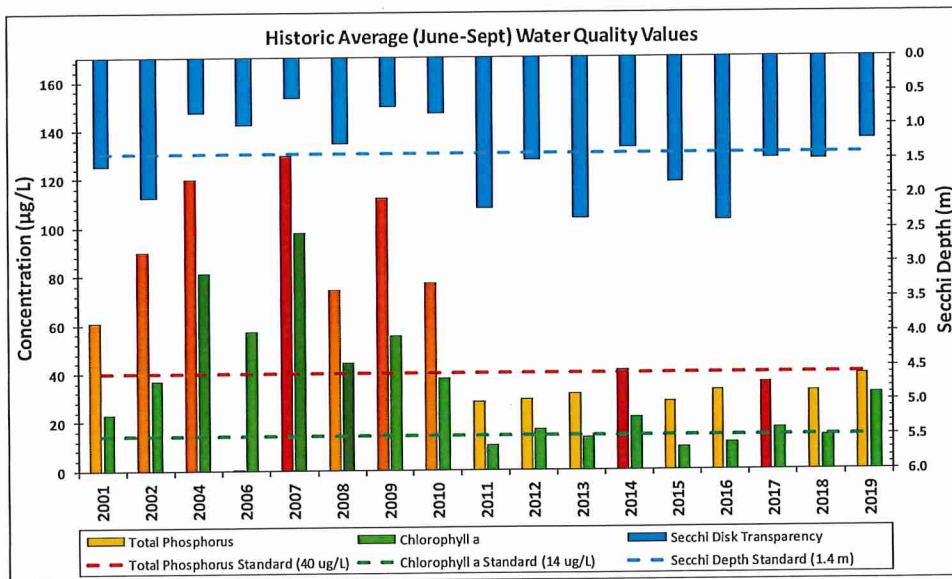


Lake Rebecca Bathymetry



Lake and Watershed Characteristics

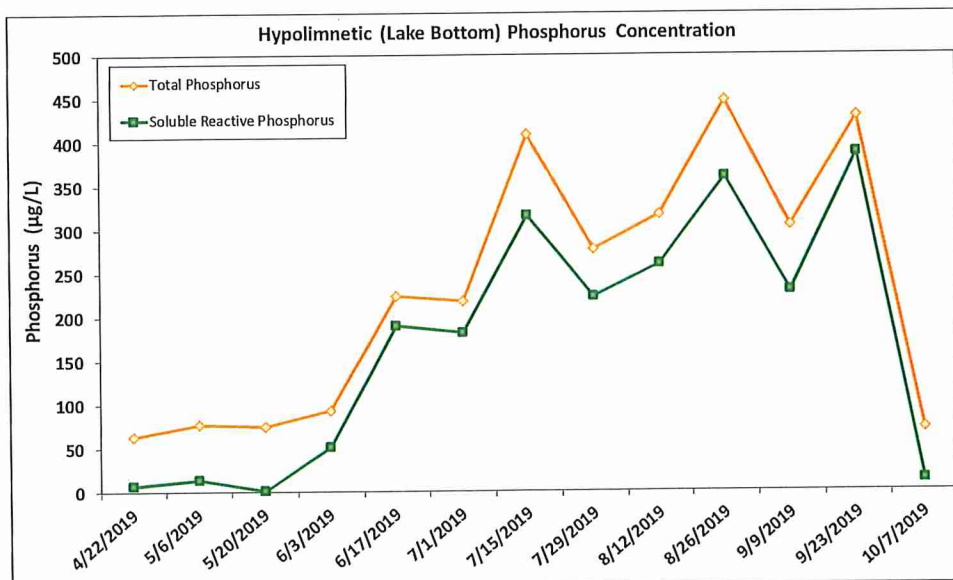
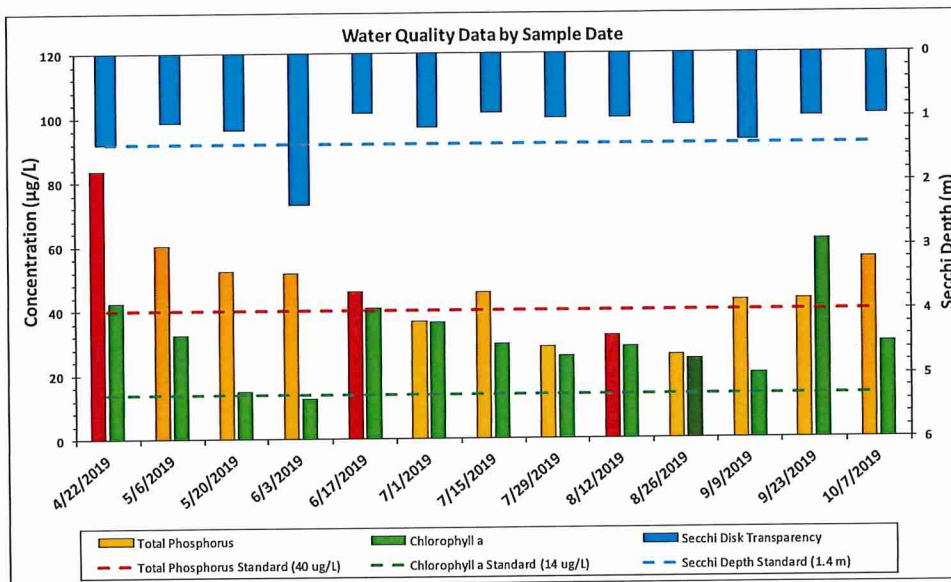
DNR #	27019200
Watershed Area	1,277 Acres
Lake Area	261 Acres
Percent Littoral Area	50%
Average Depth	14.4 ft.
Maximum Depth	31.1 ft.
Watershed Area:Lake Area	4.9:1
Impairment Classification	Excess Nutrients 2008
Classification	Deep Lake



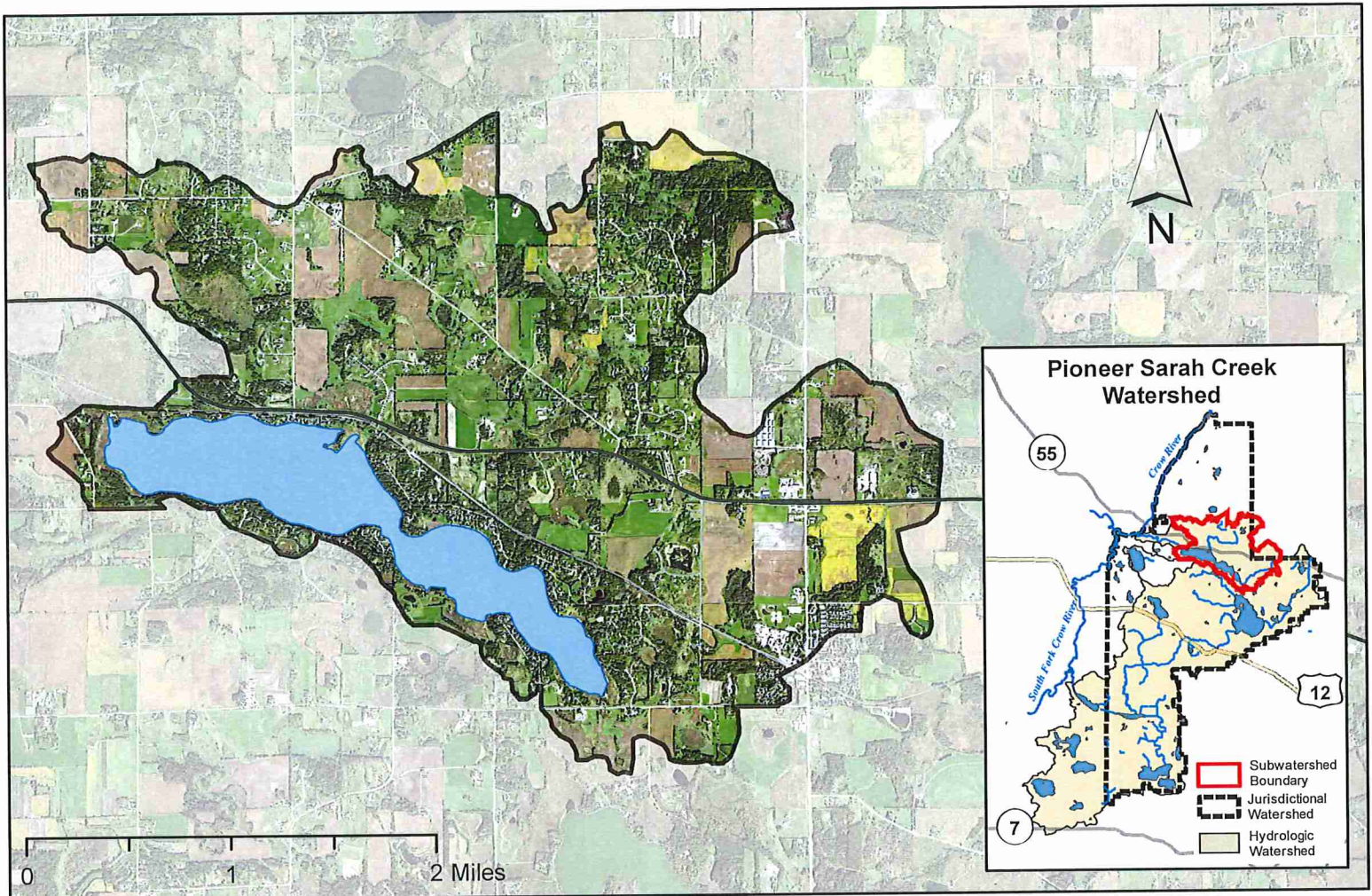
Lake Rebecca Water Quality Report Card				
Year	TP	Chl-a	Secchi	Avg Grade
2001	C	C	C	C
2002	D	C	C	C-
2004	D	F	D	D-
2006	A	D	D	C
2007	D	F	F	F
2008	D	C	C	C-
2009	D	D	D	D
2010	D	C	D	D+
2011	B	B	B	B
2012	B	B	C	B-
2013	B	B	B	B
2014	C	C	C	C
2015	B	A	C	B
2016	C	B	B	B-
2017	C	B	C	C+
2018	C	B	C	C+
2019	C	C	C	C
MPCA Standard	C	B	C	C+

Met Council Grading System for Lake Water Quality

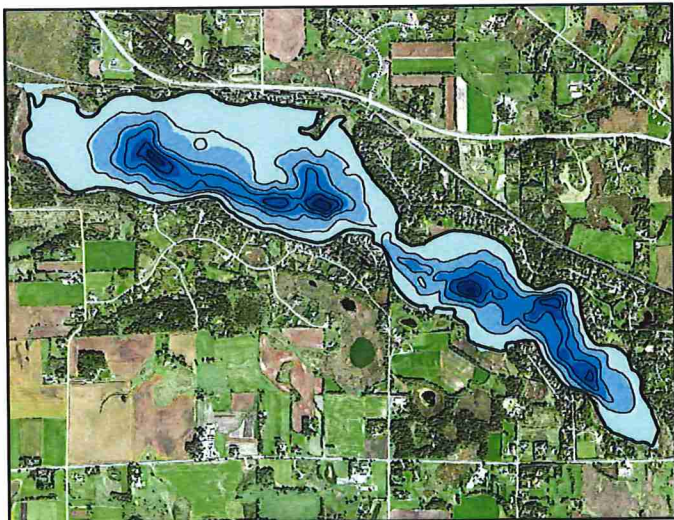
Alum Treatment: 2011



Lake Sarah Watershed Map

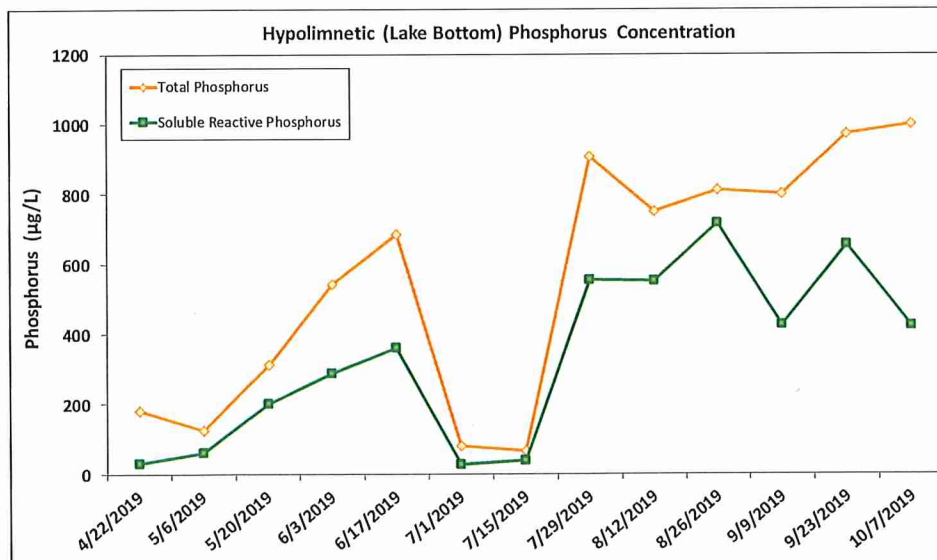
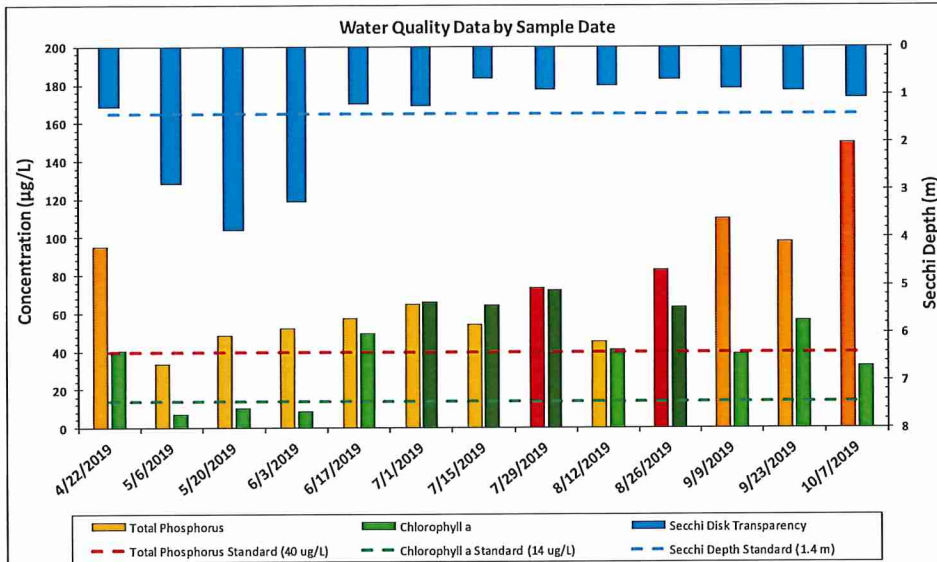
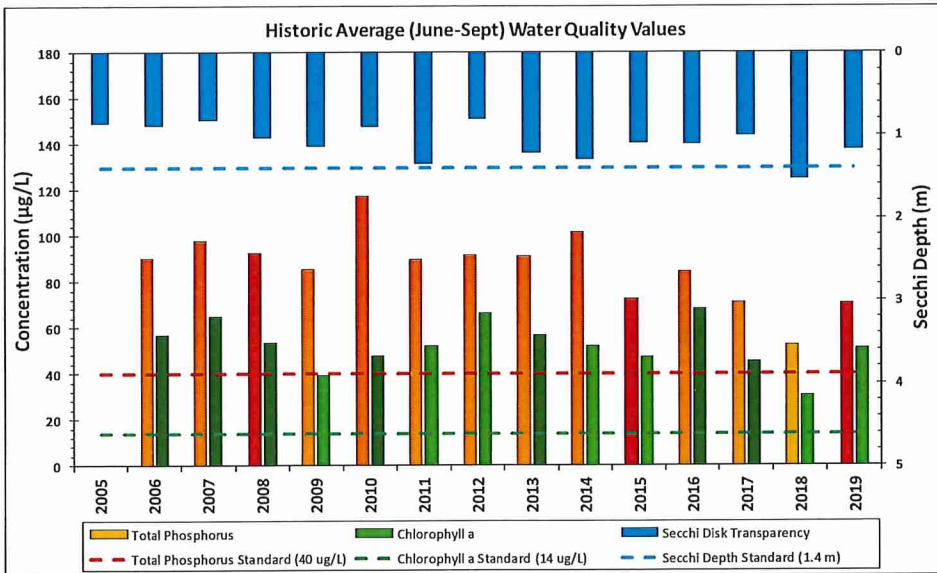


Lake Sarah Bathymetry



Lake and Watershed Characteristics

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



Lake Sarah Water Quality Report Card				
Year	TP	Chl-a	Secchi	Avg Grade
2005			D	D
2006	D	D	D	D
2007	D	D	D	D
2008	D	D	D	D
2009	D	C	D	D+
2010	D	C	D	D+
2011	D	D	C	D+
2012	D	D	D	D
2013	D	D	C	D+
2014	D	D	C	D+
2015	D	C	D	D+
2016	D	D	D	D
2017	D	C	D	D+
2018	C	C	C	C
2019	D	D	D	D
MPCA Standard	C	B	C	C+

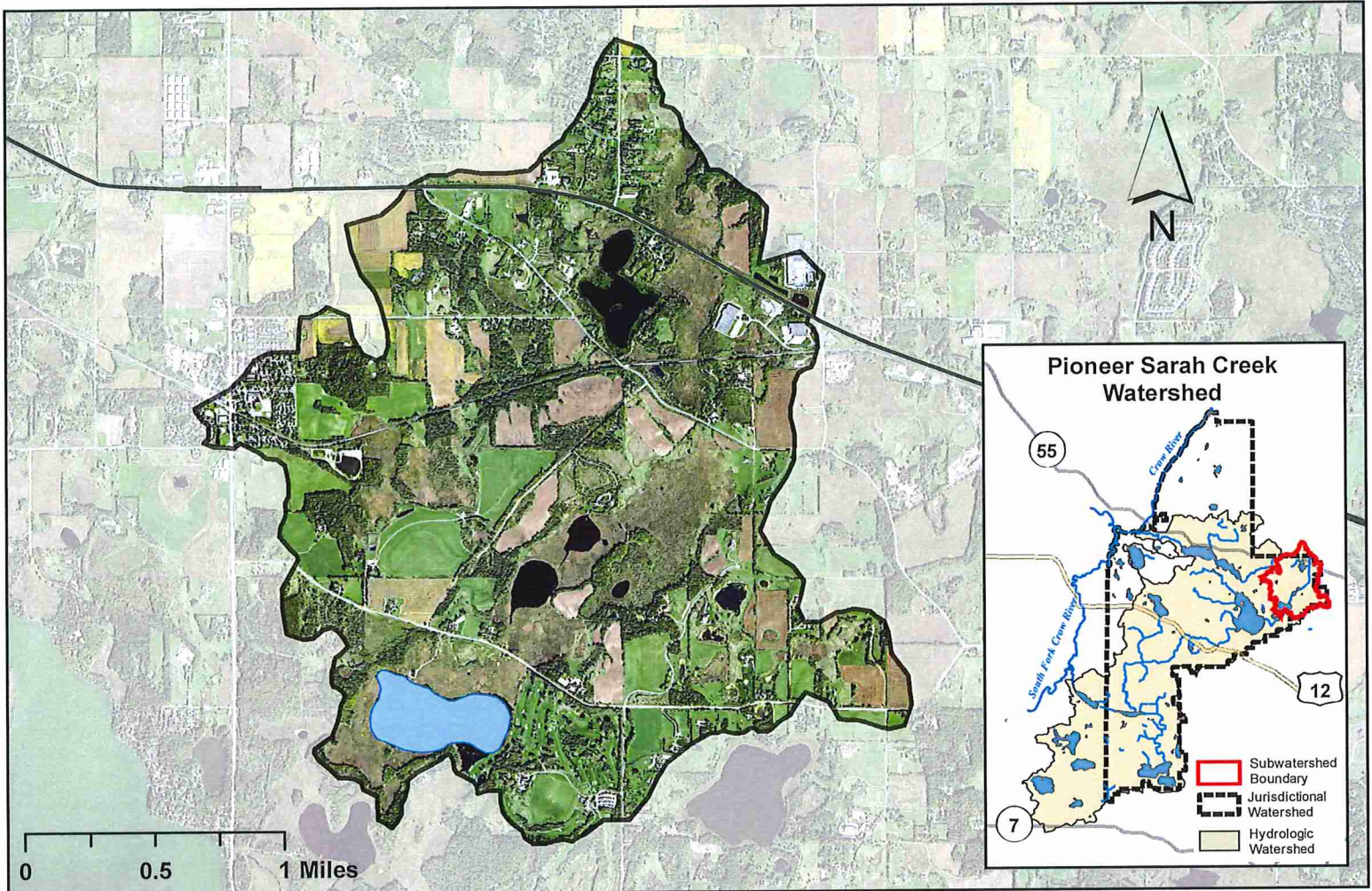
Met Council Grading System for Lake Water Quality



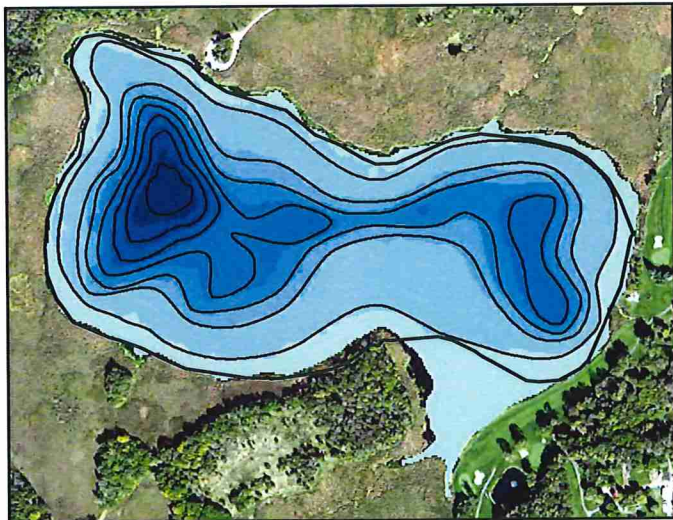
Division of Water Resources

January 2020

Spurzem Lake Watershed Map

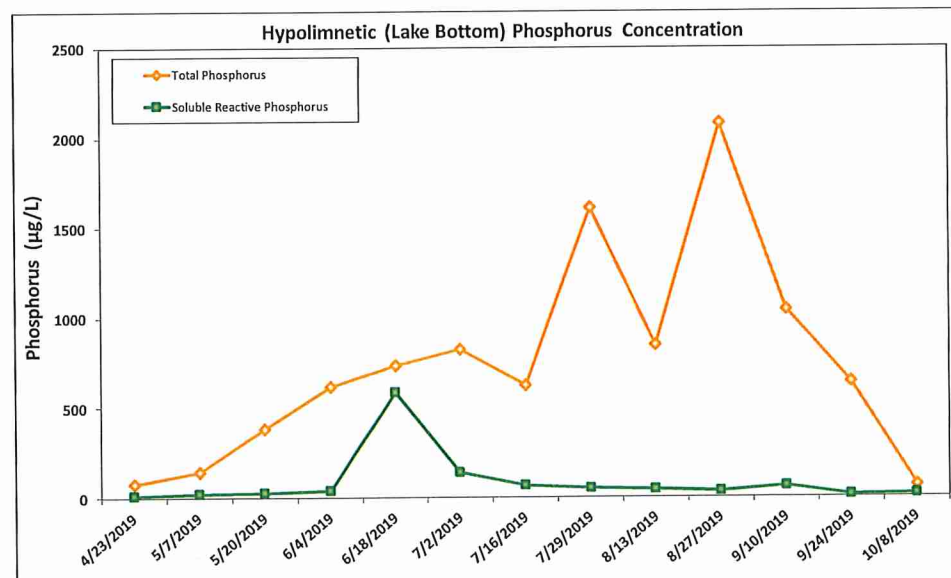
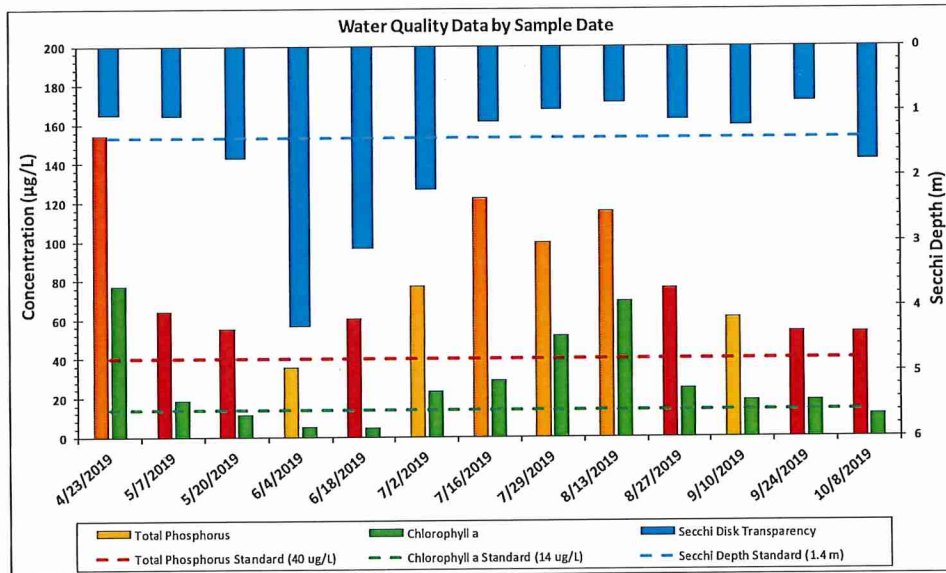
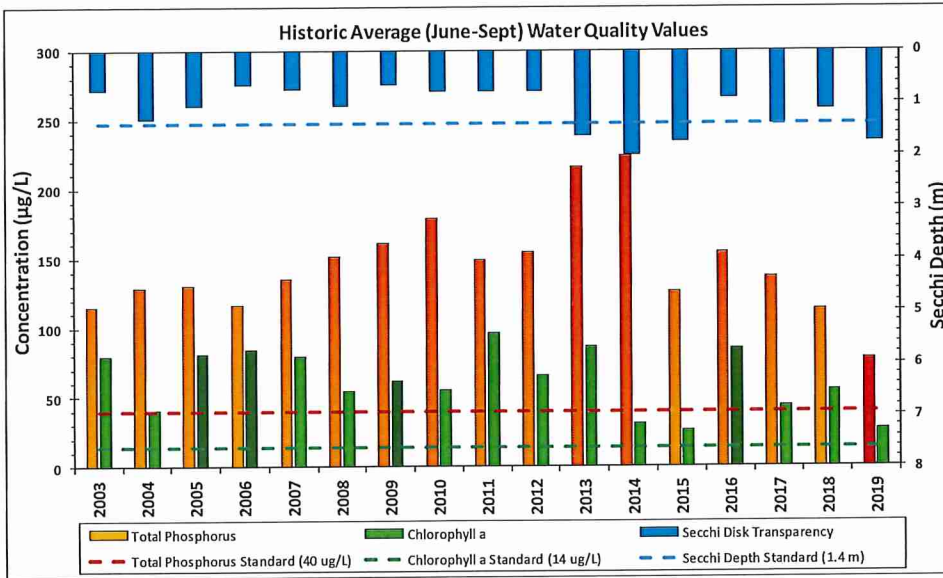


Spurzem Lake Bathymetry



Lake and Watershed Characteristics

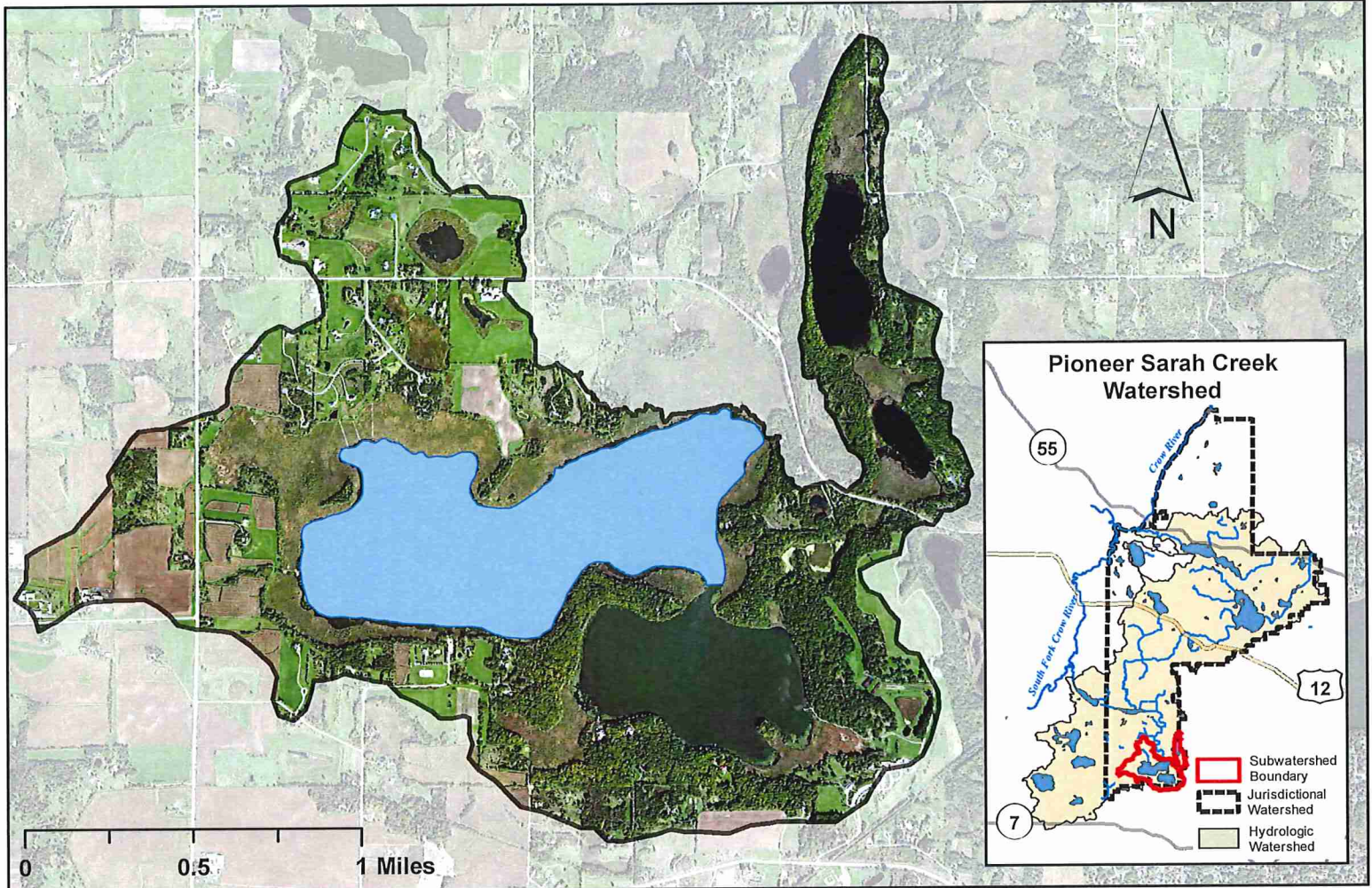
DNR #	27014900
Watershed Area	2,915 Acres
Lake Area	78.6 Acres
Percent Littoral Area	70%
Average Depth	11.1 ft.
Maximum Depth	37.4 ft.
Watershed Area:Lake Area	37.1:1
Impairment Classification	Excess Nutrients 2008
Classification	Deep Lake



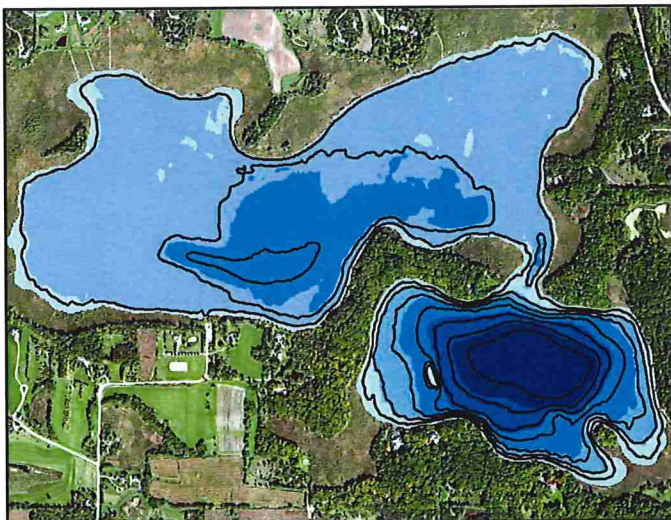
Spurzem Lake Water Quality Report Card				
Year	TP	Chl-a	Secchi	Avg Grade
2003	D	F	D	D-
2004	D	C	C	C-
2005	D	F	D	D-
2006	D	F	F	F
2007	D	F	D	D-
2008	D	D	D	D
2009	F	D	F	F
2010	F	D	D	D-
2011	D	F	D	D-
2012	F	D	D	D-
2013	F	F	C	D-
2014	F	C	C	D+
2015	D	C	C	C-
2016	F	F	D	F
2017	D	C	C	C-
2018	D	D	D	D
2019	D	C	C	C-
MPCA Standard	C	B	C	C+

Met Council Grading System for Lake Water Quality

Whaletail North Watershed Map

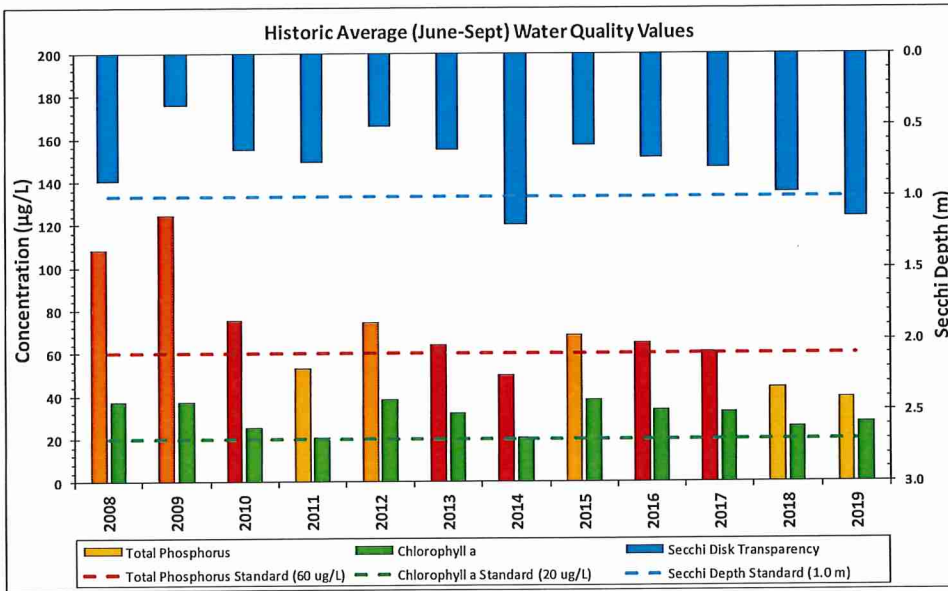


Whaletail North Bathymetry



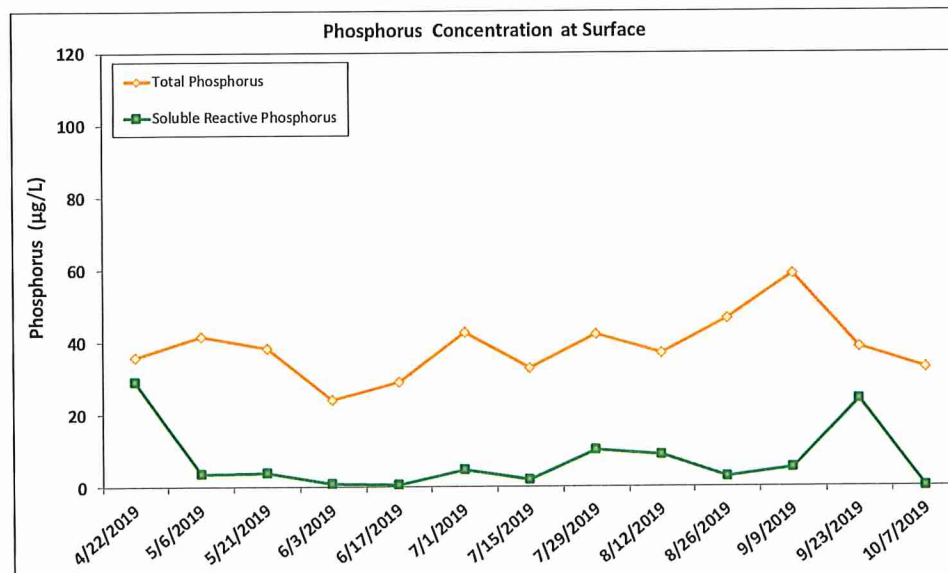
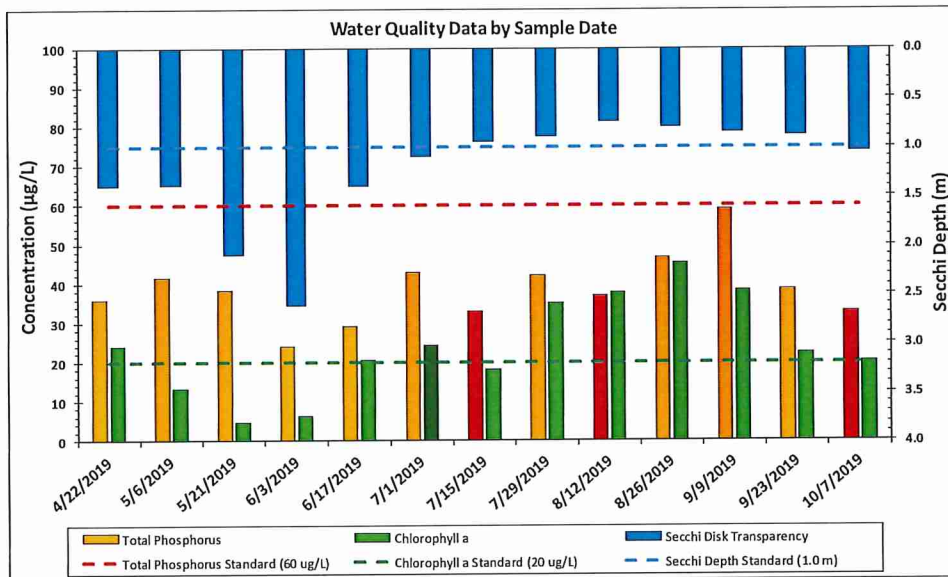
Lake and Watershed Characteristics

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

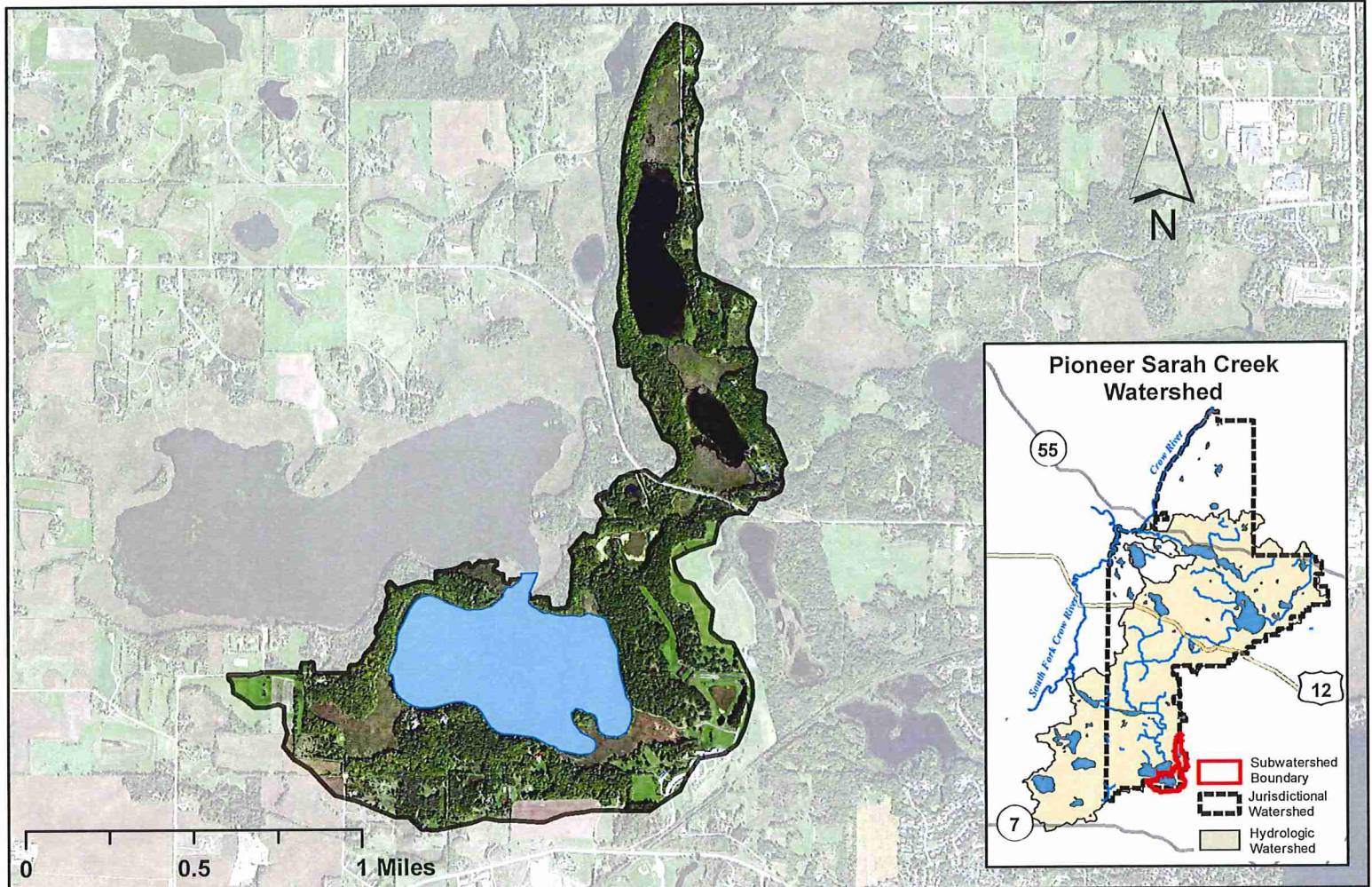


Whaletail North Water Quality Report Card				
Year	TP	Chl-a	Secchi	Avg Grade
2008	D	C	D	D+
2009	D	C	F	D
2010	D	C	F	D
2011	C	C	D	C-
2012	D	C	F	D
2013	C	C	F	D+
2014	C	C	C	C
2015	D	C	F	D
2016	C	C	D	C-
2017	C	C	D	C-
2018	C	C	D	C-
2019	C	C	D	C-
MPCA Standard	C	C	D	C-

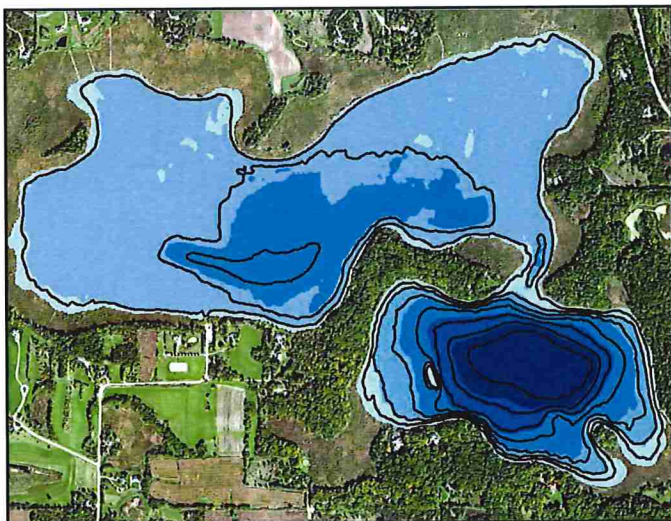
Met Council Grading System for Lake Water Quality



Whaletail South Watershed Map

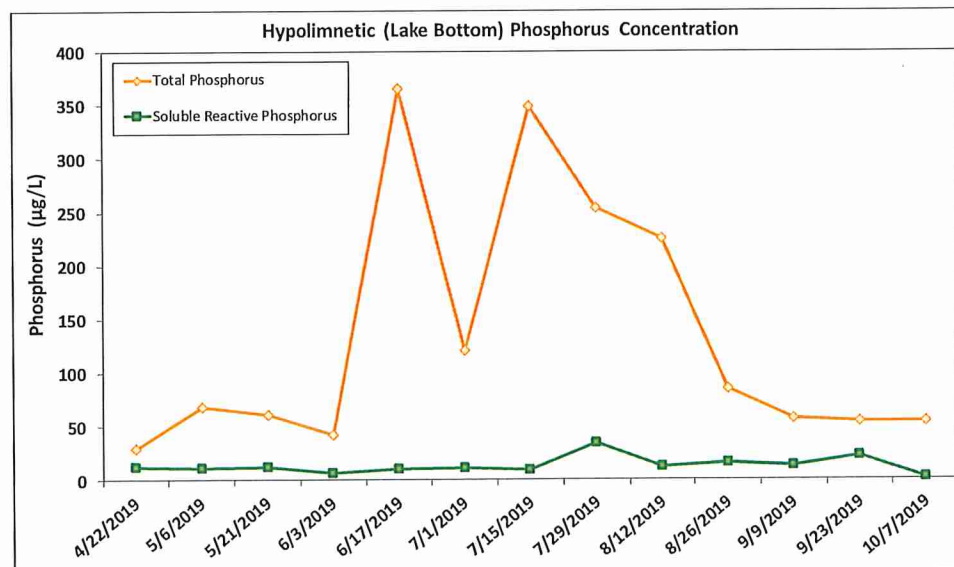
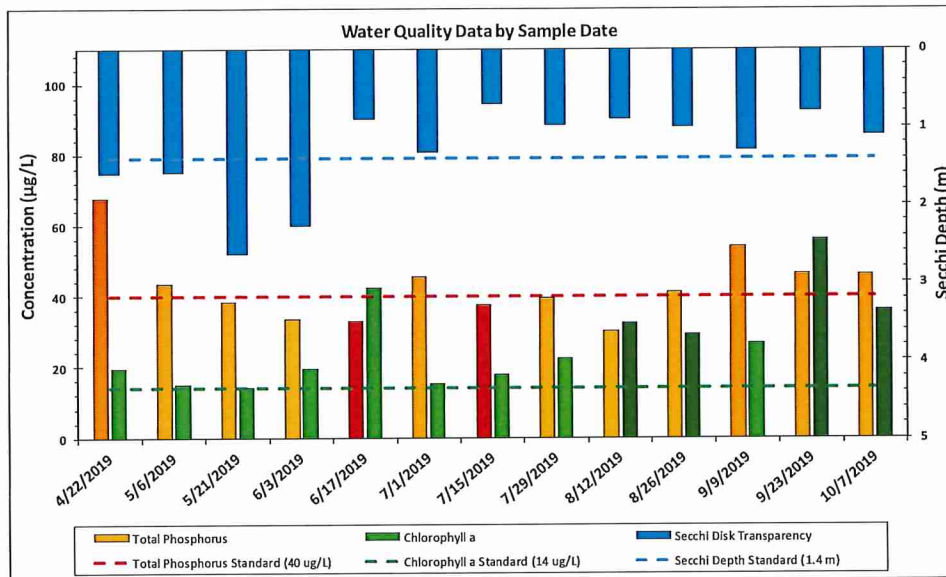
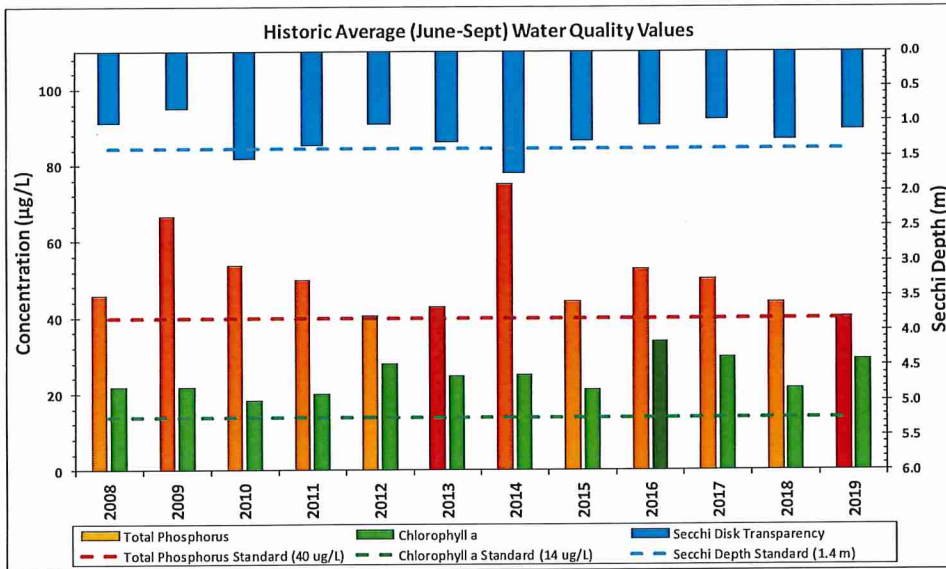


Whaletail South Bathymetry



Lake and Watershed Characteristics

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



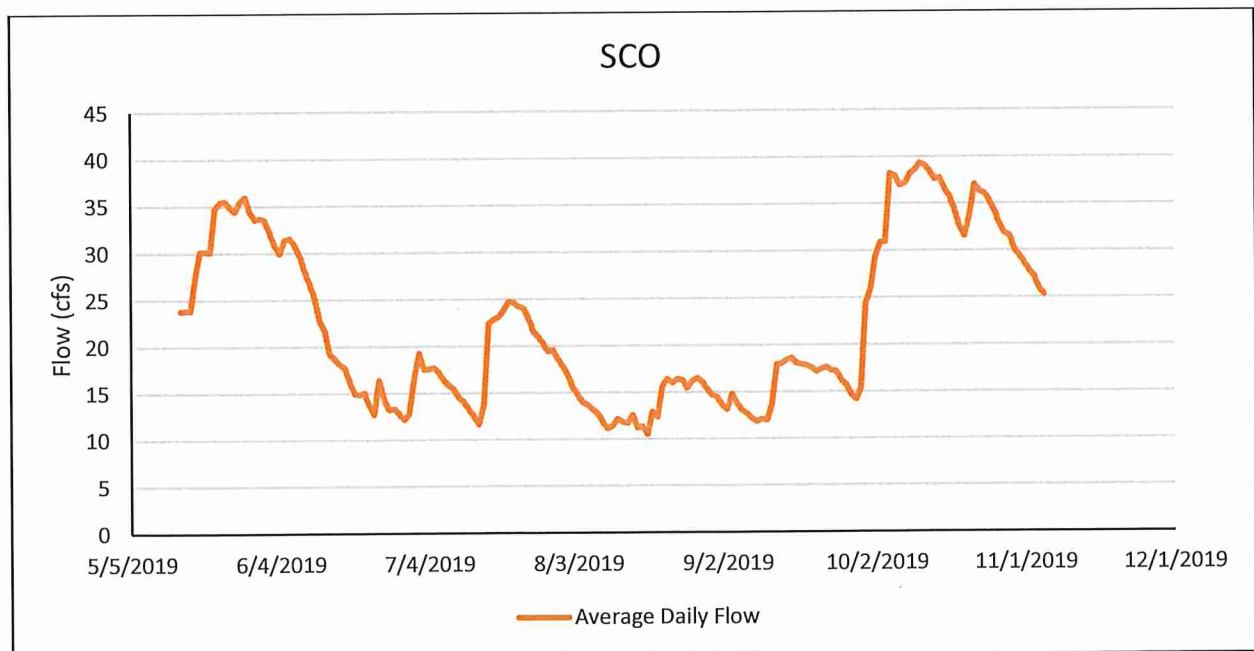
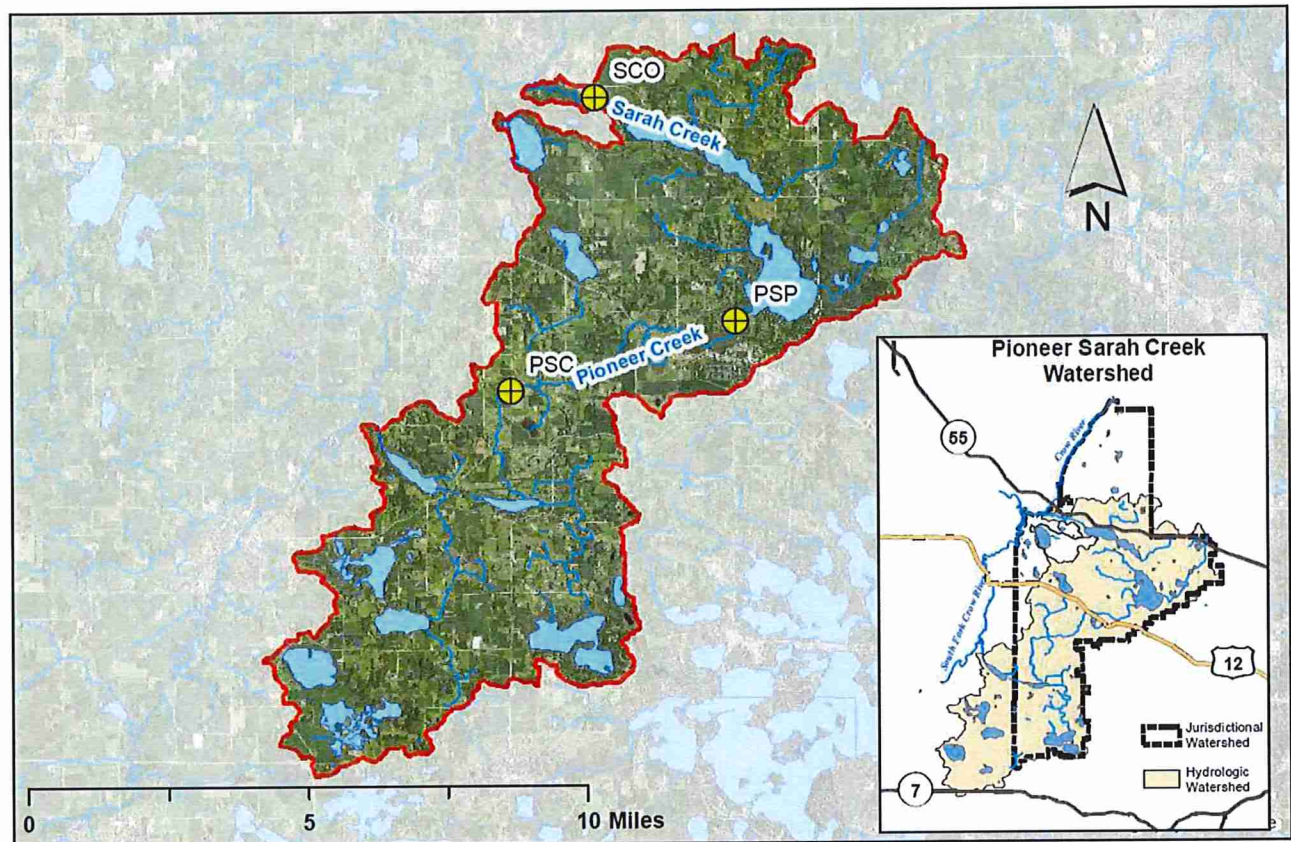
Whaletail South Water Quality Report Card				
Year	TP	Chl-a	Secchi	Avg Grade
2000	D	B	D	C-
2001	C	C	D	C-
2003	C	C	C	C
2005	C	C	D	C-
2007	C	C	C	C
2008	C	C	D	C-
2009	C	C	D	C-
2010	C	B	C	C+
2011	C	C	C	C
2012	C	C	D	C-
2013	C	C	C	C
2014	D	C	C	C-
2015	C	C	C	C
2016	C	C	D	C-
2017	C	C	D	C-
2018	C	C	C	C
2019	C	C	D	C-
MPCA Standard	C	B	C	C+

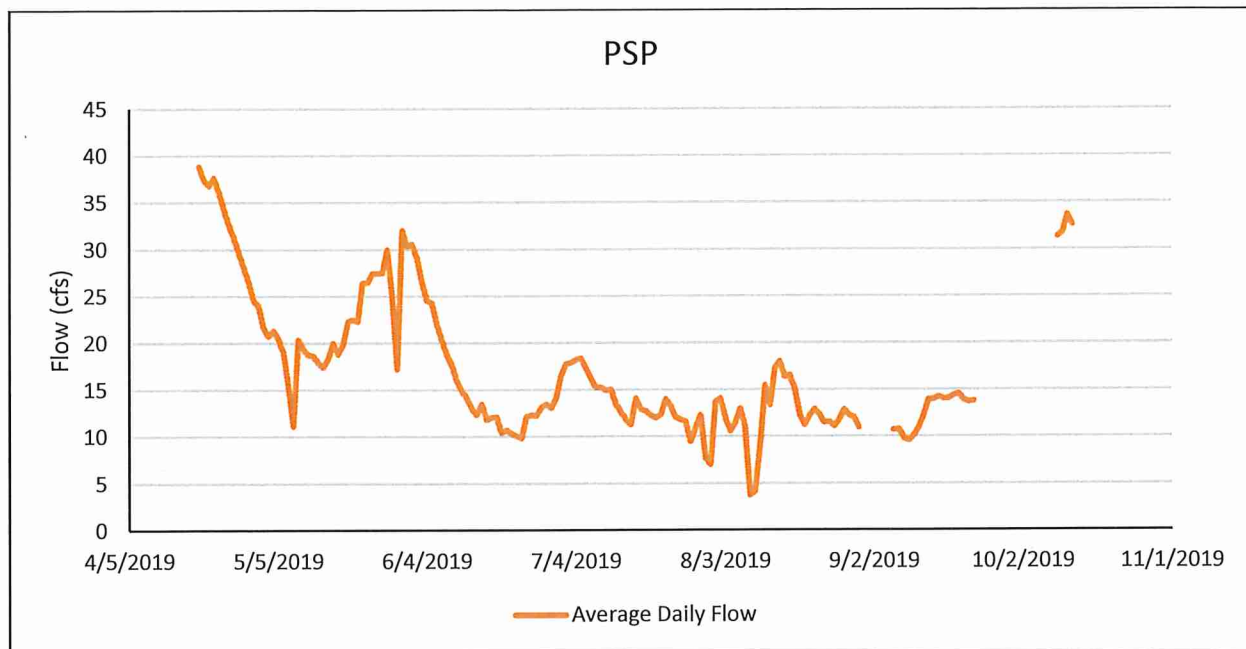
Met Council Grading System for Lake Water Quality

Appendix 5

STREAM MONITORING

Pioneer/Sarah Creek Stream monitoring - 2019





PSC was not monitored in 2019 due to high water conditions.

Hennepin County
Wetland Health Evaluation Program
2019



Dance Hall Wetland

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 Indices of Biological Integrity (IBI).

In 2019, 84 volunteers donated more than 637 hours of their time to monitor area wetlands. According to the Independent Sector, the value of volunteer time in Minnesota is \$25.43 per hour. Our volunteers contributed more than \$16,000 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. In many cases, organizations use the data to fulfill the education requirement for storm water management plans.

Monitoring
Team



Pioneer/Sarah Watershed Management Commission			
		Invertebrate Score	Vegetation Score
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.	9 Poor	11 Poor
PS-3 Dance Hall Creek Wetland	This site is at the end of Dance Hall Creek just before it flows into the lake. The Sub-watershed 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.	13 Moderate	7 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

Bladderwort 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.

