

**WHALETAIL SOUTH ALUM TREATMENT
WATER RESOURCES MANAGEMENT PROJECT
COOPERATIVE AGREEMENT**

BETWEEN

Three Rivers Park District

AND

Pioneer-Sarah Creek Watershed Management Commission

1. PARTIES

Pioneer-Sarah Creek Watershed Management Commission (hereinafter referred to as “the Commission”) and the Three Rivers Park District (hereinafter referred to as the “the Park District”), both being governmental units of the State of Minnesota, hereby enter into this Cooperative Agreement (“Agreement”). The Commission and the Park District from time to time may be referred to hereinafter as “the parties.”

2. PURPOSE

The Park District and the Commission recognize that intergovernmental cooperation in preventing degradation of aquatic resources by assessing the feasibility of alum treatment study for Whaletail Lake in the Pioneer-Sarah Creek Watershed is in the mutual interest of the citizens of Hennepin County and the metropolitan area. The parties enter into this Agreement to facilitate the improvement of Whaletail Lake water quality through the development and implementation of an alum treatment feasibility study.

3. DUTIES OF THE PARK DISTRICT

In recognition of the staff resources and capabilities of the Park District, the Park District will be responsible for:

- a. Completion of the following tasks for the South Whaletail Lake Alum Treatment Feasibility Study.
 - I. The Park District will evaluate all available monitoring data.
 - II. The Park District will re-evaluate and identify the various watershed and internal phosphorus loading sources that were provided through modeling efforts in the development of the Pioneer-Sarah Creek Watershed TMDL.
 - III. The Park District will re-assess the internal loading impacts on the water quality of South Whaletail Lake.
 - IV. The Park District will provide a cost-benefit analysis of the implementation of an alum treatment.
 - V. Preparation of the alum treatment feasibility written report to be submitted for review and approval by the Minnesota Pollution Control Agency.

- b. Performance Criteria – The Park District shall ensure that all work meets the requirements of the Minnesota Pollution Control Agency and conforms to the MPCA QA/QC sampling collection and analytical protocol.
- c. The Park District will keep track of service hours dedicated to the feasibility study. Service hours will be billed/invoiced on an hourly basis at the below rate based on personnel and task.
 - I. Principle Project Manager - \$58.70
 - II. Project Analyst - \$42.80
 - III. Project Technician Specialist – \$38.50
- d. The Park District will provide technical services for the Commission not-to-exceed \$10,000. Any additional costs for extended workload after the “not-to-exceed” limit must be approved by both parties and set forth in a written amendment to this Agreement. An invoice will be provided to the Commission at the end of the project detailing the cost of services.

4. DUTIES OF THE PIONEER-SARAH CREEK WATERSHED MANAGEMENT COMMISSION

In recognition of the staff resources and capabilities of the Commission, the Commission will be responsible for:

- a. Approval
The Commission shall review and accept the feasibility study.
- b. Review of Results
The Commission shall review all project data and computer modeling results.
- c. Financial Responsibility
The Commission shall be responsible for reimbursing the Park District for direct expenses necessary to complete the approved feasibility study. The reimbursement to the Park District shall not exceed \$10,000. Any additional costs after the “not-to-exceed” limit must be approved by both parties and set forth in a written amendment to this Agreement.

5. AMENDMENT

Any amendment to this Agreement must be in writing and approved by the Commission and the Park District. The parties shall have full power to amend this Agreement to add or delete items from the scope of this Agreement upon such terms as are agreed to between the parties.

6. TERMINATION

This Agreement will terminate upon review and acceptance of the completed feasibility study report by the Commission. Notwithstanding, either party may terminate this Agreement for any reason by providing 60 days written notice to the other party. In the event of termination, the Commission will pay pro rata for that portion of the work tasks completed in accordance with Section 4 of this Agreement.

IN WITNESS WHEREOF, the parties have caused this Cooperative Agreement executed and effective as of the date of signature of the last party to the Agreement.

**PIONEER-SARAH CREEK WATERSHED
MANAGEMENT COMMISSION**

Dated: _____

Joe Baker, Chair

Amy Juntunen, Executive Secretary

THREE RIVERS PARK DISTRICT

Dated: _____

Jami Markle, Director of Natural Resources

Brian Vlach, Senior Manager of Water Resources

**LAKE INDEPENDENCE TMDL REVIEW
WATER RESOURCES MANAGEMENT PROJECT
COOPERATIVE AGREEMENT**

BETWEEN

Three Rivers Park District

AND

Pioneer-Sarah Creek Watershed Management Commission

1. PARTIES

Pioneer-Sarah Creek Watershed Management Commission (hereinafter referred to as “the Commission”) and the Three Rivers Park District (hereinafter referred to as the “Park District”), both being governmental units of the State of Minnesota, hereby enter into this Cooperative Agreement (“Agreement”). The Commission and the Park District from time to time may be referred to hereinafter as “the parties.”

2. PURPOSE

The Park District and the Commission recognize that intergovernmental cooperation in preventing degradation of aquatic resources by reviewing and amending the Lake Independence TMDL in the Pioneer-Sarah Creek Watershed is in the mutual interest of the citizens of Hennepin County and the metropolitan area. The parties enter into this Agreement to review and amend the existing Lake Independence TMDL to better facilitate the improvements of Lake Independence water quality through the development and implementation of best management practices.

3. DUTIES OF THE PARK DISTRICT

In recognition of the staff resources and capabilities of the Park District, the Park District will be responsible for:

- a. Completion of the following tasks for the Lake Independence Total Maximum Daily Load Review Amendment Study.
 - I. The Park District will evaluate the recent available monitoring data.
 - II. The Park District will re-evaluate and identify the various watershed and internal phosphorus loading sources that were provided through modeling efforts in the development of the Lake Independence Total Maximum Daily Load.
 - III. The Park District will evaluate and assess the nutrient load reductions attributed to best management practices implemented in the watershed. These best management practices will be incorporated into a watershed model.
 - IV. The Park District will assess the sediment core analysis to adjust internal loading impacts on the water quality of Lake Independence.

- V. The Park District will provide a cost-benefit analysis of the implementation of an alum treatment.
 - VI. Preparation of the TMDL review written report to be submitted for review and approval by the Commission and Minnesota Pollution Control Agency.
- b. Performance Criteria – The Park District shall ensure that all work meets the requirements of the Minnesota Pollution Control Agency and conforms to the MPCA QA/QC sampling collection and analytical protocol.
 - c. The Park District will keep track of service hours dedicated to the feasibility study. Service hours will be billed/invoiced on an hourly basis at the below rate based on personnel and task.
 - I. Principle Project Manager - \$58.70
 - II. Project Analyst - \$42.80
 - III. Project Technician Specialist – \$38.50
 - d. The Park District will provide technical services for the Commission not-to-exceed \$30,000. Any additional costs for extended workload after the “not-to-exceed” limit must be approved by both parties and set forth in a written amendment to this Agreement. An invoice will be provided to the Commission at the end of the project detailing the cost of services.

4. DUTIES OF THE PIONEER-SARAH CREEK WATERSHED MANAGEMENT COMMISSION

In recognition of the staff resources and capabilities of the Commission, the Commission will be responsible for:

- a. Approval
The Commission shall review, provide comments, and approve the TMDL review study.
- b. Review of Results
The Commission shall review all project data and computer modeling results.
- c. Financial Responsibility
The Commission shall be responsible for reimbursing the Park District for direct expenses necessary to complete the approved TMDL review study. The reimbursement to the Park District shall not exceed \$30,000. Any additional costs after the “not-to-exceed” limit must be approved by both parties and set forth in a written amendment to this Agreement.

5. AMENDMENT

Any amendment to this Agreement must be in writing and approved by the Commission and the Park District. The parties shall have full power to amend this Agreement to add or delete items from the scope of this Agreement upon such terms as are agreed to between the parties.

6. TERMINATION

This Agreement will terminate upon review and acceptance of the completed TMDL Review Study report by the Commission. Notwithstanding, either party may terminate this Agreement for any reason by providing 90 days written notice to the other party. In the event of termination, the Commission will pay pro rata for that portion of the work tasks completed in accordance with Section 4 of this Agreement.

IN WITNESS WHEREOF, the parties have caused this Cooperative Agreement executed and effective as of the date of signature of the last party to the Agreement.

**PIONEER-SARAH CREEK WATERSHED
MANAGEMENT COMMISSION**

Dated: _____

Joe Baker, Chair

Amy Juntunen, Executive Secretary

THREE RIVERS PARK DISTRICT

Dated: _____

Luke Skinner, Associate Superintendent

Jami Markle, Director of Natural Resources



2021 Annual Activity Report



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

Table of Contents

	Page
Annual Activity Report	1
The Commission	1
Meetings	1
Staff and Consultants	1
The Watershed	1
Watershed Management Plan	1
Map – Pioneer-Sarah Creek Watershed	2
Table 1 - Area of Members within the Watershed	3
Local Plans	3
2021 Work Plan in Review	4
Water Quantity	4
Water Quality	4
Groundwater	5
Wetlands	5
Operations and Programming	5
Education and Outreach	7
Financial Reporting.....	8
2022 Projected Work Plan.....	9
Water Quantity	9
Water Quality	9
Groundwater	10
Wetlands	10
Operations and Programming	10
Education and Outreach	12
 Appendices	
1	2021 Commissioners, Staff and Consultants
2	Project Reviews
3	Financial Reporting
4	Lake Monitoring
5	Stream Monitoring
6.	Hennepin County 2021 Report

Cover Photograph:

Lake Rebecca Fishing Pier

Photo by Jonathan Hess, Three Rivers Park District

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 2021.

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 2021.

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. However, due to the COVID-19 pandemic, beginning in April 2020 the Commission has been meeting virtually via zoom.us. All other meeting criteria remained the same.

STAFF AND CONSULTANTS

The Commission has no employees. Independent consultants perform technical, legal, and administrative 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 Fourth Generation Watershed Management Plan was approved by the Board of Water and Soil Resources (BWSR) for a period of 10 years on December 17, 2020. The Commission adopted the Plan on the same date.

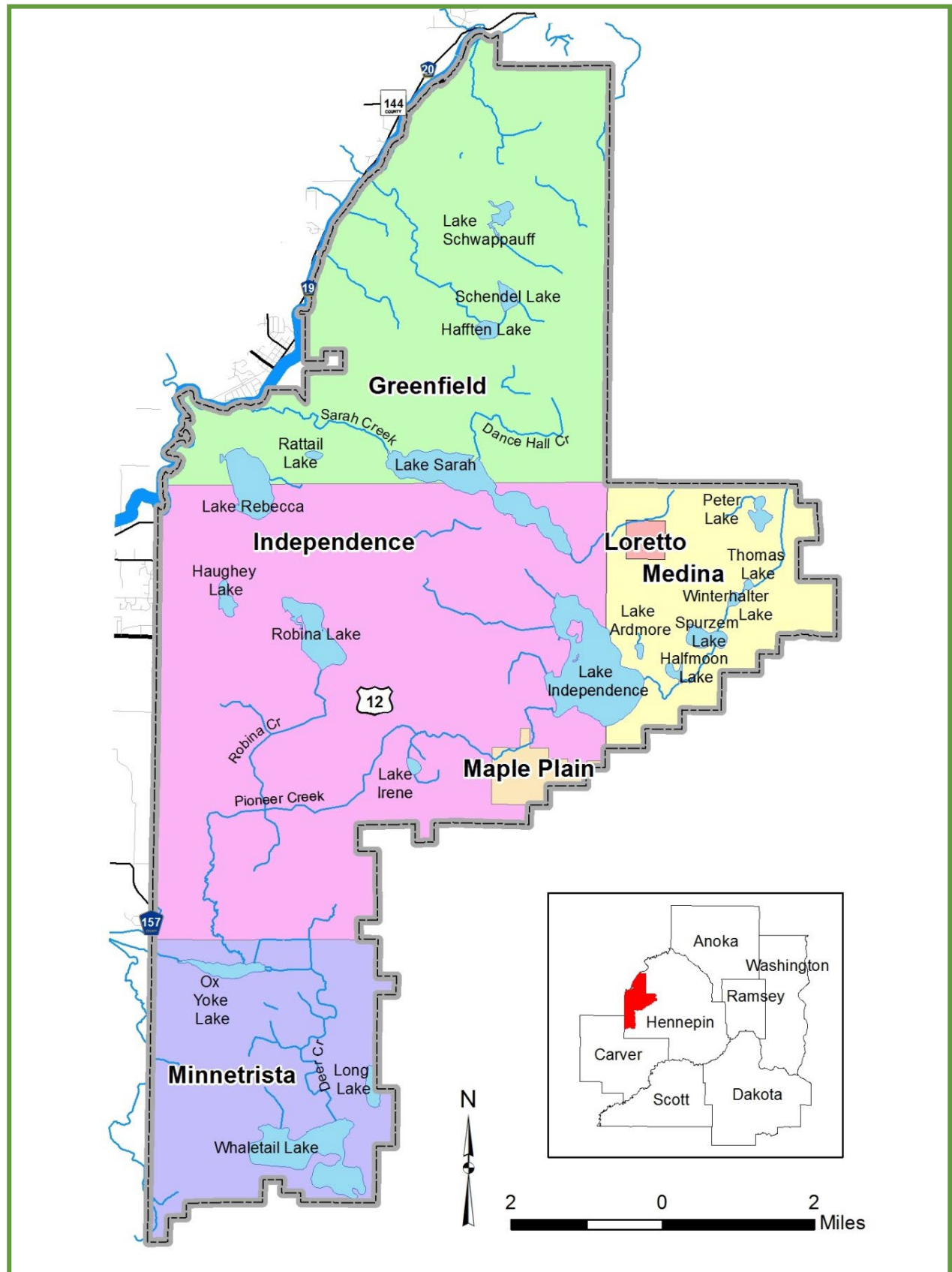


Table 1
Area of Members within the Pioneer-Sarah Creek Watershed

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

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.

In 2021 subwatershed assessments (SWAs) were started for Lake Rebecca, Spurzem Chain (funded by Hennepin County), and an update to address the changing land use in the Dancehall Creek subwatershed.

Technical Advisory Committee (TAC) meetings were held to discuss the 2021 monitoring plan, review the 2021-2023 Capital Improvement Plan, and discuss the FY21 Watershed-Based Implementation Funding (WBIF) to be used by December 31, 2023. The Pioneer-Sarah Creek watershed was awarded \$180,063 in FY21 WBIF for the South Fork Crow major watershed and \$91,105 in FY21 for the North Fork Crow major watershed.

The Baker Park Ravine project came in under-budget, leaving approximately \$21,000 in Clean Water Grant funds to use on an additional project. The County identified two projects – McCombs Channel Stabilization and White Wetland Restoration to use these funds. The projects were designed in 2021 and will be implemented in 2022.

LOCAL PLANS

Local water management plans adopted by member cities pursuant to Minnesota Statutes, Section 103B.235 shall be consistent with the Commission's Watershed Management Plan. Local plans must comply with MN Statutes, Section 103B.235 and MN Rules 8410 regarding local plan content. Update local plans must be submitted and approved by December 17, 2030.

2021 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 Fourth Generation Plan identifies issues, priorities, and goals for the ten-year period 2021-2031. Following is a summary of the work undertaken by the Pioneer-Sarah Creek Watershed Management Commission in 2021 to meet the goals, objectives and projected work plan outlined in its 2020 *Annual Report*. The projected Work Plan was approved at the Commission's March 19, 2020 meeting.

A. WATER QUANTITY. Continue to review local development/redevelopment plans for conformance with the standards outlined in the Commission's Fourth Generation Watershed Management Plan.

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

In 2021, the Commission reviewed eight plans for conformance with its standards. One project each were in the cities of Maple Plain, Medina, and Minnetrista, two projects in the City of Independence, and three projects in the City of Greenfield.

B. WATER QUALITY. 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.

1. Complete Lake Rebecca subwatershed assessment (SWA) and begin project implementation to maintain Lake Rebecca's non-impaired status. *The contract and funding for the Lake Rebecca Subwatershed Assessment was approved by the Commission at their October 21, 2021 meeting. The SWA is in progress, with field work conducted in December and analysis ongoing through early 2022. The report is expected in summer 2022.*

2. Implement BMPs to improve water quality in Spurzem, Independence, and Sarah Lakes, making progress toward their removal from the list of Impaired Waters. *The Commission is partnering with Hennepin County to complete a channel stabilization project on the McCombs property and a wetland restoration on the White property, both of which will reduce sediment and phosphorus loading to Lake Independence. These are the first BMPs funded by the Commission on private land. Both projects were approved in 2021 and will be constructed in early 2022. The Greenfield HOA Gully Stabilization Project and Slavec Texas Crossing Projects were completed in 2021.*

3. Improve water quality in the impaired lakes by 10% over the average of the previous 10 years by 2030. *BMPs identified in the Lake Independence and Dance Hall Creek Subwatershed Assessments were implemented in 2021.*

4. Maintain or improve water quality in lakes and streams with no identified impairments.

5. Conduct a TMDL/WRAPS progress review every five years. *The Commission began an update to the Dance Hall Creek Subwatershed Assessment in 2021 which should be complete in March 2022. Sediment cores for analysis have been collected on Lake Independence. Overall watershed monitoring has been increased to prepare data for TMDL/WRAPS review.*

6. Foster implementation of Best Management Practices (BMPs) in the watershed through technical and financial assistance and through partnership development. *The Commission has partnered with Hennepin County and Three Rivers Park District to work with landowners and develop projects on private land to reduce nutrient loading. Two projects were approved in 2021.*

C. GROUNDWATER.

1. Promote groundwater recharge by requiring abstraction/infiltration of runoff from new development and redevelopment.

2. Protect groundwater quality by incorporating wellhead protection study results into development and redevelopment Rules and Standards.

D. WETLANDS.

1. Preserve the existing functions and values of wetlands within the watershed.

2. Promote wetland enhancement or restoration of wetlands in the watershed. *The Commission has partnered with Hennepin County for the White Wetland Restoration project which was approved in 2021 for construction in early 2022.*

E. OPERATIONS AND PROGRAMMING.

1. Adopt a 2022 operating budget. *A 2022 operating budget of \$274,844, with member assessments totaling \$103,800, was approved on May 20, 2021.*

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

b. Fund a capital improvement program to share in the cost of projects. *The operating budget has included \$28,000 dedicated to the CIP fund annually since 2016.*

c. Use the Fourth Generation Plan as guidance to budget monitoring projects.

d. Allocate education funding. *The Commission budgeted \$3,000 in education funding for 2021.*

2. Convene a TAC meeting at least annually to identify and prioritize Capital Improvement Program (CIP) projects and share information. *A TAC meeting was held on February 25, 2021 to discuss the CIP, subwatershed assessments, annual monitoring, remaining grant/WBIF funds, targeted outreach, and new requirements for alum treatments.*

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. *The Commission entered into a Cooperative Agreement with Hennepin County to provide technical services to member cities and landowners in the development of nutrient reduction projects at their May 20, 2021 meeting.*

3. Prepare and implement an annual monitoring plan and provide annual reporting.

a. Partner with Three Rivers Park District (TRPD) to conduct bi-weekly water quality monitoring of “sentinel lakes” – Independence, Sarah, Little Long, and both basins of Whaletail. The 2021 budget allows the monitoring of five lakes. *The five sentinel lakes were monitored in 2021 along with Winterhalter and Thomas Lakes. TRPD also monitored Ardmore, Spurzem, Half Moon, Rebecca, and Little Long Lakes.*

b. Partner with Three Rivers Park District (TRPD) to conduct flow and water quality monitoring at selected sites. *The Commission budgeted funds to monitor four sites in 2021 - Dance Hall Creek, Spurzem Creek, and two site locations flowing to Lake Rebecca.*

c. Participate in Metropolitan Council’s Citizen Assisted Monitoring Program (CAMP). The Commission budgeted funds to monitor one lake in 2021. *A CAMP volunteer was not identified in 2021.*

d. Partner with Hennepin County to obtain macroinvertebrate monitoring by student volunteers through the RiverWatch program. *Due to COVID, this program was suspended in 2020 and has not been reinstated by the County as of December 31, 2021.*

e. Wetland Health Evaluation Program (WHEP), a citizen volunteer wetland monitoring program. *Due to COVID, this program was suspended in 2020 and has not been reinstated by the County as of December 31, 2021.*

4. Develop cost-share policy for opportunistic projects including projects funded by Hennepin County or other grants. *The Commission has approved cost-sharing up to 25% from CIP funds for opportunistic projects and studies that are not on the official CIP list but have direct impact to nutrient loading. CIP applications are required to receive this funding.*

5. Develop a schedule to create Lake Management Plans for Lakes Independence, Sarah, and Ardmore.

6. Develop a schedule of subwatershed assessments to identify potential high loading areas for prioritization and potential BMP implementation. *The Commission partnered with HCEE and TRPD to begin subwatershed assessments for Spurzem Creek and Lake Rebecca in 2021. Both are expected to be completed in 2022. The Dance Hall Creek SWA was also updated in 2021.*

7. Begin TMDL review and update for one lake.

8. Review biennial interest proposals and select administrative, legal and technical consultants for 2021-2022. *The biennial solicitation occurred in December 2020 and selections were made at the January 21, 2021 meeting. The Commission retained Hakanson-Anderson, technical services; JASS, administrative services; and Campbell Knutson, legal services.*

9. Publish 2020 Annual Activity Report. *The 2020 Annual Activity Report was accepted at the Commission's April 15, 2021 meeting and forwarded to the Board of Water and Soil Resources per MN Statute.*

F. EDUCATION AND OUTREACH

1. Partner with HCEE, TRPD and other entities to expand education and outreach activities.

2. Maintain the Commission website, pioneersarahcreek.org, and Facebook page to provide news to the watershed residents including annual reports, lake and stream monitoring data, monthly meeting materials, project reviews, public notices, news releases, and other watershed- or city-related information. Participate in other forms of media: city newsletters, local newspapers, television, etc., to share useful information to stakeholders. *\$1,500 was included in the 2021 budget for this purpose. In 2021 there were 1,222 individual users accessing the website on 1,614 sessions. The pages most visited are: Home, Meeting Packets, Lake Sarah, Staff, Locations and Maps, Application Requirements, Project Reviews, Fourth Generation Plan, and Best Practices.*

3. Convene Citizen Advisory Committees (CAC) as needed to advise the Commission and assist in program development and implementation. *The CAC did not meet in 2021.*

4. Provide education opportunities for Commissioners, elected and appointed officials, and other decision makers.

a. Complete handbook update.

5. Participate in collaborative groups to pool resources and undertake activities in a cost-effective manner, promote interagency cooperation, and promote consistency of messages. *The Commission continued its membership in WaterShed Partners and Staff attended monthly meetings of partners.*

6. Partner with HCEE and TRPD to undertake targeted education and outreach to landowners in the watershed.
7. Provide opportunities for the public to learn about and participate in water quality activities.
8. Enhance education opportunities for youth.
 - a. Explore opportunities for re-starting the RiverWatch program in a local school or with a Scout program. *This program has been suspended by the County due to COVID.*

FINANCIAL REPORTING

Appendix 3 includes the Commission's approved budget for 2021. 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 2021 assessments to the members are also found in *Appendix 3*.

A \$141,800 operating budget was approved by the Commission for 2021. \$6,000 was projected as proceeds from application fees, \$4,000 from interest income, and \$131,800 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, 2021. The 2020 Audit Report, which was prepared by Johnson & Company, Ltd., Certified Public Accountants, is available for viewing on the Commission's website, www.pioneersarahcreek.org.

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 2020 Audit are categorized as follows:

General engineering	11,359
General administration	72,898
Education	1,670
Programs	18,360
Projects	409,009
Capital projects	<u>0</u>
Total	\$513,296

2022 PROJECTED WORK PLAN

Following is the projected work plan for 2022 as approved by the Commission at its March 17, 2022 meeting.

A. WATER QUANTITY. Continue to review local development/redevelopment plans for conformance with the standards outlined in the Commission's Fourth Generation Watershed Management Plan.

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

B. WATER QUALITY. 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.

1. Complete Lake Rebecca subwatershed assessment and begin project implementation to maintain Lake Rebecca's non-impaired status.
2. Complete the Spurzem Creek and Dance Hall Creek subwatershed assessments (SWAs).
3. Implement BMPs to improve water quality in Spurzem, Independence, and Sarah Lakes, making progress toward their removal from the list of Impaired Waters.
3. Improve water quality in the impaired lakes by 10% over the average of the previous 10 years by 2030.
4. Maintain or improve water quality in lakes and streams with no identified impairments.

5. Begin TMDL review and update for one lake.

6. Foster implementation of Best Management Practices (BMPs) in the watershed through technical and financial assistance and through partnership development.

C. GROUNDWATER.

1. Promote groundwater recharge by requiring abstraction/infiltration of runoff from new development and redevelopment.

2. Protect groundwater quality by incorporating wellhead protection study results into development and redevelopment Rules and Standards.

D. WETLANDS.

1. Preserve the existing functions and values of wetlands within the watershed.

2. Promote wetland enhancement or restoration of wetlands in the watershed.

E. OPERATIONS AND PROGRAMMING.

1. Adopt a 2023 operating budget.

- a. Search for grants and other funds to supplement the regular budget.
- b. Fund a Capital Improvement Program (CIP) to share in the cost of projects.
- c. Use the Fourth Generation Plan as guidance to budget monitoring projects.
- d. Allocate education funding.

2. Convene a TAC meeting at least annually to identify and prioritize CIP projects and share information.

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.

c. Review Commission Rules and Standards for compliance with the 2020 MS4 Permit requirements.

d. Review Commission permits and applications for consistency with current practices.

3. Prepare and implement an annual monitoring plan and provide annual reporting.
 - a. Partner with Three Rivers Park District (TRPD) to conduct bi-weekly water quality monitoring of four “sentinel lakes” – Independence, Sarah, Little Long, and both basins of Whaletail. Two non-sentinel lakes will also be monitored in 2022.
 - b. Partner TRPD to conduct flow and water quality monitoring at selected sites. The Commission has budgeted funds to monitor four sites in 2022.
 - c. Participate in Metropolitan Council’s Citizen Assisted Monitoring Program (CAMP). The Commission has budgeted funds to monitor one lake in 2022.
 - d. Partner with Hennepin County to obtain macroinvertebrate monitoring by student volunteers through the RiverWatch program if Covid policies allow and the County resumes this program.
 - e. Partner with Hennepin County Environment and Energy (HCEE) to participate in the Wetland Health Evaluation Program (WHEP), a citizen volunteer wetland monitoring program if Covid policies allow and the County resumes this program..
4. Develop cost-share policy for opportunistic projects including projects funded by Hennepin County or other grants.
5. Develop a schedule to create Lake Management Plans for Lakes Independence, Sarah, and Ardmore.
6. Develop a schedule of subwatershed assessments (SWAs) to identify potential high loading areas for prioritization and BMP implementation.
7. Begin TMDL review and update for one lake.
8. Act as fiscal agent for the Board of Water and Soil Resources (BWSR) Watershed Based Implementation Funds (WBIF).
 - a. Funds from the 2021 biennium include \$115,000 for implementation of BMPs in the Lake Independence subwatershed, \$91,105 for development of a SWA and implementation of BMPs in the Dance Hall Creek subwatershed, \$35,063 for implementation of BMPs in the Lake Spurzem subwatershed, and \$30,000 for completion of the Lake Rebecca SWA.
 - b. Host a Convene Process approved by BWSR to allocate funds for the 2023 biennium WBIF.
9. Publish 2021 Annual Activity Report.

F. EDUCATION AND OUTREACH

1. Partner with HCEE, TRPD and other entities to expand education and outreach activities.
2. Maintain the Commission website, pioneersarahcreek.org, and Facebook page to provide news to the watershed residents including annual reports, lake and stream monitoring data, monthly meeting materials, project reviews, public notices, news releases, and other watershed- or city-related information. Participate in other forms of media: city newsletters, local newspapers, television, etc., to share useful information to stakeholders.
3. Provide education opportunities for Commissioners, elected and appointed officials, and other decision makers.
 - a. Complete handbook update.
4. Participate in collaborative groups to pool resources and undertake activities in a cost-effective manner, promote interagency cooperation, and promote consistency of messages.
5. Partner with HCEE and TRPD to undertake targeted education and outreach to landowners in the watershed.
6. Provide opportunities for the public to learn about and participate in water quality activities.
7. Enhance education opportunities for youth.
 - a. Explore opportunities for re-starting the RiverWatch program in a local school or with a Scout program.

Have a question about this report?

Need more information?

Want to know how to get involved?

Contact us: drop us an email, give us a call, we're happy to help:



<http://www.pioneersarahcreek.org/contact-us.html>

A P P E N D I X

2021 Commissioners

Member	Represented by	Responsibility	Phone/E-mail
Greenfield	Mark Workcuff 7895 Rebecca Park Trl Greenfield, MN 55373		612.501.9546 mworkcuff@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	Caitlin Cahill 5050 Independence St #97 Maple Plain, MN 55359	Vice Chair Excomm	763.479.0515 caitlincahill@mapleplain.com
Medina	Pat Wulff 2865 Lakeshore Ave Maple Plain, MN 55359		763.479.2972 Rwulff106@gmail.com
Minnetrista	John Tschumperlin 7575 Susan Lane Mound, MN 55364	Treasurer Excomm	612.791.1114 jtschumperlin@ci.minnetrista.mn.us

2021 Project Reviews				Reviewed for					Rate Control (cfs) (pre- and post-development)			Net Change Nutrient Control (lbs./yr) (pre- and post- development)		Net change		
Project No.	Project Name	City	Rule D Stormwater	Rule E Erosion Control	Rule F Floodplain	Rule G Wetland	Rule H Bridge/ Culvert Crossing	Rule I Buffers	2-yr Pre vs Post	10-yr Pre vs Post	100-yr Pre vs Post	TP load #/yr reduction	TSS load #/yr reduction	Abstracti on (c.f.)	Filtration/ biofiltratio n (c.f.)	Runoff Volume (af / yr)
2021-01	Centerpoint Gas Main	Maple Plain		x				x	nc	nc	nc					
2021-02	CSAH 92 Culvert Replacements	Minnetrista & Independence	x	x			x		nc	nc	nc					
2021-03	CSAH 50 Culvert and Slope Repair	Greenfield & Independence		x	x		x		nc	nc	nc					
2021-04	Schefers Hills	Independence		x				x	nc	nc	nc					
2021-05	Townhall Drive Culvert	Greenfield					x		nc	nc	nc					
2021-07	Spurzem Lake Boat Launch	Medina		x	x				nc	nc	nc					
2021-08	6780 Greenfield Rd	Greenfield		x				x	nc	nc	nc					
2021-09	White Wetland Restoration	Independence	x	x				x	5.35/2.28	11.07/6.00	24.66/16.00	13.1	25200		0	0

2020-2022 Operating Budgets

	2020 Budget	2021 Budget	2022 Budget	
Revenues				
Member Assessments	103,800.00	103,800.00	103,800.00	
Project Review Fees	6,000.00	6,000.00	6,000.00	
CIP Income	28,000.00	28,000.00	28,000.00	
Lake Sarah TMDL Imple	0.00	0.00	0.00	
Grant - Baker Park Ravine	0.00	0.00	0.00	
Watershed Based Funding				
Grant	0.00	0.00	135,584.00	
WCA Adm Fees	0.00	0.00	0.00	
Interest and Dividend Income	<u>9,000.00</u>	<u>4,000.00</u>	<u>1,460.00</u>	
Total Revenues	<u>146,800.00</u>	<u>141,800.00</u>	<u>274,844.00</u>	
Expenses				
Engineering/Consulting	47,000.00	35,200.00	32,500.00	
Administrative Expense	36,000.00	36,000.00	36,000.00	
Adm-Project Reviews	1,000.00	1,000.00	750.00	
Adm-CIP Mgmt	2,500.00	2,000.00	1,000.00	
Adm - Tech Support	800.00	750.00	750.00	
Legal Expense	500.00	500.00	500.00	
Audit Expense	4,500.00	4,500.00	4,500.00	
Insurance	3,100.00	2,800.00	2,800.00	
Website	1,800.00	1,800.00	1,500.00	
Adm - General Programs	0.00	0.00	0.00	
TAC Meetings	3,000.00	2,500.00	2,500.00	
Lakes Monitoring - TRPD	8,100.00	8,100.00	10,500.00	(5 Lakes)
Lakes Monitoring - CAMP	1,520.00	760.00	760.00	
Stream Monitoring	9,500.00	9,500.00	12,200.00	(4 Sites)
Education	4,000.00	4,000.00	2,500.00	
Education-Events	500.00	500.00	500.00	
Invertebrate Monitoring	1,000.00	750.00	0.00	
Grant Writing	1,000.00	1,000.00	1,000.00	
Third Gen Plan	10,000.00	0.00	0.00	
Management Plan - Admin	1,000.00	1,000.00	1,000.00	
Special Projects	2,000.00	0.00	0.00	
Fourth Gen Plan	10,000.00	0.00	0.00	
Capital Improvement Project	28,000.00	29,140.00	28,000.00	
WBIF FY 21	0.00	0.00	135,584.00	
Baker Park Ravine	0.00	0.00	0.00	
Total Expenses	<u>176,820.00</u>	<u>141,800.00</u>	<u>274,844.00</u>	
Net Income	<u>(\$ 30,020.00)</u>	<u>\$ 0.00</u>	<u>\$ 0.00</u>	

2020-2022 Member Assessments

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
2021	2020 Market Value PSC Basin	Increase in MV over Prev Year	2021 Op Budget		Increase over Prev Year	
			%age	Amount	%age	Amount
Greenfield	492,597,046	27.15%	29.66%	39,089.19	15.06%	5,116.98
Independence	598,303,894	3.57%	36.02%	47,477.37	-6.27%	(3,177.73)
Loretto	69,865,263	8.07%	4.21%	5,544.04	-2.20%	(124.89)
Maple Plain	132,270,685	6.06%	7.96%	10,496.11	-4.02%	(440.05)
Medina	180,132,527	4.03%	10.85%	14,294.11	-5.86%	(890.45)
Minnetrista	187,757,641	10.10%	11.30%	14,899.18	-3.15%	(483.87)
TOTALS	1,660,927,056	10.51%	100.00%	131,800.00	0.00%	0.00
2022	2021 Market Value PSC Basin	Increase in MV over Prev Year	2022 Op Budget		Increase over Prev Year	
			%age	Amount	%age	Amount
Greenfield	522,787,116	6.13%	29.78%	39,249.05	0.41%	159.86
Independence	634,578,595	6.06%	36.15%	47,641.96	0.35%	164.59
Loretto	71,882,465	2.89%	4.09%	5,396.69	-2.66%	(147.35)
Maple Plain	139,787,990	5.68%	7.96%	10,494.80	-0.01%	(1.31)
Medina	183,452,639	1.84%	10.45%	13,772.99	-3.65%	(521.12)
Minnetrista	203,053,025	8.15%	11.57%	15,244.52	2.32%	345.33
TOTALS	1,755,541,830	5.70%	100.00	131,800.00	-3.24%	(0.00)



Pioneer-Sarah Creek WMC – 2021 Year-end-summary

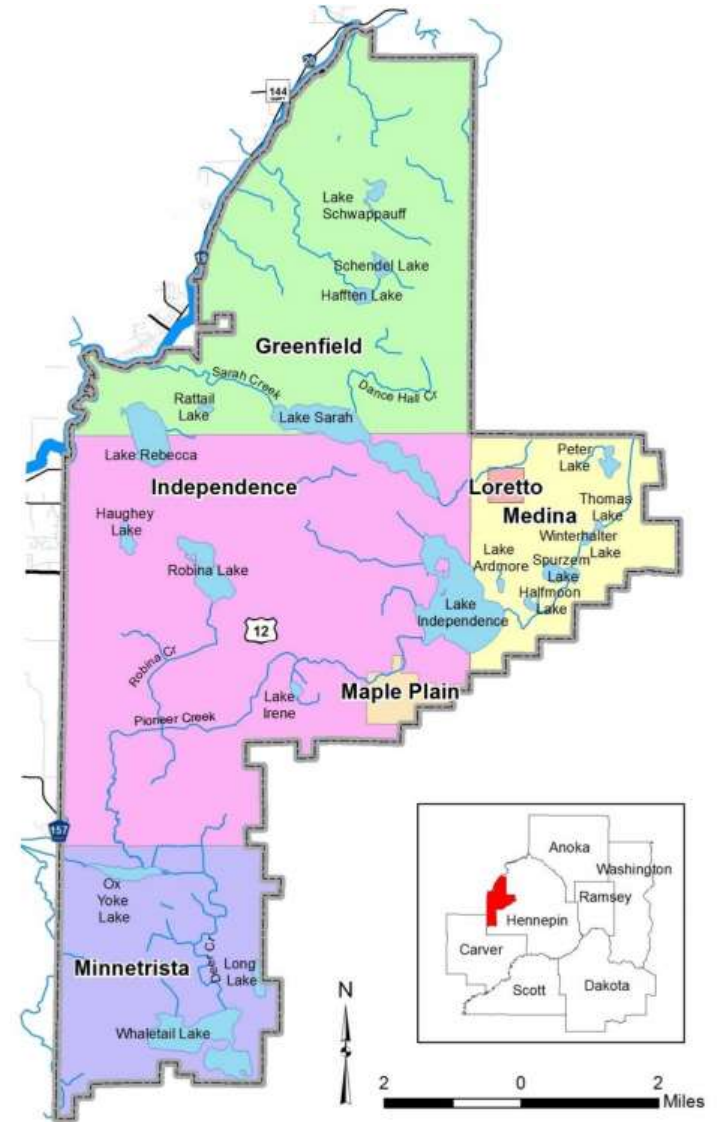
Kris Guentzel | Senior Water Resources Specialist
Paul Stewart | Rural Conservationist



County Priorities

- Execution of State grant dollars
- Implementation of Existing SWA's
- Completion of new SWA's
 - Dance Hall Creek (UPDATE)
 - Spurzem Creek (NEW)
 - Lake Rebecca (NEW)
- Outreach to Agricultural Producers

Hennepin County Environment and Energy

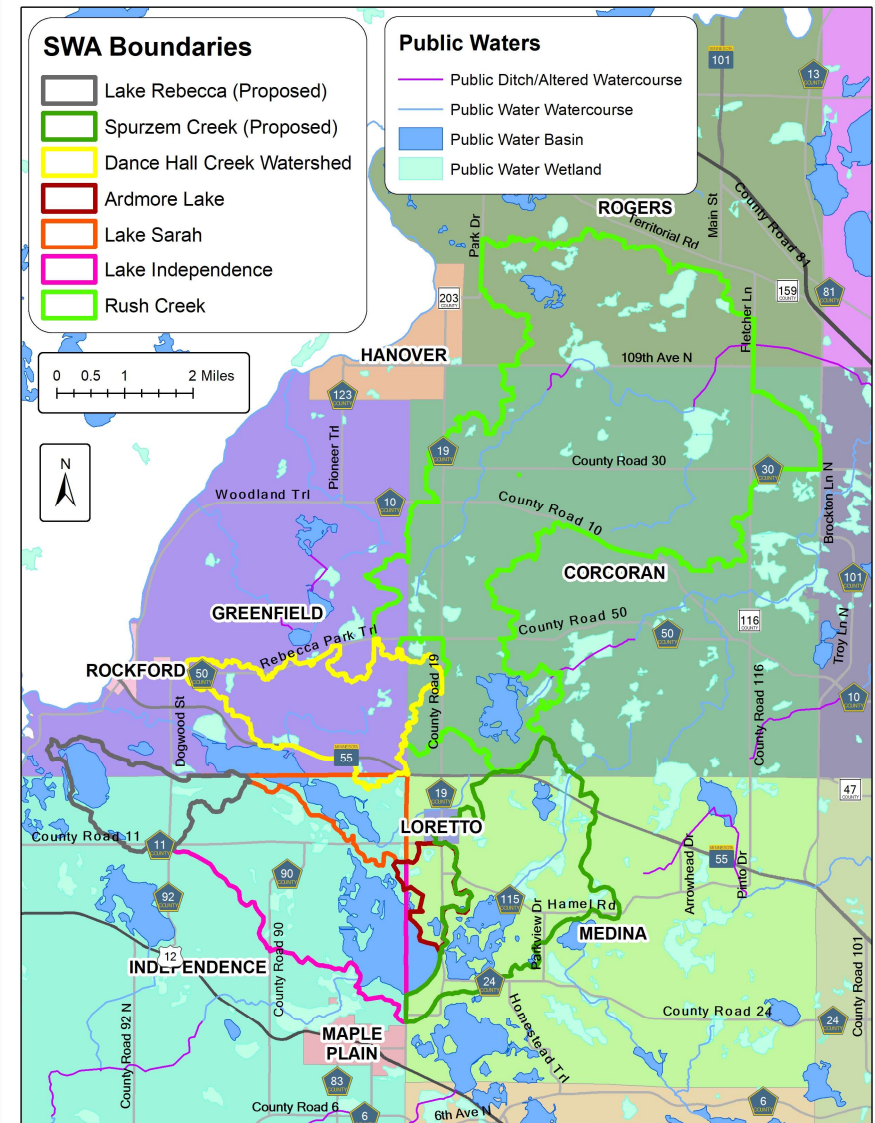


• 33 Figure ES.1: Cities in the Pioneer-Sarah Creek watershed.

Subwatershed Assessments (SWAs)

- Dance Hall Creek
 - DRAFT report available in coming days
 - Project 80% complete
 - County + partners leading outreach, Stantec completing report
- Spurzem Creek
 - Modeling ongoing
 - Project 30% complete, 207 staff hours reported thus far
 - County conducting analysis and ground-truthing
- Lake Rebecca
 - Project kick-off meeting held in Dec.
 - Modeling and field work began in Dec.
 - EOR completing report

Hennepin County Environment and Energy



Execution of State Dollars

- Watershed-Based Implementation Funding (WBIF)
 - North Fork Crow Watershed
 - \$91,105 for an update of the SWA, outreach, and implementation
 - South Fork Crow Watershed
 - \$115,000 for implementation of BMPs in Lake Independence SWA watershed
 - \$35,063 for implementation of BMPs in Spurzem Creek SWA watershed
 - \$30,000 for completion of a Lake Rebecca SWA

Hennepin County Environment and Energy

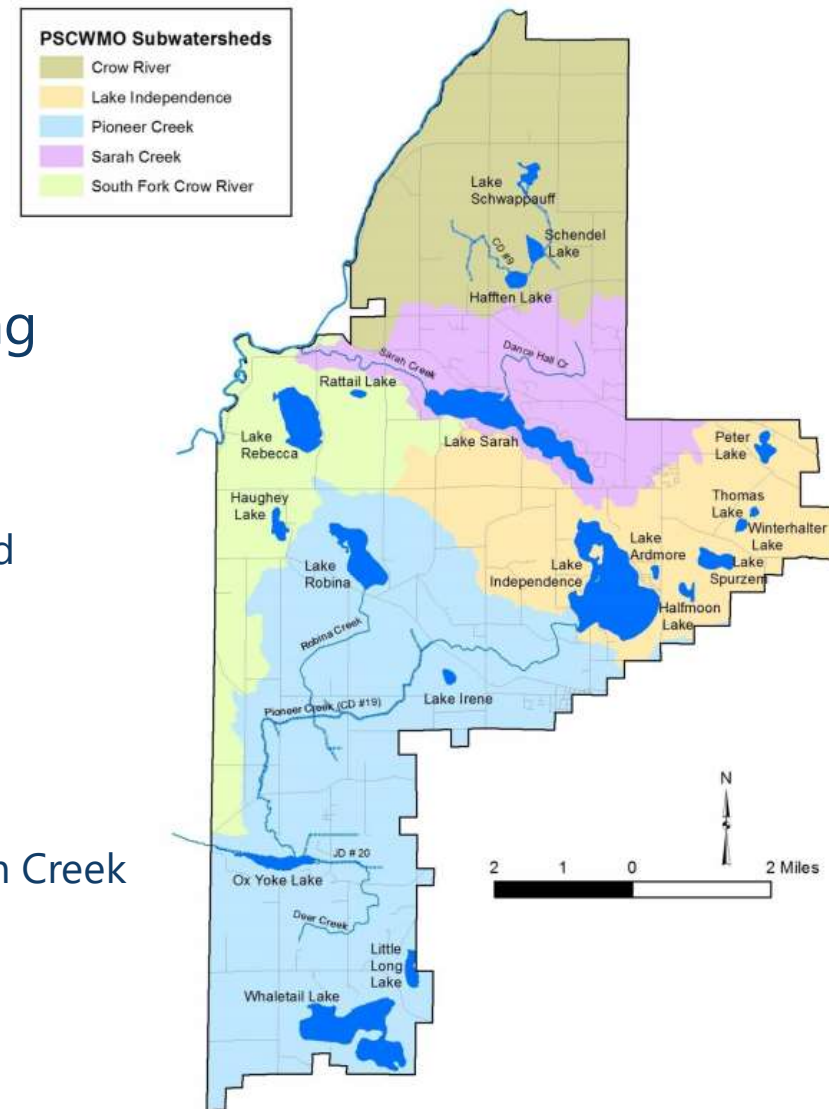


Figure 2.1. Pioneer-Sarah Creek watershed drainage systems.
Source: Minnesota DNR.

Tracking County Efforts in 2021

- 1,076 hours completed on behalf of PSCWMC
 - Primarily for landowner outreach (e.g. answering questions, promotion of program, assistance with implementation)
 - Doesn't include work on Spurzem Creek SWA, Buffer Law implementation, WCA enforcement, or work on lake program assistance
- Additional costs covered by County
 - Engineering Fees (Wright SWCD and WCD): \$9,126.94
 - Watershed and WCA Permit Fees: \$1,550.00

Project Progress in 2021

- Projects Completed in 2021
 - Greenfield HOA Gully Stabilization
 - Slavec Texas Crossing
- Several projects shovel-ready
 - McCombs Channel Stabilization
 - White Wetland Restoration
- Others under Design
 - Ibler Lakeshore Restoration
 - Malecek Drainageway
 - *Among several others*

Hennepin County Environment and Energy



Ag. Producers Outreach

- Soil Health
 - Cover Crops
 - Nutrient Management
- Targeted Outreach
 - Implementing conservation practices that protect our water
 - One-on-one help to plan and implement improvements

