



Agenda

Vermillion River Watershed Joint Powers Board Meeting

January 27, 2022, 1 p.m., in-person and teleconference via Zoom

- | | | |
|------------------------------------------------------------------------------------------------------------------------------------------------|-------------|---------|
| 1. Call to Order | | |
| 2. Election of Joint Powers Board Officers | Action | |
| 3. Roll Call | | |
| 4. Audience Comments on Items Not on the Agenda
(please limit audience comments to five minutes) | | |
| 5. Consent Agenda | Action | |
| a. Approval of Agenda | | Page 1 |
| b. Approval of Minutes from the December 2, 2021, Meeting | | Page 3 |
| c. Acceptance of Treasurer's Reports | | Page 8 |
| d. Authorization to Release a Request for Qualifications for Professional Services in 2022-2023 | | Page 10 |
| e. Authorization to Execute a Grant Agreement with the Minnesota Department of Natural Resources for the East Lake Habitat Improvement Project | | Page 12 |
| f. Authorization to Execute a Joint Powers Agreement with the City of Lakeville for the East Lake Habitat Improvement Project | | Page 14 |
| g. Authorization to Execute a Joint Powers Agreement with Dakota County Soil and Water Conservation District for Services in 2022 | | Page 16 |
| h. Authorization to Execute a Joint Powers Agreement with Scott Soil and Water Conservation District for Services in 2022 | | Page 19 |
| 6. Approval of Expenses | Action | Page 22 |
| 7. Business Items | | |
| a. Presentation on the Replacement of the Hastings Wastewater Treatment Plant | Information | Page 24 |
| b. Model Ordinance Update for Implementation of the Vermillion River Watershed Joint Powers Organization Standards | Information | Page 46 |
| 8. Staff Reports | | |
| 9. Adjourn | Action | |



Please note, the January 27, 2022, Vermillion River Watershed Joint Powers Board meeting will take place **in-person** in Conference Room A at the Extension and Conservation Center, 4100 220th Street West, Farmington Minnesota **and via teleconference** on the web-based application, Zoom. Due to the increase in cases of COVID 19 in our area, Dakota County requires masks to be worn inside all Dakota County facilities.

Commissioner Wolf attend the meeting via Zoom from his home at 19225 Fox Field Dr., Prior Lake, MN. Commissioner Wolf intends to continue attendance via interactive technology while masks are required to be worn at the regular meeting location. Notice will be provided of his location for future meetings.

Join Zoom Meeting

<https://dakotacountymn.zoom.us/j/91317854113?pwd=WUhBQjdCb0RxYzVKVFduUUUVQY0NvQT09>

Meeting ID: 913 1785 4113

Passcode: 364916

One tap mobile

+16513728299,,91317854113#,,,,*364916# US (Minnesota)

Dial by your location

+1 651 372 8299 US (Minnesota)

Meeting ID: 913 1785 4113

Passcode: 364916

Find your local number: <https://dakotacountymn.zoom.us/j/91317854113?pwd=WUhBQjdCb0RxYzVKVFduUUUVQY0NvQT09>

Other Information

Next Meeting Date: **February 24, 2022**, at 1 p.m.

You will be notified if the meeting is cancelled due to an anticipated lack of quorum.



Meeting Minutes

Vermillion River Watershed Joint Powers Board Meeting

December 2, 2021, 1 p.m., In-person and Teleconference using Zoom

Board Members in Attendance

Dakota County Commissioner Mike Slavik, Chair

Scott County Commissioner Tom Wolf, Vice Chair via teleconference

Others in Attendance

Al Full, Citizen

Bruce Johnson, Dakota County Soil and Water Conservation District, Supervisor

Mark Zabel, Dakota County, VRWJPO Administrator

Melissa Bokman-Ermer, Scott County, Watershed Co-administrator

Travis Thiel, Dakota County, VRWJPO Senior Watershed Specialist

Mark Ryan, Dakota County, VRWJPO Watershed Engineer

Brita Moore-Kutz, Dakota County, VRWJPO Communications and Outreach Specialist

Paula Liepold, Dakota County, Water Resources Education Specialist

Helen Brosnahan, Dakota County, Assistant County Attorney

1. Call to Order

Meeting was called to order at 1:02 p.m.

2. Roll Call

Commissioners Slavik and Wolf were in attendance. Commissioner Hamann-Roland witnessed the meeting via teleconference due to unforeseen circumstances she was unable to provide the required notice of appearance by interactive technology and therefore, appeared in a non-voting capacity.

3. Audience Comments on Items Not on the Agenda

Al Full appeared and addressed the Board about his concern with drainage in the area around Biscayne Avenue and 190th Street and inquired if anything is being considered to address the concerns he had raised with various government entities. Mr. Full was informed that the VRWJPO has no new or additional information related to this issue. Mark Ryan stated that he had contacted the Engineer for the Township and hadn't received any new information but the township is seeking additional outside funds to support a project. There was discussion about the potential design considerations and funding. Mark Ryan offered that he could follow up with the Township Engineer to explore what the shortfall for the project might be.

4. Approval of Consent Agenda

Vermillion River Watershed Joint Powers Organization

4100 220th Street West, Suite 103, Farmington, MN 55024

- a. Approval of Agenda
- b. Approval of Minutes from the October 28, 2021, meeting
- c. Acceptance of Treasurer's Report
- d. Approval of dates for 2022 Vermillion River Watershed Joint Powers Board (VRWJPB) meetings

Res. No. VRW 21-22: Motion by Commissioner Wolf, Second by Commissioner Slavik and passed on a 2-0 vote to approve the consent agenda.

5. Approval of Expenses

Mark Zabel presented the current expenses for approval as shown on item 5.

Res. No. VRW 21-23: Motion by Commissioner Wolf, Second by Commissioner Slavik and passed on a 2-0 roll call vote to approve the expenses totaling \$480,845.31 incurred between September 13, 2021 and October 12, 2021.

Business Items

6b. Adoption of the Vermillion River Watershed Joint Powers Organization 2022 Final Budget and Watershed Management Tax District Levy

Mark Zabel described minor changes to the final budget as compared to the draft presented in August. The changes reflect a reduction in expenses of \$25,700 and an increase in cash reserve by that same amount.

Res. No. VRW 21-24: Motion by Commissioner Wolf, Second by Commissioner Slavik and passed on a 2-0 roll call vote to adopt the VRWJPO 2022 Final Budget totaling \$1,942,600 and recommend a Vermillion River Watershed Management Tax District Levy of \$1,000,000 (\$32,500 in the Scott County portion of the watershed and \$967,500 in the Dakota County portion of the watershed).

6c. Authorize Execution of Joint Powers Agreement with Dakota County for the Wetland Health Evaluation Program

Mark Zabel described the VRWJPO's past payments for the Wetland Health Evaluation Program (WHEP) managed through the Dakota County Environmental Resources Department and the basis for no longer providing support. The request is for the Board to authorize the VRWJPO to participate in the WHEP. The JPA allows the VRWJPO to identify wetlands of interest and recruit volunteers for teams to evaluate wetlands. If the VRWJPO participates it will be responsible for supporting a team or teams and allocate funds annually when teams participate in the program. This is a five-year agreement.

Res. No. VRW 21-24: Motion by Commissioner Wolf, Second by Commissioner Slavik and passed on a 2-0 roll call vote to authorize the chair to execute a Joint Powers Agreement with Dakota County for participation in the Wetland Health Evaluation Program; subject to approval by the Dakota County Attorney's Office as to form.

6a. Presentation of Riparian landowner Survey Report

Amit Pradhananga from the University of Minnesota, Center for Changing Landscapes who does research on social and policy aspects of natural resource issues with a particular focus on water management presented on recent research completed for the VRWJPO on landowner perspectives

about water resources protection in the Vermillion River Watershed. The objective of the research is to understand landowner beliefs, norms, and behaviors associated with conservation practices and measures addressing water resources. The survey attempted to answer two questions:

- 1) What are landowner values and attitudes associated with water resources management?
- 2) What are differences in perceptions between the 2011 and 2021 surveys?

University of Minnesota project staff sent a self-administered survey to 1,000 randomly selected riparian landowners in the watershed. The surveys were sent from February to May 2021 and received a 25% response rate. The major topics surveyed were: beliefs about water resource protection and management, perspectives about conservation practices, and current and future conservation actions. Amit provided a summary of responses and an analysis of the survey and compared the current responses with those from 2011.

Analysis of the surveys established that landowners value water. Specifically, they value clean water, are concerned about water pollution, and believe it is a personal responsibility and obligation to protect water. Landowners also perceive the value of conservation positively with benefits to the community. Landowners trust local individuals and Soil and Water Conservation Districts for information about conservation practices but do not have as much trust in other governmental entities.

Commissioners inquired about how to effectively use the information developed from the survey in messaging about and delivering, conservation, protection, and management of water resources. Mr. Pradhananga stated a graduate student on the project team will conduct additional analysis of this project in thesis work and once completed, that information can be shared with the VRWJPO. Mark Zabel added that Brita Moore-Kutz has reviewed that report and incorporated recommendations from the survey into the VRWJPO Communications Plan.

6d. Model Ordinance Update for Implementation of the Vermillion River Watershed Joint Powers Organization Standards

This item was deferred to the next meeting.

Staff Reports

Melissa Bokman-Ermer

Melissa reported an extension was not sought for the \$25,000 in Watershed Based Funding Implementation Grant for projects in the Scott County portion of the watershed and those funds will be released back to the Minnesota Board of Water and Soil Resources.

Paula Liepold

Paula mentioned Dakota County will host the traveling “We Are Water” exhibit from October 13 through December 5 at the Pleasant Hills Library in Hastings and an outdoor exhibit at Lebanon Hills Regional Park. Paula and Brita, as well as other county staff, are enhancing relationships with organizations to explore mutually beneficial participation in the exhibit and related events. Interviews will be conducted to tell water stories, with a focus on inclusion of stories that have been missed or ‘absent narratives’. Profiles of local farmers will also be included.

Travis Thiel

Travis reported he and Mark Ryan proposed two projects for Clean Water Funding through the competitive grant funding process: Ravenna ravines on the Sontag property and Foxborough Park in Lakeville. Both have been recommended for funding pending Minnesota Board of Water and Soil Resources Board approval.

Mark Ryan

Mark reported he and Travis had met with City of Farmington staff to review progress on the Direct Drainage Study in Farmington. A “heat map” was generated by the consultant identifying potential sites for practices addressing direct stormwater discharges to the river. There are challenges and constraints within the City addressing these issues due to historic development and shallow groundwater.

Brita Moore-Kutz

Brita highlighted her involvement in the “We Are Water” team and its development. This project touches on many of the principles in the VRWJPO communication plan in furthering coordination, collaboration, and consistent messaging. Brita is meeting with staff at the City of Farmington about potential volunteer and outreach opportunities.

Mark Zabel

Mark covered the end of terms for members of the Vermillion River Watershed Planning Commission (WPC). Ken Betzold has served out his full eligibility as a member and will be leaving the Commission. Carolyn Miller and Tony Wotzka have completed their three-year terms and have chosen not to request reappointment. The short-term challenge is the WPC has only six current members. The WPC needs at least five members for a quorum. Commissioner Slavik asked if there is a virtual option for WPC members to attend meetings. Mark Zabel indicated that the VRWJPO is following direction from Dakota County for attendance via teleconference. Helen Brosnahan verified the WPC is subject to the Open Meeting Law.

Adjourn

Chair Slavik adjourned the meeting at 2:34 p.m.

Next Meeting Date: Thursday, January 27, 2022, at 1 p.m. in Conference Room A at the Dakota County Extension and Conservation Center, 4100 220th Street West, Farmington, MN.

Mark Zabel

Administrator for the Vermillion River Watershed Joint Powers Organization

Attest

Commissioner

Secretary/ Treasurer

Date



November 2021 Vermillion River Watershed Joint Powers Organization Treasurer's Report

January 2022- Vermillion River Watershed Joint Powers Board Meeting

		<u>Budget Amounts</u>	<u>Expenses to Date</u>	<u>Expenses Pending</u>	<u>Account Balance</u>	<u>Budget Funding Sources</u>	
I.	Administration & Operations (217002-0000)	\$ 240,500.00	\$ 142,654.25	\$ 14,439.84	\$ 83,405.91	Scott County Levy	\$ 33,350.00
II.	Research & Planning (217002-0130)	\$ 65,600.00	\$ 34,868.84	\$ 187.70	\$ 30,543.46	Dakota County Levy	\$ 966,650.00
III.	Monitoring & Assessment (217002-0230)	\$ 157,400.00	\$ 62,952.02	\$ 10,917.35	\$ 83,530.63	Expected 2019 Carryover (Fund Balance)	\$ 336,000.00
IV.	Public Communications & Outreach (217002-0330)	\$ 192,450.00	\$ 127,214.18	\$ 9,128.28	\$ 56,107.54	Special Use Permit	\$ 2,500.00
V.	Regulation (217002-0530)	\$ 65,900.00	\$ 29,761.98	\$ 2,626.34	\$ 33,511.68	CWF Grant (BWSR)	\$ 370,000.00
VI.	Coordination & Collaboration (217002-0531)	\$ 45,600.00	\$ 15,719.67	\$ 2,011.41	\$ 27,868.92	2019-2021 CWF Grant 1W1P (BWSR)	\$ 218,100.00
VII.	Feasibility/Preliminary Studies (217002-0631)	\$ 240,000.00	\$ 100,615.20	\$ 5,958.66	\$ 133,426.14	2020-2023 CWF Grant WBIF (BWSR)	\$ 243,600.00
VIII.	Capital Improvement Projects (217092-0130)	\$ 296,300.00	\$ 66,918.52	\$ 8,282.92	\$ 221,098.56	Met Council Grant	\$ -
VIX.	CWF Grant - South Branch (217002-0838)	\$ -	\$ 39.85	\$ -	\$ (39.85)	CIP Reserve	\$ 205,900.00
X.	CWF Grant - Erickson Park St (217002-0841)	\$ 164,300.00	\$ 164,250.00	\$ -	\$ 50.00	CIP Reserve Grant Match	\$ 101,800.00
XI.	CWF Grant - Aronson Park Storm (217002-0843)	\$ 10,000.00	\$ 10,000.00	\$ -	\$ -	Investment Earnings	\$ 20,000.00
XII.	CWF Grant - Webster Wetland (217002-0844)	\$ 67,000.00	\$ 64,585.98	\$ -	\$ 2,414.02	Total	\$ 2,497,900.00
XIII.	CWF Grant - Technical Assistance (217002-0845)	\$ 19,500.00	\$ -	\$ -	\$ 19,500.00		
XIV.	CWF Grant - Imminet Health T (217002-0846)	\$ 8,000.00	\$ -	\$ -	\$ 8,000.00		
XV.	CPL Grant - South Creek at Hamburg (217002-0847)	\$ -	\$ 1,607.29	\$ -	\$ (1,607.29)		
XVI.	FY2019 - Watershed Funding Grant (217002-0848)	\$ 23,700.00	\$ 5,846.87	\$ 360.80	\$ 17,492.33		
XXXIII.	CWF Grant - Middle Creek Restoration (217002-0852)	\$ 420,000.00	\$ 423,098.68	\$ -	\$ (3,098.68)		
XXXIV.	Irrigation and Audit (217002-0431)	\$ 10,000.00	\$ 10,687.50	\$ -	\$ (687.50)		
XXXV.	WBIF Grant (BWSR) 2020-2023 North Creek Stabilization (217002-0853)	\$ 187,500.00	\$ -	\$ -	\$ 187,500.00		
XXXVI.	WBIF Grant 2020-2023 Farmington Direct Drainage (217002-0854)	\$ 16,630.00	\$ -	\$ -	\$ 16,630.00		
XXXVII.	WBIF Grant (BWSR) 2020-2023 Hastings Direct Drainage (217002-0855)	\$ 16,630.00	\$ -	\$ -	\$ 16,630.00		
XXXVIII.	WBIF Grant (BWSR) 2020-2023 Ravenna Basins Restoration (217002-0856)	\$ 35,500.00	\$ -	\$ -	\$ 35,500.00		
XXXIV.	WBIF Grant (BWSR) 2020-2023 Rosemount Anti-Icing (217002-0857)	\$ 15,000.00	\$ -	\$ -	\$ 15,000.00		
VRW JPO Revised Budget Expense TOTAL		\$ 2,297,510.00	\$ 1,260,820.83	\$ 53,913.30	\$ 982,775.87		



December 2021 Vermillion River Watershed Joint Powers Organization Treasurer's Report

January 2022 - Vermillion River Watershed Joint Powers Board Meeting

		<u>Budget Amounts</u>	<u>Expenses to Date</u>	<u>Expenses Pending</u>	<u>Account Balance</u>	<u>Budget Funding Sources</u>	
I.	Administration & Operations (217002-0000)	\$ 240,500.00	\$ 157,779.44	\$ 13,787.61	\$ 68,932.95	Scott County Levy	\$ 33,350.00
II.	Research & Planning (217002-0130)	\$ 65,600.00	\$ 35,056.54	\$ 509.78	\$ 30,033.68	Dakota County Levy	\$ 966,650.00
III.	Monitoring & Assessment (217002-0230)	\$ 157,400.00	\$ 73,869.37	\$ 2,237.30	\$ 81,293.33	Expected 2019 Carryover (Fund Balance)	\$ 336,000.00
IV.	Public Communications & Outreach (217002-0330)	\$ 192,450.00	\$ 136,342.46	\$ 8,106.43	\$ 48,001.11	Special Use Permit	\$ 2,500.00
V.	Regulation (217002-0530)	\$ 65,900.00	\$ 32,388.32	\$ 2,616.30	\$ 30,895.38	CWF Grant (BWSR)	\$ 370,000.00
VI.	Coordination & Collaboration (217002-0531)	\$ 45,600.00	\$ 17,731.08	\$ 2,444.39	\$ 25,424.53	2019-2021 CWF Grant 1W1P (BWSR)	\$ 218,100.00
VII.	Feasibility/Preliminary Studies (217002-0631)	\$ 240,000.00	\$ 106,573.86	\$ 5,282.02	\$ 128,144.12	2020-2023 CWF Grant WBIF (BWSR)	\$ 243,600.00
VIII.	Capital Improvement Projects (217092-0130)	\$ 296,300.00	\$ 75,201.44	\$ 3,556.23	\$ 217,542.33	Met Council Grant	\$ -
VIX.	CWF Grant - South Branch (217002-0838)	\$ -	\$ 39.85	\$ -	\$ (39.85)	CIP Reserve	\$ 205,900.00
X.	CWF Grant - Erickson Park St (217002-0841)	\$ 164,300.00	\$ 164,250.00	\$ -	\$ 50.00	CIP Reserve Grant Match	\$ 101,800.00
XI.	CWF Grant - Aronson Park Storm (217002-0843)	\$ 10,000.00	\$ 10,000.00	\$ -	\$ -	Investment Earnings	\$ 20,000.00
XII.	CWF Grant - Webster Wetland (217002-0844)	\$ 67,000.00	\$ 64,585.98	\$ -	\$ 2,414.02	Total	\$ 2,497,900.00
XIII.	CWF Grant - Technical Assistance (217002-0845)	\$ 19,500.00	\$ -	\$ -	\$ 19,500.00		
XIV.	CWF Grant - Imminet Health T (217002-0846)	\$ 8,000.00	\$ -	\$ -	\$ 8,000.00		
XV.	CPL Grant - South Creek at Hamburg (217002-0847)	\$ -	\$ 1,607.29	\$ -	\$ (1,607.29)		
XVI.	FY2019 - Watershed Funding Grant (217002-0848)	\$ 23,700.00	\$ 6,207.67	\$ 1,530.18	\$ 15,962.15		
XXXIII.	CWF Grant - Middle Creak Restoration (217002-0852)	\$ 420,000.00	\$ 423,098.68	\$ 549.62	\$ (3,648.30)		
XXXIV.	Irrigation and Audit (217002-0431)	\$ 10,000.00	\$ 10,687.50	\$ -	\$ (687.50)		
XXXV.	WBIF Grant (BWSR) 2020-2023 North Creek Stabilization (217002-0853)	\$ 187,500.00	\$ -	\$ -	\$ 187,500.00		
XXXVI.	WBIF Grant 2020-2023 Farmington Direct Drainage (217002-0854)	\$ 16,630.00	\$ -	\$ -	\$ 16,630.00		
XXXVII.	WBIF Grant (BWSR) 2020-2023 Hastings Direct Drainage (217002-0855)	\$ 16,630.00	\$ -	\$ -	\$ 16,630.00		
XXXVIII.	WBIF Grant (BWSR) 2020-2023 Ravenna Basins Restoration (217002-0856)	\$ 35,500.00	\$ -	\$ -	\$ 35,500.00		
XXXIV.	WBIF Grant (BWSR) 2020-2023 Rosemount Anti-Icing (217002-0857)	\$ 15,000.00	\$ -	\$ 15,000.00	\$ -		
VRW JPO Revised Budget Expense TOTAL		\$ 2,297,510.00	\$ 1,315,419.48	\$ 55,619.86	\$ 926,470.66		

5d. Authorization to Release a Request for Qualifications for Professional Services in 2022-2023

Meeting Date: 1/27/2022

Item Type: Consent-Action

Contact: Travis Thiel

Telephone: 952-891-7546

Prepared by: Mark Ryan

Reviewed by: N/A

N/A

**PURPOSE/ACTION REQUESTED**

- Authorization to release a Request for Qualifications for professional services in 2022-2023

SUMMARY

Vermillion River Watershed Joint Powers Organization (VRWJPO) staff requests authorization to release a Request for Qualifications (RFQ) in January/February 2022 for professional engineering, environmental, and ecological restoration and management services. The RFQ process is required by the Minnesota Board of Water and Soil Resources (BWSR) for watershed districts and water management organizations. Water management organizations are required to solicit qualifications from firms on a biennial basis and provide the list of firms that have been compiled and approved to BWSR.

The list of firms can be used by the VRWJPO to contract for services that watershed staff may not be able to perform because of limited technical expertise or time constraints. The ability to choose firms based on their qualifications can save time by allowing staff to forego a Request for Proposal (RFP) process for every project. All services performed by a firm would require a contract with the VRWJPO, which would be submitted to the Vermillion River Watershed Joint Powers Board (VRWJPB) or the VRWJPO Administrator for approval before being executed. The VRWJPO staff requests authorization to release the RFQ for professional services in 2022-2023.

EXPLANATION OF FISCAL/FTE IMPACT

None

Supporting Documents:

Attachment A: Request for Qualifications for Professional Services in 2022-2023

Previous Board Action(s):**RESOLUTION****5d. Authorization to Release a Request for Qualifications (RFQ) for Professional Services in 2022-2023**

WHEREAS, the VRWJPO contracts with professional engineering, environmental, and ecological restoration and management services for projects that require specialized expertise not available among staff or are implemented within time constraints that staff is unable to meet; and

WHEREAS, the VRWJPO's ability to contract for professional service from a pre-approved list of qualified firms can provide advantages in project quality, timeliness, and efficiency; and

WHEREAS, Minn. Stat. 103B.227, subd. 5, requires watershed districts or watershed management organizations to issue a biennial solicitation for professional or technical consulting services and provide the list of selected firms to the Minnesota Board of Water and Soil Resources.

NOW, THEREFORE, BE IT RESOLVED that the Vermillion River Watershed Joint Powers Board (VRWJPB) approves the release of the RFQ for professional services in 2022-2023.

5e. Authorization to Execute a Grant Agreement with the Minnesota Department of Natural Resources for the East Lake Habitat Improvement Project

Meeting Date: 1/27/2022

Item Type: Regular-Action

Contact: Travis Thiel

Telephone: 952-891-7546

Prepared by: Travis Thiel

Reviewed by: N/A

N/A

**PURPOSE/ACTION REQUESTED**

- Authorization to execute a grant agreement with the Minnesota Department of Natural Resources for the East Lake Habitat Improvement Project

SUMMARY

The Vermillion River Watershed Joint Powers Organization (VRWJPO) staff requests execution of a Conservation Partners Legacy grant agreement with the Minnesota Department of Natural Resources (DNR) to convey Conservation Partners Legacy (CPL) grant funding to the City of Lakeville for habitat improvements adjacent to East Lake.

In 2021, VRWJPO staff applied for CPL grant funding for improvements in and around East Lake, including a fish barrier between East Lake and North Creek, invasive fish removals from East Lake, in-lake vegetation plantings, shoreline restoration, and forest and oak savanna restoration. CPL grant staff notified VRWJPO staff that it was prepared to award grant funding for shoreline restoration and forest and oak savanna restoration work, but the other elements of the application would not be awarded funding as they were not considered to have enough restoration longevity.

The CPL grant for the awarded activities would provide up to \$90,000 in restoration funding. The CPL grant requires a minimum 10 percent local match, which will be provided by the City. The City proposes to provide at least \$9,000 in cash match and the VRWJPO will provide grant administration. The restoration activities would be implemented in 2022, 2023, and 2024. The restoration activities will provide improved upland and riparian habitat and will result in improved water quality conditions in East Lake.

VRWJPO staff recommend executing a grant agreement with the DNR for the East Lake Habitat Improvement Project in an amount not to exceed \$90,000.

EXPLANATION OF FISCAL/FTE IMPACT

The VRWJPO will receive \$90,000 in grant revenues from the Minnesota Department of Natural Resources under the Conservation Partners Legacy Program (CPL). The VRWJPO will pass through the CPL grant funding to the City of Lakeville and will provide in-kind grant administration.

Supporting Documents:

Attachment A: Conservation Partners Legacy Grant Agreement with Minnesota Department of Natural Resources for East Lake Habitat Improvement Project

Previous Board Action(s):**RESOLUTION****5e. Authorization to Execute a Grant Agreement with the Minnesota Department of Natural Resources for the East Lake Habitat Improvement Project**

WHEREAS, in 2021, the Vermillion River Watershed Joint Powers Organization (VRWJPO) applied for Conservation Partners Legacy (CPL) grant funding for improvements in and around East Lake; and

WHEREAS, the VRWJPO was awarded CPL grant funding for shoreline, forest, and oak savanna restoration activities but was not awarded CPL grant funding for a fish barrier between East Lake and North Creek, invasive fish removals from East Lake, and in-lake vegetation plantings; and

WHEREAS, the resulting CPL grant award provides up to \$90,000 for restoration activities; and

WHEREAS, the CPL grant requires a minimum 10 percent local match, which will be provided by the City of Lakeville; and

WHEREAS, the City proposes to provide up to \$9,000 in cash match toward the project and the VRWJPO will provide grant administration; and

WHEREAS, the project activities are planned to be implemented in 2022, 2023, and 2024; and

WHEREAS, the project will provide improved upland and riparian habitat and will result in improved water quality conditions in East Lake.

NOW, THEREFORE, BE IT RESOLVED, that the Vermillion River Watershed Joint Powers Board authorizes its chair to execute a grant agreement with the Minnesota Department of Natural Resources in an amount not to exceed \$90,000 for the East Lake Habitat Improvement Project; subject to approval as to form by the Dakota County Attorney's Office.

5f. Authorization to Execute a Joint Powers Agreement with the City of Lakeville for the East Lake Habitat Improvement Project

Meeting Date: 1/27/2022

Item Type: Regular-Action

Contact: Travis Thiel

Telephone: 952-891-7546

Prepared by: Travis Thiel

Reviewed by: N/A

N/A

**PURPOSE/ACTION REQUESTED**

- Authorization to execute a Joint Powers Agreement with the City of Lakeville for the East Lake Habitat Improvement Project

SUMMARY

The Vermillion River Watershed Joint Powers Organization (VRWJPO) staff requests execution of a Joint Powers Agreement (JPA) with the City of Lakeville (City) to convey Conservation Partners Legacy (CPL) grant funding to the City for habitat improvements adjacent to East Lake.

In 2021, VRWJPO staff applied for CPL grant funding for improvements in and around East Lake, including a fish barrier between East Lake and North Creek, invasive fish removals from East Lake, in-lake vegetation plantings, shoreline restoration, and forest and oak savanna restoration. CPL grant staff notified VRWJPO staff that it was prepared to award grant funding for shoreline restoration and forest and oak savanna restoration work, but the other elements of the application would not be awarded funding as they were not considered to have enough restoration longevity.

The CPL grant for the awarded activities would provide up to \$90,000 in restoration funding. The CPL grant requires a minimum 10 percent local match, which will be provided by the City. The City proposes to provide at least \$9,000 in cash match and the VRWJPO will provide grant administration. The restoration activities would be implemented in 2022, 2023, and 2024. The restoration activities will provide improved upland and riparian habitat and will result in improved water quality conditions in East Lake.

VRWJPO staff recommend executing a JPA with the City for the East Lake Habitat Improvement Project in an amount not to exceed \$90,000.

EXPLANATION OF FISCAL/FTE IMPACT

The VRWJPO will receive \$90,000 in grant revenues from the Minnesota Department of Natural Resources under the Conservation Partners Legacy Program (CPL). The VRWJPO will pass through the CPL grant funding to the City of Lakeville and will provide in-kind grant administration.

Supporting Documents:

Attachment A: JPA with Lakeville for East Lake Habitat Improvement Project

Previous Board Action(s):**RESOLUTION****5f. Authorization to Execute a Joint Powers Agreement with the City of Lakeville for the East Lake Habitat Improvement Project**

WHEREAS, in 2021, the Vermillion River Watershed Joint Powers Organization (VRWJPO) applied for Conservation Partners Legacy (CPL) grant funding for improvements in and around East Lake; and

WHEREAS, the VRWJPO was awarded CPL grant funding for shoreline, forest, and oak savanna restoration activities but was not awarded CPL grant funding for a fish barrier between East Lake and North Creek, invasive fish removals from East Lake, and in-lake vegetation plantings; and

WHEREAS, the resulting CPL grant award provides up to \$90,000 for restoration activities; and

WHEREAS, the CPL grant requires a minimum 10 percent local match, which will be provided by the City; and

WHEREAS, the City proposes to provide up to \$9,000 in cash match toward the project and the VRWJPO will provide grant administration; and

WHEREAS, the project activities are planned to be implemented in 2022, 2023, and 2024; and

WHEREAS, the project will provide improved upland and riparian habitat and will result in improved water quality conditions in East Lake.

NOW, THEREFORE, BE IT RESOLVED, that the Vermillion River Watershed Joint Powers Board authorizes its chair to execute a Joint Powers Agreement with the City of Lakeville in an amount not to exceed \$90,000 for the East Lake Habitat Improvement Project; subject to approval as to form by the Dakota County Attorney's Office.

5g. Authorization to Execute a Joint Powers Agreement with Dakota County Soil and Water Conservation District for Services in 2022

Meeting Date: 1/27/2022
Item Type: Regular-Action
Contact: Brian Watson
Telephone: 651-480-7777
Prepared by: Mark Zabel
Reviewed by: N/A

N/A



PURPOSE/ACTION REQUESTED

- Authorization to Execute a Joint Powers Agreement with Dakota County Soil and Water Conservation District (SWCD) for Services in 2022

SUMMARY

Dakota County Soil and Water Conservation District (SWCD) provides a variety of essential services to the Vermillion River Watershed Joint Powers Organization (VRWJPO) each year, including water monitoring, outreach and education, policy development, regulatory review, inventory and assessment, and capital improvements. Each of the tasks in Dakota County SWCD's proposed work plan and budget (Attachment A) is included as a line item in the 2022 Vermillion River Watershed Joint Powers Organization (VRWJPO) budget. The largest proposed spending is in the Capital Improvement Project category. Rather than developing VRWJPO cost-sharing programs that duplicate existing efforts, the VRWJPO relies on the established cost-share programs implemented by Dakota County SWCD to efficiently implement water-quality improvement projects. The VRWJPO provides Dakota County SWCD with funds to cost-share best management practices (BMPs) in urban and rural areas throughout the watershed.

VRWJPO staff recommend authorization to execute a Joint Powers Agreement with Dakota County SWCD for Services in 2022.

EXPLANATION OF FISCAL/FTE IMPACT

Total not to exceed \$257,000.

Supporting Documents:

Attachment A: Dakota County SWCD 2022 Work Plan and Budget

Previous Board Action(s):

RESOLUTION

5g. Authorization to Execute a Joint Powers Agreement with Dakota County Soil and Water Conservation District for Services in 2022

WHEREAS, the Dakota County Soil and Water Conservation District (SWCD) provides a variety of essential services to the Vermillion River Watershed Joint Powers Organization (VRWJPO) each year, including water monitoring, outreach and education, policy development, regulatory review, inventory and assessment, and capital improvements; and

WHEREAS, the Dakota County SWCD is proposing to assist the VRWJPO with similar tasks in 2022; and

WHEREAS, the tasks outlined in the Dakota County SWCD proposed work plan and budget are each included as line items in the VRWJPO 2022 Budget in various categories; and

WHEREAS, the VRWJPO relies on Dakota County SWCD's established cost-share programs to efficiently implement capital improvement projects in the Vermillion River Watershed.

NOW, THEREFORE, BE IT RESOLVED, that the Vermillion River Watershed Joint Powers Board hereby authorizes its Chair to execute a Joint Powers Agreement with Dakota County SWCD for a total not to exceed \$257,000 as presented to the Vermillion River Watershed Joint Powers Board at its meeting on January 27, 2022; subject to approval by the Dakota County Attorney's Office as to form.

**2022 Dakota County SWCD Work Plan and Budget to
the Vermillion River Watershed Joint Powers
Organization**

Evaluation and Policy

- Incentive program policy assistance for programs to install voluntary conservation practices

\$1,600

Subtotal \$1,600**Feasibility/Preliminary Studies**

- Preliminary design, technical assistance and marketing of voluntary conservation practices

\$40,000

Subtotal \$40,000**Capital Improvement Projects**

- Install water quality projects under SWCD Cost Share Programs
- Implement Landscaping for Clean Water Grant Program (LCW)

\$61,250¹\$18,750²**Subtotal \$80,000****Public Outreach and Communication**

- Coordinate tasks under the Vermillion River Watch Program
- Conduct Landscaping for Clean Water Workshops (up to 19 total)
- Presentations for Grades 3-12 (up to 5 total)

\$ 6,000

\$30,400

\$4,000

Subtotal \$40,400**Inventories and Assessments**

- Provide GIS mapping support

\$5,000

Subtotal \$5,000**Monitoring and Data Analysis**

- Staff time for sample collection, equipment installation, maintenance, downloading, longitudinal surveys (temperature, dissolved oxygen, turbidity), winter nitrate monitoring at South Branch Vermillion River
- Data analysis, database management, data reporting, FLUX modeling, reporting
- Water quality sample analysis and QA/QC samples
- Equipment and supplies
- Macroinvertebrate collections and habitat monitoring

\$39,000

\$17,000

\$19,000

\$ 8,000

\$ 7,000

Subtotal \$90,000**Total Not To Exceed Amount: \$257,000**

1 25% technical and administrative costs will be invoiced for each contracted project installed

2 Each Landscaping for Clean Water project installed includes \$250 for landowner stipend and \$500 for technical and administrative assistance

5h. Authorization to Execute a Joint Powers Agreement with Scott Soil and Water Conservation District for Services in 2022

Meeting Date: 1/27/2022
Item Type: Action
Contact: Troy Kuphal
Telephone: 952-492-5425
Prepared by: Mark Zabel
Reviewed by: N/A

N/A



PURPOSE/ACTION REQUESTED

- Authorization to execute a Joint Powers Agreement with Scott Soil and Water Conservation District (SWCD) for Services in 2022.

SUMMARY

Scott Soil and Water Conservation District (SWCD) provides a variety of essential services to the Vermillion River Watershed Joint Powers Organization (VRWJPO) each year, including water monitoring, outreach and education, regulatory review, inventory and assessment, and capital improvements. Each task in the Scott Soil and Water Conservation District's (SWCD) proposed work plan and budget (Attachment A) is included as a line item in the 2022 Vermillion River Watershed Joint Powers Organization (VRWJPO) budget. The largest proposed spending is in the Capital Improvement Project category for cost share and financial incentives for approved best management practices (BMPs). Rather than developing VRWJPO cost-sharing programs that duplicate existing efforts, the VRWJPO relies on Scott SWCD's established cost-share programs to efficiently implement water-quality improvement projects. The VRWJPO provides Scott SWCD with funds to cost-share BMPs in urban and rural areas throughout the Scott SWCD portion of the watershed.

RECOMMENDATION

VRWJPO staff recommend authorization to execute a Joint Powers Agreement with Scott SWCD for Services in 2022.

EXPLANATION OF FISCAL/FTE IMPACT

Total not to exceed \$43,950.

RESOLUTION

5h. Authorization to Execute Joint Powers Agreement with Scott Soil and Water Conservation District for Services in 2022

WHEREAS, Scott Soil and Water Conservation District (SWCD) provides a variety of essential services to the Vermillion River Watershed Joint Powers Organization (VRWJPO) each year, including water monitoring, outreach and education, regulatory review, inventory and assessment, and capital improvements; and

WHEREAS, Scott SWCD is proposing to assist the VRWJPO with similar tasks in 2022; and

WHEREAS, each task in the Scott SWCD proposed work plan and budget is included a a line item in the VRWJPO 2022 Budget in various categories; and

WHEREAS, the VRWJPO relies on Scott SWCD's established programs to efficiently implement cost-share funding for capital improvement projects.

NOW, THEREFORE, BE IT RESOLVED, that the Vermillion River Watershed Joint Powers Board (VRWJPB) Authorize its Chair to execute a Joint Powers Agreement with Scott SWCD in an amount not to exceed \$43,950 as presented to the VRWJPB at its meeting on January 27, 2022; subject to approval by the Dakota County Attorney's Office as to form.

EXHIBIT 1

2022 SCOTT SWCD WORK PLAN AND BUDGET - DRAFT

Activity	Detail	Line Item		TOTAL	
		2021	2022	2021	2022
Water Quality Monitoring	<ul style="list-style-type: none"> Monitor water quality at one station (V24) to include: equipment set-up and take-down; flow measurements; base flow and grab samples collection; programming; thermal monitoring; data processing and management; planning and coordination. 	\$5775	\$5800	\$9,775	\$9,800
	<ul style="list-style-type: none"> Equipment maintenance, repair and replacement expenses 	\$1,500	\$1,500		
	<ul style="list-style-type: none"> Lab, data line, and courier expenses 	\$2,500	\$2,500		
Public Outreach and Education	<ul style="list-style-type: none"> Conservation, stormwater and youth education, as detailed in the Scott Clean Water Education Program 2019 Work Plan. Includes but not limited to community events/expos, library displays, news releases, Outdoor Education Day; and workshops 	\$1,300	\$1,500	\$1,300	\$1,500
Capital Improvement Program ¹	<ul style="list-style-type: none"> Project development: Prepare subwatershed assessments (SWA) to identify potential projects; identify, contact and meet with landowners with potential projects, including but not limited to the ones identified in the SWA. 	\$2,200	\$7,000	\$41,300	\$31,000
	<ul style="list-style-type: none"> Project design and engineering: feasibility investigations; surveys; project design and conservation plan preparation; construction inspections and certification; cost share contract administration. Eligible projects to include but not limited to: wetland restoration, streambank stabilization, filter strips, bioretention, nutrient management, cover crops, closed tile intakes, grade stabilization structures, grassed and lined waterways, and water and sediment control basins. 	\$8,400	\$8,000		
	<ul style="list-style-type: none"> Cost share and financial incentives for approved project applications 	\$30,700	\$16,000		
Regulatory Program Assistance	<ul style="list-style-type: none"> Research, investigations, and corrective action follow-up related to wetland, feedlot, and buffer law compliance. 	\$900	\$900	\$900	\$900
Management and Administration	<ul style="list-style-type: none"> Manage work, planning, budget and financial recordkeeping Prepare and administer Service agreement Attend Board, TAG and other JPB-sponsored meetings Identify and develop recommendations regarding JPO programs and policies 	\$750	\$750	\$750	\$750
GRAND TOTAL:				\$54,025	\$43,950

¹ To the maximum extent practical, other local, state, federal cost-share funds will be utilized to implement conservation practices before, or in conjunction with, the use VRWJPO funds. By approval of this work plan, the VRWJPO authorizes the Scott SWCD to utilize funding under this line item to provide financial assistance to landowners and occupiers in the watershed for the implementation of approved practices, as set forth in applicable 2020 cost share and incentive program policies as adopted by Scott SWCD Board of Supervisors. If insufficient CIP funds are available to approve one or more priority project(s), the SWCD will coordinate with JPO staff to request a budget amendment.



Vermillion River Watershed Joint Powers Organization

4100 220th St. W., Suite 103, Farmington, MN 55024

Date: January 27, 2022
To: Vermillion River Watershed Joint Powers Board
From: Staff
Subject: Joint Powers Organization Expenses

Agenda Item 6

Expenses from the invoices submitted between October 13, 2021 and November 12, 2021 totalled \$236,159.21

The invoices submitted between November 13, 2021 and December 13, 2021 are listed below:

<u>Invoice</u>	<u>Vendor</u>		<u>Amount</u>
November 2021	Dakota County Staff	\$	34,575.08
November 2021	Dakota County Legal	\$	685.35
IN27637	Scott County	\$	1,102.37
1863022	Stantec	\$	1,922.50
90910927	US Dept of Interior (US Geological Survey)	\$	8,638.00
31937	Minnesota Native Landscapes	\$	6,895.00
21-15200-15	144Design	\$	95.00
Total expense as approved on December 23, 2021			\$ 53,913.30

Action Requested: Approve all above expenses as presented on January 27, 2022



Vermillion River Watershed Joint Powers Organization

4100 220th St. W., Suite 103, Farmington, MN 55024

Date: January 27, 2022
To: Vermillion River Watershed Joint Powers Board
From: Staff
Subject: Joint Powers Organization Expenses

Agenda Item 6

Expenses from the invoices submitted between November 13, 2021 and December 13, 2021 totalled \$53,913.30

The invoices submitted between December 14, 2021 and January 14, 2022 are listed below:

<u>Invoice</u>	<u>Vendor</u>		<u>Amount</u>
December	DC Staff	\$	37,635.61
1871844	Stantec	\$	1,469.25
21-4011	144Design	\$	95.00
1872277	Stantec	\$	1,420.00
4457	City of Rosemount	\$	15,000.00
Total expense as approved on January 27, 2022		\$	55,619.86

Action Requested: Approve all above expenses as presented on January 27, 2022

7a. Presentation on the Replacement of the Hastings Wastewater Treatment Plant

Meeting Date: 1/27/2022
Item Type: Information
Contact: Mark Zabel
Telephone: 952-891-7011
Prepared by: Mark Zabel

**PURPOSE/ACTION REQUESTED**

- Presentation on the Replacement of the Hastings Wastewater Treatment Plant

SUMMARY

Staff from the Metropolitan Council will provide a presentation describing plans for replacing the Hastings Wastewater Treatment Plant (see Attachment A). The current plant will be closed and replaced with a lift pump station which will transfer materials to a newly located and constructed wastewater treatment plant. The new plant will be located southeast of the City of Hastings near Ravenna Trail and Glendale Road. Effluent from the plant will be discharged to the Mississippi River.

EXPLANATION OF FISCAL/FTE IMPACT

No fiscal impact.

Supporting Documents:

Attachment A: Presentation Slides

Previous Board Action(s):

- ;

RESOLUTION

This item is information only.

MCES Hastings Wastewater Treatment Plant Facility Plan

MCES Staff

Rene Heflin, Manager, Plant Engineering

Kyle Colvin, Manager, Wastewater Planning and Community Programs

Judy Sventek, Manager, Water Resources Planning

Heidi Hutter, Principal Engineer, Plant Engineering

Chad Davison, Principal Engineer, Interceptor Engineering



Agenda



Presentation

30 Min

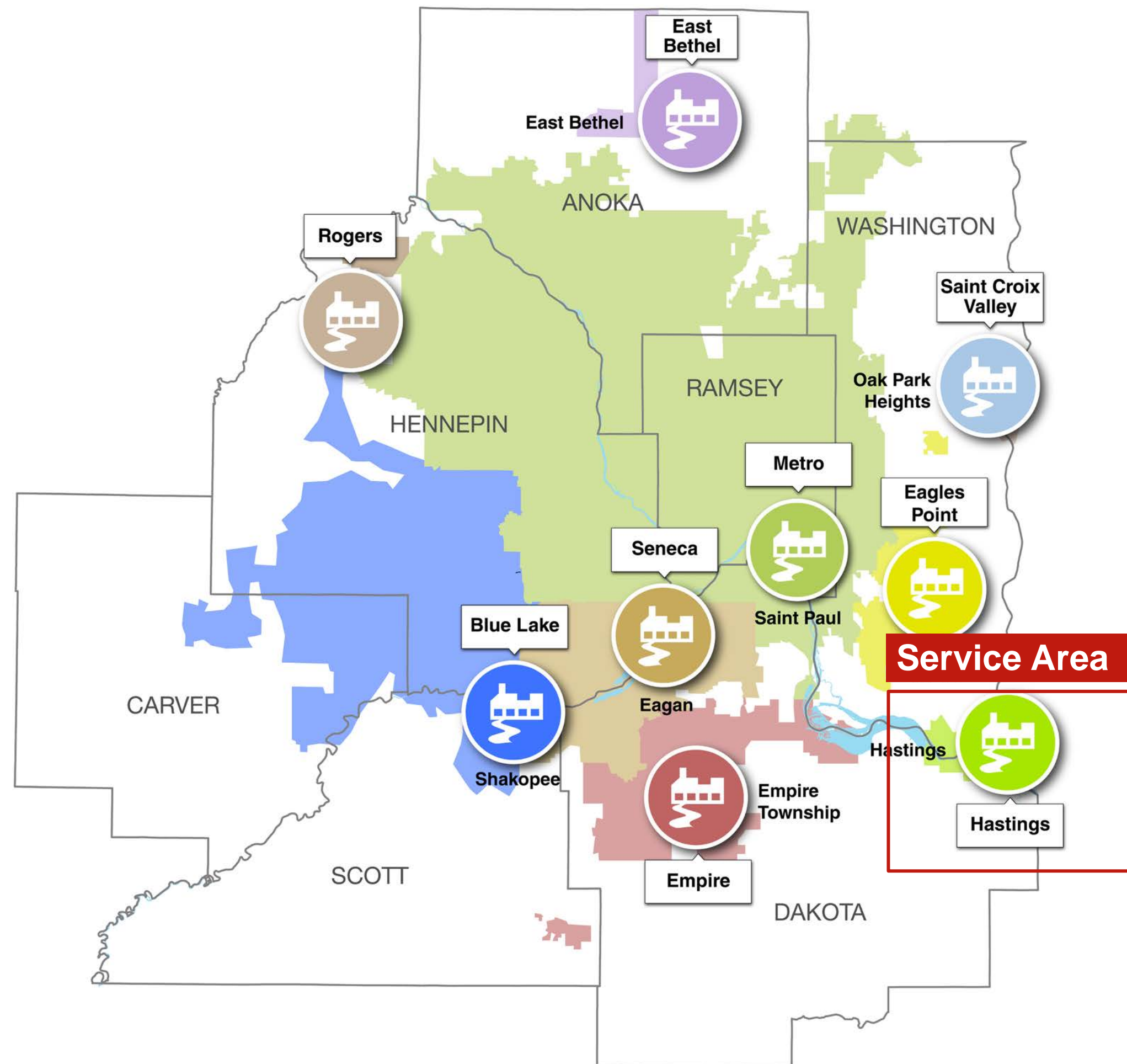
- Introduction to MCES and the Hastings WWTP
- Relocation Drivers
 - Growth
 - Potential Permit
 - Condition Assessment
- New WWTP Site
- Haul Routes
- Outfall Easements
- Lift Station and Conveyance
- Decommissioning Existing WWTP Site
- Program Summary and Next Steps
- MCES Contacts



Q/A

Service Area and Facilities

Wastewater Treatment Plant Locations



We serve ~50% of Minnesota's population

WHO WE SERVE

7-county Twin Cities Metro Area

111 communities

3,000 square miles

2,700,000+ people

OUR FACILITIES

9 wastewater treatment plants

640 miles of interceptors

61 lift stations (pumping stations)

250 million gallons per day (average)

Hastings WWTP Overview



- 1952 Constructed
- 1970 MCES Acquired
- 1985 Last Expansion

30 Consecutive Years of Perfect Permit Compliance

Hastings WWTP Service Area

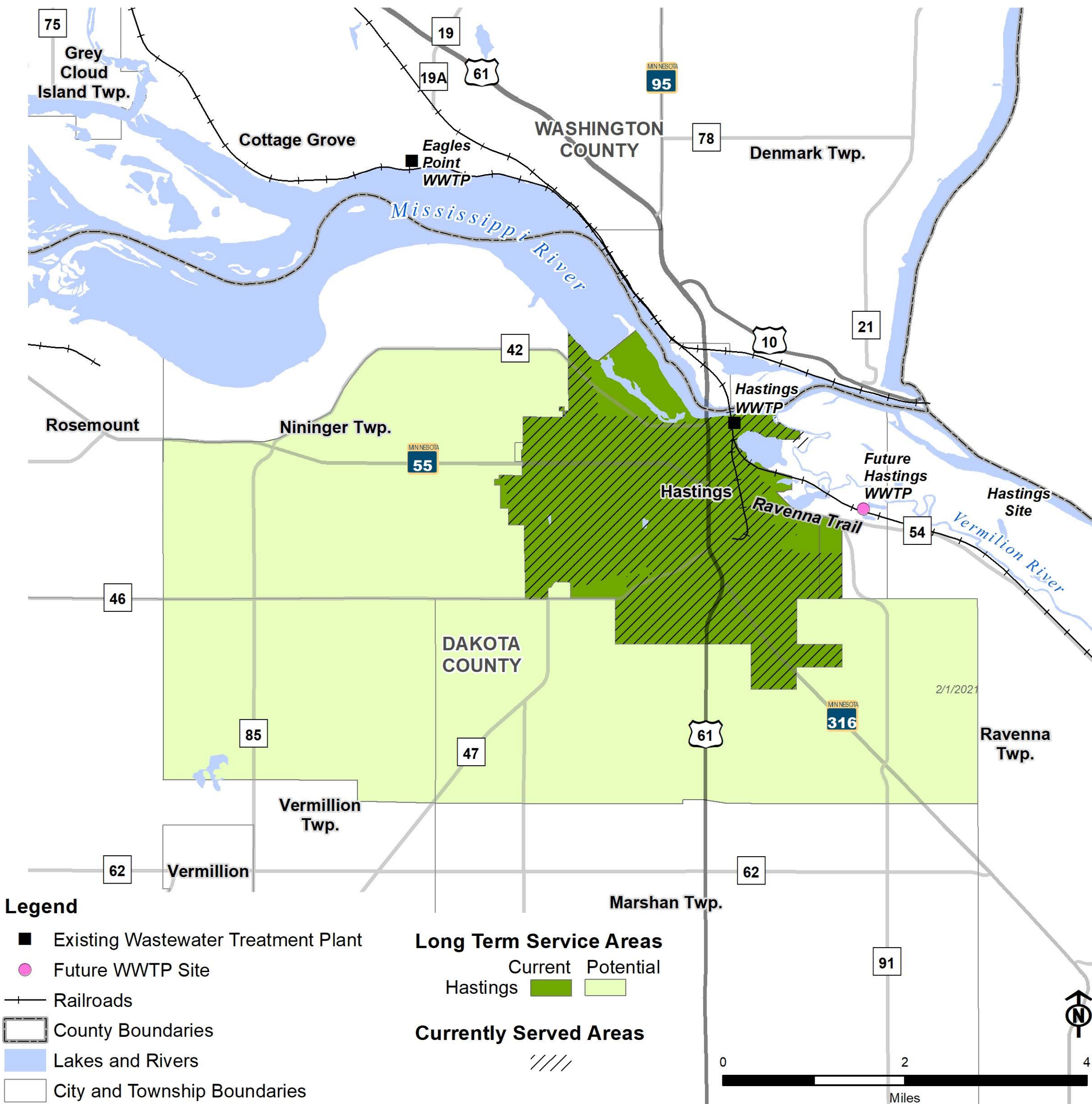
Long Term Service Area

10M gallons/day long-term planned capacity*
29,000 residents served (in 2040)

*MCES 2040 Water Resources Policy Plan – Post 2040

Existing Service Area

2.3M gallons/day plant capacity
23,000 residents served

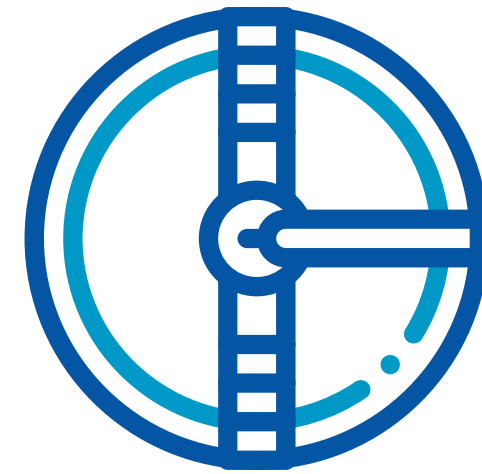


Project Need



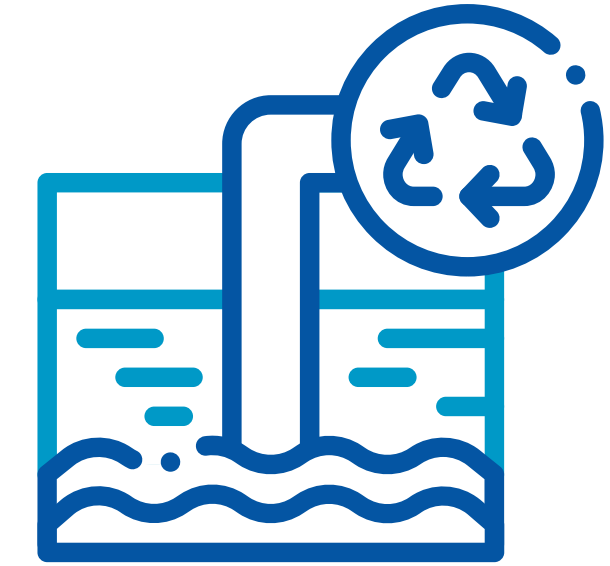
The plant needs to expand to serve population growth in the service area.

The Hastings Wastewater Treatment Plant is projected to exceed its existing capacity of 2.34 million gallons per day of wastewater in 2050 due to growth within the service area.



Additional wastewater treatment is needed to meet future environmental regulations.

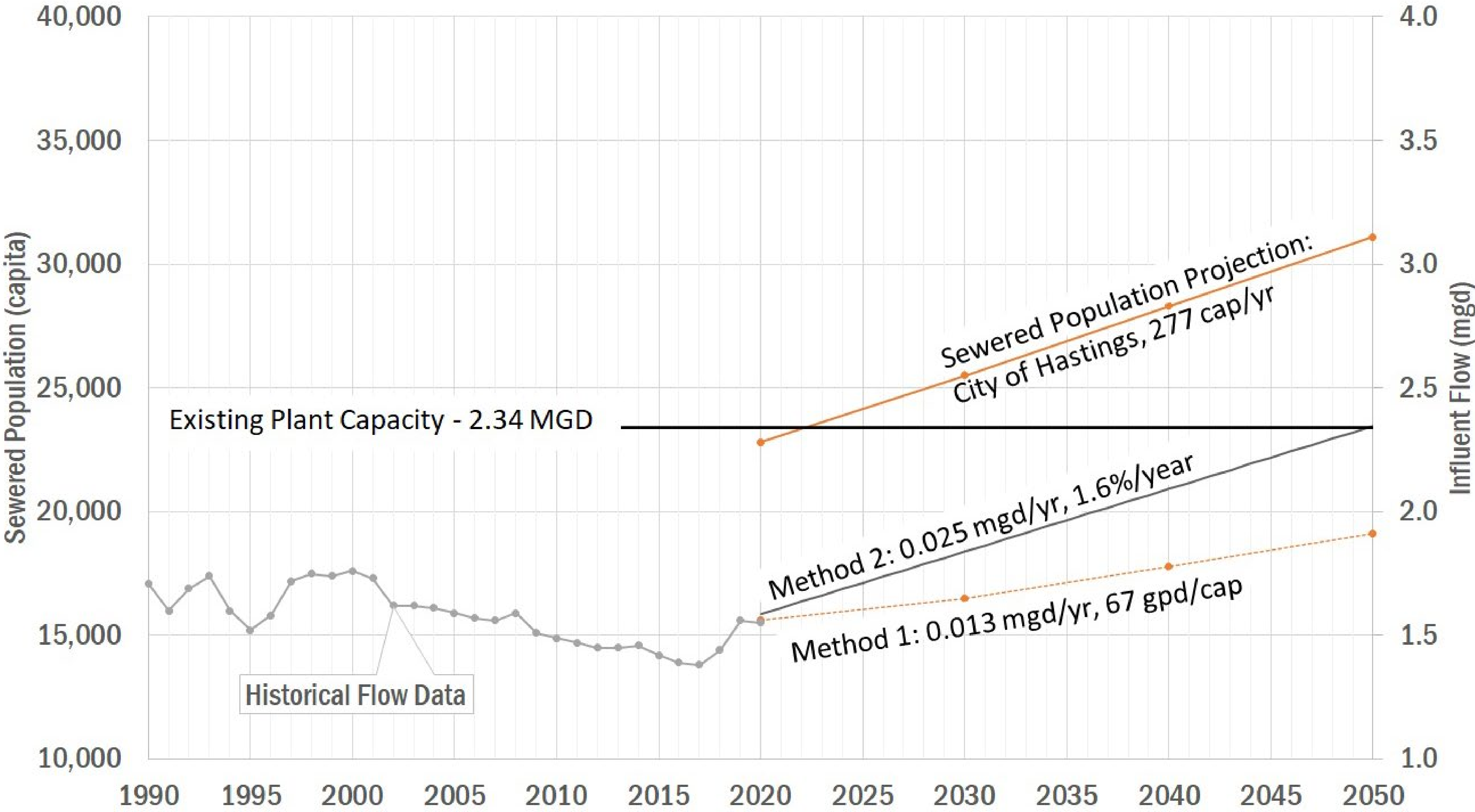
The MPCA's 2014 Nutrient Reduction Strategy calls for 45% reduction in nitrogen loads to the Mississippi River by 2040.



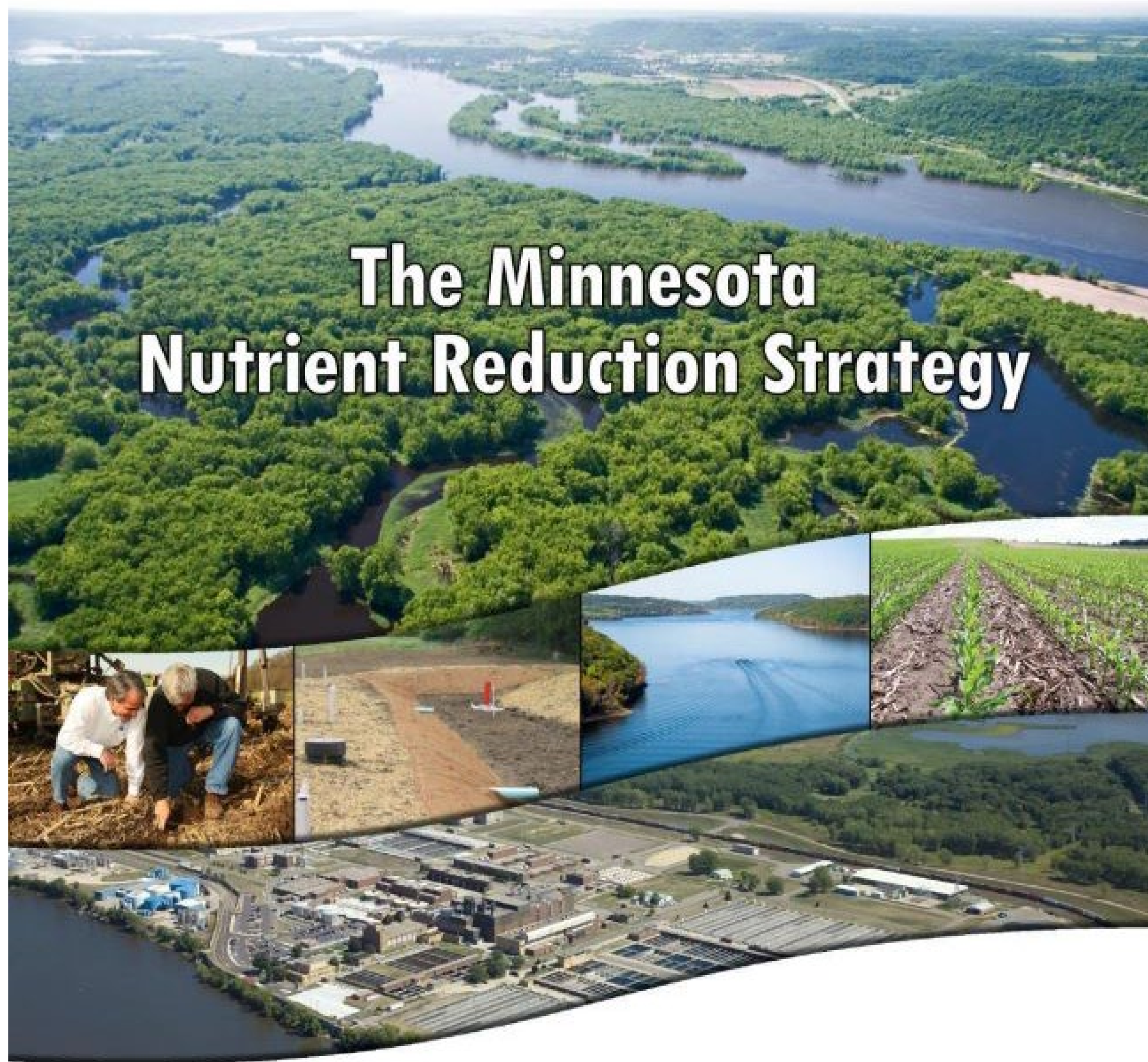
Existing facilities that are near end of service life need to be renewed.

A 2020 condition assessment documented need for major investment in the existing facility.

Projected Growth in the Service Area



Minnesota Nutrient Reduction Strategy



- 45% Reduction in Nitrogen Loads to the Mississippi by 2040
- Load Reductions at Wastewater Treatment Plants will be necessary
- Hastings area is prioritized by the MCPA for future nutrient reduction
- Plant expansion at the current Hastings WWTP would be required
 - Expansion is challenging and limited.
 - Derating capacity is not an option for MCES.



Future Hastings WWTP Site

Xcel

Future Hastings WWTP Parcels

- In Hastings
- In Ravenna Township
- Base Flood Elevations
- DNR FEMA Floodplain
 - 100 Year Floodplain (AE)
 - 500 Year Floodplain

Build Site

BP

HASTINGS

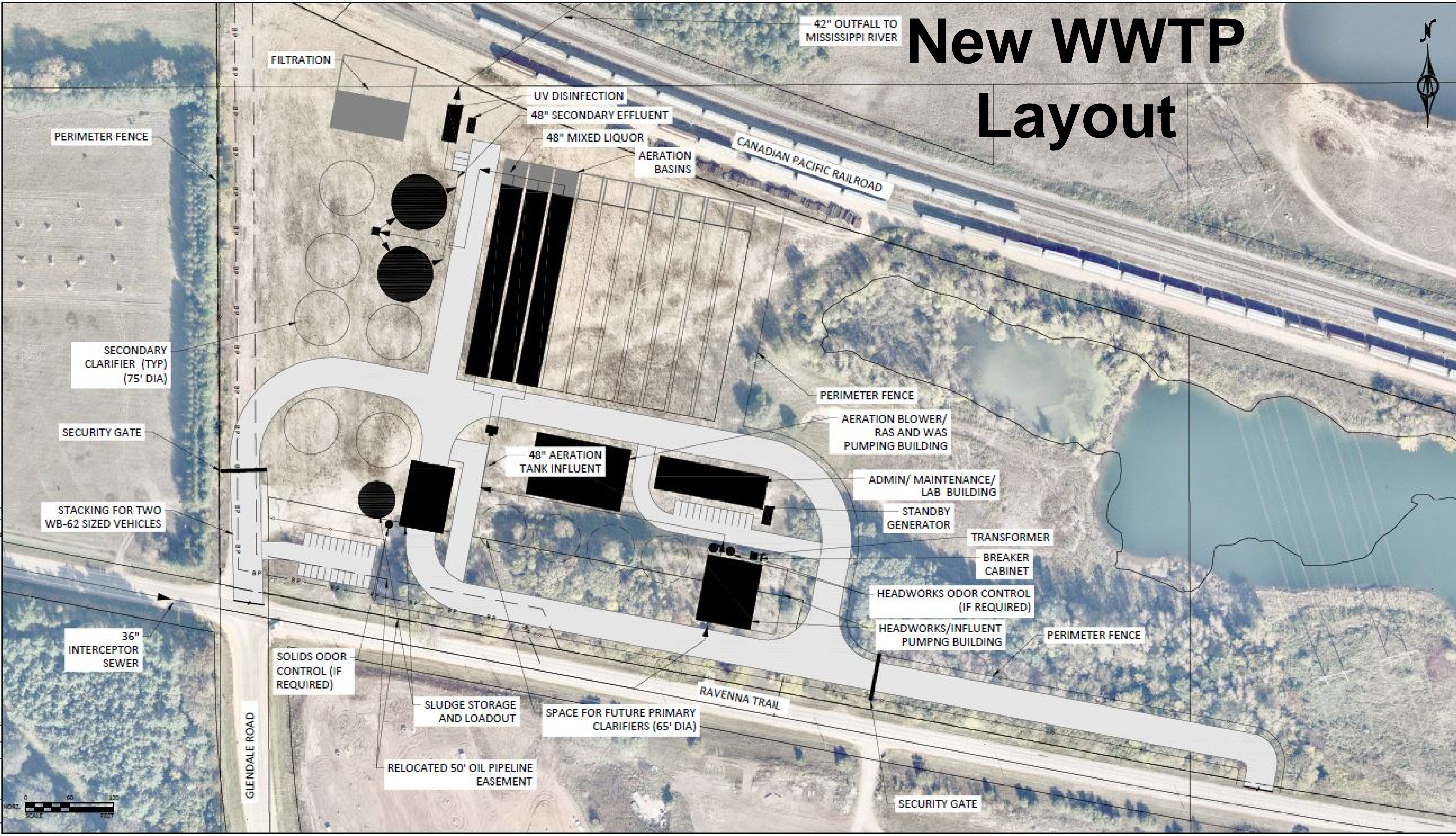
Canadian Pacific Railway

Vermillion River

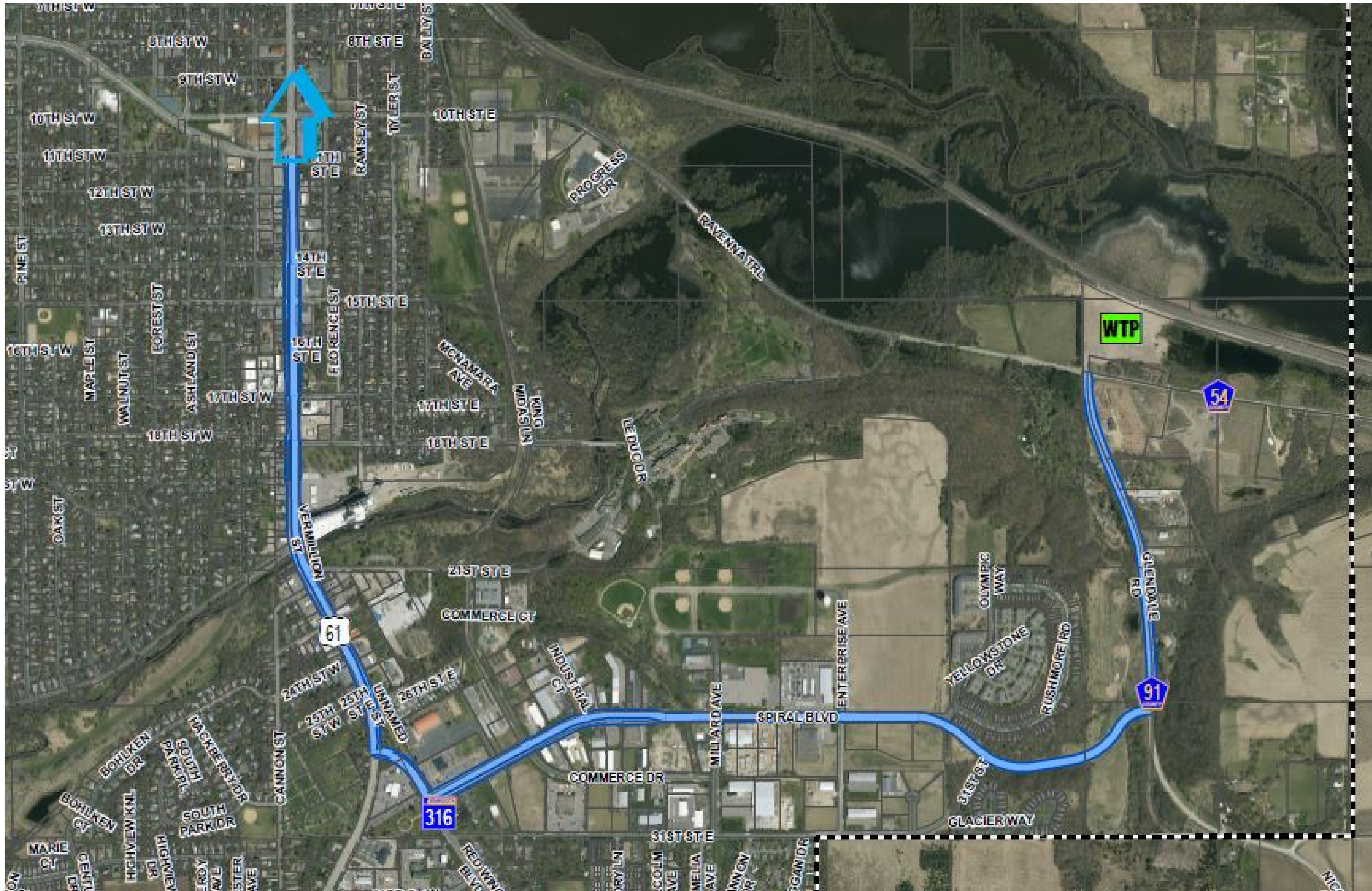


- Utility Easement
- Build Site

New WWTP Layout



WWTP Proposed Haul Route



- Estimated 3 to 4 truck trips per day, hauling sludge to the Metro WWTP for processing
- We propose crossing County Road 54/Ravenna Trail. No turn lanes are planned at this time.

Lift Station Preliminary Layout



Similar size and configuration of lift station expected.

Forcemain Alignment



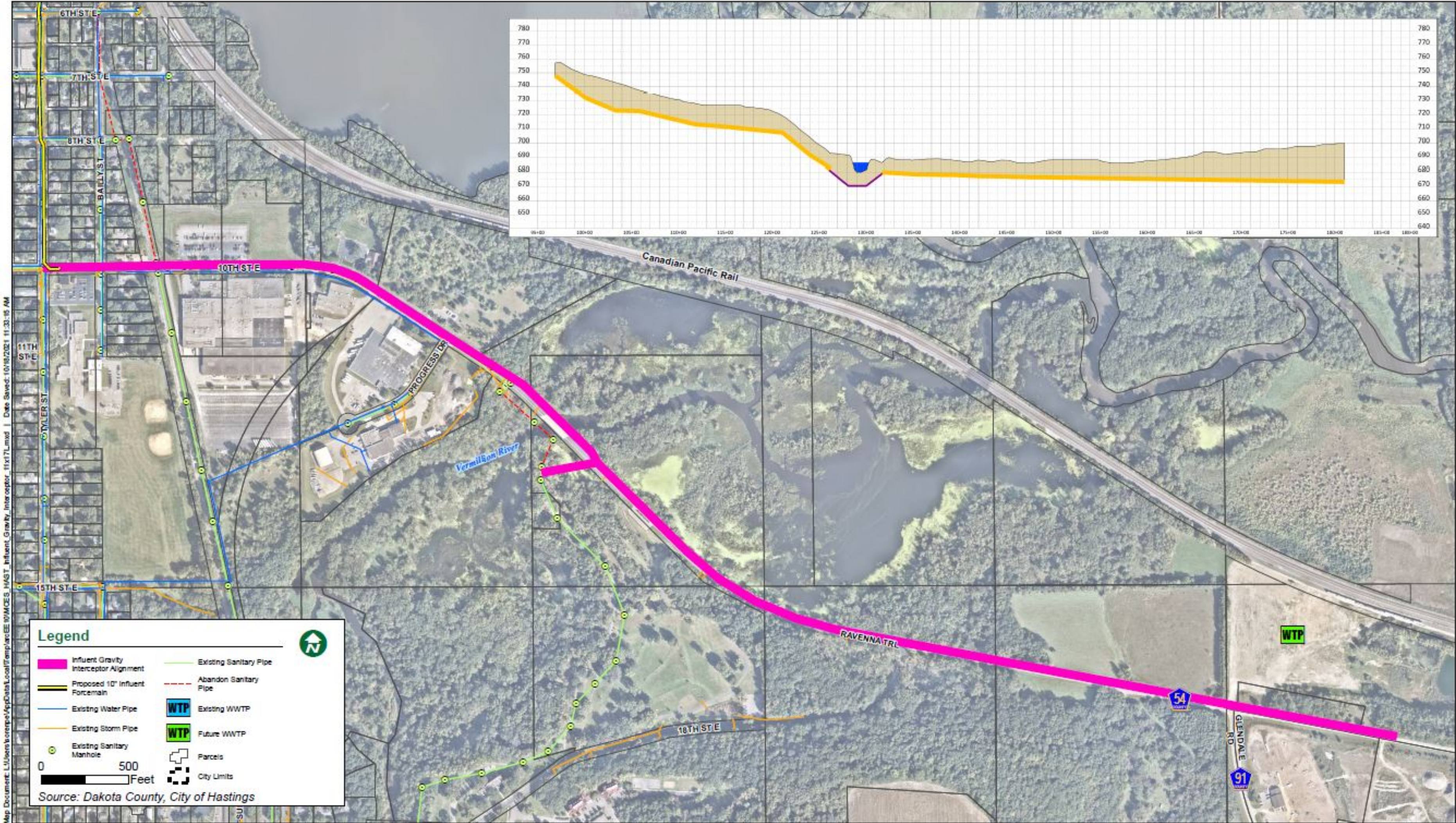
- Tyler Street full reconstruction
- Met Council will fund the repair or replacement of any City utilities impacted by the forcemain installation
- Opportunity for a cooperative construction project. We would need to negotiate an agreement for any improvements the City would want included

Gravity Alignment



Hastings WWTP Facility Plan
Hastings, MN

Figure 1: Influent Gravity - Tenth Street/Ravenna Trail
October 2021

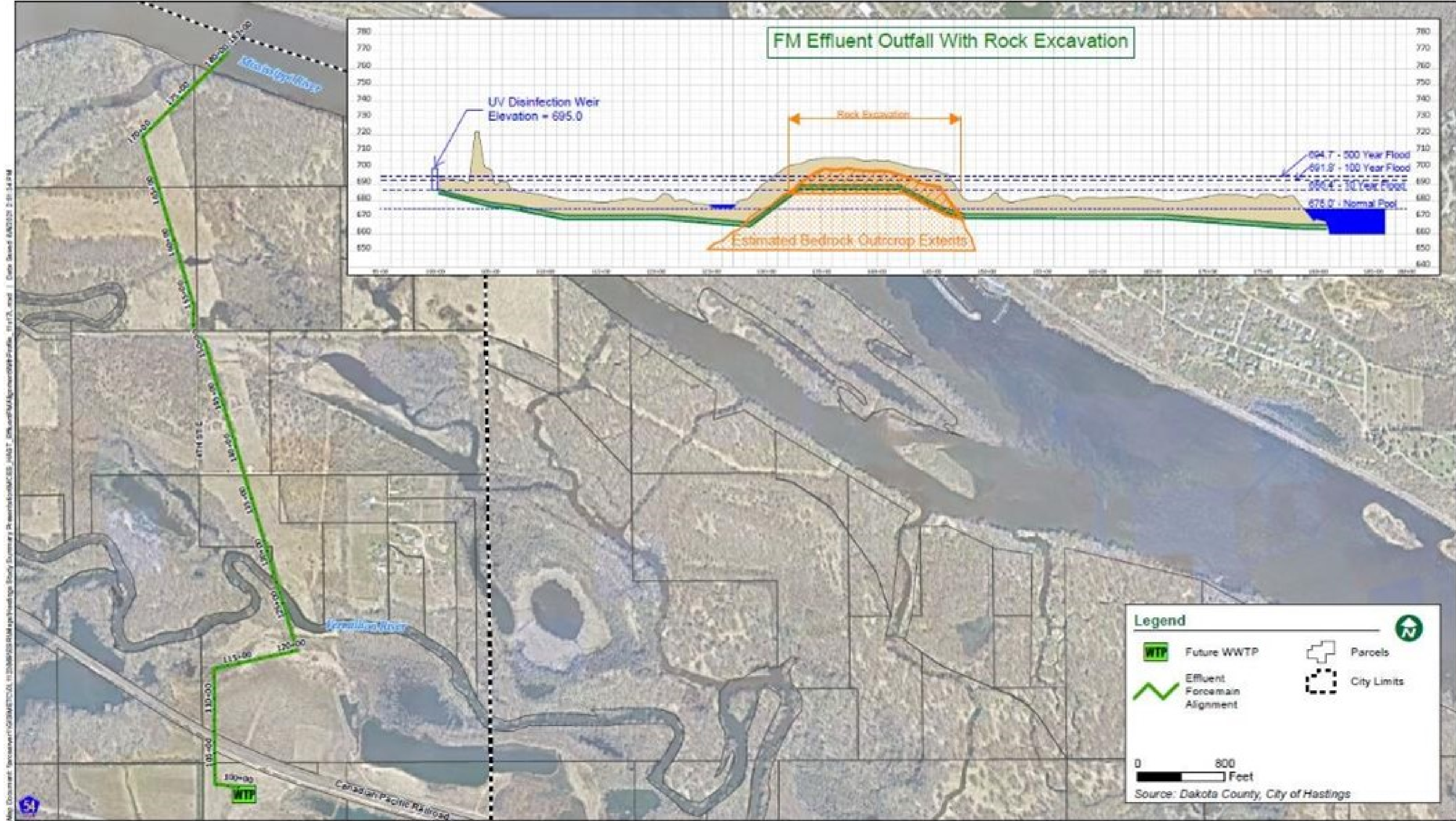


Treated Water Discharge Alignment



Hastings WWTP Facility Plan
Hastings, MN

Effluent Forcemain Alignment & Profile
August 2021

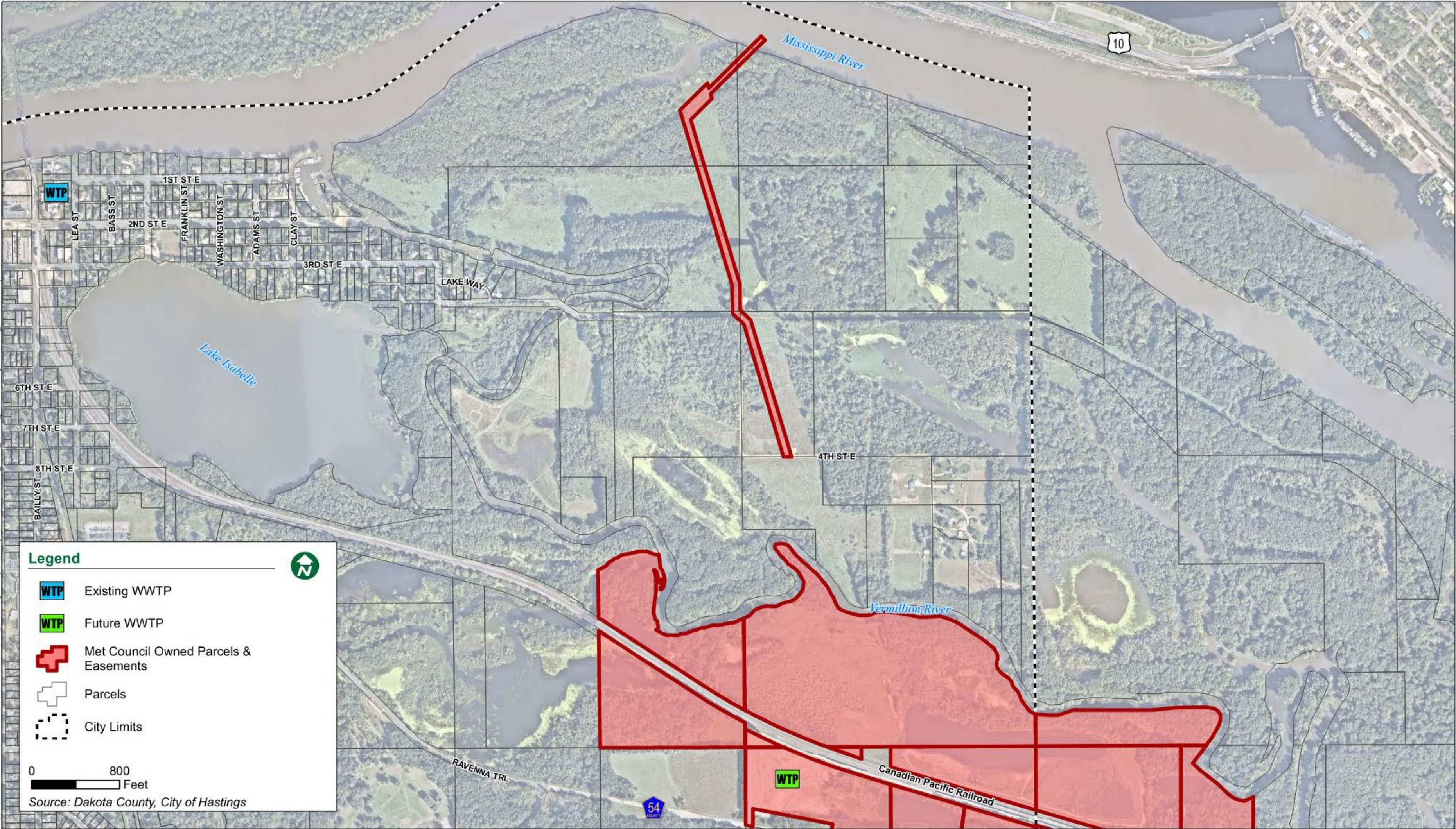


Discharge Alignment Existing Easements

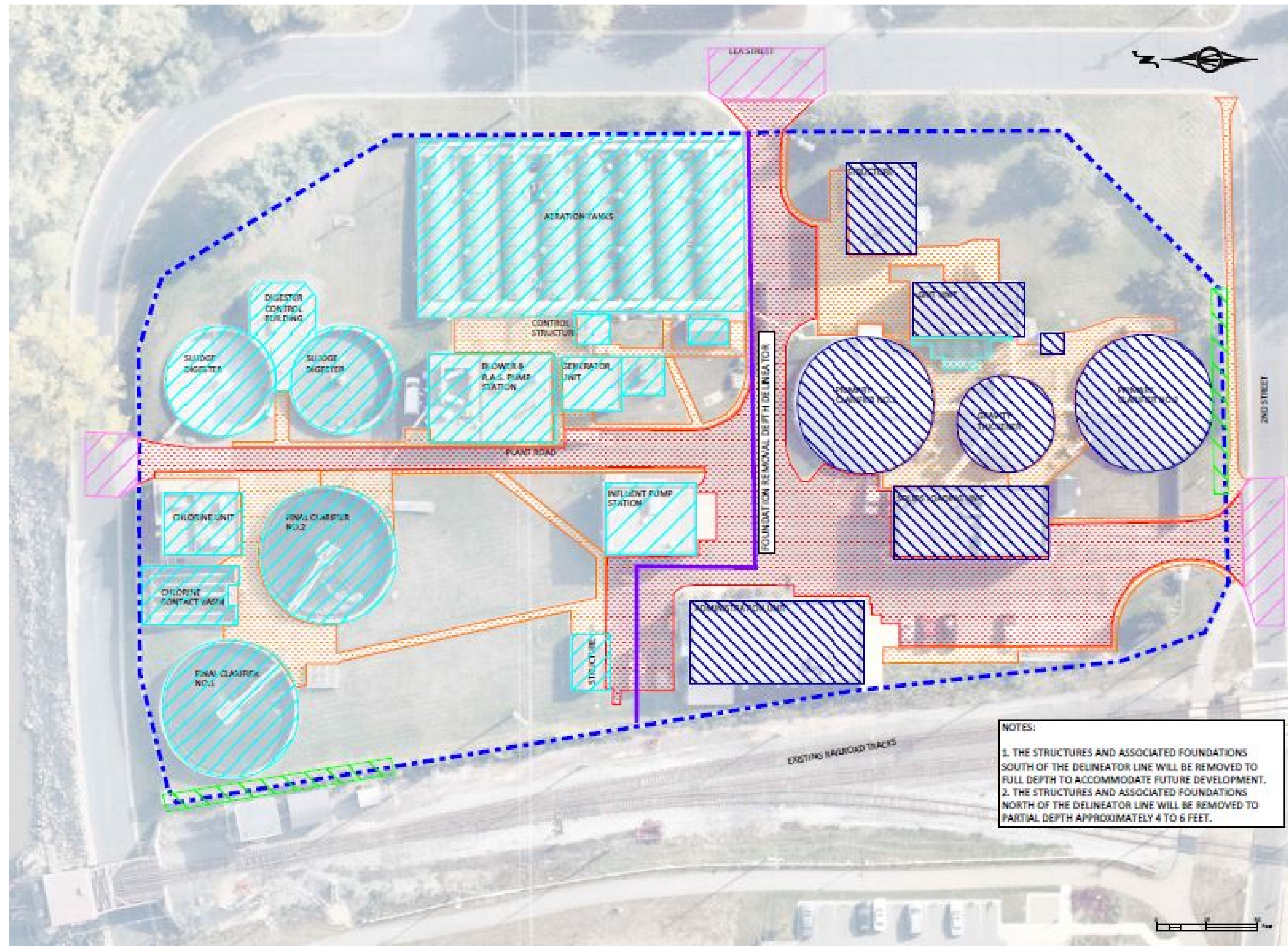


Hastings WWTP Facility Plan
Hastings, MN

Outfall Existing Easements
August 2021



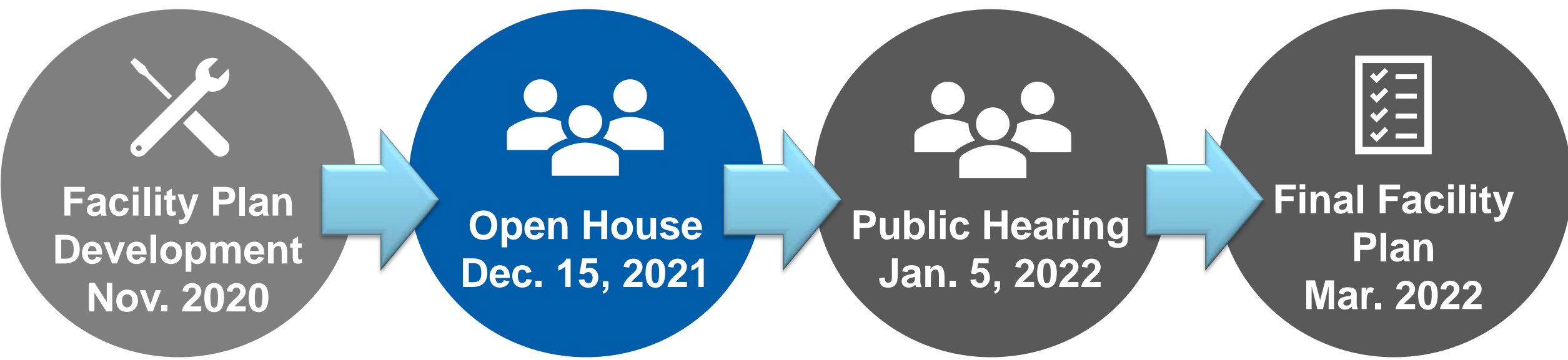
Decommissioning Plan



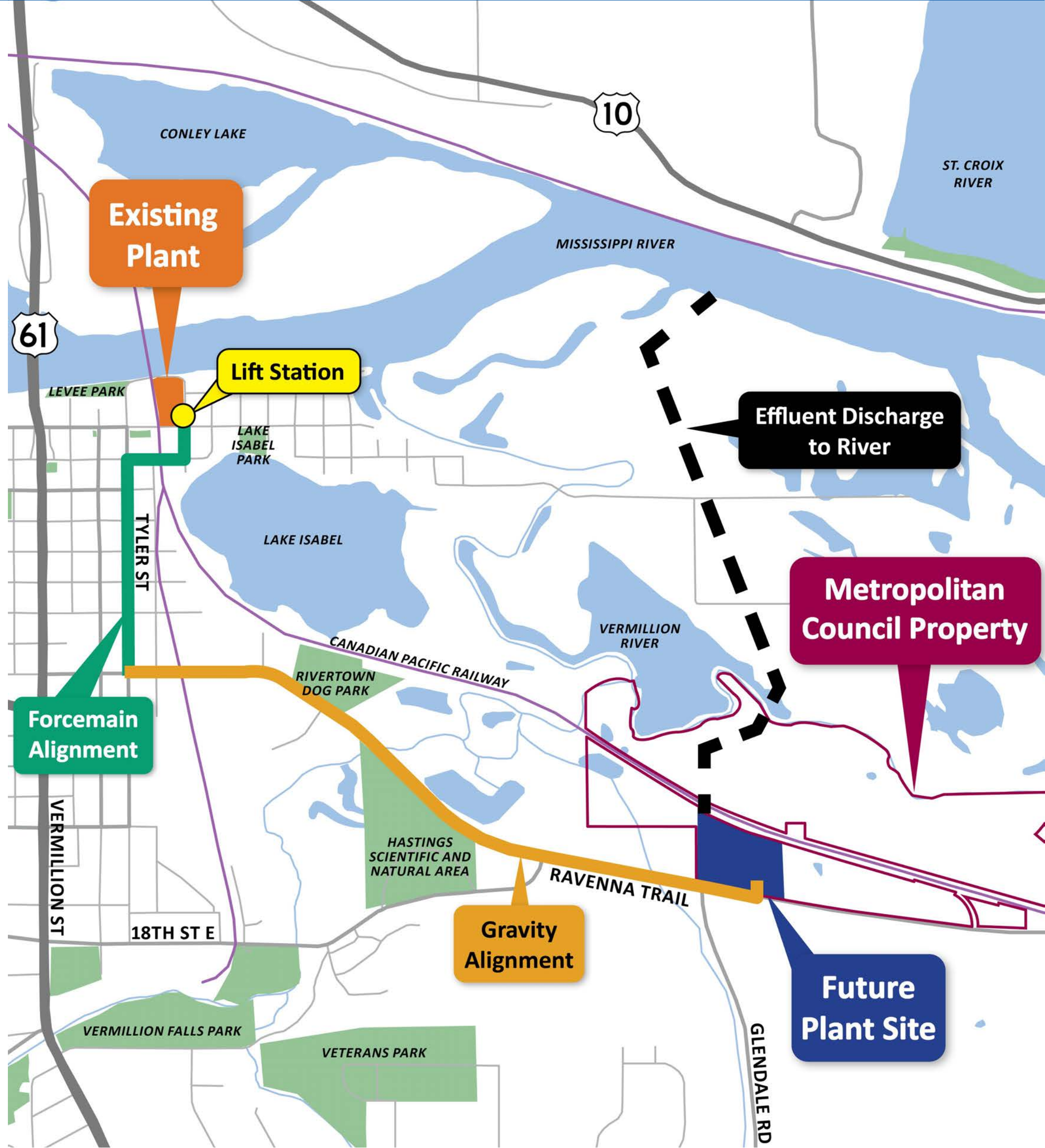
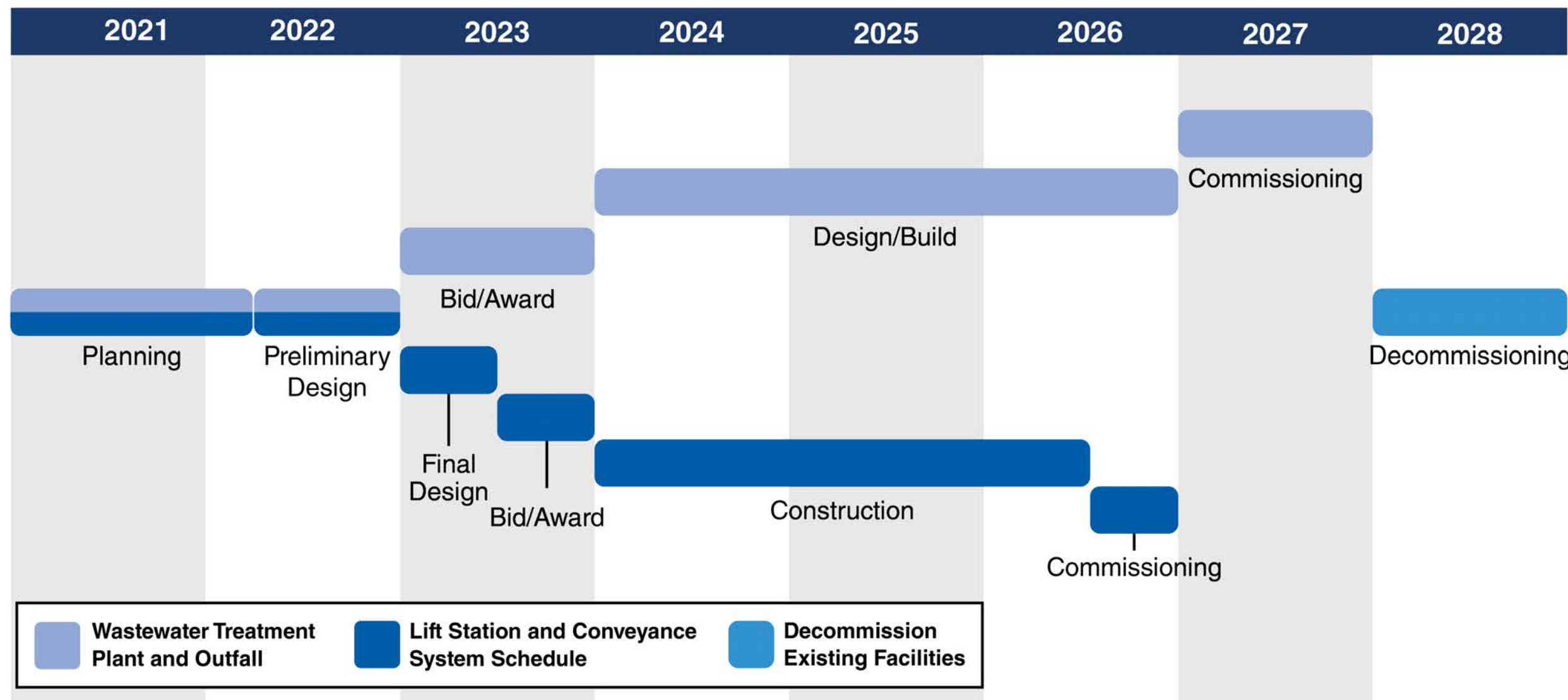
- Concept to be used as a starting point for our intergovernmental agreement negotiations.
- South half of property shows removal of structures to bottom of footings.
- North half shows partial removal to 6 feet below ground elevation.

Program Summary & Next Steps

Facility Plan Schedule



Project Schedule



MCES Staff Contacts

MCES Staff Contacts

Rene Heflin, Manager, Plant Engineering
Rene.Heflin@metc.state.mn.us

Kyle Colvin, Manager, Wastewater Planning and
Community Programs
Kyle.colvin@metc.state.mn.us

Judy Sventek, Manager, Water Resources Planning
Judy.Sventek@metc.state.mn.us

Heidi Hutter, Principal Engineer, Plant Engineering
Heidi.hutter@metc.state.mn.us

Chad Davison, Principal Engineer, Interceptor
Engineering
Chad.Davison@metc.state.mn.us

**Or check out the project website:
HastingsWWTP.com**



Q&A

7b. Model Ordinance Update for Implementation of the Vermillion River Watershed Joint Powers Organization Standards

Meeting Date: 1/27/2022
Item Type: Information
Contact: Mark Ryan
Telephone: 952-891-7596
Prepared by: Mark Ryan

**PURPOSE/ACTION REQUESTED**

- Model Ordinance Update for Implementation of the Vermillion River Watershed Joint Powers Organization Standards

SUMMARY

The Vermillion River Watershed Joint Powers Organization (VRWJPO) updated its watershed Standards, a document of minimum regulatory requirements for the watershed, during the last Vermillion River Watershed Management Plan (the Watershed Plan) update in 2016 and then amended the Standards in 2019 based on feedback from watershed communities. From 2018 to 2020, communities in the watershed also updated local comprehensive plans including Local Water Management Plans. Many of the townships and small cities in the watershed elected to adopt the Watershed Plan by reference rather than write individual Local Water Management Plans. Part of implementing the Watershed Plan includes implementing the VRWJPO Standards through local ordinances (unless a community has agreed to have the VRWJPO operate a local permitting program).

After the last round of comprehensive planning, many of the townships and small cities combined to create the Water Resources Management Ordinance for the Dakota County Rural Collaborative (2010 Update). With the updates to the VRWJPO Standards in 2016 and 2019, there are now some portions of the ordinance that are outdated. In addition, some larger communities may have additional requirements for stormwater brought on by the Municipal Separate Storm Sewer System (MS4) permitting program of the Minnesota Pollution Control Agency.

In response to the need for communities to update their ordinances, the VRWJPO created an updated model ordinance for local communities to modify and/or adopt to ensure that local requirements match the latest version of the VRWJPO Standards. A copy of the model ordinance is attached. VRWJPO staff will contact local community staff about ordinances early in 2022 and will offer to answer questions upon request.

EXPLANATION OF FISCAL/FTE IMPACT

No fiscal impact.

Supporting Documents:

Attachment A: VRWJPO Model Ordinance 2021 Update

Previous Board Action(s):

- ;

RESOLUTION

This item is information only.



Request for Qualifications for Professional Services in 2022-2023

Pursuant to Minnesota Statutes Section 103B.227, Subd. 5, the Vermillion River Watershed Joint Powers Organization (VRWJPO) is soliciting Statements of Qualifications (SOQ) for engineering, environmental, and ecological restoration and management services for 2022 through 2023. The VRWJPO is seeking firms interested in being included in a pool of firms that will be called on to provide services for specific types of projects.

Submitted SOQs must have two sections as follows:

Section 1) General Firm Information and Qualifications

The first section should include a letter of interest, a list of related work/projects/clients, a fee schedule for 2022-2023, and names and qualifications of key personnel. Section 1 may not exceed six (6) pages, including the letter of interest, table of contents, cover pages, and any other content the firm desires to include in this section of the SOQ.

Section 2) Service Area Qualifications

The second section should provide a summary of your qualifications and unique expertise in each of the following service areas you wish to be considered for future work. Each service area qualification may not exceed two (2) pages.

- 1) Watershed, Subwatershed and Water Resource Management and Planning
 - Services generally related to planning and development of water resources management plans, subwatershed management plans, watershed management plans, and other relevant plans associated with watershed management and organizations.
- 2) Lake, Wetland and Stream Restoration and Management
 - Services generally related to the interpreting water resources data, making technical recommendations based on water resources data, and design and oversight of water quality and habitat improvement projects including, but not limited to: shoreline stabilization design, fisheries management, alum/chemical treatment, lake drawdown, wetland hydrology and vegetation restoration, stream meandering, streambank stabilization, and in-stream habitat restoration.
- 3) Hydrologic, Hydraulic and Water Quality Modeling and Analysis
 - Services generally related to the development and/or analysis of water resource models, modeling data, and any associated reporting of modeling results. Model types used in development and/or analyses include, but are not limited to: HydroCAD, XPSWMM/PCSWMM/SWMMV, HEC-RAS, HEC-HMS, P8, WinSLAMM, BATHTUB, PTMApp, ACPF, and MIDS Calculator.



- 4) Urban Stormwater BMP Design and Construction Management
 - Services generally related to the design of urban stormwater BMPs and construction management. Urban stormwater BMP examples include, but are not limited to: bioretention, filtration basins, infiltration basins, wet sedimentation basins, iron-enhanced filters, bioswales, tree trenches, hydrodynamic separators and similar structural devices, pre-treatment practices, native vegetation filter strips, stormwater reuse, and permeable pavement.
- 5) Native Seeding, Plant Installation, Vegetation Management, Erosion Control and Bioengineering Installation
 - Services generally related to on-the-ground implementation of native seeding, plant/plug installation, mowing, herbicide treatment, prescribed burning, and installation of erosion control and bioengineering practices.

The VRWJPO will review all submittals and determine which firms are qualified in each of the five areas listed above. Those firms qualified in each respective service area will be placed in a pool of professional service firms for calendar years 2022-2023. The VRWJPO will request proposals or quotations for projects from the pool within a service area as needed.

Please provide the SOQ in electronic (.pdf) format. SOQs must be submitted no later than **Tuesday, March 1, 2022, at 4:00 p.m.** SOQs should be sent via email to travis.thiel@co.dakota.mn.us. Notification of whether a firm is accepted into the pool will be provided to each firm by Monday, March 28, 2022.

VRWJPO staff will review SOQs and reserve the right to reject any and all SOQs or otherwise take such action it deems in the best interest of the VRWJPO. For further information about the VRWJPO, contact Travis Thiel, Senior Watershed Specialist at (952) 891-7546 or via [email](mailto:travis.thiel@co.dakota.mn.us), or visit <http://www.vermillionriverwatershed.org>.

Water Resources Management

Model Ordinance

2021 UPDATE

**Applicable to the Communities of the Vermillion River
Watershed**

Drafted by the Vermillion River Watershed Joint Powers Organization (VRWJPO) to assist with ordinance updates after the 2018-19 Comprehensive Planning Process (2040 Comprehensive Plans) and the 2019 The VRWJPO Standards

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ORDINANCE NO. _____

**CITY OR TOWNSHIP,
DAKOTA COUNTY, MINNESOTA**

**AN ORDINANCE ESTABLISHING
WATER RESOURCES
MANAGEMENT PERMIT
REQUIREMENTS AND
PERFORMANCE STANDARDS**

The Board of Supervisors of _____ Township (the “Community”) ordains as follows:

SECTION 1. TITLE

This ordinance shall be known as the “Water Resources Management Ordinance” except as referred to herein as “this Ordinance.”

SECTION 2. PURPOSE

The purpose of this Ordinance is to protect the public health, safety, and welfare through the effective management of water resources in this Community. It is intended that the requirements, regulations, and performance standards of this Ordinance will:

- Implement the Vermillion River Watershed Management Plan as adopted by reference in the Dakota County Collaborative Comprehensive Plan or Community-level comprehensive plan,
- Protect and preserve the function and value of water resources,
- Prevent unregulated land disturbance activities which may harm water resources,
- Protect wetland functions consistent with the Wetland Conservation Act,
- Reduce harmful effects of erosion and sedimentation,
- Reduce property damage by seasonal flooding,
- Improve surface and groundwater quality.

SECTION 3. SCOPE AND AUTHORITY

3.01 Scope. The terms, standards, and regulations of this Ordinance shall apply within the portion of the Community located within the Vermillion River Watershed. No land shall be subdivided or disturbed, except in compliance with the terms, standards, and regulations set forth herein.

3.02 Authority. The Community shall act as the Local Governmental Unit (LGU) for the permitting and enforcement of this Ordinance, except as otherwise specifically provided herein.

3.03 Referral to Vermillion River Watershed Joint Powers Organization (VRWJPO). Prior to the approval of a permit involving any following conditions, the Community must forward land alterations plans to the VRWJPO for review and comment:

- Variances from this Ordinance that affect surface water or impact surface water/groundwater interactions,
- Diversions,
- Intercommunity flows (upon request of adjoining communities),
- Land disturbance area of 40 acres or more, and
- Projects that are adjacent to or appear to impact a watercourse or unique natural resources.

3.04 General Plan Submittal Requirements. In addition to the plan submittal requirements identified by the Community for the various permit applications in this Ordinance, any permit submittal requiring review by the VRWJPO in Section 3.03 above shall include electronic files or two sets of plans (preferred 11" X 17") for referral by the Community to the VRWJPO.

SECTION 4. DEFINITIONS

4.01 Application and Interpretation. Except as otherwise provided or clearly implied by context, all terms shall be given their commonly accepted definition. Unless specifically defined herein, terms used in this Ordinance shall have the same definition as provided in Minn. Stat. § Chs. 103B and 103D and Minn. R. Ch. 8410 as may be amended, and if not defined there, shall have common usage meaning. The words "shall" and "must" are mandatory, while the words "may" or "should" are permissive.

4.02 Definitions. For the purposes of this Ordinance, the following terms, words, and phrases have the meaning stated below. Terms, words, or phrases not defined in this Ordinance shall have a dictionary or customary meaning.

- A. Agricultural Activity – The use of land for the growing, production, and wholesale distribution or retail sale of field crops, livestock, and livestock products for income production, including but not limited to the following:
1. Field crops, including but not limited to, barley, beans, corn, hay, oats, potatoes, rye, sorghum, and sunflowers
 2. Livestock, including but not limited to, dairy and beef cattle, goats, sheep, hogs, horses, poultry, game birds and other animals, including deer, rabbits and mink
 3. Livestock products, including but not limited to, milk, butter, cheese, eggs, meat, fur, and honey
 4. Trees, shrubs, bushes, and plants for wholesale distribution
 5. Sod farming
 6. Orchards
- B. Agricultural Preserve – A land area created and restricted according to Minnesota Statutes Ch. 473H to remain in agricultural use.
- C. Applicant – A person or entity, or representative thereof, that applies for a building

permit, subdivision approval, or a permit to allow land-disturbing activities. Applicant also means that person's agents, employees, and others acting under this person's direction.

- D. Bankfull Channel Width – The channel width of a stream, creek, or river at bankfull stage.
- E. Bankfull Stage – The water level in a stream channel, creek, or river where the flow just begins to leave the main channel and enter the connected floodplain.
- F. Base Flood Elevation – The elevation of a surface water resulting from a flood that has a one percent chance of equaling or exceeding that level in any given year.
- G. Best Management Practices (BMPs) – Techniques proven to be effective in controlling runoff, erosion and sedimentation, including those documented in the Minnesota Stormwater Manual (MPCA 2005 as amended in online Wiki format) and other sources approved by the VRWJPO as such sources may be amended, revised, or supplemented.
- H. Board – The Board of Supervisors or Town Board of a township.
- I. BWSR – Minnesota Board of Water and Soil Resources.
- J. Buffer – An area of natural, minimally maintained, vegetated ground cover abutting or surrounding a watercourse, public waters wetland, or wetland.
- K. Commercial Use Development – The development of property for use as a commercial business or office.
- L. Community – A city or township as defined in Minnesota Statutes 462.352, subdivision 2, and “the Community” shall mean the community adopting this Ordinance.
- M. Community Building Inspector – The Building Inspector or Building Official hired by the Community to implement and enforce the provisions of this Ordinance.
- N. Community Engineer – The registered professional Engineer hired by the Community to implement and enforce the provisions of this Ordinance.
- O. Community – A city or town as defined in Minnesota Statutes 462.352, subdivision 2, and “this Community” shall mean the community adopting this Ordinance.
- P. Compensatory Storage – Excavated volume of material below the floodplain elevation required to offset floodplain fill.
- Q. Council – The City Council of a city.
- R. County – Dakota County.
- S. Dakota SWCD or SWCD – The Dakota County Soil and Water Conservation District.
- T. Dead Storage – The volume of space located below the overflow point of a basin, pond or landlocked basin.
- U. Developer – A person, firm, corporation, sole proprietorship, partnership, state agency, or political subdivision thereof engaged in a subdivision or land disturbance activity.
- U. Drain or Drainage – Any method for removing or diverting water from water bodies, including excavation of an open ditch, installation of subsurface drainage tile, filling, diking, or pumping.

- V. Easement – A strip of privately-owned land which is legally described and encumbered for use by another party or public entity for a specific purpose described in an easement document, recorded by Dakota County.
- W. Erosion – The wearing away of the ground surface as a result of wind, flowing water, ice movement or land disturbing activities.
- X. Erosion and Sediment Control Plan – A plan of BMPs or equivalent measures designed to control runoff and erosion and to retain or control sediment on land during the period of land disturbing activities with standards. Erosion and Sediment Control Plans are intended to be simpler plans illustrating or describing the placement of erosion and sediment control BMPs that do not require the detail of Stormwater Pollution Prevention Plans (SWPPPs) that are required under State permits.
- Y. Excavation – The artificial removal of soil or other earth material.
- Z. Fill – The deposit of soil or other earth materials by artificial means.
- AA. Filtration – A process by which stormwater runoff is captured, temporarily stored, and routed through a filter bed, vegetated strip, or buffer to improve water quality and slow down stormwater runoff.
- BB. Floodplain – The area adjacent to a waterbody that is inundated during a 100-year flood.
- CC. Floodplain Storage – The volume of space available for flood waters within the floodplain.
- DD. Fragmentation - The breaking up of an organism's habitat into discontinuous chunks.
- EE. Grassed Waterway - A natural or constructed channel that is shaped or graded to required dimensions and established in suitable vegetation for the stable conveyance of runoff. (Minnesota NRCS Conservation Practice Standard Code 412, October 2017, as amended from time to time).
- FF. Green Acres – Real property or real estate that qualifies as agricultural property having agricultural use under the Minnesota Agricultural Property Tax Law, Minnesota Statutes Section 273.111.
- GG. Hydric Soil - A soil that formed under conditions of saturation, flooding or ponding long enough during the growing season to develop anaerobic conditions in the upper horizon.
- HH. Hydrophytic Vegetation – Plant life growing in water or on a substrate that is at least periodically deficient in oxygen as a result of excessive water content.
- II. Industrial Use Development – The development of property for industrial use as identified by the Standard Industrial Classification (SIC) codes or the North American Industry Classification System (NAICS code).
- JJ. Infiltration – A stormwater retention method for the purpose of reducing the volume of stormwater runoff by transmitting water into the ground through the earth's surface.
- KK. Impervious Surface – A constructed hard surface that either prevents or retards the entry of water into the soil and causes water to run off the surface in greater quantities and at an increased rate of flow than prior to development. Examples include rooftops, sidewalks, patios, driveways, parking lots, storage areas, and concrete, asphalt, or gravel roads.

- LL. Infrastructure – The system of public works for a county, state, or Local Government Unit, including, but not limited to, structures, roads, bridges, culverts, sidewalks, stormwater management facilities, conveyance systems and pipes, pump stations, sanitary sewers and interceptors, hydraulic structures, permanent erosion control and stream bank protection measures, water lines, gas lines, electrical lines and associated facilities, and phone lines and supporting facilities.
- MM. Land Disturbing Activity (Land Disturbance) –Any activity on property that results in a change or alteration in the existing ground cover (both vegetative and non-vegetative) and/or the existing soil topography. Land disturbing activities include, but are not limited to, development, redevelopment, demolition, construction, reconstruction, clearing, grading, filling, stockpiling, excavation and borrow pits. The use of land for new and continuing agricultural activities and routine vegetation management activities shall not constitute a land disturbing activity under this Ordinance. For example, clearing of trees for agricultural field crops or pasture, management of trees on woodlands or wooded lots, and natural area restoration activities would not constitute a land disturbing activity under these Standards.
- NN. Landlocked Basin – A water basin one acre or more in size that does not have a natural outlet at or below the existing 100-year flood elevation as determined by the 100-year, 10-day snowmelt runoff event.
- OO. Local Governmental Unit (LGU) – All cities, counties, and townships lying in whole or part within the Vermillion River Watershed.
- PP. Lot – A parcel of land platted or described by metes and bounds, registered land survey, or other accepted means and separated from other parcels or portions by said description, for the purpose of sale, lease, or separation thereof, as recorded by Dakota County.
- QQ. Lot of Record – Any lot that legally existed prior to the adoption date of the original Water Resources Management Ordinance on _____, 2009.
- RR. Meander – A sinuous bend of a river, stream, or creek.
- SS. Meander Belt – The area between lines drawn tangential to the extreme limits of fully developed meanders.
- TT. Minimum Impact Alignment – Is the alignment for a proposed road, street, utility, path or access that creates the smallest area of impact to a buffer, waterway, or floodplain. For activities that cross a buffer, watercourse, or floodplain, the minimum impact alignment is one that crosses perpendicular, or near perpendicular, to the longitudinal orientation of the buffer, watercourse, or floodplain as reasonable to serve to intended purpose of the improvement.
- UU. MPCA – Minnesota Pollution Control Agency.
- VV. Municipality – A city or township.
- WW. Native Vegetation – Plant species that are indigenous to Minnesota, or that expand their range into Minnesota without being intentionally or unintentionally introduced by human activity and are classified as native in documentation referenced by MN Rules 8420.0112.

- XX. Natural Retention or Detention – Retention or detention storage of rainwater and runoff that occurs due to the natural landscape and is not artificially constructed.
- YY. New Development – The construction of any public or private improvement project, infrastructure, structure, street or road that creates more than 1 acre of new or additional impervious surface or, the subdivision of land.
- ZZ. Noxious Weeds – A noxious weed as defined in MN Rules 1505.0751.
- AAA. NPDES – National Pollutant Discharge Elimination System.
- BBB. NRCS – United States Department of Agriculture Natural Resource Conservation Service.
- CCC. Ordinary High Water Level (OHWL) – The boundary of water basins, watercourses, public waters, and public waters wetlands as set by the Minnesota Department of Natural Resources.
- DDD. Outlot – A parcel of land shown on a subdivision plat as an outlot, as designated by Dakota County, and designated alphanumerically, (for example – Outlot A.). Outlots are used to designate one of the following: Land that is part of the subdivision but is to be subdivided into lots and blocks at a later date; land that is to be used for a specific purpose as designated in a developer’s agreement or other agreement between the Local Governmental Unit and the developer; or for a public purpose that may have restricted uses such as a buffer.
- EEE. Person – The word “person” includes individual, firm, company, corporation, partnership, trust and other legal entities.
- FFF. Plat – The drawing or map of a subdivision prepared for filing of record pursuant to Minnesota Statutes Chapter 505.
- GGG. Pre-development Condition – The land use on a site that existed in 2005.
- HHH. Public Waters – Public Waters means water resources as defined in Minn. Stat. § 103G.005, subd. 15.
- III. Public Waters Wetland – Any public waters wetland as defined in Minn. Stat. § 103G.005, subd. 15a.
- JJJ. Recreational Use Development - Any development of land for recreational use, including but not limited to, parklands, sporting facilities, golf courses, and other commercial or public facilities designed and used to provide recreational opportunities to the public.
- KKK. Redevelopment – The rebuilding, repair, or alteration of a structure, land surface, road or street, or facility that creates less than 1 acre of new impervious surface, and disturbs, replaces, or alters more than 1 acre of existing impervious surface. Note: for the purposes of this Ordinance, if an activity creates more than 1 acre of new or additional impervious surface, the activity is considered new development and exceptions in this Ordinance for redevelopment do not apply to the increased (new) impervious surface exceeding 1 acre.
- LLL. Right-Of-Way (ROW) – A strip of land occupied or intended to be occupied by a street, railroad, electric transmission line, oil or gas pipeline, water main, sanitary or storm

- sewer main, or another special use, and dedicated to public use by the recording of the plat on which such right-of-way is established.
- MMM. Runoff – Rainfall, snowmelt, irrigation, or otherwise discharged water flowing over the ground surface.
- NNN. Rural Preserves – Class 2a or 2b property that had been assessed under Minnesota Statutes 2006, section 273.111, or that is part of an agricultural homestead under Minnesota Statutes, section 273.13, subdivision 23, paragraph (a).
- OOO. Sediment – Soil or other surficial material transported by surface water as a product of erosion.
- PPP. Sedimentation – The process or action of depositing sediment.
- QQQ. Sinuuous – The curving patterns of a river, stream, or creek.
- RRR. Soil – The unconsolidated mineral and organic material on the immediate surface of the earth. For the purposes of this Ordinance, stockpiles of sand, gravel, aggregate, concrete or bituminous materials are not considered “soil” stockpiles.
- SSS. Stewardship Plan – A conservation plan completed for agricultural land and activities accepted by the Dakota County SWCD or the VRWJPO.
- TTT. Stormwater - Under Minnesota Rule 7077.0105, subpart 41b, stormwater means “precipitation runoff, stormwater runoff, snow melt runoff, and any other surface runoff and drainage.” According to the Federal Code of Regulations under 40 CFR 122.26 [b][13], stormwater means “stormwater runoff, snow melt runoff and surface and drainage.” Stormwater does not include construction site dewatering.
- UUU. Stream Type – One of numerous stream types based on morphology defined by Rosgen, D., 1996, *Applied River Morphology*.
- VVV. Stormwater Pollution Prevention Plan (SWPPP) – A plan for stormwater discharge that includes erosion prevention measures and sediment controls that, when implemented, will decrease soil erosion on a parcel of land and decrease off-site nonpoint pollution.
- WWW. Structure – Anything manufactured, constructed or erected which is normally attached to or positioned on land, including portable structures, earthen structures, water and storage systems, drainage facilities and parking lots.
- XXX. Subdivision – The separation of an area, lot, or tract of land under single ownership into two or more parcels, tracts, or lots.
- YYY. USDA – United States Department of Agriculture.
- ZZZ. VRWJPO – Vermillion River Watershed Joint Powers Organization.
- AAAA. Watercourse – Intermittent and perennial streams as shown on Map 1 attached to this Ordinance.
- BBBB. Wet Detention Facility – A permanent man-made structure for the temporary storage of runoff that contains a permanent pool of water.
- CCCC. Wetland – Any wetland as defined in Minn. Stat. § 103G.005, subd. 19.
- DDDD. Wetland Conservation Act (WCA) – The Minnesota Wetland Conservation Act of 1991,

as amended.

EEEE. Wetland Type – A wetland type or type as defined by Minnesota Rules 8420.0111.

SECTION 5. EROSION AND SEDIMENT CONTROL

5.01 Erosion and Sedimentation Control Plan. No person shall commence a land disturbing activity meeting or exceeding the thresholds provided below, unless exempted, without submitting an Erosion and Sedimentation Control Plan to the Community Engineer or the Community Building Inspector. No building permit or land disturbing activity shall be authorized until the Community approves this plan. At a minimum the erosion prevention and sedimentation standards must conform with Best Management Practices (BMPs) defined in this Ordinance.

Criteria for requiring a permit with less than one (1) acre of disturbance are as follows:

- A. Land disturbing activities on slopes greater than six percent.
- B. Greater than 100 cubic yards of imported or stockpiled material.
- C. New public or private roads or driveways greater than 125 feet in length.
- D. Land disturbing activities greater than 10,000 square feet of land if commercial, industrial, or recreational use development.
- E. Filling, draining, or altering of natural or artificial stormwater storage, retention, or watercourses.
- F. Land disturbing activities located within 150 feet of wetlands identified on or adjacent to the land disturbing activities.
- G. Land disturbing activities that could reasonably be expected to deliver sediment to adjacent properties, wetlands, or water resources.

Exemptions for preparing an Erosion and Sedimentation Control Plan include the following:

- A. Minor land disturbing activities such as home gardens, repairs, and maintenance work.
- B. Construction, installation, and maintenance of individual sewage treatment systems, other than those on steep slopes (e.g., 6 percent or greater), or on riparian lots within a Shoreland District.
- C. Construction, installation, and maintenance of public utility lines or individual service connections unless the activity disturbs more than 1 acre, in which case the requirements in Section 5.02 apply.
- D. Installation of any fence, sign, telephone or electric poles, or other kinds of posts or poles.
- E. Emergency activity necessary to protect life or prevent substantial harm to persons or property.
- F. All maintenance, repair, resurfacing and reconditioning activities on impervious surfaces, which do not involve land-disturbing activities outside of the existing impervious surfaces.
- G. Construction of any structure on an individual lot in a subdivision with an approved

SWPPP, so long as any land disturbing and stormwater management activity complies with the approved plan.

5.02 Stormwater Pollution Prevention Plan (SWPPP). No person shall commence a land disturbing activity one acre or more in area without submitting an SWPPP to the Community Engineer for review and approval. The applicant is required to obtain a National Pollutant Discharge Elimination System/State Disposal System (NPDES/SDS) construction stormwater permit from the Minnesota Pollution Control Agency (MPCA). No building permit or land disturbing activity shall be authorized until the Community Engineer approves this plan and a permit is issued by the MPCA. The SWPPP shall contain all components required to meet the requirements of the NPDES General Construction Permit issued by the MPCA, August 1, 2018, as amended. All modifications or amendments to a SWPPP must be reviewed and approved by the Community Engineer and the MPCA.

5.03 Construction Erosion and Sediment Control Criteria. Land disturbances shall be governed by the following minimum construction erosion control standards:

- A. Erosion and sediment control measures shall be consistent with Best Management Practices (BMPs) and shall be sufficient to retain sediment on site.
- B. All temporary erosion and sediment controls shall be installed on all down gradient perimeters before commencing the land disturbing activity and left in place and maintained as needed until removed per Community approval after the site had been stabilized. All permanent erosion control measures shall be installed and operational per the design and as required by the Community prior to the removal of temporary controls.
- C. Erosion and sediment controls shall meet the standards for the General Permit Authorization to Discharge Storm Water Associated With Construction Activity Under the National Pollutant Discharge Elimination System/State Disposal System Permit Program Permit MN R100001 (NPDES General Construction Permit) issued by the Minnesota Pollution Control Agency, August 1, 2018, as amended for projects disturbing more than 1 acre.
- D. Permanent cover of the site must be completed in accordance with the NPDES General Construction Permit requirements.
- E. All on-site stormwater conveyance channels shall be designed and constructed to withstand the expected velocity of flow from a 10-year frequency storm without erosion.
- F. If the activity creates more than 1 acre of disturbed area, and the activity is taking place on a site where soils are currently disturbed (e.g., a tilled agricultural site that is being developed), areas that will not be graded as part of the development and areas that will not be stabilized according to the timeframes specified in the NPDES General Construction permit Part IV.B.S, shall be seeded with a temporary or permanent cover before commencing the proposed land disturbing activity.

(Section 5.04 was added by the Rural Collaborative engineer in the 2010 version; these are good requirements but more detailed than what is in the VRWJPO Standards and therefore would be up to the Community to keep)

5.04 Minimum Stormwater Pollution Prevention Measures and Related Inspections. These minimum control measures are required where bare soil is exposed. Due to the diversity of

individual construction sites, each site will be individually evaluated. Where additional control measures are needed, they will be specified at the discretion of the Community Engineer. The Community Engineer reserves the right to receive comments from the Dakota County Soil and Water Conservation District (SWCD) or the VRWJPO. The Community will determine what action is necessary to prevent excessive erosion from occurring on the site. If the following conditions are not met as outlined below, the MPCA will be notified for lack of compliance, fines may be levied, and prosecution for non-compliance with this Ordinance will be pursued.

- A. All grading plans and building site surveys must be reviewed by the Community for effectiveness of erosion control measures in the context of the site topography and drainage.
- B. The stormwater pollution prevention plan's measures, the limit of disturbed surface and the location of buffer areas shall be marked on the approved grading plan, and identified with flags, stakes, signs etc. on the development site before work begins.
- C. Sediment control measures must be properly installed by the builder before construction activity begins. Such structures may be adjusted during dry weather to accommodate short-term activities, such as those that require the passage of very large vehicles. As soon as this activity is finished or before rainfall, the erosion and sediment control structures must be returned to the configuration specified by the Community. Sufficient erosion control structures must be in place before a footing inspection will be done.
- D. Diversion of channeled runoff around disturbed areas, if practical, or the protection of the channel.
- E. If a stormwater pollution prevention plan involves directing some or all of the site's runoff, the applicant or its designated representative shall obtain from adjacent property owners any necessary easements or other property interests concerning the flowing of such water.
- F. Land disturbing activities should be phased or scheduled to minimize the amount of exposed soil at any time to lessen the potential for erosion and sedimentation.
- G. Generally, sufficient silt fence or other sediment control device will be required to hold all sheet flow runoff generated at an individual site, until it can either infiltrate or seep through the device's pores.
- H. For soil stockpiles greater than 10 cubic yards the toe of the pile must be more than 25 feet from a road, drainage channel or stormwater inlet. If such stockpiles will be left for more than 7 days; they must be stabilized with mulch, vegetation, tarps or other means. If left for less than 7 days, erosion from stockpiles must be controlled with silt fences or rock check dams.
 - 1. If for any reason a soil stockpile of any size is located closer than 25 feet from a road, drainage channel or stormwater inlet, and will be left for more than 7 days, it must be covered with tarps or controlled in some other manner
- I. All sand, gravel or other mining operations taking place on the development site shall have a National Pollutant Discharge Elimination System General Stormwater permit for industrial activities and all required Minnesota Department of Natural Resources permits.
- J. Temporary rock construction entrances will be required wherever vehicles enter and exit a site, according to specifications required by the Community Engineer. Slash mulch, 4"-

10", may be used in lieu of rock if approved by the Community Engineer.

- K. Parking is prohibited on all bare lots and all temporary construction entrances, except where street parking is not available.
- L. Streets must be cleaned and swept whenever tracking of sediments occurs and before sites are left idle for weekends and holidays. Regular sweeping must occur on paved roads at least once a week, unless notified by the Community, in which case sweeping will need to occur within 24 hours of being notified by the Community.
- M. Water (impacted by the construction activity) removed from the site by pumping must be treated by temporary sedimentation basins, geotextile filters, grit chambers, sand filters, up-flow chambers, hydro-cyclones, swirl concentrators or other appropriate controls. Such water shall not be discharged in a manner that causes erosion or flooding of the site, receiving channels, adjacent property or a wetland.
- N. Catch Basins and sediment ponds must be cleaned prior to acceptance by the Community.
- O. Roof drain leaders. All newly constructed and reconstructed buildings must route roof drain leaders to pervious areas (not natural wetlands) where the runoff can infiltrate. The discharge rate shall be controlled so that no erosion occurs in the pervious areas.
- P. At a minimum, SWPPP inspections shall be done weekly and within 24 hours after a rainfall event greater than 0.5 inches in 24 hours by the applicant or the applicant's representative in accordance with the MPCA permit for sites that disturb 1 acre or more of land.
- Q. Follow-up inspections must be performed by the Community on a regular basis to ensure that erosion and sediment control measures are properly installed and maintained. In all cases the inspectors will attempt to work with the developer and/or builder to maintain proper erosion and sediment control at all sites.
 - 1. In cases where cooperation is withheld, construction stop orders may be issued by the Community, until erosion and sediment control measures meet specifications. A second erosion and sediment control/grading inspection must then be scheduled and passed before the final inspection will be done.
- R. The NPDES permittee shall inspect all stormwater management facilities during construction in accordance with the NPDES permit requirements. A copy of the inspection records shall be given to the Community.

5.05 Required Submittals

- A. Erosion and Sediment Control Plan. Project plans shall include the following:
 - 1. Project site plan, construction sketch, or aerial photo information showing the extent of the project proposed for a property or properties. This should include all proposed structures, accesses, impervious surfaces, and areas where grading and construction activities are to occur.
 - 2. Proposed erosion and sediment control measures for how soil loss will be mitigated from the site. In the absence of this information, the proposed control measures can be provided as markups and comments by Community representatives or the Community Engineer that instruct the landowner/project applicant what is required for construction.

3. Notes or descriptions on how the disturbed area will be stabilized with seeding, landscaping, etc. to ensure that bare soils are no longer present after completion. For agricultural areas, returning to cropland is acceptable for final stabilization/cover.

- B. Stormwater Pollution Prevention Plan. Project site plans including a SWPPP that shall contain all components required to meet the requirements of the NPDES General Construction Permit issued by the MPCA, August 1, 2018, as amended.

SECTION 6. STORMWATER MANAGEMENT

6.01 Application of Ordinance. No person or political subdivision shall commence a land disturbing activity for “new development” or “redevelopment” (per Section 4: Definitions, ZZ. or KKK.), unless specifically exempted below, without first obtaining a permit from the Community incorporates and approves a SWPPP and the stormwater management requirements below.

6.02 Post Construction Water Quality Criteria. Land disturbances shall be governed by the following minimum post construction water quality standards:

- A. Post construction stormwater runoff quality measures shall meet the standard for the General Permit Authorization to Discharge Storm Water Associated With Construction Activity Under the National Pollutant Discharge Elimination System/State Disposal System Permit Program Permit MN R100001 (NPDES General Construction Permit) issued by the Minnesota Pollution Control Agency, June 25, 2018, as amended; except where more specific requirements are provided in paragraphs B, C, D, and E below.
- B. Infiltration/filtration options described under Runoff Volume Control Standard B, are the preferred approach to satisfying the water quality treatment requirements of the NPDES General Construction Permit in areas that drain to the trout stream portions of the Vermillion River and its tributaries where such areas do not first drain to a waterbody with 10 or more acres of open water.
- C. Ponds with permanent wet pools are allowed in areas tributary to the trout stream portions of the Vermillion River and its tributaries where such areas do not first drain to a waterbody with 10 or more acres of open water, if the applicant demonstrates:
1. No net increase in the temperature of the discharge for the 2-year 24-hour event with the use of alternative technologies and has met the Volume Control requirements of these Standards; or
 2. That the wet pond is designed for zero discharge for the 2-year, 24-hour storm; or
 3. That the Volume Control requirements of these Standards are met and the following measures are used to the extent practical in order of decreasing preference:
 - a. The wet pond is designed with a combination of measures such as shading, filtered bottom withdrawal, vegetated swale discharges, or constructed wetland treatment cells that will limit temperature increases.
 - b. Additional volume control measures and credits are used beyond that required to meet the Runoff Volume Standards as a means of limiting the frequency and duration of discharges from the pond.
- D. The water quality control volumes necessary to meet the NPDES General Construction Permit that are satisfied using infiltration or filtration technologies (filtration only on

Type C and D soils) can count toward the Volume Control requirements of this Ordinance.

- E. Ponds with overflows or outlets located below the seasonally high water table are allowed only where it can be demonstrated that there is a reasonable need for such an outlet to control seepage damage to existing structures.
- F. Redevelopment projects are required to incorporate water quality BMPs to the extent practical.

6.03 Runoff Temperature Control Criteria. Land disturbances shall be governed by the following minimum runoff temperature control standards:

- A. Post construction runoff criteria for controlling temperature increases relies on the establishment of buffers as specified in Section 8; the prioritization of temperature sensitive BMPs such as infiltration and filtration, and the designation of temperature sensitive wet pond design approaches in the Post Construction Water Standards above; and the control of runoff volume increases and the use of credits with the Runoff Volume Control Standards below. No additional specific temperature criteria are incorporated since these standards emphasize approaches sensitive to runoff temperature. However, since these other standards allow flexibility, and in some cases waivers, permit applications involving the creation of one or more acres of new impervious surface in the trout stream portions of the Vermillion River and its tributaries, where such areas do not first drain to a waterbody with 10 or more acres of open water:
 - 1. Must include a narrative description of the temperature sensitive practices incorporated.
 - 2. The Community may limit or deny waivers, or may require additional runoff temperature BMPs, if the Community or the VRWJPO finds that the site design does not minimize the potential for runoff temperature increases.

6.04 Peak Runoff Rate Control Criteria. Land disturbances shall be governed by the following minimum runoff rate control standards:

- A. A hydrograph method based on sound hydrologic theory will be used to analyze runoff for the design or analysis of flows and water levels. Modeling shall use the current applicable modeling standards (e.g., Atlas-14 for precipitation amounts, as amended or replaced).
- B. Runoff rates for proposed activities, and development shall
 - 1. Apply land cover conditions existing in 2005 as the baseline for existing conditions in runoff calculations.
 - 2. Not exceed existing runoff rates for the 1-year, 10-year, and 100-year critical duration storm events.
 - 3. Be implemented such that peak runoff rate controls keep future peak flood flows for the Vermillion River 100-year, 4-day event from increasing above existing conditions peak flows.
 - 4. Not exceed the existing rate for the VRWJPO Intercommunity Flow study goal flow value for the Community.
- C. Detention basins with permanent wet pools are allowed in area's tributary to the trout

stream portions of the Vermillion River provided Post Construction Water Quality Standard 5.04 C. above is met.

6.05 Runoff Volume Control Criteria. Land disturbances shall be governed by the following minimum runoff volume control standards:

- A. New development must incorporate volume control practices into the design sufficient to prevent an increase in the runoff volume for the 2-year 24-hour storm above pre-development conditions, unless waived in accordance with Runoff Volume Control Standard G. below. Determination of the necessary control volume to achieve this standard shall be calculated on a site-by-site basis for each individual proposal.
- B. The water quality control volumes necessary to meet the NPDES General Construction Permit that are satisfied using infiltration or filtration technologies (filtration only on Type C and D soils) can count toward the Volume Control requirements of this Ordinance.
- C. When using infiltration for volume control, infiltration volumes and facility sizes shall be calculated using appropriate site information and applying design criteria from the Minnesota Stormwater Manual.
- D. Constructed infiltration facilities, such as infiltration basins and trenches:
 - 1. Can only be used if there is pretreatment of stormwater runoff designed to protect the infiltration system from clogging with sediment and to protect groundwater quality,
 - 2. Cannot be used within 400 feet of a municipal or other community supply well or within 100 feet of a private well unless specifically allowed by an approved wellhead protection plan,
 - 3. Cannot be used for runoff from fueling and vehicle maintenance areas and industrial areas with exposed significant materials,
 - 4. Cannot be used on areas with less than 3 feet vertical separation from the bottom of the infiltration system and the seasonal high ground water table, and
 - 5. Cannot be used in Type D soils.
- E. Infiltration areas must be fenced or otherwise protected from disturbance before the land disturbing activity starts.
- F. Volume control amounts may be waived by the Community for sites with predominately Type C and D soils, or where a shallow water table prevents construction of infiltration systems, provided the following are met in order of decreasing preference:
 - 1. Infiltration volumes and facility sizes shall be calculated using appropriate site information and applying design criteria from the Minnesota Stormwater Manual.
 - 2. Underdrains are used to promote filtration instead of infiltration.
- G. Vegetation used in conjunction with infiltration systems must be tolerant of urban pollutants, and the range of soil moisture conditions anticipated.

(Sections 6.06-6.07 were added by the Rural Collaborative engineer in the 2010 version; these are good requirements but more detailed than what is in the VRWJPO Standards and therefore would be up to the Community to keep)

6.06 Minimum Design Standards for Stormwater Drainage Facilities. Stormwater drainage

facilities shall be designed to convey the flow of surface waters without damage to persons or property. The system shall insure drainage at all points along streets and provide positive drainage away from buildings. Drainage plans shall be consistent with local and regional drainage plans. The facilities shall be designed to protect against surface erosion and siltation of surface water, and to prevent the discharge of excess runoff onto adjacent properties.

- A. All storm sewer shall be designed to convey the 10-year critical duration storm event according to methods of accepted engineering practice subject to approval by the Community Engineer.
- B. A map identifying all of the individual drainage areas, and storm sewer design sheets identifying drainage area, runoff coefficient, time of concentration, intensity, runoff, slope, diameter, length, and capacity of the pipe, velocity within the pipe and invert elevations shall be submitted with the plans. All normal and high water levels of existing and proposed stormwater ponds, wetlands, lakes, streams and rivers shall be included on the plans.
- C. If required by the Community Engineer, 100-feet of 4-inch perforated drain tile shall be installed at all low point catch basins located within Community right-of-way. The drain tile shall be connected to proposed storm sewer facilities.
- D. Catch basins shall have a minimum depth of 3.5-feet.
- E. All stormwater pollution control management facilities must be designed to minimize the need for maintenance, to provide easy vehicle and personnel access for maintenance purposes and be structurally sound. These facilities must have a plan of operation and maintenance that ensures continued effective removal of the pollutants carried in stormwater runoff. It shall be the responsibility of the applicant to obtain any necessary easements or other property interests to allow access to the stormwater management facilities for inspection and maintenance purpose.

6.07 Minimum Design Standards for Stormwater Wet Detention Facilities. All stormwater detention basins that do not discharge directly into the Vermillion River or its tributaries shall be designed in accordance with the Walker Method for Wet Detention Basins. The following standards shall be utilized.

- A. The permanent pool shall be equal to or greater than the runoff from a 2.5-inch rainfall for fully developed watershed conditions.
- B. The average pond depth obtained by dividing the permanent pool volume by the permanent pool area shall be a minimum of 3 feet.
- C. Side slopes shall be a maximum of 3:1 above the normal water level (NWL) and a maximum of 3:1 below the NWL with a 10:1 bench located below the NWL.
- D. Pond inlets and outlets shall be located so as not to encourage plug flow.
- E. A 20-foot minimum easement adjacent to a public road shall be provided to all ponds so Community maintenance crews have access to the pond.
- F. Concrete outlet structures shall be provided for all stormwater basins in accordance with Community standards or a standard approved by the Community Engineer.
- G. The lowest opening for all structures adjacent to stormwater ponds, wetlands, lakes or other water ways shall be at least 3 feet above the 100-year high water elevation.

- H. The lowest opening in any structure adjacent to stormwater ponds, wetlands, lakes or other water ways shall be at least 2 feet above the emergency overflow elevation. A minimum freeboard of 1 foot is required between the 100-year flood elevation and the emergency overflow elevation.
- I. The minimum floor elevation for all structures adjacent to land-locked stormwater ponds, wetlands, lakes or other water ways shall be at least 2 feet above the back to back 100-year flood elevation.
- J. A phasing plan for the construction of new and/or temporary detention basins shall be submitted to the Community Engineer for approval. Detention basins shall be constructed prior to other construction. The detention basins shall be cleared of sediment by the contractor at the end of the project. Infiltration basins shall not be constructed until the end of the project to eliminate unnecessary compaction of the soils.

6.08 Permanent Maintenance of Stormwater Facilities. All stormwater management structures and facilities shall be maintained in perpetuity to assure that the structures and facilities function as originally designed. The responsibility for maintenance shall be assumed either by the city, township, or county with jurisdiction over the structures and facilities; or by the applicant, their successors, or assigns entering into a maintenance agreement with the Community.

6.09 Stormwater Easements and Covenants. The applicant for stormwater permits shall establish, in a form acceptable to the Community, temporary and permanent drainage and utility easements, or dedicated outlots, for ponding, flowage, and drainage purposes over hydrologic features such as waterbodies and public stormwater basins. The easements, or outlots, shall include the right of reasonable access for inspection, monitoring, maintenance, and enforcement purposes. The Community may require that the land be subjected to restrictive covenants or a conservation easement or other easement, in form acceptable to the Community, to prevent the future expansion of impervious surface and the loss of infiltration capacity.

6.10 Waivers. The Community may waive on-site runoff rate, water quality, and runoff volume standards, consistent with the Collaborative Local Water Management Plan, and provided the off-site stormwater facilities are capable of meeting the other requirements in this Section.

6.11 Trading. Consistent with criteria established by or approved by the VRWJPO, the Community may consider off-site pollutant trading on a case-by-case basis. Any proposed trade must document conditions whereby the proposed offsite facility or practice provides a benefit that directly offsets any potential pollutant increase to the stream resulting from the proposed development. The responsibility for maintenance shall be addressed according to Section 8.4 of these standards. Any proposed off-site trade must be approved by the VRWJPO before implementation.

6.12 Required Submittals. All construction activities required to meet Stormwater Management requirements shall submit a stormwater management memo or plan that covers the following design components at a minimum:

- A. The following additional information shall be submitted along with the SWPPP.
 - 1. Drainage maps for the existing and proposed conditions.

2. A detailed breakdown of existing and proposed curve numbers.
3. Map identifying soil types.
4. A drainage report, certified by a professional engineer, identifying existing and proposed peak runoff rates and volumes flowing off-site to adjacent watersheds for the 2, 10 and 100-year events.
5. All calculations and information used in determining peak discharge rates and volumes utilizing the Soil Conservation Service TR-55/TR-20, or other approved programs/models.
6. First floor and lowest opening elevations for all existing and proposed buildings.
7. Delineation of existing wetlands, as defined in the Wetland Conservation Act.
8. Lakes, streams, shoreland and floodplains shall also be shown on the plans.
9. Locations of the normal and high water elevations for all water bodies on the plans.
10. Locations of any well locations within 500 feet of the site.
11. Additional details required in the VRWJPO Rules for any land disturbance required to be referred to the VRWJPO for review.

SECTION 7. WETLAND MANAGEMENT

7.01 Wetland Alteration Approval Required. No person or political subdivision shall drain, fill, excavate, or otherwise alter a wetland or public waters wetland without completing a wetland application provided by the Minnesota Board of Water and Soil Resources (BWSR), consistent with the requirements of the Wetland Conservation Act (WCA). The application may be referred to the technical evaluation panel appointed by the Community, BWSR, and the Dakota County SWCD for technical findings and recommendations prior to any action on the application by the Community. The Community is the LGU for all WCA review and permitting.

7.02 Wetland Determinations and Delineations. The Community shall refer to all maps and resources available in determining whether a land disturbing activity may impact a wetland. The Community has the authority and responsibility to carefully evaluate all potential wetland impacts. In instances when a potential wetland area is not illustrated on any maps or other resources and its existence is questioned, the Community shall contact the Dakota County SWCD and request a determination as to whether a wetland may in fact exist. If the SWCD determines that a wetland may exist, the Community shall require the person proposing the land disturbing activity to conduct a field evaluation and delineation of the potential wetland. The SWCD shall approve the evaluation and delineation. The Community shall reimburse the SWCD for its determination and evaluations, according to fees established by the SWCD. Nothing shall prevent the Community from requiring the person engaged in a land disturbing activity to reimburse the Community for its out-of-pocket expenses incurred in the wetland determination and delineation procedure.

7.03 Wetland Management Priorities. The Community establishes the following priorities in managing wetlands:

- A. Work to achieve no net loss of wetlands.
- B. Replace lost wetlands in the same subwatershed whenever possible.
- C. Provide equal or greater functions and values for lost wetlands at the replacement ratios dictated by the WCA.

- D. Avoid direct or indirect wetland disturbance in accordance with State and Federal requirements and approved local wetland management plans.
- E. Limit the use of high-quality wetlands for stormwater management where other alternatives exist.
- F. Prevent direct discharge of stormwater runoff facilities into wetlands.
- G. Avoid fragmentation of natural areas and corridors when feasible and mitigate when unavoidable.

7.04 Wetland Alteration/Mitigation Standards.

- A. Any drainage, filling, excavation, or other alteration of a public waters wetland or wetland shall be conducted in compliance with Minnesota Statutes Section 103G.245, the WCA, Minnesota Rule Chapter 8420, Minnesota Rule Chapter 7050.0186, and regulations established herein.
- B. In order to preserve WCA exemption or no loss determination, projects involving excavation in Types 1, 2, 6, and 7 wetlands must demonstrate a beneficial purpose, such as habitat or water quality improvements, and minimize loss of wetland function as determined by the LGU.
- C. A high quality (or equivalent value) public waters wetland or wetland, as determined using the Minnesota Routine Assessment Method (MNRAM 3.0 as amended) or other state accepted functional assessment method for vegetative diversity, may not be used for stormwater management and treatment unless the use will not adversely affect the function and public value of the wetland and other alternatives do not exist.
- D. Wetland replacement/mitigation siting must follow the priority order below:
 - 1. Mitigation on-site.
 - 2. Mitigation within the same minor subwatershed as established by the Minnesota Department of Natural Resources for the “1979 Watershed Mapping Project” pursuant to Minnesota Laws 1977, chapter 455, section 33, subdivision 7, paragraph (a).
 - 3. Mitigation within the VRWJPO boundary.
 - 4. Mitigation within Dakota County.
- E. Transportation projects shall pursue wetland mitigation projects to the extent practical using the standards above; however, this does not preclude the use of the BWSR Replacement Program.
- F. When seeking to achieve wetland mitigation through the acquisition of wetland credits through Wetland Banking (Minnesota Rules part 8420.0522), replacement credits are required to occur within the Vermillion River Watershed for wetland impacts occurring in the Vermillion River Watershed as long as there are wetland bank replacement credits available from a wetland bank within the Vermillion River Watershed.

7.05 Required Submittals. When wetlands are present on a new development or redevelopment site, the following information shall be submitted to the community:

- A. Maps showing delineated boundaries of wetlands located on or adjacent to the subject property. Boundaries shall be established by a field wetland delineation in accordance

with Wetland Conservation Act (WCA) approved methods. In some cases, particularly those where wetlands are intended to be avoided, the WCA LGU may be able to work with a contracted partner (e.g., the Dakota SWCD) to delineate the wetland boundaries based on a field visit or available mapping data.

- B. Construction plans showing the project boundaries and location of the project relative to on-site wetlands.
- C. For sites with impacts to wetlands, submittals needed to satisfy the needs of the WCA permit program will be required by the Community. This includes, but is not limited to, a full “Joint Application for Activities Affecting Water Resources in Minnesota” and complete wetland delineation reports.

SECTION 8. WETLAND AND WATERWAY BUFFERS

8.01 Wetland and Waterway Protection. It is a stated purpose of this Ordinance to protect and preserve the function and value of water resources in the Community. The provisions of this Section identify requirements for land preservation adjacent to wetlands and waterways for the purpose of protecting the function and value of water resources.

8.02 Buffers Required. A buffer of land adjacent to wetlands, public waters wetlands, and major waterways shall be established according to the requirements of this Section and encumbered by permanent easement or other formal mechanism, as described in Section 8.06, for all lots of record created after the adoption date of the original Water Resources Management Ordinance on _____, 2010, except as follows:

- A. A division of land exempt from local subdivision regulation as defined in Minnesota Statutes.
- B. A court-ordered division of land that precludes the Community from establishing these regulations.
- C. A division of land, where the resulting lots qualify for Green Acres or Rural Preserves agricultural tax classification.
- D. An authorized division of land enrolled in an Agricultural Preserve.

8.03 Structure Setbacks in Lieu of Buffers. All structures approved after the adoption date of the original Water Resources Management Ordinance, _____, 2009, shall comply with a setback standard equal to the minimum buffer widths prescribed in Section 8.04 and Section 7.05 of this Ordinance, in areas where buffers have not been established.

8.04 Wetland Buffer Criteria and Dimensions. For all wetlands and public waters wetlands requiring buffers according to this Ordinance, a wetlands delineation shall be required and a wetlands functional assessment using the Minnesota Routine Assessment Method (MNRAM 3.0 as amended) or other state accepted functional assessment method for vegetative diversity shall be completed by the person required to establish the buffer, unless such assessment has been completed by the Dakota County SWCD. The functional assessment shall be consistent with standards established or recommended by the SWCD. Buffer dimensions shall be established, based on the value of wetlands, identified as follows:

Buffer Dimension	Exceptional Quality (Preserve)	High Quality (Manage 1)	Medium Quality (Manage 2)	Low Quality (Manage 3)
Average Width	50 feet	40 feet	30 feet	25 feet
Minimum Width	30 feet	30 feet	25 feet	16.5 feet

8.05 Major Waterways Buffer Criteria and Dimensions. Major Waterways in the Community are identified by the VRWJPO, as illustrated on Map 1, October 26, 2006, attached to this Ordinance as Appendix A. At any point in time that Map 1 is updated and formally adopted by the VRWJPO, and the updated map of Major Waterways is formally transmitted to the Community by the VRWJPO, the Community shall replace Map 1 with the updated map. For all Major Waterways requiring buffers according to this Ordinance, required buffers shall meet the following dimensions, based upon the following classifications of the waterways:

Waterway Classification	Buffer Dimensions and Standards
Conservation Corridor	Lower Reach (Vermillion River downstream of Biscayne Avenue): 150-foot average, 100-foot minimum, measured from the edge of the meander belt of the river
Conservation Corridor	Upper Reach (Vermillion River upstream of Biscayne Avenue and South Branch Vermillion River): 150-foot average, 100-foot minimum, measured from the edge of the meander belt of the river
Aquatic Corridor Principal Connector	100-foot average, 65 feet minimum, measured from the edge of the meander belt of the river
Aquatic Corridor Principal Connector with Trout Stream Designation	100-foot minimum, no averaging, measured from the edge of the meander belt of the river
Aquatic Corridor Tributary Connector	50-foot average, 35-foot minimum: plus 2 feet for every 1 percent of slope,
Water Quality Corridor	30-foot average, 20-foot minimum where there is a flow path for concentrated surface runoff, measured from the center line of the flow path

8.06 Buffer Standards. The following standards shall apply to all buffers established in this Section.

- A. Where acceptable natural vegetation exists in buffer areas, the retention of such vegetation in an undisturbed state is required unless approval to replace such vegetation is received. A buffer has acceptable vegetation if it:
 1. Has a continuous, dense layer of perennial grasses that has been uncultivated or

- unbroken for at least 5 consecutive years, or
 - 2. Has an overstory of trees and/or shrubs that has been uncultivated or unbroken for at least 5 consecutive years, or
 - 3. Contains a mixture of the plant communities in 1 and 2 above that has been uncultivated or unbroken for at least 5 years.
- B. Buffers shall be staked and protected in the field prior to construction unless the vegetation and the condition of the buffer are considered inadequate. Existing conditions vegetation will be considered unacceptable if:
- 1. Physical condition of the buffer tends to channelize the flow of surface water, or
 - 2. Vegetative cover is less than 90%.
- C. Where buffer vegetation and conditions are unacceptable, or where approval has been obtained to replant, buffers shall be replanted and maintained according to the following standards:
- 1. Buffers shall be planted with a native seed mix approved by the State of Minnesota, NRCS, or the Dakota SWCD, with the exception of a one-time planting with an annual nurse or cover crop. Plantings of native forbs and grasses may be substituted for seeding. All substitutions must be approved by the Community. Groupings/clusters of native trees and shrubs, of species and at densities appropriate to site conditions, shall also be planted throughout the buffer area.
 - 2. The seed mix and planting shall be broadcast/installed according to State of Minnesota, NRCS, or Dakota SWCD specifications. The selected seed mixes and plantings for permanent cover shall be appropriate for the soil site conditions and free of invasive species.
 - 3. Buffer vegetation (both natural and created) shall be protected by erosion and sediment control measures during construction.
 - 4. During the first five full growing seasons, except where the Community has determined vegetation establishment is acceptable, the owner or applicant must replant buffer vegetation where the vegetative cover is less than 90%. The owner or applicant must assure reseeding or replanting if the buffer changes at any time through human intervention or activities.
- D. Where a buffer is required, the Community shall require the protection of the buffer under a conservation easement, or include the buffer in a dedicated outlot as part of platting and subdivision approval, except where the buffer is located in a public transportation right-of-way. Buffers shall also be monumented to clearly designate the boundaries of all new buffers within new residential subdivisions. A monument shall consist of a post and a buffer strip sign approved by the LGU.
- E. Alterations, including building, storage, paving, routine mowing, burning, plowing, introduction of noxious vegetation, cutting, dredging, filling, mining, dumping, grazing livestock, agricultural production, yard waste disposal, or fertilizer application are prohibited within any buffer. Periodic mowing or burning, or the use of fertilizers and pesticides for the purpose of managing and maintaining native vegetation is allowed with approval of the Community. Noxious weeds may be removed and mechanical or spot herbicide treatments may be used to control noxious weeds, but aerial or broadcast spraying is not acceptable. Prohibited alterations would not include plantings that enhance the natural vegetation or selective clearing or pruning of trees or vegetation that

are dead, diseased or pose similar hazards, or as otherwise clarified in Standard F.

- F. The following activities shall be permitted within any buffer, and shall not constitute prohibited alterations:
1. The following activities are allowed within both the minimum and average buffer width areas:
 - a. Use and maintenance of an unimproved access strip through the buffer, not more than 10 feet in width, for recreational access to the major waterway or wetland and the exercise of riparian rights.
 - b. Structures that exist when the buffer is created.
 - c. Placement, maintenance, repair, or replacement of public roads and utility and drainage systems that exist on creation of the buffer or are required to comply with any subdivision approval or building permit obtained from the Community, so long as any adverse impacts of public road, utility, or drainage systems on the function of the buffer have been avoided or minimized to the extent practical.
 - d. Clearing, grading, and seeding is allowed if part of an approved Wetland Replacement Plan, or approved Stream Restoration Plan.
 - e. A multipurpose trail through an area protected by conservation easement or in a dedicated outlot is allowed, provided it is designed and constructed to minimize erosion and new impervious surfaces, maintains an absolute minimum distance of at least fifteen feet as measured from the edge of the trail nearest the water resource to the wetland or public waters wetland edge, the bank of the watercourse, or the meander belt, and averages at least one-half the total VRWJPO identified buffer width. Where needed to cross the watercourse, the minimum impact alignment shall be used. The area between the trail and the water resource must be maintained in perennial vegetation in an undisturbed state excepting regular required maintenance of the buffer. Boardwalks and pedestrian bridges associated with a multipurpose trail must be approved by the Community or the VRWJPO.
 - f. The construction of underground utilities such as water, stormwater, and sanitary sewers and pipelines provided the minimum impact alignment is used, the area is stabilized in accordance with Standard 8.06B above, and setbacks established in the Floodplain Alterations Standard 9.03D are met.
 2. The following activities are allowed within those portions of the average buffer width that exceed the minimum buffer width:
 - a. Stormwater management facilities, provided the land areas are stabilized in accordance with Standard 8.06B above, and alterations prohibited in Standard 8.06E above are upheld.
 - b. The area of shallow vegetated infiltration and biofiltration facilities, and water quality ponds not to exceed 50 percent of the pond area, adjacent to wetlands and major waterways may be included in buffer averaging provided the facilities do not encroach into the minimum buffer width, and the land areas are stabilized in accordance with Standard 8.06C above, and alterations prohibited in Standard 8.06E above are upheld.

8.07 Exceptions.

- A. The Buffer Standards do not apply to any wetland or public waters wetland with an

applicable exemption listed under the WCA, and to those portions of wetlands that will be filled under approved wetland replacement plans per the WCA.

- B. Community Comprehensive Wetland Management Plans which prescribe required buffer widths shall be compliant with standards set by the VRWJPO; applicable ordinances governing widths, restrictions, allowable uses, and monumentation must meet or exceed the requirements set by the VRWJPO.
- C. The Buffer Standards for Water Quality Corridors do not apply to lots of record as of the date of the published VRWJPO Rules, October 8, 2007, that are less than one acre in size.
- D. The Buffer Standards do not apply to existing outlots that received preliminary plat approval in the two year period (or more if the preliminary plat approval was extended by the Community) preceding the date of the published VRWJPO Rules, October 8, 2007.
- E. Where a stream meandering project has been completed, the buffer width shall be established by the Community and shall be no less than the minimum.
- F. The Buffer Standards do not apply to lots created that are enrolled in Green Acres, Rural Preserves, Agricultural Preserves, or similar agricultural or rural preservation programs controlling or limiting the potential for future lot subdivision or development, as part of the subdivision process. In areas where land use zoning provides for agricultural zoning with one building eligibility per every quarter of a quarter section (40 acres) of property, the buffer requirement will not be exercised until such time as the land use zoning is changed to an alternate use zoning or a higher density of residential building eligibilities. At that time, the buffer requirement will be fully implemented. For all properties seeking a permit under this exemption, the permit will require that structure setbacks are met which allow the future implementation of the buffer requirement with no impact to permanent structural elements. This exemption does not include transfer of building eligibilities for purposes of clustering.

8.08 Required Submittals. When buffers are established as required in Section 8.02, the following information shall be submitted to the community:

- A. Construction plans and specifications showing the delineated wetland edge, buffer strip location(s), the location of buffer monuments and the location of any temporary fencing required.
- B. A narrative description of each buffer strip identifying its current condition.
- C. A legal description and drawing of each buffer strip, signed forms for conservation easements; or record of an administrative land split, preliminary plat or final plat demonstrating that the buffer area is contained in a dedicated outlot.
- D. A landscaping and vegetation management plan according to Criteria 3 below, including a compliance monitoring and certification plan and a cost estimate, for buffer strips with unacceptable vegetation as defined by Criteria 2 below or where grading in a buffer strip is proposed.

SECTION 9. FLOODPLAIN ALTERATION

9.01 Floodplain Alteration Approval Required. No person or political subdivision shall alter or fill land, or build a structure or infrastructure below the 100-year base flood elevation of any major waterway, public waters, public waters wetland, or other wetland without first obtaining a

permit from the Community or Dakota County, acting as the LGU. Where Dakota County has floodplain management jurisdiction, the provisions of this Section and Dakota County Ordinance No. 50 Shoreland and Floodplain Management Ordinance shall apply.

9.02 Floodplain Management Priorities. The Community establishes the following priorities in managing floodplains:

- A. Protect the natural function of the floodplain storage areas from encroachment.
- B. Manage floodplains to maintain critical 100-year storage volumes.
- C. Limit floodplain alterations in order to obtain “no net loss” of floodplain storage, including the preservation, restoration, and management of floodplain wetlands.
- D. Require compensatory storage for new developments within the floodplain.

9.03 Floodplain Management Standards. Land disturbing activities in or near the 100-year critical flood elevation shall be subject to the following standards.

- A. Floodplain alteration or filling shall not cause a net decrease in flood storage capacity below the projected 100-year critical flood elevation unless it is shown that the proposed alteration or filling, together with the alteration or filling of all other land on the affected reach of the waterbody to the same degree of encroachment as proposed by the applicant, will not cause high water or aggravate flooding on other land and will not unduly restrict flood flows.
- B. Where 100-year flood critical elevations have been established, all new structures shall be constructed with the low floor consistent with the minimum elevations as specified in State of Minn. R. Ch. 6120 Shoreland and Floodplain Management, and Dakota County Ordinance No. 50 Shoreland and Floodplain Ordinance, as applicable.
- C. Projects involving development, redevelopment, or the subdivision of land, shall establish flood storage, flowage, and drainage easements over areas below the 100-year critical flood elevation of any public water, public waters wetland, or wetland.
- D. Setbacks for floodplain alterations, fill, and new underground utilities, such as water, sanitary and storm sewers and interceptors, gas lines, phone lines, and pipelines; shall be established and used along major waterways. These setbacks shall be established as follows: (the exception is for utilities that need to reach or cross the major waterway, provided the minimum impact alignment is used)
 - 1. Where a major waterway has a sinuous flow pattern and a meander belt can be identified, the setback for new underground utilities shall be setback 15 feet from the outer edge of the meander belt.
 - 2. Where a sinuous flow pattern and meander belt are not readily identifiable because of past channel alterations and/or the geomorphology of the channel, the setback established for new underground utilities shall provide for the potential for restoration and a sinuous flow pattern as follows:
 - a. Where there are existing encroachments that limit full restoration of the stream to the meander widths appropriate for the stream type, the setback shall be 15 feet from the reasonably achievable restoration width for the meander belt given the

existing encroachments.

- b. Where full restoration is possible, the setback shall be 15 feet from a meander belt width established along the stream reach that has a width 10 times the bankfull channel width. An assessment of the stream type may be completed, and meander belt widths established according to the stream type, in place of using the above 10x formula. Note: the 1999 Vermillion River Assessment Report, as amended, available at the Dakota County SWCD or the Dakota County offices of the VRWJPO, provides assessment of stream type for many reaches of the Vermillion River.
 3. Where buffers are required, above ground encroachments, alterations, and fill shall be consistent with the prohibited and allowed uses and widths specified in the Buffer Standard.
- E. Projects that alter floodplain boundaries, such as bridge crossings and regional ponds that increase upstream high water levels are allowed provided that:
1. The applicant submits easements or other documentation in a form acceptable to the LGU or the VRWJPO demonstrating and recording the consent of the owner of any land affected by the increased high water levels,
 2. The action is consistent with other portions of these Standards; and Local, State and Federal Regulations, and
 3. The upstream impacts, riparian impacts and habitat impacts of the proposed action are analyzed and no detrimental impacts result, or adverse impacts are mitigated.

9.04 Required Submittals. For any permit required in this Section, the following information shall be submitted to the Community and/or Dakota County:

- A. Site plan showing boundary lines, delineation and existing elevation contours of the work area, ordinary high-water level, and 100-year critical flood elevation. All elevations shall be referenced to NGVD, 1929 datum.
- B. Grading plan showing any proposed elevation changes.
- C. Draft preliminary plat of any proposed subdivision.
- D. Determination by a registered professional engineer of the 100-year critical flood elevation before and after the proposed activity.
- E. Computation of the change in flood storage capacity as a result of the proposed alteration or fill.
- F. Erosion control and sediment plan, or Stormwater Pollution Prevention Plan, which complies with the Stormwater Management Rule.
- G. Soil boring results if available.

SECTION 10. DRAINAGE ALTERATION

10.01 Drainage Alteration Approval Required. No person or political subdivision shall artificially drain surface water, or obstruct or divert the natural flow of runoff so as to affect a drainage system, or harm the public health, safety, or general welfare of the Community, without first obtaining a permit from the Community.

10.02 Drainage System Priorities. The Community establishes the following priorities in managing existing drainage systems:

- A. Use existing natural retention and detention areas for stormwater management to maintain or improve existing water quality.
- B. Manage stormwater to minimize erosion.
- C. Allow outlets from landlocked basins, provided such outlets are consistent with State and Federal regulations, and the downstream impacts, riparian impacts, and habitat impacts of such outlets have been analyzed and no detrimental impacts result.
- D. Mitigate and reduce the impact of past increase in stormwater discharge on downstream conveyance systems.
- E. Address known flooding/erosion problems that cross jurisdictional boundaries and address other boundary issues and the diversion/alteration of watershed flows in local water plans.
- F. Address gully erosion problems in the watershed.
- G. Maximize upstream floodwater storage.

10.03 Drainage Alteration Standards. Land disturbing activities affecting existing drainage systems shall be subject to the following standards.

- A. Outlets from landlocked basins with a tributary drainage area of 100 acres or more will be allowed, provided such outlets are consistent with other portions of these Standards, State and Federal regulations, and the downstream impacts, riparian impacts, and habitat impacts of such outlets have been analyzed and no detrimental impacts result. The analysis and determination of detrimental impacts shall:
 - 1. Use a hydrograph method based on sound hydrologic theory to analyze runoff for the design or analysis of flows and water levels,
 - 2. Ensure a hydrologic regime consistent with the Peak Runoff Rate Control Standards and the Runoff Volume Control Standards of this Ordinance,
 - 3. Ensure the outlet does not create adverse downstream flooding or water quality conditions, or materially affect stability of downstream major waterways,
 - 4. Maintain dead storage within the basin to the extent possible while preventing damage to property adjacent to the basin,
 - 5. Ensure that the low floors of new structures adjacent to the basin are set consistent with the Floodplain Alterations Standards, and
 - 6. Ensure that proposed development tributary to the land-locked basin has incorporated runoff volume control practices to the extent practical.
- B. Artificial drainage, flow obstruction, and diversions involving waterways, public waters, public water wetland, wetlands with drainage areas of 640 acres or more will be allowed provided such alterations or diversions are consistent with other portions of these Standards, State and Federal regulations, and the downstream impacts, riparian impacts and habitat impacts of such alterations or diversions have been analyzed and no detrimental impacts result. Proposals for drainage alterations and diversions shall demonstrate that:
 - 1. There is a reasonable necessity for such drainage alteration or diversion to improve or protect human health and safety, or to improve or protect aquatic resources;
 - 2. Reasonable care has been taken to avoid unnecessary injury to upstream and downstream land;

3. The utility or benefit accruing to the land on which the drainage will be altered reasonable outweighs the gravity of the harm resulting to the land receiving the burden; and
 4. The drainage alteration or diversion is being accomplished by reasonably improving and aiding the normal and natural system of drainage according to its reasonable carrying capacity, or in the absence of a practicable natural drain, a reasonable and feasible artificial drainage system is being adopted.
- C. Drainage alterations, diversions, and landlocked basin outlets shall be provided with stable channels and outfall.

10.04 Exceptions.

- A. No permit shall be required where it is demonstrated that the proposed drainage alteration or diversion does not cause off-site erosion, sedimentation, flooding, or other damage.
- B. The Community may waive the requirements regarding upstream and downstream flooding impacts if the applicant submits easements or other documentation in form acceptable to the Community, demonstrating and recording the consent of the owner of any burdened land to the proposed alteration.

10.05 Required Submittals. For any permit required in this Section, the following information shall be submitted to the Community, the VRWJPO, and Dakota County if the LGU:

- A. Map showing location of proposed alteration and tributary area.
- B. Existing and proposed cross sections and profile of affected drainage area.
- C. Description of bridges or culverts required.
- D. Narrative and calculations verifying compliance with the above criteria.

SECTION 11. APPLICATIONS, PERMIT FEES, ESCROWS, AND SURETY

11.01 Applications. All requests for approvals required by this Ordinance shall be made on application forms or by procedures prescribed by the Community, and reviewed and acted upon through procedures established by the Community, and according to timeframes established by state law.

11.02 Permit Fees. All requests for approvals required in this Ordinance shall be obligated to pay applicable permit fees established by the Community and review procedure fees, including the reimbursement of out-of-pocket expenses incurred by the Community in the review and approval process. Out-of-pocket expenses include but are not limited to consulting fees, other agency review fees, public hearing publications, mailings, and similar expenses.

11.03 Escrow Fund. The Community may require a cash escrow fund, in amounts established by the Community, for the anticipated out-of-pocket expenses incurred by the Community identified in Section 10.02 above. A person seeking approvals from the Community shall be obligated to pay all out-of-pocket expenses regardless of the existence of an escrow fund or the amount required in an escrow fund.

11.04 Financial Surety. The Community may require cash, a letter of credit, performance bond, or other surety, in a form and amount determined by the Community, to guarantee

satisfactory completion of any land disturbing activities and to protect the public health, safety and welfare.

SECTION 12. APPEALS AND VARIANCES

Appeals for the interpretation of any provision of this Ordinance and variances from the literal application of the provisions in this Ordinance may be appropriate in certain circumstances. The appeals and variance procedures to consider interpretations or relief from the provisions of this Ordinance shall follow the procedures and requirements, and shall require the same findings and considerations for granting appeals or variances, as are prescribed in the Community Zoning Ordinance. In addition to the Community's appeals and variance procedures, written notification shall be made by the Community to the VRWJPO of any proposed appeal or variance proceeding no later than at the time notice of the proceeding is delivered to the official newspaper for publication. The Community must take into consideration any comments from the VRWJPO before acting on any appeal or variance.

SECTION 13. AMENDMENTS

Amendments to this ordinance may be initiated by petition of any person or by direction of the Community. Any consideration for an amendment to this Ordinance shall require a public hearing, including publication of the public hearing according to law. The public hearing may be held by the Planning Commission or the governing body, as determined by the Community. Prior to action on any amendment to this Ordinance by the governing body, the Community must forward a notice of the public hearing to the VRWJPO at the time notice of the proceeding is delivered to the official newspaper for publication. The Community must review and consider any comments from the VRWJPO prior to acting on any amendment.

SECTION 14. ABROGATION AND STRICTER PROVISIONS

It is not intended by this Ordinance to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. Where any provision of this Ordinance conflicts with a provision of other Community ordinances, the stricter provisions shall prevail.

SECTION 15. VIOLATIONS AND PENALTIES

15.01 Civil Remedy. In the event of a violation of this Ordinance, the Community may institute appropriate actions or proceedings to include injunctive relief to prevent, restrain, correct or abate such violations or threatened violations, and the Community Attorney may institute such action.

15.02 Criminal Remedy. Any person, who violates any of the provision of this Ordinance or who fails to comply with any provision of this Ordinance or who makes any false statement in any document submitted under this Ordinance, shall be guilty of a misdemeanor and, upon conviction thereof, shall be punished as provided by law. Each day that a violation continues shall constitute a separate offense.

SECTION 16. SEVERABILITY

If any section, clause, provision or portion of this ordinance is adjudged unconstitutional or

invalid by a court of law, the remainder of this Ordinance shall not be affected and shall remain in full force.

SECTION 17. REPEAL AND REPLACEMENT

This Ordinance repeals and replaces Ordinance No._____, adopted on_____, 2009.

SECTION 18. EFFECTIVE DATE

This Ordinance shall be in full force and effect from and after its passage and publication according to law.

Adopted this ____ day of _____ 2010 by the Board of Supervisors of _____ Township, MI

ATTEST:

_____, Chair

_____, Clerk

Official summary published in the _____ on _____, 2021.

APPENDIX A

Map 1 – Stream Classifications and Buffer Standards