



# MANKATO'S WATER RESOURCE RECOVERY FACILITY...A REGIONAL ASSET



The City of Mankato seeks a \$44.5 million bonding appropriation (H.F. 145 and S.F. 190) to fund a portion of the \$89 million cost.



## HIGHLIGHTS

Mankato's Water Resource Recovery Facility:

- Is a regional asset that serves about 65,000 people in Eagle Lake, Madison Lake, North Mankato, Skyline, South Bend Township, the Lake Washington Sanitary Sewer District and Mankato.
- Removes 95 percent of the phosphorus that comes into the facility and discharges phosphorus at approximately 75 percent below the permitted discharge limit allowing for trading to occur with partners where improvements necessary to meet treatment requirements may not be financially feasible.
- Supplies reclaimed water to a local energy company for cooling, which helps reduce phosphorous levels discharged into the river and avoids depleting water from deep aquifers by approximately 400 million gallons per year. Secondary benefits include reuse for irrigation and street sweeping.
- Provides nutrient rich biosolids to agricultural partners in the surrounding townships that supports approximately 300 acres of corn and soybean production annually.
- Relieves phosphorous trading partners from making major capital investments. These partners include the cities of Walnut Grove and Granite Falls, the Lower Sioux Indian Community, Granite Falls Energy and Archer Daniels Midland (ADM) in Marshall.

The City of Mankato:

- Supports surrounding communities by sharing information to help them reduce inflow and infiltration entering the sanitary system.
- Proactively looks for opportunities to reduce phosphorous discharges and increase biosolids by working with partners in agriculture production and other communities in the Minnesota River Basin.



## CONTACT

Susan MH Arntz, City Manager  
Office: (507) 387-8695  
sarntz@mankatomn.gov



## WHY IS FUNDING NEEDED?

- **Build regional resiliency.** Jurisdictions served by Mankato's Water Resource Recovery Facility generally do not have the funding available to build and/or maintain their own wastewater treatment facility. By serving the region, Mankato's facility provides access to quality wastewater treatment at a reasonable cost. Mankato's phosphorous trading partners benefit because they do not have the funding needed to make major capital improvements that would meet effluent standards.
- **Benefit the environment.** Capturing more biogas, a natural energy source produced by the breakdown of organic matter, helps reduce use of natural gas, storage and hauling needs for biosolids and the potential for landfilling biosolids. This decreases capital and operations costs, which protects rate payers from swings due to volatility in fuel costs.
- **Address growth needs.** Although the facility is designed to treat 11.25 million gallons of wastewater per day, solids handling limits the ability to effectively meet this capacity. Expansion allows opportunities for additional regionalization, providing effective wastewater treatment through economies of scale.
- **Replace aging infrastructure.** The facility is more than 65 years old. Many of the items that need to be replaced have been operating since the facility first opened in the 1950's. Most of the items have been modified or repurposed during subsequent facility improvements and have now reached the end of their useful life.
- **Update technology.** Technology has made significant changes in how the wastewater treatment process works. Updates will bring technology current to help more efficiently operate the facility.



"This regional facility is an asset that serves people in six communities. If not funded, the financial impact to these communities will be significant."  
Susan MH Arntz, Mankato City Manager





## WHO BENEFITS?

People who live in:

- Eagle Lake
- Madison Lake
- North Mankato
- Skyline
- Walnut Grove
- Granite Falls
- Lower Sioux Indian Community
- South Bend Township
- Lake Washington Sanitary Sewer District
- Mankato



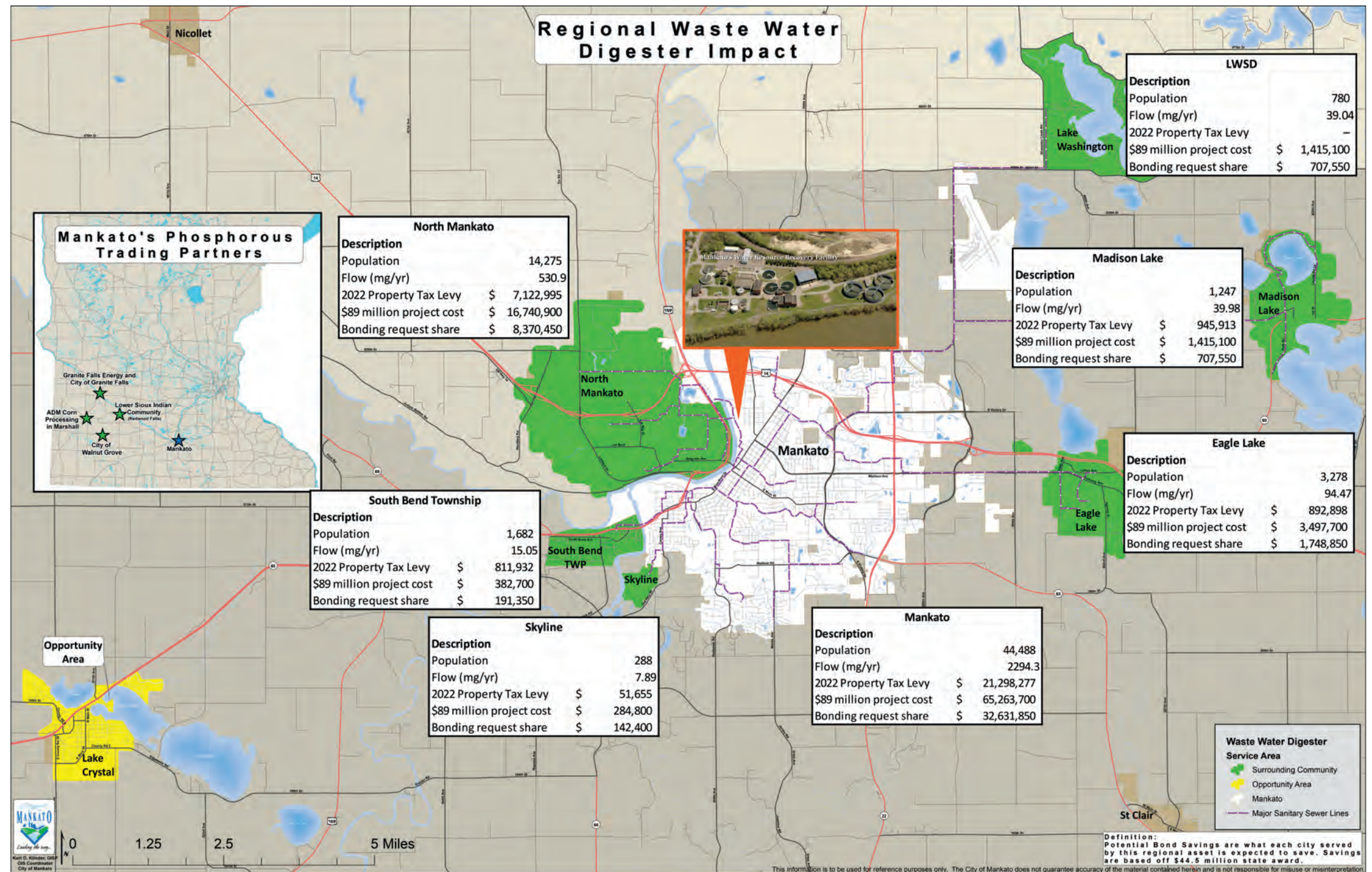
## BONDING REQUEST: \$44.5 MILLION

Total project cost: \$89 million

## WHAT WILL FUNDING BE USED FOR?

To improve the digestion process and solids handling by replacing equipment more than 65 years old and at the end of their useful life.

# WATER RESOURCE RECOVERY FACILITY



## WHAT HAPPENS IF FUNDING ISN'T PROVIDED?



- Surrounding jurisdictions will face large financial and economic challenges in trying to find a way to provide wastewater treatment services to their communities.
- Biosolids will increase in landfills rather than being used as a beneficial nutrient by the region's local agricultural community.
- Maintenance costs will continue to rise and affect affordability for rate payers. Without these necessary and important updates, the asset will decline and eventually fail.
- With limited capacity, the facility will be incapable of serving additional communities. The City of Lake Crystal has needs to replace their wastewater treatment facility and connection to the regional facility is the preferred option.







# MANKATO'S WATER RESOURCE RECOVERY FACILITY COST OVERVIEW

PROJECT ASPECTS	JUNE 2021 REQUEST COSTS	2023 REQUEST COSTS
General Requirements	\$2,857,658.96	\$6,873,267.10
Sitework	\$5,672,619.66	\$13,643,835.97
Preliminary Treatment	\$1,095,574.79	\$2,635,086.37
Secondary Treatment	\$66,650.94	\$160,309.44
Disinfection	\$3,963,647.96	\$9,533,401.82
Solids Processing Building	\$431,148.25	\$1,037,001.67
Digester Control Building	\$6,949,401.68	\$16,714,763.61
Digester 1, 2, & 3	\$3,262,771.69	\$7,847,647.90
Sludge Storage Tank	\$273,893.70	\$658,771.59
Digester Gas Storage	\$941,444.50	\$2,264,370.79
Biosolids Storage Facility	\$2,565,019.68	\$6,169,408.48
Septage Receiving Improvements	\$546,745.97	\$1,315,038.35
Operations Building	\$2,801,422.23	\$6,738,006.01
<b>Construction Total</b>	<b>\$31,428,000.00</b>	<b>\$75,590,909.10</b>
Contingency	\$7,545,000.00	\$7,559,090.91
<b>Total Probable Construction Cost</b>	<b>\$38,970,000.00</b>	<b>\$83,150,000.01</b>
Engineering and Administration	\$5,850,000.00	\$5,850,000.00
<b>Total Project Cost</b>	<b>\$44,820,000.00</b>	<b>\$89,000,000.00</b>

PROJECT FUNDING	JUNE 2021 REQUEST COSTS	2023 REQUEST COSTS
PFA - Loan	\$21,420,000.00	\$37,500,000.00
PSIG Grant	\$3,400,000.00	\$7,000,000.00
State Bonding Request	\$20,000,000.00	\$44,500,000.00
<b>Total</b>	<b>\$44,820,000.00</b>	<b>\$89,000,000.00</b>

## INFLATIONARY ADJUSTMENTS

- Structural steel and rebar - multiple increases (account for ~\$65% of project).
- Precast and prestressed concrete - cost increases and lead times of up to a year or more.
- Majority of pumps and motors are custom manufactured with steel and microchips that continue to have supply chain pressures.

**\*Note - The scope of the project has not changed over this timeframe shown.**



**RESOLUTION SUPPORTING STATE BONDING FOR THE REGIONAL  
WATER RESOURCE RECOVERY FACILITY**

WHEREAS, the City of Mankato provides sewer and wastewater services to its residents and that sewage and wastewater is treated at the City of Mankato Wastewater Recovery Resource Facility (WRRF) to ensure that the water meets state and federal water quality standards before it is discharged into the Minnesota River, and

WHEREAS, the City of Mankato is supportive of a regional bonding appropriation request along with six other partner Greater Mankato Jurisdictions, that will have significant regional impact; and

WHEREAS, by processing wastewater through the Mankato WRRF, the City of Mankato has avoided building a separate facility and has saved its ratepayers and the state from the additional cost of building and operating a separate facility, and

WHEREAS, the Mankato WRRF is aging and requires upgrades that will cost an estimated \$89 Million to continue operating and to meet current and future water quality regulations, and

WHEREAS, providing \$44.5 Million in bond appropriations to finance this upgrade to the Mankato WRRF will keep our sewer rates affordable, and

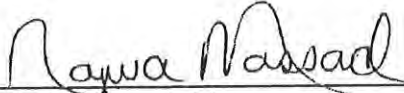
WHEREAS, upgrading the WRRF will protect and preserve Minnesota waters downstream of our city benefiting Minnesota residents throughout the state;

BE IT RESOLVED that the City Council of Mankato, Minnesota urges through this Resolution to Minnesota Legislature pass a bonding bill that includes \$44.5 Million to pay for the Mankato WRRF and that Governor Tim Walz sign such a bonding bill;

BE IT FURTHER RESOLVED that this resolution be transmitted Senator Nick Frentz, Representative Luke Fredrick, Representative Jeff Brand, Speaker of the House Melissa Hortman, Senate Majority Leader Kari Dziedzic, House Minority Leader Lisa Demuth, Senate Minority Leader Melissa López Franzen, and Governor Tim Walz.

This resolution shall become effective upon its adoption and without publication.

Passed this 9<sup>th</sup> day of January 2023

  
\_\_\_\_\_  
Najwa Massad, Mayor

ATTEST:

  
\_\_\_\_\_  
Renae Kopischke, MMC, City Clerk

**Resolution Supporting State Bonding for the  
Regional Water Resource Recovery Facility**

WHEREAS, the City of North Mankato provides sewer and wastewater services to its residents, and that sewage and wastewater are treated at the City of Mankato Wastewater Recovery Resource Facility (WRRF) to ensure that the water meets state and federal water quality standards before it is discharged into the Minnesota River, and

WHEREAS, the City of North Mankato is supportive of a regional bonding appropriation request along with six other partners Greater Mankato Jurisdictions, that will have a significant regional impact; and

WHEREAS, by processing wastewater through the Mankato WRRF, the City of North Mankato has avoided building a separate facility and has saved its ratepayers and the state from the additional cost of building and operating a separate facility, and

WHEREAS, the Mankato WRRF is aging and requires upgrades that will cost an estimated \$89 Million to continue operating and to meet current and future water quality regulations, and

WHEREAS, providing \$44.5 Million in bond appropriations to finance this upgrade to the Mankato WRRF will keep our sewer rates affordable, and

WHEREAS, upgrading the WRRF will protect and preserve Minnesota waters downstream of our city, benefiting Minnesota residents throughout the state;

BE IT RESOLVED that the City Council of the City of North Mankato, Minnesota, urges through this Resolution to Minnesota Legislature to pass a bonding bill that includes \$44.5 Million to pay for the Mankato WRRF and that Governor Tim Walz sign such a bonding bill;

BE IT FURTHER RESOLVED that this resolution be transmitted to Senator Nick Frentz, Representative Luke Fredrick, Representative Jeff Brand, Speaker of the House Melissa Hortman, Senate Majority Leader Kari Dziedzic, House Minority Leader Lisa Demuth, Senate Minority Leader Melissa López Franzen, and Governor Tim Walz.

Adopted January 17, 2023.

  
\_\_\_\_\_  
Mayor

Attest:

  
\_\_\_\_\_  
City Clerk

**Resolution No. 2023-10: A Resolution Supporting State Bonding for the  
Regional Water Resource Recovery Facility**

City of Eagle Lake

WHEREAS, the City of Eagle Lake provides sewer and wastewater services to its residents and that sewage and wastewater is treated at the City of Mankato Wastewater Recovery Resource Facility (WRRF) to ensure that the water meets state and federal water quality standards before it is discharged into the Minnesota River, and

WHEREAS, the City of Eagle Lake is supportive of a regional bonding appropriation request along with six other partner Greater Mankato Jurisdictions, that will have significant regional impact; and

WHEREAS, by processing wastewater through the Mankato WRRF, the City of Eagle Lake has avoided building a separate facility and has saved its ratepayers and the state from the additional cost of building and operating a separate facility, and

WHEREAS, the Mankato WRRF is aging and requires upgrades that will cost an estimated \$89 Million to continue operating and to meet current and future water quality regulations, and

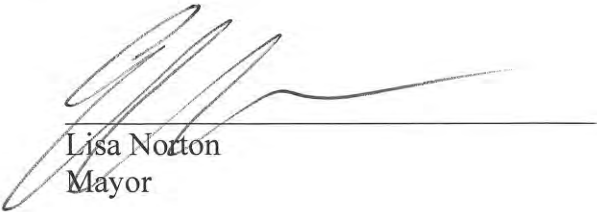
WHEREAS, providing \$44.5 Million in bond appropriations to finance this upgrade to the Mankato WRRF will keep our sewer rates affordable, and

WHEREAS, upgrading the WRRF will protect and preserve Minnesota waters downstream of our city benefiting Minnesota residents throughout the state;


**BE IT RESOLVED that the City Council of Eagle Lake, Minnesota urges through this Resolution that the Minnesota Legislature pass a bonding bill that includes \$44.5 Million to pay for the Mankato WRRF and that Governor Tim Walz sign such a bonding bill;**

BE IT FURTHER RESOLVED that this resolution be transmitted to Senator Nick Frentz, Representative Luke Fredrick, Representative Jeff Brand, Speaker of the House Melissa Hortman, Senate Majority Leader Kari Dziedzic, House Minority Leader Lisa Demuth, Senate Minority Leader Melissa López Franzen, and Governor Tim Walz.

Adopted: January 9, 2023.

  
\_\_\_\_\_  
Lisa Norton  
Mayor

Attest:

  
\_\_\_\_\_  
Jennifer J. Bromeland  
City Administrator



**CITY OF MADISON LAKE, MINNESOTA  
BLUE EARTH COUNTY, MINNESOTA  
RESOLUTION #2023-07**

**A RESOLUTION SUPPORTING STATE BONDING FOR THE REGIONAL WATER  
RESOURCE RECOVERY FACILITY**

**WHEREAS**, the City of Madison Lake provides sewer and wastewater services to its residents and that sewage and wastewater is treated at the City of Mankato Wastewater Recovery Resource Facility (WRRF) to ensure that the water meets state and federal water quality standards before it is discharged into the Minnesota River, and

**WHEREAS**, the City of Madison Lake is supportive of a regional bonding appropriation request along with six other partner Greater Mankato Jurisdictions, that will have significant regional impact; and

**WHEREAS**, by processing wastewater through the Mankato WRRF, the City of Madison Lake has saved its ratepayers and the state from the additional cost of building and operating a separate facility, and

**WHEREAS**, the Mankato WRRF is aging and requires upgrades that will cost an estimated \$89 Million to continue operating and to meet current and future water quality regulations, and

**WHEREAS**, providing \$44.5 Million in bond appropriations to finance this upgrade to the Mankato WRRF will keep our sewer rates affordable, and

**WHEREAS**, upgrading the WRRF will protect and preserve Minnesota waters downstream of our city benefiting Minnesota residents throughout the state;

**BE IT RESOLVED** that the City Council of Madison Lake, Minnesota urges through this Resolution to Minnesota Legislature pass a bonding bill that includes \$44.5 Million to pay for the Mankato WRRF and that Governor Tim Walz sign such a bonding bill;

**BE IT FURTHER RESOLVED** that this resolution be transmitted Senator Nick Frenzt, Representative Luke Fredrick, Representative Jeff Brand, Speaker of the House Melissa Hortman, Senate Majority Leader Kari Dziedzic, House Minority Leader Lisa Demuth, Senate Minority Leader Melissa López Franzen, and Governor Tim Walz.

Adopted January 17, 2023.

  
\_\_\_\_\_  
Pat Burt, Mayor Pro-Tem

Attest:

  
\_\_\_\_\_  
Liz Wille, City Administrator

Resolution # 22.32

RESOLUTION OF SUPPORT FOR A FUTURE BONDING BILL  
FOR THE CITY OF MANKATO  
FOR BOARD OF MANAGERS FOR  
LAKE WASHINGTON SANITARY DISTRICT

WHEREAS, the Regular Meeting of the Board of Members on Monday, December 12, 2022, made a motion regarding the future of a bonding bill for a new septic plant with the City of Mankato.

WHEREAS, the Board of Managers unanimously voted to support such a bonding bill.

NOW, THEREFORE, BE IT RESOLVED by the Board of Mangers of the Lake Washington Sanitary District, as follows:

1. Resolution #22.32, Support of the future bonding bill for the City of Mankato for upgrades need to the septic plant.

Dated this 12<sup>th</sup> day of December, 2022.

LAKE WASHINGTON SANITARY DISTRICT

By:   
Its: Chairman

• ATTEST:

By: Carol L Howard  
Carol Howard  
Its: Secretary

I, Carol Howarsd, Secretary of the Lake Washington Sanitary District, do hereby certify that the foregoing resolution was moved for adoption by Board member Aukes and seconded by Board member Dougan and, upon vote being taken thereon, the foregoing resolution was passed by a vote of 4 in favor 0 and against, with 0 abstained.

Dated this 12th day of December 2022.



**RESOLUTION #2023-2**  
**South Bend Township**  
**Blue Earth County, Minnesota**

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**RESOLUTION SUPPORTING STATE BONDING FOR THE  
REGIONAL WATER RESOURCE RECOVERY FACILITY**

WHEREAS, the Town of South Bend provides sewer and wastewater services to its residents in the LeHillier area and that sewage and wastewater is treated at the City of Mankato Wastewater Recovery Resource Facility (WRRF) to ensure that the water meets state and federal water quality standards before it is discharged into the Minnesota River, and

WHEREAS, the Town of South Bend is supportive of a regional bonding appropriation request along with six other partner Greater Mankato Jurisdictions, that will have significant regional impact; and

WHEREAS, by processing wastewater through the Mankato WRRF, the Town of South Bend has avoided building a separate facility and has saved its ratepayers and the state from the additional cost of building and operating a separate facility, and

WHEREAS, the Mankato WRRF is aging and requires upgrades that will cost an estimated \$89 Million to continue operating and to meet current and future water quality regulations, and

WHEREAS, providing \$44.5 Million in bond appropriations to finance this upgrade to the Mankato WRRF will keep our sewer rates affordable, and

WHEREAS, upgrading the WRRF will protect and preserve Minnesota waters downstream of our city benefiting Minnesota residents throughout the state;

BE IT RESOLVED that the Town Board of South Bend, Minnesota urges through this Resolution to Minnesota Legislature pass a bonding bill that includes \$44.5 Million to pay for the Mankato WRRF and that Governor Tim Walz sign such a bonding bill;

BE IT FURTHER RESOLVED that this resolution be transmitted Senator Nick Frentz, Representative Luke Fredrick, Representative Jeff Brand, Speaker of the House Melissa Hortman, Senate Majority Leader Kari Dziedzic, House Minority Leader Lisa Demuth, Senate Minority Leader Melissa López Franzen, and Governor Tim Walz.

Adopted January 10<sup>th</sup>, 2023.

  
Chairperson

Attest:

  
Town Clerk

Councilor Hanson introduced the following resolution and moved for its adoption:

**RESOLUTION 2303**  
**Lake Crystal Resolution on Mankato Water Resource Recovery Facility**

City of Lake Crystal  
State of Minnesota

WHEREAS, the city of Lake Crystal provides sewer and wastewater services to its residents. The facility is aging and will require expensive upgrades to handle the increased volume of a growing community and to treat the water for pollutants as required by the city's National Pollutant Discharge Elimination System permit, and

WHEREAS, having studied the long-term capital and operational costs of building a new wastewater treatment facility and having compared it to the cost of processing its wastewater at the Mankato Water Resource and Recovery Facility (WRRF), the City of Lake Crystal has determined that it is in the economic interest of the city and the State of Minnesota to avoid building its own new wastewater facility and to send its wastewater to the Mankato WRRF for processing, and

WHEREAS, the Mankato WRRF is aging and requires upgrades that will cost \$90 million to continue operating and to meet current and future water quality regulations, and

WHEREAS, without that upgrade the Mankato WRRF will not have the capacity to treat Lake Crystal's wastewater, which would require Lake Crystal to request state funding to build a new facility, and

WHEREAS, upgrading the WRRF will protect and preserve Minnesota waters downstream of our city benefiting Minnesota residents throughout the state; and

WHEREAS, the City of Mankato requires financial assistance from the state to pay for the upgrades to its WRRF to keep its rates affordable for all the residents and businesses served by the regional WRRF;

BE IT RESOLVED that the City Council of Lake Crystal, Minnesota urges through this Resolution to Minnesota Legislature pass a bonding bill that includes \$ 44.5 million to pay for the Mankato WRRF and that Governor Tim Walz sign such a bonding bill;

BE IT FURTHER RESOLVED that this resolution be transmitted to Senator Rich Draheim, Representative Bjorn Olson, Senate Capital Investment Chair Sandy Pappas, Senate Capital Investment Minority Lead Karin Housley, House Capital Investment Chair Fue Lee, House Capital Investment Minority Lead Dean Urdahl, Speaker of the House Melissa Hortman, Senate Majority Leader Kari Dziedzic, House Minority Leader Lisa Demuth, Senate Minority Leader Mark Johnson, and Governor Tim Walz.

The motion for the adoption of the foregoing resolution was seconded by Councilor Hanson and upon a vote being taken thereon, the following voted in favor thereof: Wiens, Windsperger, Turgeon, Hanson, and Cooper.

And the following voted against the same: None

Passed and duly Adopted by the City Council of the City of Lake Crystal this 17<sup>th</sup> day of January, 2023.



Councilor Hanson introduced the following resolution and moved for its adoption:

  
\_\_\_\_\_  
Todd Wiens, Mayor

Attest:

  
\_\_\_\_\_  
Angela Grafstrom, City Administrator