FIVE-YEAR
CAPITAL IMPROVEMENT PLAN

2024

GREEN BAY
WATER

THE MISSION OF THE GREEN BAY WATER UTILITY IS
TO PROVIDE A RELIABLE, HIGH-QUALITY
DRINKING WATER SUPPLY
WITH EXCEPTIONAL CUSTOMER SERVICE AND VALUE.

GREEN BAY WATER UTILITY
CAPITAL IMPROVEMENT PLAN
PROGRAM DEVELOPMENT

It is the intent of the Green Bay Water Utility to maintain a Capital Improvement Plan both to provide physical facilities that are responsive to the needs and demands of the Utility and Utility customers and to be supportive of the long and short range economic, social and environmental development policies of the Utility.

Development of the Five-Year Capital Improvement Plan entails planning together by the various departments within the Utility and with the Business Manager and General Manager. Project requests are submitted by departments in preparation of their operating budget requests. Project and operating budget requests are reviewed by the General Manager in order to develop a capital program and to balance the operating impacts of projects and their funding sources. The Five-Year Capital Improvement Plan is updated each year as an essential component of budget development.

The Five-Year Capital Improvement Plan serves as a planning tool for future growth and development within the Utility. Funds are appropriated in the budget for the current year only, with subsequent years being separately authorized with that year's budget. Sound planning, project descriptions and accurate cost estimates aid in the formulation of a plan that is used as a valuable management tool in accomplishing needed capital improvements within the Utility's ability to pay.

Expenditures consist of a permanent addition to the Utility's assets of major importance and cost and according to Public Service Commission (PSC) definitions. The cost of land acquisition, construction, renovation and equipment are included. Capital Plan assets should have a multi-year useful life or extend the useful life of an existing asset. The Plan includes projects costing approximately $10,000 or greater.

Funding is provided by user fees "rates" charged to the customers who receive services provided by the Utility. Funding can also be generated through the borrowing of funds (principal) at a cost (interest). Revenue bonds are the main instrument used.

Significant operating and maintenance expenses that are related to maintaining the Utility's capital assets are also included. These are non-frequent or one-time expenses that do not meet the PSC definitions of capital assets but that would have significant effects on our operating budget in a given year. Projects costing $300,000 or above are included. These expenses would mostly likely be funded by borrowing of funds and/or recovered through user fees over a number of years.

GREEN BAY WATER UTILITY
CAPITAL IMPROVEMENT PLAN
2023 PROJECT STATUS

Project	Dept.	2023 Budget Amount	2023 Projected or Actual Cost	2023 Projected Status
Firewall Upgrade	Administrative	$ 15,000	-	Carry forward to 2024
Miscellaneous Computer Upgrades	Administrative	20,000	50,000	Complete
Phone System Upgrade	Administrative	65,000	-	Carry forward to 2024
Server Optimization Upgrades and Storage Enhancements	Administrative	30,000	20,000	Complete
Vehicle/Equipment Replacement Program Summary	Distribution	85,000	85,000	Complete
Small Equipment	Distribution	45,000	24,000	Complete
Small Safety Equipment	Distribution	10,000	1,000	Complete
Water Utility Installs of Services, Hydrants, Valves & Mains	Distribution	700,000	750,000	Complete
Cityworks Upgrades and Implementations	Engineering	50,000	100,000	Complete
GIS (ESRI) Upgrade and Implementations	Engineering	10,000	-	Carry forward to 2024
Water Main Relays	Engineering	4,960,000	3,700,000	Complete
Meter Replacement	Metering & Cross Connection	370,225	600,000	Complete
Generator Addition at Lake Station	Pumping	200,000	70,000	Carry forward to 2024
PLC Replacement	Pumping	80,000	100,000	Complete
Vault Replacement - Hwy 54/57	Pumping	80,000	55,000	Carry forward to 2024
Calibration Instrumentation	Treatment	9,500	9,721	Complete
Insertion Mag Meters Project	Treatment	400,000	100,000	Carry forward to 2024
Corrosion Control Upgrade	Treatment	40,000	-	Carry forward to 2024
Lab Equipment	Treatment	40,000	15,000	Complete
		$ 7,209,725	$ 5,679,721	

GREEN BAY WATER UTILITY
CAPITAL IMPROVEMENT PLAN
2024-2028

Page	Project	Dept.	2024	2025	2026	2027	2028	Total
4	Billing System Customer Portal Upgrade	Administrative	$ 205,000	$ -	$ -	$ -	$ -	$ 205,000
5	Computer System Upgrades	Administrative	50,000	30,000	30,000	30,000	30,000	170,000
6	Firewall Upgrade	Administrative	15,000	-	-	-	-	15,000
7	Phone System Replacement	Administrative	50,000	-	-	-	-	50,000
8	Server Optimization Upgrades & Storage Enhancements	Administrative	100,000	30,000	30,000	30,000	30,000	220,000
9	Village of Pulaski Water Main*	Administrative	1,230,000	-	-	-	-	1,230,000
10	Village of Luxemburg Water Main*	Administrative	-	1,230,000	-	-	-	1,230,000
11	Vehicle/Equipment Replacement Program Summary	Distribution	770,000	710,000	735,000	820,000	321,000	3,356,000
12-16	Distribution Vehicles							
17-18	Metering & Cross Connection Vehicles							
19-20	Office & Engineering Vehicles							
21-24	Pumping Vehicles							
25-26	Treatment Vehicles							
27	Small Equipment	Distribution	25,000	25,000	25,000	25,000	25,000	125,000
28	Small Safety Equipment	Distribution	10,000	10,000	10,000	10,000	10,000	50,000
29	Water Utility Installs of Services, Hydrants, Valves & Mains	Distribution	750,000	750,000	750,000	750,000	750,000	3,750,000
30	36-Inch Transmission Main Segment Replacements*	Engineering	400,000	100,000	-	-	-	500,000
31	Cityworks Upgrade & Implementation	Engineering	30,000	100,000	50,000	20,000	20,000	220,000
32	GIS (ESRI) Upgrade & Implementation	Engineering	150,000	30,000	50,000	10,000	10,000	250,000
33-37	Water Main Relays	Engineering	5,060,000	6,510,000	6,530,000	3,190,000	5,030,000	26,320,000
38	Meter Replacement	Metering & Cross Connection	320,000	365,500	473,000	556,000	707,000	2,421,500
39	Chlorine System Upgrade at Lake Station	Pumping	180,000	-	-	-	-	180,000
40	Generator Addition at Lake Station*	Pumping	1,000,000	4,000,000	5,950,000	-	-	10,950,000
41	Radio Replacement	Pumping	150,000	-	-	-	-	150,000
42	Vault Replacement - Hwy 54/57	Pumping	90,000	-	-	-	-	90,000
43	PLC Replacement - All Stations	Pumping	-	300,000	-	-	-	300,000
44	Water Tower - Bader Zone	Pumping	-	-	300,000	5,300,000	-	5,600,000
45	Corrosion Control Upgrade	Treatment	100,000	600,000	-	-	-	700,000
46	Insertion Mag Meters*	Treatment	325,000	-	-	-	-	325,000
47	Lab Equipment	Treatment	40,000	40,000	40,000	40,000	40,000	200,000
48	SCADA Software Upgrade	Treatment	200,000	-	-	-	-	200,000
49	Filter Media	Treatment	-	300,000	-	-	-	300,000
50	Lab Addition	Treatment	-	550,000	-	-	-	550,000
51	Diesel Generator Replacement	Treatment	-	-	375,000	-	-	375,000
52	Residuals Management Project*	Treatment	-	-	-	6,000,000	-	6,000,000
	Total Project Costs		$ 11,250,000	$ 15,680,500	$ 15,348,000	$ 16,781,000	$ 6,973,000	$ 66,032,500
	Funding Sources:							
	Water User Fees		$ 8,295,000	$ 10,450,500	$ 9,398,000	$ 10,781,000	$ 6,973,000	$ 45,897,500
	Revenue Bonds/Safe Drinking Water Loan*		2,955,000	5,230,000	5,950,000	6,000,000	-	20,135,000
	Total Funding Sources		$ 11,250,000	$ 15,680,500	$ 15,348,000	$ 16,781,000	$ 6,973,000	$ 66,032,500

See pages 53-58 for Significant Operating and Maintenance Expenses

GREEN BAY WATER UTILITY
CAPITAL IMPROVEMENT PLAN
PROJECT REQUEST FOR 2024 - 2028

Project Title: Billing System Customer Portal Upgrade

Department: Administration

Project Description & Justification:

Our current customer portal included in our billing software (NorthStar) is eCare. This upgrade is mandatory due to security and the old system will not be supported. The new customer portal is SilverBlaze. This customer portal enhances mobile customer experiences and provides more user-friendly access to their utility account information.

Impact on On-going Operating Costs/Personnel Requirements:

The annual license subscription will increase approximately $55,000. This will cover all 5 utilities that we bill for.

COST ANALYSIS
Estimated Cash Summary

2024	2025	2026	2027	2028	Total
$ 205,000	$ -	$ -	$ -	$ -	$ 205,000

GREEN BAY WATER UTILITY
CAPITAL IMPROVEMENT PLAN
PROJECT REQUEST FOR 2024 - 2028

Project Title: Computer System Upgrades

Department: Administrative

Project Description & Justification:

Miscellaneous hardware replacements and software updates on desktop computers, laptops, printers etc. Increase in 2024 replacements to handle new phone system allowing virtual phones.

Impact on On-going Operating Costs/Personnel Requirements:

N/A

COST ANALYSIS
Estimated Cash Summary

2024	2025	2026	2027	2028	Total
$ 50,000	$ 30,000	$ 30,000	$ 30,000	$ 30,000	$ 170,000

GREEN BAY WATER UTILITY
CAPITAL IMPROVEMENT PLAN
PROJECT REQUEST FOR 2024 - 2028

Project Title: Firewall Upgrade

Department: Administrative

Project Description & Justification:

Firewall upgrade will be needed for hardware to stay current with cybersecurity standards. This will be completed in conjunction with the phone system upgrade.

Impact on On-going Operating Costs/Personnel Requirements:

N/A

COST ANALYSIS
Estimated Cash Summary

2024	2025	2026	2027	2028	Total
$ 15,000	$ -	$ -	$ -	$ -	$ 15,000

GREEN BAY WATER UTILITY
CAPITAL IMPROVEMENT PLAN
PROJECT REQUEST FOR 2024 - 2028

Project Title: Phone System Replacement

Department: Administrative

Project Description & Justification:

This project was started by analyzing the needs of the Utility. The City upgraded their system a couple of years ago. We are able to partner with the City on their phone system and equipment. The phone system upgrade is needed for hardware to stay current with hardware and software technology standards. Additional features and capacity will be needed to meet the demands of our billing customers, citizens and staff. The project will be started in late 2023 and completed by first quarter of 2024.

Impact on On-going Operating Costs/Personnel Requirements:

N/A

COST ANALYSIS
Estimated Cash Summary

2024	2025	2026	2027	2028	Total
$ 50,000	$ -	$ -	$ -	$ -	$ 50,000

GREEN BAY WATER UTILITY
CAPITAL IMPROVEMENT PLAN
PROJECT REQUEST FOR 2024 - 2028

Project Title: Server Optimization Upgrades & Storage Enhancements

Department: Administrative

Project Description & Justification:

In 2024, the server room will need to be overhauled. All hardware and software will need to be replaced to increase data storage. In future years we will continue to upgrade servers to current Microsoft Operating System and upgrade and add to the hardware at the main office and filter plant based on additional building and operational needs.

Impact on On-going Operating Costs/Personnel Requirements:

N/A

COST ANALYSIS
Estimated Cash Summary

2024	2025	2026	2027	2028	Total
$ 100,000	$ 30,000	$ 30,000	$ 30,000	$ 30,000	$ 220,000

GREEN BAY WATER UTILITY
CAPITAL IMPROVEMENT PLAN
PROJECT REQUEST FOR 2024 - 2028

Project Title: Village of Pulaski Water Main

Department: Administrative

Project Description & Justification:

Contribution to construction based on Pulaski guaranteeing 0.325 MGD usage.

Impact on On-going Operating Costs/Personnel Requirements:

N/A

COST ANALYSIS
Estimated Cash Summary

2024	2025	2026	2027	2028	Total
$ 1,230,000	$ -	$ -	$ -	$ -	$ 1,230,000

GREEN BAY WATER UTILITY
CAPITAL IMPROVEMENT PLAN
PROJECT REQUEST FOR 2024 - 2028

Project Title: Village of Luxemburg Water Main

Department: Administrative

Project Description & Justification:

Contribution to construction based on Luxemburg guaranteeing 0.325 MGD usage.

Impact on On-going Operating Costs/Personnel Requirements:

N/A

COST ANALYSIS
Estimated Cash Summary

2024	2025	2026	2027	2028	Total
$ -	$ 1,230,000	$ -	$ -	$ -	$ 1,230,000

GREEN BAY WATER UTILITY
CAPITAL IMPROVEMENT PLAN
VEHICLE/EQUPMENT REPLACEMENT PROGRAM SUMMARY
2024 - 2028

2024

ID	Year	Make	Model	Department	Description	Condition	Anticipated miles/hours	Recommended Replacement	Est. Replacement Cost	Disposition
16	2019	Chev	Silverado 3500	Distribution	Crew truck*	7	53,690	55,000 miles	$85,000	Keep - Misc. Fleet
86	2005	Intl	Dump Truck	Distribution	Front line daily usage	4	129,711	100,000 miles	$185,000	Sell
98	2009	Intl	Dump Truck	Distribution	Front line daily usage	4	91,945	100,000 miles	$185,000	Sell
5	2015	Chev	Silverado 2500	Distribution	UDF/service truck	5	111,542	125,000 miles	$75,000	Keep - Misc. Fleet
61	2010	John Deere	Backhoe	Distribution	Limited usage breaker	5	8,368 hours	7,500 hours	$165,000	Sell
308	2017	Chev	Colorado	Pumping	Electrician work truck	5	113,346	125,000 miles	$75,000	Sell or keep
								TOTAL	$770,000	

2025

ID	Year	Make	Model	Department	Description	Condition	Anticipated miles/hours	Recommended Replacement	Est. Replacement Cost	Disposition
95	2009	Ford	F250	Distribution	Valve turner/service truck	6	63,949	125,000 miles	$75,000	Keep - Misc. Fleet
3	2016	Mack	Dump Truck	Distribution	Front line daily usage	6	75,900	100,000 miles	$185,000	Sell
7	2015	Cat	Backhoe	Distribution	Backhoe	5	9,408 hours	7,500 hours	$165,000	Sell
4	2015	Chev	Silverado 2500	Distribution	Locate/service truck #	5	121,000	125,000 miles	$75,000	Keep - Misc. Fleet
111	2008	Chev	2500 Van	Metering	Service van #	2	103,954	125,000 miles	$50,000	Sell or keep
113	2013	Ford	E250 Van	Metering	Service van #	4	126,383	125,000 miles	$50,000	Sell or keep
210	2009	Pont	G6	Office & Eng	IT daily usage #	5	117,885	125,000 miles	$35,000	Sell
307	2017	Chev	Colorado	Pumping	Electrician work truck	5	108,896	125,000 miles	$75,000	Sell or keep
								TOTAL	$710,000	

2026

ID	Year	Make	Model	Department	Description	Condition	Anticipated miles/hours	Recommended Replacement	Est. Replacement Cost	Disposition
18	2019	Chev	Silverado 2500	Distribution	Locate/service truck #	7	118,999	125,000 miles	$75,000	Keep - Misc. Fleet
19	2019	Ford	F350	Distribution	Crew truck*	8	51,444	55,000 miles	$85,000	Keep - Misc. Fleet
429	2013	Vermeer	LP555SDT	Distribution	Limited use vacuum excavator	6	2,012 hours	2,000 hours	$90,000	Sell
9	2016	Frtliner	Dump Truck	Distribution	Front line daily usage	7	81,280	100,000 miles	$185,000	Sell
8	2015	Cat	Backhoe	Distribution	Backhoe	5	10,700 hours	7,500 hours	$165,000	Sell
309	2018	Ford	F250	Pumping	Electrician work truck	7	98,357	125,000 miles	$80,000	Sell or keep
212	2015	Chev	Colorado	Treatment	Foreman truck #	7	107,311	125,000 miles	$55,000	Keep - Misc. Fleet
								TOTAL	$735,000	

2027

ID	Year	Make	Model	Department	Description	Condition	Anticipated miles/hours	Recommended Replacement	Est. Replacement Cost	Disposition
83	2000	GMC	Sierra 2500	Distribution	Mechanic service truck	4	91,055	125,000 miles	$80,000	Sell
64	1991	John Deere	Loader	Distribution	Yard loader	6	6,498 hours	8,000 hours	$235,000	Sell
88	2006	Chev	5500 4 x 4	Distribution	Limited use dump truck	7	40,175	100,000 miles	$100,000	Sell
11	2017	Mack	Dump Truck	Distribution	Front line daily usage	8	82,244	100,000 miles	$185,000	Sell
15	2017	Cat	Backhoe	Distribution	Backhoe	8	8,600 hours	7,500 hours	$165,000	Sell
213	2016	Chev	Colorado	Pumping	Foreman truck #	7	112,650	125,000 miles	$55,000	Keep - Misc. Fleet
								TOTAL	$820,000	

2028

ID	Year	Make	Model	Department	Description	Condition	Anticipated miles/hours	Recommended Replacement	Est. Replacement Cost	Disposition
414	2000	Simco	Drill Rig	Distribution	Limited use drill rig	7	2,071 hours	3,000 hours	$140,000	Sell
114	2013	Ford	E250 Van	Metering	Service van #	6	79,198	125,000 miles	$50,000	Sell or keep
214	2017	Dodge	Journey	Office & Eng	GM daily usage #	9	56,923	125,000 miles	$38,000	Sell
208	2006	GMC	Canyon	Office & Eng	Engineer limited usage #	6	67,180	125,000 miles	$55,000	Sell
305	2019	Chev	Equinox	Treatment	Front line daily usage #	7	155,399	150,000 miles	$38,000	Sell
								TOTAL	$321,000	

Condition 1-10 - (1 = poor, 10 = excellent)

*Crew trucks get replaced every three to five years due to essential reliability. Retired Crew trucks become miscellaneous fleet vehicles used for Distribution maintenance.

#Electric vehicle option

GREEN BAY WATER UTILITY
CAPITAL IMPROVEMENT PLAN
PROJECT REQUEST FOR 2024 - 2028

Project Title: Distribution Vehicles - 2024

Department: Distribution

Project Description & Justification:

$85,000 - Front line daily use crew truck.
#16, a 2019 Chev Silverado 3500 crew truck will remain in the fleet until it reaches its maximum service life and then be retired.

$185,000 - Front line daily use dump truck.
#86 a 2005 International dump truck will be sold.

$185,000 - Front line daily use dump truck.
#98, a 2009 International dump truck will be sold.

$75,000 - Front line daily use UDF/service truck.
#5, a 2015 Chev Silverado 2500 UDF/service truck will remain in the fleet until it reaches its maximum service life and then be retired.

$165,000 - Front line daily use backhoe.
#61, a 2010 John Deere backhoe will be sold.

Impact on On-going Operating Costs/Personnel Requirements:

The major factor for this equipment replacement is mileage and reliability (daily front line use). Given our climate, rust plays a significant role in the longevity of our vehicles/equipment. This type of maintenance is very expensive and often times doesn't last.

COST ANALYSIS
Estimated Cash Summary

2024	2025	2026	2027	2028	Total
$ 695,000	$ -	$ -	$ -	$ -	$ 695,000

GREEN BAY WATER UTILITY
CAPITAL IMPROVEMENT PLAN
PROJECT REQUEST FOR 2024 - 2028

Project Title: Distribution Vehicles - 2025

Department: Distribution

Project Description & Justification:

$75,000 - Front line daily use valve turner mounted/service truck.
#95, a 2009 Ford F250 valve turner mounted/service truck will remain in the fleet until it reaches its maximum service life and then be retired.

$185,000 - Front line daily use dump truck.
#3, a 2016 Mack dump truck will be sold.

$165,000 - Front line daily use backhoe.
#7, a 2015 Cat backhoe will be sold.

$75,000 - Front line daily use locate truck. Electric vehicle option will be evaluated.
#4, a 2015 Chevy 2500 truck will remain in the fleet until it reaches its maximum service life and then be retired.

Impact on On-going Operating Costs/Personnel Requirements:

The major factor for this equipment replacement is mileage and reliability (daily front line use). Given our climate, rust plays a significant role in the longevity of our vehicles/equipment. This type of maintenance is very expensive and often times doesn't last.

COST ANALYSIS
Estimated Cash Summary

2024	2025	2026	2027	2028	Total
$ -	$ 500,000	$ -	$ -	$ -	$ 500,000

GREEN BAY WATER UTILITY
CAPITAL IMPROVEMENT PLAN
PROJECT REQUEST FOR 2024 - 2028

Project Title: Distribution Vehicles - 2026

Department: Distribution

Project Description & Justification:

$75,000 - Front line daily use locate/service truck. Electric vehicle option will be evaluated.
#18, a 2019 Chev Silverado 2500 locate/service truck will remain in the fleet until it reaches its maximum service life and then be retired.

$85,000 - Front line daily use crew truck.
#19, a 2019 Ford F350 crew truck will remain in the fleet until it reaches its maximum service life and then be retired.

$90,000 - Limited use vacuum excavator.
#429, a 2013 Vermeer vacuum excavator will be sold.

$185,000 - Front line daily use dump truck.
#9, a 2016 Freightliner dump truck will be sold.

$165,000 - Front line daily use backhoe.
#8, a 2015 Cat backhoe will be sold.

Impact on On-going Operating Costs/Personnel Requirements:

The major factor for this equipment replacement is mileage and reliability (daily front line use). Given our climate, rust plays a significant role in the longevity of our vehicles/equipment. This type of maintenance is very expensive and often times doesn't last.

COST ANALYSIS
Estimated Cash Summary

2024	2025	2026	2027	2028	Total
$ -	$ -	$ 600,000	$ -	$ -	$ 600,000

GREEN BAY WATER UTILITY
CAPITAL IMPROVEMENT PLAN
PROJECT REQUEST FOR 2024 - 2028

Project Title: Distribution Vehicles - 2027

Department: Distribution

Project Description & Justification:

$80,000 - Limited use mechanic service truck.
#83, a 2000 GMC Sierra 2500 mechanic service truck will be sold.

$235,000 - Limited use yard loader.
#64, a 1991 John Deere loader will be sold.

$100,000 - Limited use utility small dump truck.
#88, a 2006 Chev 5500 4x4 will be sold.

$185,000 - Front line daily use dump truck.
#11, a 2017 Mack dump truck will be sold.

$165,000 - Front line daily use backhoe.
#15, a 2017 Cat backhoe will be sold.

Impact on On-going Operating Costs/Personnel Requirements:

The major factor for this equipment replacements is mileage and reliability (daily front line use). Given our climate, rust plays a significant role in the longevity of our vehicles/equipment. This type of maintenance is very expensive and often times doesn't last.

COST ANALYSIS
Estimated Cash Summary

2024	2025	2026	2027	2028	Total
$ -	$ -	$ -	$ 765,000	$ -	$ 765,000

GREEN BAY WATER UTILITY
CAPITAL IMPROVEMENT PLAN
PROJECT REQUEST FOR 2024 - 2028

Project Title: Distribution Vehicles - 2028

Department: Distribution

Project Description & Justification:

$140,000 - Limited use drill rig.
#414, a 2000 Simco drill rig will be sold.

Impact on On-going Operating Costs/Personnel Requirements:

The major factor for this equipment replacements is mileage and reliability (daily front line use). Given our climate, rust plays a significant role in the longevity of our vehicles/equipment. This type of maintenance is very expensive and often times doesn't last.

COST ANALYSIS
Estimated Cash Summary

2024	2025	2026	2027	2028	Total
$ -	$ -	$ -	$ -	$ 140,000	$ 140,000

GREEN BAY WATER UTILITY
CAPITAL IMPROVEMENT PLAN
PROJECT REQUEST FOR 2024 - 2028

Project Title: Metering & Cross Connection Vehicles - 2025

Department: Distribution

Project Description & Justification:

$50,000 - Front line daily use service van. Electric vehicle option will be evaluated. #111, a 2008 Chev 2500 service van will be sold or remain in the fleet until it reaches its maximum service life and then be retired.

$50,000 - Front line daily use service van. Electric vehicle option will be evaluated. #113, a 2013 Ford E250 service van will be sold or remain in the fleet until it reaches its maximum service life and then be retired.

Impact on On-going Operating Costs/Personnel Requirements:

The major factor for this equipment replacement is mileage and reliability (daily front line use). Given our climate, rust plays a significant role in the longevity of our vehicles/equipment. This type of maintenance is very expensive and often times doesn't last.

COST ANALYSIS
Estimated Cash Summary

2024	2025	2026	2027	2028	Total
$ -	$ 100,000	$ -	$ -	$ -	$ 100,000

GREEN BAY WATER UTILITY
CAPITAL IMPROVEMENT PLAN
PROJECT REQUEST FOR 2024 - 2028

Project Title: Metering & Cross Connection Vehicles - 2028

Department: Distribution

Project Description & Justification:

$50,000 - Front line daily use service van. Electric vehicle option will be evaluated.
#114, a 2013 Ford E250 service van will be sold or remain in the fleet until it reaches its maximum service life and then be retired.

Impact on On-going Operating Costs/Personnel Requirements:

The major factor for this equipment replacements is mileage and reliability (daily front line use). Given our climate, rust plays a significant role in the longevity of our vehicles/equipment. This type of maintenance is very expensive and often times doesn't last.

COST ANALYSIS
Estimated Cash Summary

2024	2025	2026	2027	2028	Total
$ -	$ -	$ -	$ -	$ 50,000	$ 50,000

GREEN BAY WATER UTILITY
CAPITAL IMPROVEMENT PLAN
PROJECT REQUEST FOR 2024 - 2028

Project Title: Office & Engineering Vehicles - 2025

Department: Distribution

Project Description & Justification:

$35,000 - Front line daily use miscellaneous transportation vehicle. Electric vehicle option will be evaluated. #210, a 2009 Pontiac G6 will be sold.

Impact on On-going Operating Costs/Personnel Requirements:

The major factor for this equipment replacement is mileage and reliability (daily front line use). Given our climate, rust plays a significant role in the longevity of our vehicles/equipment. This type of maintenance is very expensive and often times doesn't last.

COST ANALYSIS
Estimated Cash Summary

2024	2025	2026	2027	2028	Total
$ -	$ 35,000	$ -	$ -	$ -	$ 35,000

GREEN BAY WATER UTILITY
CAPITAL IMPROVEMENT PLAN
PROJECT REQUEST FOR 2024 - 2028

Project Title: Office & Engineering Vehicles - 2028

Department: Distribution

Project Description & Justification:

$38,000 - Front line daily use transportation vehicle. Electric vehicle option will be evaluated. #214, a 2017 Dodge Journey will be sold.

$55,000 - Engineering limited use vehicle. Electric vehicle option will be evaluated. #208, a 2006 GMC Canyon will be sold.

Impact on On-going Operating Costs/Personnel Requirements:

The major factor for this equipment replacements is mileage and reliability (daily front line use). Given our climate, rust plays a significant role in the longevity of our vehicles/equipment. This type of maintenance is very expensive and often times doesn't last.

COST ANALYSIS
Estimated Cash Summary

2024	2025	2026	2027	2028	Total
$ -	$ -	$ -	$ -	$ 93,000	$ 93,000

GREEN BAY WATER UTILITY
CAPITAL IMPROVEMENT PLAN
PROJECT REQUEST FOR 2024 - 2028

Project Title: Pumping Vehicles - 2024

Department: Distribution

Project Description & Justification:

$75,000 - Front line daily use electrician work truck.
#308, 2017 Chev Colorado electrician work truck will be sold or remain in the fleet until it reaches the maximum service life and then be retired.

Impact on On-going Operating Costs/Personnel Requirements:

The major factor for this equipment replacement is mileage and reliability (daily front line use). Given our climate, rust plays a significant role in the longevity of our vehicles/equipment. This type of maintenance is very expensive and often times doesn't last.

COST ANALYSIS
Estimated Cash Summary

2024	2025	2026	2027	2028	Total
$ 75,000	$ -	$ -	$ -	$ -	$ 75,000

GREEN BAY WATER UTILITY
CAPITAL IMPROVEMENT PLAN
PROJECT REQUEST FOR 2024 - 2028

Project Title: Pumping Vehicles - 2025

Department: Distribution

Project Description & Justification:

$75,000 - Front line daily use electrician work truck.
#307, 2017 Chev Colorado electrician work truck will be sold or remain in the fleet until it reaches the maximum service life and then be retired.

Impact on On-going Operating Costs/Personnel Requirements:

The major factor for this equipment replacement is mileage and reliability (daily front line use). Given our climate, rust plays a significant role in the longevity of our vehicles/equipment. This type of maintenance is very expensive and often times doesn't last.

COST ANALYSIS
Estimated Cash Summary

2024	2025	2026	2027	2028	Total
$ -	$ 75,000	$ -	$ -	$ -	$ 75,000

GREEN BAY WATER UTILITY
CAPITAL IMPROVEMENT PLAN
PROJECT REQUEST FOR 2024 - 2028

Project Title: Pumping Vehicles - 2026

Department: Distribution

Project Description & Justification:

$80,000 - Front line daily use pumping electrician work truck.
#309, a 2018 Ford F250 electrician work truck will be sold or remain in the fleet until it reaches its maximum service life and then be retired.

Impact on On-going Operating Costs/Personnel Requirements:

The major factor for this equipment replacement is mileage and reliability (daily front line use). Given our climate, rust plays a significant role in the longevity of our vehicles/equipment. This type of maintenance is very expensive and often times doesn't last.

COST ANALYSIS
Estimated Cash Summary

2024	2025	2026	2027	2028	Total
$ -	$ -	$ 80,000	$ -	$ -	$ 80,000

GREEN BAY WATER UTILITY
CAPITAL IMPROVEMENT PLAN
PROJECT REQUEST FOR 2024 - 2028

Project Title: Pumping Vehicles - 2027

Department: Distribution

Project Description & Justification:

$55,000 - Daily use foreman transportation vehicle. Electric vehicle option will be evaluated. #213, a 2016 Chev Colorado foreman truck will remain in the fleet until it reaches its maximum service life and then be retired.

Impact on On-going Operating Costs/Personnel Requirements:

The major factor for this equipment replacement is mileage and reliability (daily front line use). Given our climate, rust plays a significant role in the longevity of our vehicles/equipment. This type of maintenance is very expensive and often times doesn't last.

COST ANALYSIS
Estimated Cash Summary

2024	2025	2026	2027	2028	Total
$ -	$ -	$ -	$ 55,000	$ -	$ 55,000

GREEN BAY WATER UTILITY
CAPITAL IMPROVEMENT PLAN
PROJECT REQUEST FOR 2024 - 2028

Project Title: Treatment Vehicles - 2026

Department: Distribution

Project Description & Justification:

$55,000 - Daily use foreman transportation vehicle. Electric vehicle option will be evaluated. #212, a 2015 Chev Colorado foreman truck will remain in the fleet until it reaches its maximum service life and then be retired.

Impact on On-going Operating Costs/Personnel Requirements:

The major factor for this equipment replacement is mileage and reliability (daily front line use). Given our climate, rust plays a significant role in the longevity of our vehicles/equipment. This type of maintenance is very expensive and often times doesn't last.

COST ANALYSIS
Estimated Cash Summary

2024	2025	2026	2027	2028	Total
$ -	$ -	$55,000	$ -	$ -	$ 55,000

GREEN BAY WATER UTILITY
CAPITAL IMPROVEMENT PLAN
PROJECT REQUEST FOR 2024 - 2028

Project Title: Treatment Vehicles - 2028

Department: Distribution

Project Description & Justification:

$38,000 - Front line daily use transportation vehicle. Electric vehicle option will be evaluated. #305, a 2019 Chev Equinox will be sold.

Impact on On-going Operating Costs/Personnel Requirements:

The major factor for this equipment replacements is mileage and reliability (daily front line use). Given our climate, rust plays a significant role in the longevity of our vehicles/equipment. This type of maintenance is very expensive and often times doesn't last.

COST ANALYSIS
Estimated Cash Summary

2024	2025	2026	2027	2028	Total
$ -	$ -	$ -	$ -	$ 38,000	$ 38,000

GREEN BAY WATER UTILITY
CAPITAL IMPROVEMENT PLAN
PROJECT REQUEST FOR 2024 - 2028

Project Title: Small Equipment

Department: Distribution

Project Description & Justification:

This request is for the purchase of equipment for new vehicle set up and new or replacement equipment ranging in price from $500 - $10,000. Examples include generators, pipe saws, gas and electric pumps, valve operators, trench compactors, inspection cameras, pipe tapping machines, pipe tapping motors, welders, electronic leak detection equipment, GPS locating equipment and torch kits.
The major factor for these equipment replacements is maintenance and reliability (daily front line use).

Impact on On-going Operating Costs/Personnel Requirements:

N/A

COST ANALYSIS
Estimated Cash Summary

2024	2025	2026	2027	2028	Total
$ 25,000	$ 25,000	$ 25,000	$ 25,000	$ 25,000	$ 125,000

GREEN BAY WATER UTILITY
CAPITAL IMPROVEMENT PLAN
PROJECT REQUEST FOR 2024 - 2028

Project Title: Small Safety Equipment

Department: Distribution

Project Description & Justification:

This request is for the replacement of safety equipment ranging in price from $500 - $10,000. Examples would be trench shields, air shores, fin form trench wall plates, large steel shoring plates, davit systems for confined space entry/exit, oxygen monitors and ventilators. The major factor for these equipment replacements is maintenance and reliability (daily front line use).

Impact on On-going Operating Costs/Personnel Requirements:

N/A

COST ANALYSIS
Estimated Cash Summary

2024	2025	2026	2027	2028	Total
$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 50,000

GREEN BAY WATER UTILITY
CAPITAL IMPROVEMENT PLAN
PROJECT REQUEST FOR 2024 - 2028

Project Title: Water Utility Installs of Services, Hydrants, Valves & Mains

Department: Distribution

Project Description & Justification:

Water Utility stand alone installations of services, hydrants & valves along with replacement of mains due to repairs.

Impact on On-going Operating Costs/Personnel Requirements:

N/A

COST ANALYSIS
Estimated Cash Summary

2024	2025	2026	2027	2028	Total
$ 750,000	$ 750,000	$ 750,000	$ 750,000	$ 750,000	$ 3,750,000

GREEN BAY WATER UTILITY
CAPITAL IMPROVEMENT PLAN
PROJECT REQUEST FOR 2024 - 2028

Project Title: 36-Inch Transmission Main Segment Replacements

Department: Engineering

Project Description & Justification:

Replace the pipe segments on the 36" Transmission Mains that were identified with wire breaks from the PipeDiver analysis. Replace the 9 pipe segments with broken wires along Finger Road and the 2 pipe segments along Grandview Road in 2025.

Impact on On-going Operating Costs/Personnel Requirements:

N/A

COST ANALYSIS
Estimated Cash Summary

2024	2025	2026	2027	2028	Total
$ 400,000	$ 100,000	$ -	$ -	$ -	$ 500,000

GREEN BAY WATER UTILITY
CAPITAL IMPROVEMENT PLAN
PROJECT REQUEST FOR 2024 - 2028

Project Title: Cityworks Upgrade & Implementation

Department: Engineering

Project Description & Justification:

Upgrade is needed for 2025 because Cityworks software is moving to a different platform and will not be supported any longer. This also includes consultant costs for Cityworks yearly updates & assistance through Power Engineers.

Impact on On-going Operating Costs/Personnel Requirements:

N/A

COST ANALYSIS
Estimated Cash Summary

2024	2025	2026	2027	2028	Total
$ 30,000	$ 100,000	$ 50,000	$ 20,000	$ 20,000	$ 220,000

GREEN BAY WATER UTILITY
CAPITAL IMPROVEMENT PLAN
PROJECT REQUEST FOR 2024 - 2028

Project Title: GIS (ESRI) Upgrade & Implementation

Department: Engineering

Project Description & Justification:

Upgrade is needed for 2024 because ESRI software is moving to a different platform and our GIS would not be supported any longer. This also includes consultant costs for GIS yearly updates.

Impact on On-going Operating Costs/Personnel Requirements:

N/A

COST ANALYSIS
Estimated Cash Summary

2024	2025	2026	2027	2028	Total
$ 150,000	$ 30,000	$ 50,000	$ 10,000	$ 10,000	$ 250,000

GREEN BAY WATER UTILITY
CAPITAL IMPROVEMENT PLAN
PROJECT REQUEST FOR 2024 - 2028

Project Title: Water Main Relays - 2024

Department: Engineering

Project Description & Justification:

Relays on Resurfacing Streets:
8th Street - $270,000
Baird Street - $110,000
Biemeret Street - $240,000
Crooks Street - $180,000
Deckner Avenue - $160,000
Ethel Avenue - $290,000
Foeller Drive - $200,000
Grognet Street - $110,000
Henry Street - $290,000
Hudson Street - $330,000
Langlade Avenue - $160,000
Lincoln Street - $130,000
Reber Street - $160,000
Roscoe Street - $330,000

Total Footage = 22,000 Feet / 4.17 Miles

Relays on Reconstructed Streets:
Country Club Road - $1,060,000
Finger Road - $300,000
Howard Street - $140,000
Maple Avenue - $110,000
Oakland Avenue - $220,000
School Place - $270,000

Impact on On-going Operating Costs/Personnel Requirements:

N/A

COST ANALYSIS
Estimated Cash Summary

2024	2025	2026	2027	2028	Total
$ 5,060,000	$ -	$ -	$ -	$ -	$ 5,060,000

GREEN BAY WATER UTILITY
CAPITAL IMPROVEMENT PLAN
PROJECT REQUEST FOR 2024 - 2028

Project Title: Water Main Relays - 2025

Department: Engineering

Project Description & Justification:

Relays on Resurfacing Streets:	Relays on Reconstructed Streets:
Amy Street - $220,000	Arndt Street - $110,000
Berger Street - $130,000	Elmore Street - $1,350,000
Biemeret Street - $490,000	Hinkle Street - $130,000
Briquelet Street - $350,000	Irwin Avenue - $80,000
Cedar Street - $220,000	Maple Avenue - $380,000
Clayton Place - $200,000	St. Clair Street - $460,000
Deschane Place - $240,000	Spring Street - $80,000
Frank Street - $70,000	
Oak Grove Avenue - $290,000	
Park Street - $510,000	
Parkwood Court - $70,000	
Rutgers Street - $90,000	
Schoen Street - $220,000	
Servais Street - $400,000	
Steven Street - $350,000	
Wegner Street - $70,000	

Total Footage = 27,200 Feet / 5.15 Miles

Impact on On-going Operating Costs/Personnel Requirements:

N/A

COST ANALYSIS
Estimated Cash Summary

2024	2025	2026	2027	2028	Total
$ -	$ 6,510,000	$ -	$ -	$ -	$ 6,510,000

GREEN BAY WATER UTILITY
CAPITAL IMPROVEMENT PLAN
PROJECT REQUEST FOR 2024 - 2028

Project Title: Water Main Relays - 2026

Department: Engineering

Project Description & Justification:

Relays on Resurfacing Streets:
14th Avenue - $420,000
Alvina Street - $200,000
Bond Street - $130,000
Bretcoe Drive - $200,000
Grouse Court - $70,000
Hillside Lane - $330,000
Irene Street - $90,000
Minor Court - $200,000
Morning Star Court - $50,000
Neufeld Street - $350,000
Raymond Street - $310,000
Rosalie Lane - $220,000
Rufffed Court - $70,000
Skyline Boulevard - $70,000
Skyline Boulevard(ES) - $220,00
Skyline Boulevard(WS) - $110,000
Spence Street - $620,000
Woodruff Court - $70,000

Relays on Reconstructed Streets:
13th Avenue - $570,000
Chicago Street - $80,000
Division Street - $250,000
Hinkle Street - $410,000
Maple Avenue - $190,000
Mather Street - $1,300,000

Total Footage = 25,700 Feet / 4.87 Miles

Impact on On-going Operating Costs/Personnel Requirements:

N/A

COST ANALYSIS
Estimated Cash Summary

2024	2025	2026	2027	2028	Total
$ -	$ -	$ 6,530,000	$ -	$ -	$ 6,530,000

GREEN BAY WATER UTILITY
CAPITAL IMPROVEMENT PLAN
PROJECT REQUEST FOR 2024 - 2028

Project Title: Water Main Relays - 2027

Department: Engineering

Project Description & Justification:

Relays on Resurfacing Streets:
Alpine Drive - $180,000
Columbia Avenue - $460,000
Eastview Drive - $200,000
Lost Lane - $200,000
Minahan Street - $130,000
Park Street - $110,000
Royal Boulevard - $270,000
Royal Boulevard - $110,000
Schwartz Street - $200,000

Relays on Reconstructed Streets:
13th Avenue - $870,000
Congress Street - $110,000
Emilie Street - $350,000

Total Footage = 13,300 Feet / 2.52 Miles

Impact on On-going Operating Costs/Personnel Requirements:

N/A

COST ANALYSIS
Estimated Cash Summary

2024	2025	2026	2027	2028	Total
$ -	$ -	$ -	$ 3,190,000	$ -	$ 3,190,000

GREEN BAY WATER UTILITY
CAPITAL IMPROVEMENT PLAN
PROJECT REQUEST FOR 2024 - 2028

Project Title: Water Main Relays - 2028

Department: Engineering

Project Description & Justification:

Relays on Resurfacing Streets:
Alrose Street - $130,000
Crest Lane - $240,000
Erma Drive - $110,000
Goodell Street - $130,000
Langlade Avenue - $330,000
Maryhill Drive - $250,000
Newberry Avenue - $310,000
Ruffed Court - $50,000
Russell Street - $220,000
St. Lawrence Drive - $240,000
Waverly Place - $130,000

Total Footage = 19,400 Feet / 3.67 Miles

Relays on Reconstructed Streets:
Chestnut Avenue - $190,000
Chicago Street - $350,000
Christiana Street - $270,000
Clay Street - $1,150,000
Quincy Street - $930,000

Impact on On-going Operating Costs/Personnel Requirements:

N/A

COST ANALYSIS
Estimated Cash Summary

2024	2025	2026	2027	2028	Total
$ -	$ -	$ -	$ -	$ 5,030,000	$ 5,030,000

GREEN BAY WATER UTILITY
CAPITAL IMPROVEMENT PLAN
PROJECT REQUEST FOR 2024 - 2028

Project Title: Meter Replacement

Department: Metering & Cross Connection

Project Description & Justification:

Meters are replaced every year according to PSC guidelines. The following is a listing of the number of meters and MTUs that will be purchased each year (including labor):

2024: Meters - 1,778 MTUs - 500
2025: Meters - 500 MTUs - 1,300
2026: Meters - 1,400 MTUs - 1,500
2027: Meters - 2,000 MTUs - 1,500
2028: Meters - 2,500 MTUs - 2,200

Impact on On-going Operating Costs/Personnel Requirements:

N/A

COST ANALYSIS
Estimated Cash Summary

2024	2025	2026	2027	2028	Total
$ 320,000	$ 365,500	$ 473,000	$ 556,000	$ 707,000	$ 2,421,500

GREEN BAY WATER UTILITY
CAPITAL IMPROVEMENT PLAN
PROJECT REQUEST FOR 2024 - 2028

Project Title: Chlorine System Upgrade at Lake Station

Department: Pumping

Project Description & Justification:

This project would take the current system and replace it with the current best practice. All chlorine gas will be in one building including the injection point. This would include moving equipment from the pump station to the chlorine building, adding an additional room inside the chlorine building, and burying new water supply and solution delivery lines between the buildings. This will improve safety of the current dated system by eliminating the long run of vacuum pipe filled with gaseous chlorine and the gas injection point located in the pump station.

Impact on On-going Operating Costs/Personnel Requirements:

N/A

COST ANALYSIS
Estimated Cash Summary

2024	2025	2026	2027	2028	Total
$ 180,000	$ -	$ -	$ -	$ -	$ 180,000

GREEN BAY WATER UTILITY
CAPITAL IMPROVEMENT PLAN
PROJECT REQUEST FOR 2024 - 2028

Project Title: Generator Addition at Lake Station

Department: Pumping

Project Description & Justification:

Install an additional generator including switch gear and accommodating structure at the Lake Station.
Associated engineering work for preparation of plans and specifications to occur in 2023. The reason for the costs spreading over 3 years is that this would potentially go out for bid spring of 2024 with long lead times up to 24 months on some components. Some other work, site prep, and other items will most likely happen in 2025.

Impact on On-going Operating Costs/Personnel Requirements:

Would allow us to run more pumps, improve efficiency and provide greater reliability. This would also bring safer electrical equipment to the generator switchgear and change to a more common voltage.

COST ANALYSIS
Estimated Cash Summary

2024	2025	2026	2027	2028	Total
$ 1,000,000	$ 4,000,000	$ 5,950,000	$ -	$ -	$ 10,950,000

GREEN BAY WATER UTILITY
CAPITAL IMPROVEMENT PLAN
PROJECT REQUEST FOR 2024 - 2028

Project Title: Radio Replacement

Department: Pumping

Project Description & Justification:

Replace outdated data radios at all sites with new radios, antennas and cabling. Radios are obsolete and only one company will fix our existing ones. This will also set the stage for PLC replacement at all sites with the new radios having ethernet connections.

Impact on On-going Operating Costs/Personnel Requirements:

N/A

COST ANALYSIS
Estimated Cash Summary

2024	2025	2026	2027	2028	Total
$ 150,000	$ -	$ -	$ -	$ -	$ 150,000

GREEN BAY WATER UTILITY
CAPITAL IMPROVEMENT PLAN
PROJECT REQUEST FOR 2024 - 2028

Project Title: Vault Replacement - Hwy 54/57

Department: Pumping

Project Description & Justification:

The recently abandoned in place Bay Highlands vault will be removed from its existing location, refurbished and relocated near the Hwy 54/57 well. This relocated vault will replace the existing Hwy 54/57 vault, which is outdated, too small to make upgrades or repairs and is a safety concern being located right off the edge of the highway.

Impact on On-going Operating Costs/Personnel Requirements:

The new vault will allow us to meter & track water entering the Bader Pressure Zone. We will also be able to perform maintenance with only one employee instead of the two we previously had to send out.

COST ANALYSIS
Estimated Cash Summary

2024	2025	2026	2027	2028	Total
$ 90,000	$ -	$ -	$ -	$ -	$ 90,000

GREEN BAY WATER UTILITY
CAPITAL IMPROVEMENT PLAN
PROJECT REQUEST FOR 2024 - 2028

Project Title: PLC Replacement - All Stations

Department: Pumping

Project Description & Justification:

Replace Programmable Logic Controller Systems (PLCs) at all stations. A large number of the current PLCs are over 20 years old and no longer supported. The newer units will ensure replacement parts will be available. Communication to these sites is critical and without the PLC we will not have data, operation nor communication at these sites.

Impact on On-going Operating Costs/Personnel Requirements:

Our pumping staff will be assisting with the installation of the new PLCs to offset vendor cost.

COST ANALYSIS
Estimated Cash Summary

2024	2025	2026	2027	2028	Total
$ -	$ 300,000	$ -	$ -	$ -	$ 300,000

GREEN BAY WATER UTILITY
CAPITAL IMPROVEMENT PLAN
PROJECT REQUEST FOR 2024 - 2028

Project Title: Water Tower - Bader Zone

Department: Pumping

Project Description & Justification:

Install 1 million gallon water tower in Bader zone. Includes the purchase of land and engineering in 2026.

Impact on On-going Operating Costs/Personnel Requirements:

N/A

COST ANALYSIS
Estimated Cash Summary

2024	2025	2026	2027	2028	Total
$ -	$ -	$ 300,000	$ 5,300,000	$ -	$ 5,600,000

GREEN BAY WATER UTILITY
CAPITAL IMPROVEMENT PLAN
PROJECT REQUEST FOR 2024 - 2028

Project Title: Corrosion Control Upgrade

Department: Treatment

Project Description & Justification:

Install new chemical feed system from the results of the pilot plant study. Anticipate this to include chemical day and bulk tanks, metering pumps, containment system, etc. Depending on size of equipment a small addition to the facility might be needed. Engineering for the project is planned for 2024 and installation in 2025.

Impact on On-going Operating Costs/Personnel Requirements:

There will be an on-going chemical cost and maintenance costs for pumps, tanks, etc.

COST ANALYSIS
Estimated Cash Summary

2024	2025	2026	2027	2028	Total
$ 100,000	$ 600,000	$ -	$ -	$ -	$ 700,000

GREEN BAY WATER UTILITY
CAPITAL IMPROVEMENT PLAN
PROJECT REQUEST FOR 2024 - 2028

Project Title: Insertion Mag Meters

Department: Treatment

Project Description & Justification:

An evaluation of existing equipment, conditions and replacement options was performed in 2022. Engineering costs for installation of new insertion mag meters into finished water transmission lines and possible direct purchase of meters will be incurred in 2023. The existing finished water vaults will not allow installation of new equipment. The existing vaults will either need to be renovated or possibly new can style vaults installed. Replace existing finished water venturi meters with insertion mag meters in 2024.

Impact on On-going Operating Costs/Personnel Requirements:

N/A

COST ANALYSIS
Estimated Cash Summary

2024	2025	2026	2027	2028	Total
$ 325,000	$ -	$ -	$ -	$ -	$ 325,000

GREEN BAY WATER UTILITY
CAPITAL IMPROVEMENT PLAN
PROJECT REQUEST FOR 2024 - 2028

Project Title: Lab Equipment

Department: Treatment

Project Description & Justification:

As we continue to expand our lab capabilities we need to purchase new lab equipment.

Impact on On-going Operating Costs/Personnel Requirements:

No new personnel will be needed, but there will most likely be additional operating costs such as equipment maintenance, reagents, etc.

COST ANALYSIS
Estimated Cash Summary

2024	2025	2026	2027	2028	Total
$ 40,000	$ 40,000	$ 40,000	$ 40,000	$ 40,000	$ 200,000

GREEN BAY WATER UTILITY
CAPITAL IMPROVEMENT PLAN
PROJECT REQUEST FOR 2024 - 2028

Project Title: SCADA Software Upgrade

Department: Treatment

Project Description & Justification:

The filter plant and distribution system Supervisory Control and Data Acquisition (SCADA) will need to be upgraded with new hardware and software. The last upgrade was in 2014/15. This would include 11 computers, 19 monitors and 4 printers.

Impact on On-going Operating Costs/Personnel Requirements:

N/A

COST ANALYSIS
Estimated Cash Summary

2024	2025	2026	2027	2028	Total
$ 200,000	$ -	$ -	$ -	$ -	$ 200,000

GREEN BAY WATER UTILITY
CAPITAL IMPROVEMENT PLAN
PROJECT REQUEST FOR 2024 - 2028

Project Title: Filter Media

Department: Treatment

Project Description & Justification:

We will most likely need to add additional filter media in the form of anthracite to each filter. Over time, media is lost from each filter primarily during the filter back wash process.

Impact on On-going Operating Costs/Personnel Requirements:

I do not anticipate any additional costs.

COST ANALYSIS
Estimated Cash Summary

2024	2025	2026	2027	2028	Total
$ -	$ 300,000	$ -	$ -	$ -	$ 300,000

GREEN BAY WATER UTILITY
CAPITAL IMPROVEMENT PLAN
PROJECT REQUEST FOR 2024 - 2028

Project Title: Lab Addition

Department: Treatment

Project Description & Justification:

The upgrade/expansion of the lab will allow for more in house testing of water quality parameters with the goal of achieving improved finished water quality.

Impact on On-going Operating Costs/Personnel Requirements:

There will be additional on-going operating costs for such things as lab equipment maintenance, lab supplies, etc.

COST ANALYSIS
Estimated Cash Summary

2024	2025	2026	2027	2028	Total
$ -	$ 550,000	$ -	$ -	$ -	$ 550,000

GREEN BAY WATER UTILITY
CAPITAL IMPROVEMENT PLAN
PROJECT REQUEST FOR 2024 - 2028

Project Title: Diesel Generator Replacement

Department: Treatment

Project Description & Justification:

The 650 KW diesel generator at the filter plant that provides backup to the ozone facility is approaching 21 years old and needs to be replaced.

Impact on On-going Operating Costs/Personnel Requirements:

I do not anticipate any impact on operating costs and no additional personnel required.

COST ANALYSIS
Estimated Cash Summary

2024	2025	2026	2027	2028	Total
$ -	$ -	$ 375,000	$ -	$ -	$ 375,000

GREEN BAY WATER UTILITY
CAPITAL IMPROVEMENT PLAN
PROJECT REQUEST FOR 2024 - 2028

Project Title: Residuals Management Project

Department: Treatment

Project Description & Justification:

Implement recommendations from the residuals management study that was performed in 2021. This may include the construction of a sanitary sewer, organic removal treatment process or other residuals treatment that will allow for disposal of any solids/sludge that are produced during the treatment process.
This new disposal method will help reduce the amount of concentrated organics that are currently being recycled to the head of the plant. This means a reduction in organics that need to be removed from the water and improved water quality.

Impact on On-going Operating Costs/Personnel Requirements:

There could be additional operating costs, specifically for sending this waste to NEW Water.

COST ANALYSIS
Estimated Cash Summary

2024	2025	2026	2027	2028	Total
$ -	$ -	$ -	$ 6,000,000	$ -	$ 6,000,000

GREEN BAY WATER UTILITY
CAPITAL IMPROVEMENT PLAN - SIGNIFICANT OPERATING AND MAINTENANCE EXPENSES
2024-2028

Page	Project	Dept.	2024	2025	2026	2027	2028	Total
54	Huron Tank Overcoat	Pumping	$ 330,000	$ -	$ -	$ -	$ -	$ 330,000
55	Abandon Highway B Booster	Pumping	-	500,000	-	-	-	500,000
56	Quincy Tank Overcoat	Pumping	-	-	-	270,000	-	270,000
57	Filter Plant 500,000 Gallon Tank Overcoat	Treatment	-	350,000	-	-	-	350,000
58	Sludge Lagoon Dredging #2	Treatment	-	-	-	500,000	-	500,000
	Total Project Costs		$ 330,000	$ 850,000	$ -	$ 770,000	$ -	$ 1,950,000
	Funding Sources:							
	Water User Fees		$ 330,000	$ 850,000	$ -	$ 770,000	$ -	$ 1,950,000
	Revenue Bonds/State Trust Fund Loans		-	-	-	-	-	-
	Total Funding Sources		$ 330,000	$ 850,000	$ -	$ 770,000	$ -	$ 1,950,000

GREEN BAY WATER UTILITY
CAPITAL IMPROVEMENT PLAN - OPERATING AND MAINTENANCE EXPENSES
PROJECT REQUEST FOR 2024 - 2028

Project Title: Huron Tank Overcoat

Department: Pumping

Project Description & Justification:

This would include a cleaning and overcoat on the exterior of the Huron Tank. It is also recommended to spot clean and recoat the dry interior platforms. We would also perform any WDNR code compliance updates as recommended. Overcoating the tank will extend the life of the existing paint system by 30 years.

Impact on On-going Operating Costs/Personnel Requirements:

This project would require a drain down of the tank for approximately 4-6 weeks.

COST ANALYSIS
Estimated Cash Summary

2024	2025	2026	2027	2028	Total
$ 330,000	$ -	$ -	$ -	$ -	$ 330,000

GREEN BAY WATER UTILITY
CAPITAL IMPROVEMENT PLAN - OPERATING AND MAINTENANCE EXPENSES
PROJECT REQUEST FOR 2024 - 2028

Project Title: Abandon Highway B Booster

Department: Pumping

Project Description & Justification:

Abandon Highway B booster including the reservoir.

Impact on On-going Operating Costs/Personnel Requirements:

Lower maintenance costs and streamline pumping operations.

COST ANALYSIS
Estimated Cash Summary

2024	2025	2026	2027	2028	Total
$ -	$ 500,000	$ -	$ -	$ -	$ 500,000

GREEN BAY WATER UTILITY
CAPITAL IMPROVEMENT PLAN - OPERATING AND MAINTENANCE EXPENSES
PROJECT REQUEST FOR 2024 - 2028

Project Title: Quincy Tank Overcoat

Department: Pumping

Project Description & Justification:

This would include a cleaning and overcoat on the exterior of the Quincy Tank. It is also recommended to spot clean and recoat the dry interior platforms. We would also perform any WDNR code compliance updates as recommended. Overcoating the tank will extend the life of the existing paint system by 30 years.

Impact on On-going Operating Costs/Personnel Requirements:

This project would require a drain down of the tank for approximately 4-6 weeks.

COST ANALYSIS
Estimated Cash Summary

2024	2025	2026	2027	2028	Total
$ -	$ -	$ -	$ 270,000	$ -	$ 270,000

GREEN BAY WATER UTILITY
CAPITAL IMPROVEMENT PLAN - OPERATING AND MAINTENANCE EXPENSES
PROJECT REQUEST FOR 2024 - 2028

Project Title: Filter Plant 500,000 Gallon Tank Overcoat

Department: Treatment

Project Description & Justification:

The 500,000 gallon elevated tank at the filter plant will need to be overcoated.
The tank was constructed in 2006 and has not been painted since. Overcoating the tank should extend the life of the existing paint 10 to 15 years.

Impact on On-going Operating Costs/Personnel Requirements:

I do not anticipate any impact on operating costs and no additional personnel are required.

COST ANALYSIS
Estimated Cash Summary

2024	2025	2026	2027	2028	Total
$ -	$ 350,000	$ -	$ -	$ -	$ 350,000

GREEN BAY WATER UTILITY
CAPITAL IMPROVEMENT PLAN - OPERATING AND MAINTENANCE EXPENSES
PROJECT REQUEST FOR 2024 - 2028

Project Title: Sludge Lagoon #2 (North Lagoon) Dredging

Department: Treatment

Project Description & Justification:

Sludge lagoon #2 will be dredged and the solids land applied. Solids from the treatment process are drained from settling tanks to the lagoon every spring and fall. The solids accumulate in the lagoon and it must be dredged so more solids can be added. This is a project that happens every 5 to 7 years per lagoon.

Impact on On-going Operating Costs/Personnel Requirements:

N/A

COST ANALYSIS
Estimated Cash Summary

2024	2025	2026	2027	2028	Total
$ -	$ -	$ -	$ 500,000	$ -	$ 500,000