

**Water Capital Improvement Program**  
Projects with Executive Summary

**2023-2027**

Project Name and Executive Summary	2023 Budget	2024	2025	2026	2027	Beyond 2027	Project Total
<b>2023 Utility Department Computers</b>	<b>10,000</b>	-	-	-	-	-	<b>10,000</b>
These are touch screen laptops for the crew in the field.	10,000	-	-	-	-	-	10,000
<b>2023 Water - F-350 w Plow w/Liftgate</b>	<b>100,000</b>	-	-	-	-	-	<b>100,000</b>
The request is to replace a daily-use truck #4492 that will be repurposed into the fleet for the seasonal employee use. This is a Mobile Work Station Vehicle for the Water Division of Public Works. It carries all the tools and equipment for the various task assigned. This truck will also be assigned to a cul-de-sac plow route. Ties to Strategic Plan initiative of well maintained infrastructure. Cost estimate is based on quotes from dealer.	100,000	-	-	-	-	-	100,000
This will be used to maintain the high service level. It is a safety measure guarantying that we will be able to quickly respond to any water emergency.							
<b>2023 Water - Skidsteer Upgrade</b>	<b>32,000</b>	-	-	-	-	-	<b>32,000</b>
Request is to upgrade the Bobcat skidsteer unit 4454, a varied use utility unit, from a wheeled unit to a track unit. It is used on all water main break responses, service line repairs, and all other earth or equipment (with forks) moving related work. Acquisition will be part of the dealer's trade-in/trade-up program. We have been participating in this program for years to ensure that we always have the latest safety equipment and reliable machinery. This also allows us to modify equipment based on changing needs of the department. The change from a wheeled unit to a tracked unit is to improve the quality of response. Tracked units manage in wet dirt/mud much better than wheeled units. Our experience has been that the wheeled unit can get stuck often which adds work and delays our response. Additionally, a tracked unit does less damage to residents yards and to the asphalt street when performing repairs. Ties to Strategic Plan initiative of well maintained infrastructure. Cost estimate is based on a quote from the dealer.	32,000	-	-	-	-	-	32,000
This will be used to maintain the service level that we strive for.							
<b>2023 Water - Treatment Plant Floor Scrubber</b>	<b>11,500</b>	-	-	-	-	-	<b>11,500</b>
Request is for a walk-behind electric floor scrubber. Between the four treatment plants, 65,415 square feet of flooring needs to be maintained. Floors are not currently being maintained to the level needed to preserve them. The new machine will allow for more frequent cleaning to meet the maintenance needs of the floors and extend their useful life. This will be used at all 4 treatment plants for cleaning. We already have a trailer that we can transport it around with. With plant 4 online we have a lot of square footage to maintain to a higher level and we will be repainting all 3 other treatment plants in the future. Ties to Strategic Plan initiative of well maintained infrastructure. Cost estimate is based on October 2021 quote from dealer.	11,500	-	-	-	-	-	11,500
This will be used to maintain the service level that we require to maintain our infrastructure longer at the 3 existing plants. This will be a new portion for plant 4, which has twice the flooring footage that all the other plants combined. With this being a new building, it is important to maintain the floor from the beginning with the heavy equipment being stored in the garage. To sweep and scrub this by hand would be very time-consuming with 2 full-time employees dedicated to this.							

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Projects with Executive Summary

**2023-2027**

Project Name and Executive Summary	2023 Budget	2024	2025	2026	2027	Beyond 2027	Project Total
<b>2023 Water - Treatment Plant Floor Sweeper</b>	<b>14,000</b>	-	-	-	-	-	<b>14,000</b>
<p>Request is for a walk-behind electric floor sweeper. Between the four treatment plants, 65,415 square feet of flooring needs to be maintained. Floors are not currently being maintained to the level needed to preserve them. The new machine will allow for more frequent cleaning to meet the maintenance needs of the floors and extend their useful life. Request is for a floor sweeper that we are looking to use at plant 4, 1, and 2. The sweeper can be used indoors and outdoors. With the floor coatings we applied at plant 4, we want to keep the sand and rocks from damaging the epoxy covering. With the excavator and dump truck stored there, it will be a weekly if not daily sweeping of debris from water main breaks on the truck and trailers. We have a lot of area to sweep and we can use it to sweep outside the garage to prevent bringing in dirt and rocks. Ties to Strategic Plan initiative of well maintained infrastructure. The request will save money by extending the life of the floors. Cost estimate is based on October 2021 quote from dealer.</p> <p>This will be used to maintain the service level that we require to maintain our infrastructure longer at the 3 existing plants. This will be a new portion for plant 4, which has twice the flooring footage that all the other plants combined. With this being a new building, it is important to maintain the floor from the beginning with the heavy equipment being stored in the garage. To sweep and scrub this by hand would be very time-consuming with 2 full-time employees dedicated to this.</p>	14,000	-	-	-	-	-	14,000
<b>2023 Water - Treatment Plant Security System</b>	<b>100,000</b>	-	-	-	-	-	<b>100,000</b>
<p>Provide remote security monitoring and surveillance at the three existing Water Treatment Facilities. This would be an expansion of the current security monitoring systems being used at City Hall and Public Works. The security cameras are outdated and non functional at plants 1,2,3. They are original to the building and repairs can't be done to the system. PW FC Priority 8. For homeland security standards along with AWWA Standards, we need to have a deterrent method in place. While it may not deter all actors and perpetrators, it would help in prosecution if something were to happen. Ties to Strategic Plan initiative of Well Maintained Infrastructure. Annual contractual services cost of \$5,000.</p> <p>This will be used to maintain security and follow Homeland Security standards for safe drinking water.</p>	100,000	-	-	-	-	-	100,000
<b>2023 Water - Treatment Plant Single Man Lift</b>	<b>17,000</b>	-	-	-	-	-	<b>17,000</b>
<p>We need access to the ceiling level in the treatment plants for maintenance of the lights and to run new chemical feed lines yearly at the plants. At plant 4, we don't have a way of doing so besides using ladders and in the garage they are 20 feet tall. Also, this lift will be able to go through pass through regular doors to get into interior rooms and the meeting room at public works. Ties to Strategic Plan initiative of well maintained infrastructure. Cost estimate is based on November 2021 quote from dealer will be used to maintain the service level with producing quality drinking water.</p> <p>This will relieve a safety aspect of maintenance by not having to use extension ladders and we can use this in multiple buildings as it fits through doors and will increase worker safety.</p>	17,000	-	-	-	-	-	17,000

**Water Capital Improvement Program**  
Projects with Executive Summary

**2023-2027**

Project Name and Executive Summary	2023 Budget	2024	2025	2026	2027	Beyond 2027	Project Total
<b>2023 Water - Water Break Trailer</b>	<b>40,000</b>	-	-	-	-	-	<b>40,000</b>
<p>To use for all our watermain breaks and water service line repairs and utility excavations. We store all our tools and equipment in this so we can drive it out to each site with all the equipment we need. We stock everything we need in this and all of the tools and safety equipment. It will have a heater in it like the van does now so the crew can get some warmth on really cold jobs. Currently we use the unit # 4431 van for both our hydrant maintenance and our water breaks and utility excavations. It is pretty tight in there for working space and we can only use it on one job at a time. With the new trailer we will keep the van as a hydrant maintenance unit and will be using it all year. With the separate water main break trailer we will be able to use both at one time. Ties to Strategic Plan initiative of well maintained infrastructure. Cost estimate is based on quote from H &amp; H Trailer in April 2022.</p> <p>This request is to maintain current services that we provide now.. There is a safety factor associated along with this purchase that the staff will be able to get out of the cold and warm up during cold weather.</p>	40,000	-	-	-	-	-	40,000
<b>Air stripper media replacement and controls</b>	<b>250,000</b>	-	-	-	-	-	<b>250,000</b>
The air stripper is original from plant construction. It is used to take out a chemical in the water from a pollution plume that is likely from petroleum. Having this is the only way we could have put wells #3 and #4 back into service after they were pulled from use. The media inside the tower is past its service life and needs to be replaced. It is part of the Department of Health requirements to get it to a safe maximum contaminant level. It has been pushed back from last year to next year already. We had a rough estimate of 125,000.00 to do it last year, so I am thinking 200,000.00 will be a safe estimate for 2023.	250,000	-	-	-	-	-	250,000
<b>Chlorine cylinder heads for plant 1 and 3 chlorine tanks</b>	<b>15,000</b>	-	-	-	-	-	<b>15,000</b>
We will be replacing the chlorine heads on the cylinders that feed the plant. These are original from plant construction. They wear out and need to be replaced after time. They feed the gas chlorine to treat the water. That maintains our safe drinking water. This request maintains service levels and is necessary to continue to operate the plants.	15,000	-	-	-	-	-	15,000
<b>Fire hose covers</b>	-	<b>15,000</b>	-	-	-	-	<b>15,000</b>
Covers for traffic to drive over when we have hose out for water breaks	-	15,000	-	-	-	-	15,000
<b>GPS Locator</b>	<b>12,000</b>	<b>12,000</b>	-	-	-	-	<b>24,000</b>
This is used for locating our utilities as required by the state of Minnesota and the office of pipeline safety. This will provide enhanced ability to utilize GIS to map and identify water utility assets and will allow the set up of long-term asset maintenance plans within the EAMS system. We may be able to apply for a safety grant to cover half the amount if it is available next year. A second locator is in the 2024 budget as we usually have 2 full-time employees doing locates now.	12,000	12,000	-	-	-	-	24,000
<b>Install new well #22</b>	-	-	-	-	-	<b>400,000</b>	<b>400,000</b>
Installing new future well to feed plant 4, when development to the north happens	-	-	-	-	-	400,000	400,000
<b>Lexington water separation and metering</b>	-	<b>1,000,000</b>	-	-	-	-	<b>1,000,000</b>
This project is related to a pending lawsuit. Project would entail separating out water main from Lexington to maintain the integrity of Blaine water.	-	1,000,000	-	-	-	-	1,000,000

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Projects with Executive Summary

**2023-2027**

Project Name and Executive Summary	2023 Budget	2024	2025	2026	2027	Beyond 2027	Project Total
<b>Meter Reading Base Stations</b>	<b>85,000</b>	-	-	-	-	-	<b>85,000</b>
The city's AMI collection base stations are experiencing daily Minor Rectifier Alarms. While these alarms do not prevent the city from collecting readings it is a sign that the current stations are showing their age. The base station located at the Paul Parkway can no longer receive software updates, as the flash memory module has failed. The city relies on these base collector stations to collect the meter readings for billing. Failure of one of these stations would critically impact the ability to process monthly billing. Current support of the base stations is being phased out by Sensus. Replacement components for the base stations are becoming increasingly difficult to source, due to part scarcity and cost.	85,000	-	-	-	-	-	85,000
<b>New chemical pumps at plants</b>	-	<b>25,000</b>	<b>25,000</b>	-	-	-	<b>50,000</b>
Replace old pumps with new pumps for chemical feed	-	25,000	25,000	-	-	-	50,000
<b>New gravity treatment plant</b>	-	-	-	-	-	<b>30,000,000</b>	<b>30,000,000</b>
Replace plant 1 with a new gravity feed plant next to the reservoir. Project would likely be needed around 2040.	-	-	-	-	-	30,000,000	30,000,000
<b>Plant 1 media replacement</b>	-	-	<b>250,000</b>	-	-	-	<b>250,000</b>
Removing old media and replacing with new media and new laterals. Media is what allows the filters to function properly.	-	-	250,000	-	-	-	250,000
<b>Plant 2 media replacement</b>	-	-	-	<b>500,000</b>	-	-	<b>500,000</b>
Removing old media and replacing with new media and new laterals. Media is what allows the filters to function properly.	-	-	-	500,000	-	-	500,000
<b>Plant 3 media replacement</b>	<b>300,000</b>	-	-	-	-	-	<b>300,000</b>
Removing old media and replacing with new media and new laterals. Media is what allows the filters to function properly.	300,000	-	-	-	-	-	300,000
<b>Reclaim pump puller at plant #1 and #3</b>	<b>20,000</b>	-	-	-	-	-	<b>20,000</b>
Install hoist to pull reclaim pump. Plant 1 never had one installed and plant 3 is in need of replacement. This request could be deferred until 2024 if needed. This request is maintain service levels.	20,000	-	-	-	-	-	20,000
<b>Reclaim pumps at treatment plants</b>	-	<b>10,000</b>	<b>20,000</b>	-	-	-	<b>30,000</b>
Replace original pumps used for reclaiming water that has been backwashed and is dirty. Allows water to be ran through the filters again which results in less water sent to waste.	-	10,000	20,000	-	-	-	30,000
<b>RPZ replacement at all 3 plants</b>	<b>20,000</b>	-	-	-	-	-	<b>20,000</b>
Replacing old RPZs with just one at the start of the system. By having just one at the start of the system there will be future maintenance savings.	20,000	-	-	-	-	-	20,000
<b>SCADA Computer Replacements</b>	<b>30,000</b>	<b>30,000</b>	<b>30,000</b>	<b>30,000</b>	<b>30,000</b>	<b>30,000</b>	<b>180,000</b>
These are the SCADA computers. We have had most of them for a few years and we need to get replacements on a schedule to maintain the system. The cost reflects the special build of the computer, the software, plus installation and warranty from our SCADA contractor. This would cover at least one SCADA computer and one SCADA server computer.	30,000	30,000	30,000	30,000	30,000	30,000	180,000
<b>Tower 4 gate valve replacement</b>	-	<b>75,000</b>	-	-	-	-	<b>75,000</b>
Replace 20" gate valve at tower 4 that is leaking by when shut off.	-	75,000	-	-	-	-	75,000

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**2023-2027**

Project Name and Executive Summary	2023 Budget	2024	2025	2026	2027	Beyond 2027	Project Total
<b>Water Altitude Valves</b>	<b>25,000</b>	-	-	-	-	-	<b>25,000</b>
Repair of valves that control how much water is in the water towers. They need to be rebuilt from time to time. This maintains the service level and allows the water towers to function as intended.	25,000	-	-	-	-	-	25,000
<b>Water main replacement</b>	<b>1,000,000</b>	<b>1,000,000</b>	<b>1,100,000</b>	<b>1,100,000</b>	<b>1,200,000</b>	<b>1,200,000</b>	<b>6,600,000</b>
Water mains are replaced annually along with street projects to minimize customer impacts for utility replacements.	1,000,000	1,000,000	1,100,000	1,100,000	1,200,000	1,200,000	6,600,000
<b>Water tower 1 cleaning</b>	-	<b>60,000</b>	-	-	-	-	<b>60,000</b>
Cleaning tower 1 to protect our investment. Done on an annual basis along with an inspection.	-	60,000	-	-	-	-	60,000
<b>Water tower 2 replacement/rehab</b>	-	<b>2,300,000</b>	-	-	-	-	<b>2,300,000</b>
Replacement water tower/ rehabbing of existing tower number 2.	-	2,300,000	-	-	-	-	2,300,000
<b>Water tower 3 cleaning</b>	-	<b>50,000</b>	-	-	-	-	<b>50,000</b>
Cleaning tower 3 to protect our investment. Done every 5 years along with an inspection.	-	50,000	-	-	-	-	50,000
<b>Water tower 4 rehab</b>	-	<b>60,000</b>	<b>1,500,000</b>	-	-	-	<b>1,560,000</b>
Rehab of tower 4 to protect our investment. Paint needs re-done every 20 years.	-	60,000	1,500,000	-	-	-	1,560,000
<b>Water treatment plant 1 doors</b>	<b>20,000</b>	-	-	-	-	-	<b>20,000</b>
Replace all doors. They are original and wearing out which negatively impacts the security of the treatment plants.	20,000	-	-	-	-	-	20,000
<b>Water treatment plant 1 flat roof repair</b>	<b>15,000</b>	-	-	-	-	-	<b>15,000</b>
This is the original roof on the plant and we are starting to see failures and leaks into the plant. Some roof patching needs done to maintain the roof.	15,000	-	-	-	-	-	15,000
<b>Water treatment plant 1 improvements</b>	-	<b>350,000</b>	-	-	-	-	<b>350,000</b>
This covers plant 1 interior improvements for the electrical, mechanical and painting of the inside. Also covers exterior improvements to repair deficiencies in brick and mortar and sidewalks	-	350,000	-	-	-	-	350,000
<b>Water treatment plant 1 valves, actuators, and meters</b>	<b>100,000</b>	-	-	-	-	-	<b>100,000</b>
All flow control valves, actuators, and meters are original. Project is to replace old valves and actuators to run the plant. Staff would perform these replacements. This is preventative maintenance. Could be part of a larger project, but there are cost saving measures to have staff replace these parts. Needs to be done in 2023 to prevent down time.	100,000	-	-	-	-	-	100,000
<b>Water treatment plant 2 doors</b>	<b>20,000</b>	-	-	-	-	-	<b>20,000</b>
Replace all doors. They are original and wearing out which negatively impacts the security of the treatment plants.	20,000	-	-	-	-	-	20,000
<b>Water treatment plant 2 expansion</b>	-	-	-	-	<b>1,400,000</b>	-	<b>1,400,000</b>
Expand capacity for treatment at plant 2 so we can get better quality water with longer contact time in the filters.	-	-	-	-	1,400,000	-	1,400,000
<b>Water treatment plant 2 flat roof repair</b>	<b>15,000</b>	-	-	-	-	-	<b>15,000</b>
This is the original roof on the plant and we are starting to see failures and leaks into the plant. Some roof patching needs done to maintain the roof.	15,000	-	-	-	-	-	15,000

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Projects with Executive Summary

**2023-2027**

Project Name and Executive Summary	2023 Budget	2024	2025	2026	2027	Beyond 2027	Project Total
<b>Water treatment plant 2 flow control valves, actuators, and meters</b>	<b>250,000</b>	-	-	-	-	-	<b>250,000</b>
All flow control valves, actuators, and meters are original. Project is to replace old valves and actuators to run the plant. Staff would perform these replacements. This is preventative maintenance. Could be part of a larger project, but there are cost saving measures to have staff replace these parts. Needs to be done in 2023 to prevent down time.	250,000	-	-	-	-	-	250,000
<b>Water treatment plant 2 improvements</b>	<b>1,400,000</b>	-	-	-	-	-	<b>1,400,000</b>
Water Treatment Plant 2 has not had the interior maintained well and has degraded due to corrosion from the HVAC system. This covers the electrical, mechanical and painting of the inside of plant 2.	1,400,000	-	-	-	-	-	1,400,000
<b>Water treatment plant 3 doors</b>	<b>20,000</b>	-	-	-	-	-	<b>20,000</b>
This may be rolled into a larger project totaling \$1.4 million. If the full project does not move forward, the doors still need replaced. Doors are original and wearing out which negatively impacts the security of the treatment plants.	20,000	-	-	-	-	-	20,000
<b>Water Treatment plant 3 flow control valves, actuators, and meters</b>	<b>100,000</b>	-	-	-	-	-	<b>100,000</b>
All flow control valves, actuators, and meters are original. Project is to replace old valves and actuators to run the plant. Staff would perform these replacements. This is preventative maintenance. Could be part of a larger project, but there are cost saving measures to have staff replace these parts. Needs to be done in 2023 to prevent down time. Maintains reliability of plants.	100,000	-	-	-	-	-	100,000
<b>Water treatment plant 3 improvements</b>	<b>450,000</b>	-	-	-	-	-	<b>450,000</b>
This covers the electrical, mechanical and painting of the inside. Also includes repair of outside deficiencies in brick and mortar and sidewalks. The plant is in need of updating.	450,000	-	-	-	-	-	450,000
<b>Well 12 VFD</b>	<b>30,000</b>	-	-	-	-	-	<b>30,000</b>
Well 12 is inside plant 2 and request is for updating with a new vfd. We upgraded well 13 this year. Well 12 must have the VFD replaced because if this piece of equipment fails it will damage other areas of the treatment plant. Downtime at this plant results in a reduction of 6 million gallons of water production. This request is to maintain.	30,000	-	-	-	-	-	30,000
<b>Well 18,19 VFD's</b>	-	-	-	-	<b>50,000</b>	-	<b>50,000</b>
Adding VFD's that were not installed when new; this will allow more control of pumping the well.	-	-	-	-	50,000	-	50,000
<b>Well control covers at 17,18,19,20,21</b>	-	<b>200,000</b>	<b>400,000</b>	<b>400,000</b>	-	-	<b>1,000,000</b>
Buildings to put over the well controls to protect the electronics; they are just in a metal cabinet now. One in 2024 and then two in 2025 and 2026.	-	200,000	400,000	400,000	-	-	1,000,000
<b>Well controls air conditioning</b>	<b>30,000</b>	<b>60,000</b>	-	-	-	-	<b>90,000</b>
These are to keep the control panels cool for the electronics that should have been installed with them when new. There are a lot of electronics that need to stay cool to work properly. We have been using a tent to cover the panels and leave the door open, but this is a high security risk. These need to be secure and cool to function properly. This request is to maintain service levels. 2023: 30,000 for well 17; 2024: \$60,000 for well 20 and 21	30,000	60,000	-	-	-	-	90,000
<b>Well data loggers</b>	<b>25,000</b>	-	-	-	-	-	<b>25,000</b>
Well data loggers are requested by the DNR at each well to monitor the level in the observation wells. These are needed to provide data for an appropriation permit for the three new wells.	25,000	-	-	-	-	-	25,000

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**2023-2027**

Project Name and Executive Summary	2023 Budget	2024	2025	2026	2027	Beyond 2027	Project Total
<b>Well rehab</b>	-	50,000	50,000	100,000	100,000	100,000	400,000
Well pump rehab and seals on the pumps. The pumps are overhauled and the well is videoed to see if it is still as it should be. this is a cycle through all the wells.	-	50,000	50,000	100,000	100,000	100,000	400,000
<b>Wellhouse 10 replacement</b>	-	-	960,000	-	-	-	960,000
Replacing wellhouse #10. Replacing wellhouse #10 with a new one. It is a dated well house with old equipment that needs to be upgraded	-	-	960,000	-	-	-	960,000
<b>Wellhouse 5 replacement</b>	-	830,000	-	-	-	-	830,000
Wellhouse 5 is a seasonal use well that is in poor condition and in need of replacement. Wellhouse will likely fail within 1 to 2 years.	-	830,000	-	-	-	-	830,000
<b>Wellhouse 7 replacement</b>	-	-	-	870,000	-	-	870,000
Replacing wellhouse #7 with a new one. It is a dated well house with old equipment that needs to be upgraded.	-	-	-	870,000	-	-	870,000
<b>Wellhouse 8 replacement</b>	-	-	1,125,000	-	-	-	1,125,000
Replacing wellhouse #8 to finish up the last well house upgrade program. It is a dated wellhouse with old equipment that needs to be upgraded.	-	-	1,125,000	-	-	-	1,125,000

**Water Five-Year Capital Improvement Program**  
Projects by Revenue Source

**2023-2027**

Revenue Sources	2023 Budget	2024	2025	2026	2027	Beyond 2027	Revenue Total
Revenue Bonds - Water	4,556,500	6,127,000	5,460,000	3,000,000	2,780,000	31,730,000	53,653,500
<b>Grand Total</b>	<b>4,556,500</b>	<b>6,127,000</b>	<b>5,460,000</b>	<b>3,000,000</b>	<b>2,780,000</b>	<b>31,730,000</b>	<b>53,653,500</b>

Project Name and Revenue Sources	2023 Budget	2024	2025	2026	2027	Beyond 2027	Revenue Total
<b>2023 Utility Department Computers</b>	<b>10,000</b>	-	-	-	-	-	<b>10,000</b>
Revenue Bonds - Water	10,000	-	-	-	-	-	10,000
<b>2023 Water - F-350 w Plow w/Liftgate</b>	<b>100,000</b>	-	-	-	-	-	<b>100,000</b>
Revenue Bonds - Water	100,000	-	-	-	-	-	100,000
<b>2023 Water - Skidsteer Upgrade</b>	<b>32,000</b>	-	-	-	-	-	<b>32,000</b>
Revenue Bonds - Water	32,000	-	-	-	-	-	32,000
<b>2023 Water - Treatment Plant Floor Scrubber</b>	<b>11,500</b>	-	-	-	-	-	<b>11,500</b>
Revenue Bonds - Water	11,500	-	-	-	-	-	11,500
<b>2023 Water - Treatment Plant Floor Sweeper</b>	<b>14,000</b>	-	-	-	-	-	<b>14,000</b>
Revenue Bonds - Water	14,000	-	-	-	-	-	14,000
<b>2023 Water - Treatment Plant Security System</b>	<b>100,000</b>	-	-	-	-	-	<b>100,000</b>
Revenue Bonds - Water	100,000	-	-	-	-	-	100,000
<b>2023 Water - Treatment Plant Single Man Lift</b>	<b>17,000</b>	-	-	-	-	-	<b>17,000</b>
Revenue Bonds - Water	17,000	-	-	-	-	-	17,000
<b>2023 Water - Water Break Trailer</b>	<b>40,000</b>	-	-	-	-	-	<b>40,000</b>
Revenue Bonds - Water	40,000	-	-	-	-	-	40,000
<b>Air stripper media replacement and controls</b>	<b>250,000</b>	-	-	-	-	-	<b>250,000</b>
Revenue Bonds - Water	250,000	-	-	-	-	-	250,000
<b>Chlorine cylinder heads for plant 1 and 3 chlorine tanks</b>	<b>15,000</b>	-	-	-	-	-	<b>15,000</b>
Revenue Bonds - Water	15,000	-	-	-	-	-	15,000
<b>Fire hose covers</b>	-	<b>15,000</b>	-	-	-	-	<b>15,000</b>
Revenue Bonds - Water	-	15,000	-	-	-	-	15,000
<b>GPS Locator</b>	<b>12,000</b>	<b>12,000</b>	-	-	-	-	<b>24,000</b>
Revenue Bonds - Water	12,000	12,000	-	-	-	-	24,000
<b>Install new well #22</b>	-	-	-	-	-	<b>400,000</b>	<b>400,000</b>
Revenue Bonds - Water	-	-	-	-	-	400,000	400,000
<b>Lexington water separation and metering</b>	-	<b>1,000,000</b>	-	-	-	-	<b>1,000,000</b>
Revenue Bonds - Water	-	1,000,000	-	-	-	-	1,000,000
<b>Meter Reading Base Stations</b>	<b>85,000</b>	-	-	-	-	-	<b>85,000</b>
Revenue Bonds - Water	85,000	-	-	-	-	-	85,000
<b>New chemical pumps at plants</b>	-	<b>25,000</b>	<b>25,000</b>	-	-	-	<b>50,000</b>
Revenue Bonds - Water	-	25,000	25,000	-	-	-	50,000
<b>New gravity treatment plant</b>	-	-	-	-	-	<b>30,000,000</b>	<b>30,000,000</b>
Revenue Bonds - Water	-	-	-	-	-	30,000,000	30,000,000



**Water Five-Year Capital Improvement Program**  
Projects by Revenue Source

**2023-2027**

Revenue Sources	2023 Budget	2024	2025	2026	2027	Beyond 2027	Revenue Total
<b>Plant 1 media replacement</b>	-	-	250,000	-	-	-	250,000
Revenue Bonds - Water	-	-	250,000	-	-	-	250,000
<b>Plant 2 media replacement</b>	-	-	-	500,000	-	-	500,000
Revenue Bonds - Water	-	-	-	500,000	-	-	500,000
<b>Plant 3 media replacement</b>	300,000	-	-	-	-	-	300,000
Revenue Bonds - Water	300,000	-	-	-	-	-	300,000
<b>Reclaim pump puller at plant #1 and #3</b>	20,000	-	-	-	-	-	20,000
Revenue Bonds - Water	20,000	-	-	-	-	-	20,000
<b>Reclaim pumps at treatment plants</b>	-	10,000	20,000	-	-	-	30,000
Revenue Bonds - Water	-	10,000	20,000	-	-	-	30,000
<b>RPZ replacement at all 3 plants</b>	20,000	-	-	-	-	-	20,000
Revenue Bonds - Water	20,000	-	-	-	-	-	20,000
<b>SCADA Computer Replacements</b>	30,000	30,000	30,000	30,000	30,000	30,000	180,000
Revenue Bonds - Water	30,000	30,000	30,000	30,000	30,000	30,000	180,000
<b>Tower 4 gate valve replacement</b>	-	75,000	-	-	-	-	75,000
Revenue Bonds - Water	-	75,000	-	-	-	-	75,000
<b>Water Altitude Valves</b>	25,000	-	-	-	-	-	25,000
Revenue Bonds - Water	25,000	-	-	-	-	-	25,000
<b>Water main replacement</b>	1,000,000	1,000,000	1,100,000	1,100,000	1,200,000	1,200,000	6,600,000
Revenue Bonds - Water	1,000,000	1,000,000	1,100,000	1,100,000	1,200,000	1,200,000	6,600,000
<b>Water tower 1 cleaning</b>	-	60,000	-	-	-	-	60,000
Revenue Bonds - Water	-	60,000	-	-	-	-	60,000
<b>Water tower 2 replacement/rehab</b>	-	2,300,000	-	-	-	-	2,300,000
Revenue Bonds - Water	-	2,300,000	-	-	-	-	2,300,000
<b>Water tower 3 cleaning</b>	-	50,000	-	-	-	-	50,000
Revenue Bonds - Water	-	50,000	-	-	-	-	50,000
<b>Water tower 4 rehab</b>	-	60,000	1,500,000	-	-	-	1,560,000
Revenue Bonds - Water	-	60,000	1,500,000	-	-	-	1,560,000
<b>Water treatment plant 1 doors</b>	20,000	-	-	-	-	-	20,000
Revenue Bonds - Water	20,000	-	-	-	-	-	20,000
<b>Water treatment plant 1 flat roof repair</b>	15,000	-	-	-	-	-	15,000
Revenue Bonds - Water	15,000	-	-	-	-	-	15,000
<b>Water treatment plant 1 improvements</b>	-	350,000	-	-	-	-	350,000
Revenue Bonds - Water	-	350,000	-	-	-	-	350,000
<b>Water treatment plant 1 valves, actuators, and meters</b>	100,000	-	-	-	-	-	100,000
Revenue Bonds - Water	100,000	-	-	-	-	-	100,000
<b>Water treatment plant 2 doors</b>	20,000	-	-	-	-	-	20,000
Revenue Bonds - Water	20,000	-	-	-	-	-	20,000

**Water Five-Year Capital Improvement Program**  
Projects by Revenue Source

**2023-2027**

Revenue Sources	2023 Budget	2024	2025	2026	2027	Beyond 2027	Revenue Total
<b>Water treatment plant 2 expansion</b>	-	-	-	-	<b>1,400,000</b>	-	<b>1,400,000</b>
Revenue Bonds - Water	-	-	-	-	1,400,000	-	1,400,000
<b>Water treatment plant 2 flat roof repair</b>	<b>15,000</b>	-	-	-	-	-	<b>15,000</b>
Revenue Bonds - Water	15,000	-	-	-	-	-	15,000
<b>Water treatment plant 2 flow control valves, actuators, and meters</b>	<b>250,000</b>	-	-	-	-	-	<b>250,000</b>
Revenue Bonds - Water	250,000	-	-	-	-	-	250,000
<b>Water treatment plant 2 improvements</b>	<b>1,400,000</b>	-	-	-	-	-	<b>1,400,000</b>
Revenue Bonds - Water	1,400,000	-	-	-	-	-	1,400,000
<b>Water treatment plant 3 doors</b>	<b>20,000</b>	-	-	-	-	-	<b>20,000</b>
Revenue Bonds - Water	20,000	-	-	-	-	-	20,000
<b>Water Treatment plant 3 flow control valves, actuators, and meters</b>	<b>100,000</b>	-	-	-	-	-	<b>100,000</b>
Revenue Bonds - Water	100,000	-	-	-	-	-	100,000
<b>Water treatment plant 3 improvements</b>	<b>450,000</b>	-	-	-	-	-	<b>450,000</b>
Revenue Bonds - Water	450,000	-	-	-	-	-	450,000
<b>Well 12 VFD</b>	<b>30,000</b>	-	-	-	-	-	<b>30,000</b>
Revenue Bonds - Water	30,000	-	-	-	-	-	30,000
<b>Well 18,19 VFD's</b>	-	-	-	-	<b>50,000</b>	-	<b>50,000</b>
Revenue Bonds - Water	-	-	-	-	50,000	-	50,000
<b>Well control covers at 17,18,19,20,21</b>	-	<b>200,000</b>	<b>400,000</b>	<b>400,000</b>	-	-	<b>1,000,000</b>
Revenue Bonds - Water	-	200,000	400,000	400,000	-	-	1,000,000
<b>Well controls air conditioning</b>	<b>30,000</b>	<b>60,000</b>	-	-	-	-	<b>90,000</b>
Revenue Bonds - Water	30,000	60,000	-	-	-	-	90,000
<b>Well data loggers</b>	<b>25,000</b>	-	-	-	-	-	<b>25,000</b>
Revenue Bonds - Water	25,000	-	-	-	-	-	25,000
<b>Well rehab</b>	-	<b>50,000</b>	<b>50,000</b>	<b>100,000</b>	<b>100,000</b>	<b>100,000</b>	<b>400,000</b>
Revenue Bonds - Water	-	50,000	50,000	100,000	100,000	100,000	400,000
<b>Wellhouse 10 replacement</b>	-	-	<b>960,000</b>	-	-	-	<b>960,000</b>
Revenue Bonds - Water	-	-	960,000	-	-	-	960,000
<b>Wellhouse 5 replacement</b>	-	<b>830,000</b>	-	-	-	-	<b>830,000</b>
Revenue Bonds - Water	-	830,000	-	-	-	-	830,000
<b>Wellhouse 7 replacement</b>	-	-	-	<b>870,000</b>	-	-	<b>870,000</b>
Revenue Bonds - Water	-	-	-	870,000	-	-	870,000
<b>Wellhouse 8 replacement</b>	-	-	<b>1,125,000</b>	-	-	-	<b>1,125,000</b>
Revenue Bonds - Water	-	-	1,125,000	-	-	-	1,125,000
<b>Grand Total</b>	<b>4,556,500</b>	<b>6,127,000</b>	<b>5,460,000</b>	<b>3,000,000</b>	<b>2,780,000</b>	<b>31,730,000</b>	<b>53,653,500</b>

**Water Five-Year Capital Improvement Program**  
Projects by Expense Category

**2023-2027**

Expense Category	2023 Budget	2024	2025	2026	2027	Beyond 2027	Project Total
Construction	3,980,000	5,910,000	5,195,000	2,870,000	2,750,000	31,700,000	52,405,000
Consulting	100,000	160,000	235,000	100,000	-	-	595,000
Motor Vehicles	100,000	-	-	-	-	-	100,000
Other Equipment	222,000	27,000	-	-	-	-	249,000
Heavy Machinery & Equip	114,500	-	-	-	-	-	114,500
Computers	40,000	30,000	30,000	30,000	30,000	30,000	190,000
<b>Grand Total</b>	<b>4,556,500</b>	<b>6,127,000</b>	<b>5,460,000</b>	<b>3,000,000</b>	<b>2,780,000</b>	<b>31,730,000</b>	<b>53,653,500</b>

Project Name and Expense Category	2023 Budget	2024	2025	2026	2027	Beyond 2027	Project Total
<b>2023 Utility Department Computers</b>	<b>10,000</b>	-	-	-	-	-	<b>10,000</b>
Computers	10,000	-	-	-	-	-	10,000
<b>2023 Water - F-350 w Plow w/Liftgate</b>	<b>100,000</b>	-	-	-	-	-	<b>100,000</b>
Motor Vehicles	100,000	-	-	-	-	-	100,000
<b>2023 Water - Skidsteer Upgrade</b>	<b>32,000</b>	-	-	-	-	-	<b>32,000</b>
Heavy Machinery & Equip	32,000	-	-	-	-	-	32,000
<b>2023 Water - Treatment Plant Floor Scrubber</b>	<b>11,500</b>	-	-	-	-	-	<b>11,500</b>
Heavy Machinery & Equip	11,500	-	-	-	-	-	11,500
<b>2023 Water - Treatment Plant Floor Sweeper</b>	<b>14,000</b>	-	-	-	-	-	<b>14,000</b>
Heavy Machinery & Equip	14,000	-	-	-	-	-	14,000
<b>2023 Water - Treatment Plant Security System</b>	<b>100,000</b>	-	-	-	-	-	<b>100,000</b>
Other Equipment	100,000	-	-	-	-	-	100,000
<b>2023 Water - Treatment Plant Single Man Lift</b>	<b>17,000</b>	-	-	-	-	-	<b>17,000</b>
Heavy Machinery & Equip	17,000	-	-	-	-	-	17,000
<b>2023 Water - Water Break Trailer</b>	<b>40,000</b>	-	-	-	-	-	<b>40,000</b>
Heavy Machinery & Equip	40,000	-	-	-	-	-	40,000
<b>Air stripper media replacement and controls</b>	<b>250,000</b>	-	-	-	-	-	<b>250,000</b>
Construction	250,000	-	-	-	-	-	250,000
<b>Chlorine cylinder heads for plant 1 and 3 chlorine tanks</b>	<b>15,000</b>	-	-	-	-	-	<b>15,000</b>
Construction	15,000	-	-	-	-	-	15,000
<b>Fire hose covers</b>	-	<b>15,000</b>	-	-	-	-	<b>15,000</b>
Other Equipment	-	15,000	-	-	-	-	15,000
<b>GPS Locator</b>	<b>12,000</b>	<b>12,000</b>	-	-	-	-	<b>24,000</b>
Other Equipment	12,000	12,000	-	-	-	-	24,000
<b>Install new well #22</b>	-	-	-	-	-	<b>400,000</b>	<b>400,000</b>
Construction	-	-	-	-	-	400,000	400,000
<b>Lexington water separation and metering</b>	-	<b>1,000,000</b>	-	-	-	-	<b>1,000,000</b>
Construction	-	1,000,000	-	-	-	-	1,000,000
<b>Meter Reading Base Stations</b>	<b>85,000</b>	-	-	-	-	-	<b>85,000</b>
Other Equipment	85,000	-	-	-	-	-	85,000
<b>New chemical pumps at plants</b>	-	<b>25,000</b>	<b>25,000</b>	-	-	-	<b>50,000</b>
Construction	-	25,000	25,000	-	-	-	50,000
<b>New gravity treatment plant</b>	-	-	-	-	-	<b>30,000,000</b>	<b>30,000,000</b>
Construction	-	-	-	-	-	30,000,000	30,000,000
<b>Plant 1 media replacement</b>	-	-	<b>250,000</b>	-	-	-	<b>250,000</b>
Construction	-	-	250,000	-	-	-	250,000

**Water Five-Year Capital Improvement Program**  
Projects by Expense Category

**2023-2027**

Expense Category	2023 Budget	2024	2025	2026	2027	Beyond 2027	Project Total
<b>Plant 2 media replacement</b>	-	-	-	<b>500,000</b>	-	-	<b>500,000</b>
Construction	-	-	-	500,000	-	-	500,000
<b>Plant 3 media replacement</b>	<b>300,000</b>	-	-	-	-	-	<b>300,000</b>
Construction	300,000	-	-	-	-	-	300,000
<b>Reclaim pump puller at plant #1 and #3</b>	<b>20,000</b>	-	-	-	-	-	<b>20,000</b>
Construction	20,000	-	-	-	-	-	20,000
<b>Reclaim pumps at treatment plants</b>	-	<b>10,000</b>	<b>20,000</b>	-	-	-	<b>30,000</b>
Construction	-	10,000	20,000	-	-	-	30,000
<b>RPZ replacement at all 3 plants</b>	<b>20,000</b>	-	-	-	-	-	<b>20,000</b>
Construction	20,000	-	-	-	-	-	20,000
<b>SCADA Computer Replacements</b>	<b>30,000</b>	<b>30,000</b>	<b>30,000</b>	<b>30,000</b>	<b>30,000</b>	<b>30,000</b>	<b>180,000</b>
Computers	30,000	30,000	30,000	30,000	30,000	30,000	180,000
<b>Tower 4 gate valve replacement</b>	-	<b>75,000</b>	-	-	-	-	<b>75,000</b>
Construction	-	75,000	-	-	-	-	75,000
<b>Water Altitude Valves</b>	<b>25,000</b>	-	-	-	-	-	<b>25,000</b>
Other Equipment	25,000	-	-	-	-	-	25,000
<b>Water main replacement</b>	<b>1,000,000</b>	<b>1,000,000</b>	<b>1,100,000</b>	<b>1,100,000</b>	<b>1,200,000</b>	<b>1,200,000</b>	<b>6,600,000</b>
Construction	1,000,000	1,000,000	1,100,000	1,100,000	1,200,000	1,200,000	6,600,000
<b>Water tower 1 cleaning</b>	-	<b>60,000</b>	-	-	-	-	<b>60,000</b>
Construction	-	60,000	-	-	-	-	60,000
<b>Water tower 2 replacement/rehab</b>	-	<b>2,300,000</b>	-	-	-	-	<b>2,300,000</b>
Construction	-	2,300,000	-	-	-	-	2,300,000
<b>Water tower 3 cleaning</b>	-	<b>50,000</b>	-	-	-	-	<b>50,000</b>
Construction	-	50,000	-	-	-	-	50,000
<b>Water tower 4 rehab</b>	-	<b>60,000</b>	<b>1,500,000</b>	-	-	-	<b>1,560,000</b>
Construction	-	-	1,500,000	-	-	-	1,500,000
Consulting	-	60,000	-	-	-	-	60,000
<b>Water treatment plant 1 doors</b>	<b>20,000</b>	-	-	-	-	-	<b>20,000</b>
Construction	20,000	-	-	-	-	-	20,000
<b>Water treatment plant 1 flat roof repair</b>	<b>15,000</b>	-	-	-	-	-	<b>15,000</b>
Construction	15,000	-	-	-	-	-	15,000
<b>Water treatment plant 1 improvements</b>	-	<b>350,000</b>	-	-	-	-	<b>350,000</b>
Construction	-	350,000	-	-	-	-	350,000
<b>Water treatment plant 1 valves, actuators, and meters</b>	<b>100,000</b>	-	-	-	-	-	<b>100,000</b>
Construction	100,000	-	-	-	-	-	100,000
<b>Water treatment plant 2 doors</b>	<b>20,000</b>	-	-	-	-	-	<b>20,000</b>
Construction	20,000	-	-	-	-	-	20,000
<b>Water treatment plant 2 expansion</b>	-	-	-	-	<b>1,400,000</b>	-	<b>1,400,000</b>
Construction	-	-	-	-	1,400,000	-	1,400,000
<b>Water treatment plant 2 flat roof repair</b>	<b>15,000</b>	-	-	-	-	-	<b>15,000</b>
Construction	15,000	-	-	-	-	-	15,000
<b>Water treatment plant 2 flow control valves, actuators, and meters</b>	<b>250,000</b>	-	-	-	-	-	<b>250,000</b>
Construction	250,000	-	-	-	-	-	250,000
<b>Water treatment plant 2 improvements</b>	<b>1,400,000</b>	-	-	-	-	-	<b>1,400,000</b>
Construction	1,300,000	-	-	-	-	-	1,300,000
Consulting	100,000	-	-	-	-	-	100,000
<b>Water treatment plant 3 doors</b>	<b>20,000</b>	-	-	-	-	-	<b>20,000</b>
Construction	20,000	-	-	-	-	-	20,000

**Water Five-Year Capital Improvement Program**  
Projects by Expense Category

**2023-2027**

Expense Category	2023 Budget	2024	2025	2026	2027	Beyond 2027	Project Total
<b>Water Treatment plant 3 flow control valves, actuators, and meters</b>	<b>100,000</b>	-	-	-	-	-	<b>100,000</b>
Construction	100,000	-	-	-	-	-	100,000
<b>Water treatment plant 3 improvements</b>	<b>450,000</b>	-	-	-	-	-	<b>450,000</b>
Construction	450,000	-	-	-	-	-	450,000
<b>Well 12 VFD</b>	<b>30,000</b>	-	-	-	-	-	<b>30,000</b>
Construction	30,000	-	-	-	-	-	30,000
<b>Well 18,19 VFD's</b>	-	-	-	-	<b>50,000</b>	-	<b>50,000</b>
Construction	-	-	-	-	50,000	-	50,000
<b>Well control covers at 17,18,19,20,21</b>	-	<b>200,000</b>	<b>400,000</b>	<b>400,000</b>	-	-	<b>1,000,000</b>
Construction	-	200,000	400,000	400,000	-	-	1,000,000
<b>Well controls air conditioning</b>	<b>30,000</b>	<b>60,000</b>	-	-	-	-	<b>90,000</b>
Construction	30,000	60,000	-	-	-	-	90,000
<b>Well data loggers</b>	<b>25,000</b>	-	-	-	-	-	<b>25,000</b>
Construction	25,000	-	-	-	-	-	25,000
<b>Well rehab</b>	-	<b>50,000</b>	<b>50,000</b>	<b>100,000</b>	<b>100,000</b>	<b>100,000</b>	<b>400,000</b>
Construction	-	50,000	50,000	100,000	100,000	100,000	400,000
<b>Wellhouse 10 replacement</b>	-	-	<b>960,000</b>	-	-	-	<b>960,000</b>
Construction	-	-	850,000	-	-	-	850,000
Consulting	-	-	110,000	-	-	-	110,000
<b>Wellhouse 5 replacement</b>	-	<b>830,000</b>	-	-	-	-	<b>830,000</b>
Construction	-	730,000	-	-	-	-	730,000
Consulting	-	100,000	-	-	-	-	100,000
<b>Wellhouse 7 replacement</b>	-	-	-	<b>870,000</b>	-	-	<b>870,000</b>
Construction	-	-	-	770,000	-	-	770,000
Consulting	-	-	-	100,000	-	-	100,000
<b>Wellhouse 8 replacement</b>	-	-	<b>1,125,000</b>	-	-	-	<b>1,125,000</b>
Construction	-	-	1,000,000	-	-	-	1,000,000
Consulting	-	-	125,000	-	-	-	125,000
<b>Grand Total</b>	<b>4,556,500</b>	<b>6,127,000</b>	<b>5,460,000</b>	<b>3,000,000</b>	<b>2,780,000</b>	<b>31,730,000</b>	<b>53,653,500</b>