GREENSTONE

THE CORPORATION OF THE MUNICIPALITY OF GREENSTONE

Municipal Drinking Water License Financial Plan

This Financial Plan was approved by Municipal Council on June 8, 2026

This Financial Plan was prepared by:

Corporate Services & Public Services
Municipality of Greenstone
1800 Main Street
Geraldton, ON P0T 1M0

CONTENTS

1. INTRODUCTION AND SUMMARY

The Municipality of Greenstone owns five separate drinking water systems. This financial plan covers the combined financial information for all of the drinking water systems and includes the drinking water systems in Beardmore, Caramat, Geraldton, Longlac and Nakina.

This Financial Plan has been prepared to comply with the requirements of Ontario Regulation 453/07 and addresses the Corporation of the Municipality of Greenstone's (Greenstone) Drinking Water Systems and associated distribution systems. The financial statements included in this plan adhere to the minimum six-year forecast requirement.

This financial plan utilizes the guidelines of the Public Sector Accounting Board standards PSAB 3150 for Tangible Capital Assets (TCA) as required by Ontario Regulation 453/07. PSAB 3150 ensures municipalities and ratepayers are more aware of the investment in physical infrastructure and the cost of using an asset to provide services over its useful life. Furthermore, it also encourages long-term planning for capital renewal and replacement.

The financial plan was prepared for Greenstone's Drinking Water Systems based on information contained in the recently approved Asset Management Plan (November 2025) which identifies the current practices and strategies that are in place to manage the system's infrastructure. The AMP was developed to achieve compliance with July 1, 2025, requirements under O. Reg. 588/17. This includes requirements for proposed levels of service and inventory reporting for all asset categories. Furthermore, the financial plan utilized the approved 2026 Rate Supported Water and Wastewater Budget which detailed future operating budgeted projections and capital and major maintenance projects.

The plan laid out in this document, and its associated appendices, will maintain Greenstone's safe, clean and secure water supply for current and future residents. Greenstone is a firm believer that financial planning is essential to ensure that the drinking water system provides value not just for today's customers but also for future generations.

The financial plans represent a balanced approach to the investment and renewal required to sustain existing infrastructure as outlined in the Asset Management Plan along with the installation of any new infrastructure in conjunction with the Municipality's Official Plan and Zoning By-laws. System improvements are also contemplated to improve customer experience. Reliable infrastructure and performance of the water system are key elements to not only economic development but also quality-of-life and safety in the community. The Financial Plan is a summary of various capital and operational programs already approved and implemented by Council or those that are in draft form or will be completed in the near future.

Following approval of the Financial Plan by Council, any requested changes will be made and the plan will be published on the Municipality's website and submitted to the Ministry of Municipal Affairs and Housing, as required by the legislation. Hard copies will be available to the public upon request.

As systems need change and evolve, so too, will this plan. This plan will be revised within one year of the July 1, 2030 deadline for the Municipality's Asset Management Plan update, and at a minimum, every five years thereafter.

1.1. Service Context

The supply of fresh, clean water is a very important service to Greenstone. Residents expect to be able to turn on their tap at any time and be able to trust that the water coming out is safe to drink. Greenstone owes a duty of care to residents and businesses to ensure that water is available, clean and safe and it is this responsibility that guides Staff in its day-to-day operations, long term planning and recommendations to Council. Below is a description of the objectives and principles of the waterworks area as well as a description of the organizational make-up of the staff involved in supplying clean water within the Environmental Services Division.

1.1.1. Municipal Drinking Water System Sustainability Principles

Financial sustainability for water and wastewater systems is intended to ensure that residents enjoy safe drinking water that is provided on a reliable basis over the long-term in a manner that maintains environmental protection. The attainment of financial sustainability does not necessarily need to occur at once but rather can involve a transition over many years.

In general, sustainability refers to the ability to maintain a certain position over time. While the S.D.W.A. requires a declaration of the financial plan's sustainability, it does not give a clear definition of what would be considered sustainable. Instead, the MECP released a guideline ("Towards Financially Sustainable Drinking-Water and Wastewater Systems") that provides possible approaches to achieving sustainability. The Province's Principles of Financially Sustainable Water Services are provided below:

Principle #1: Ongoing public engagement and transparency can build support for, and confidence in, financial plans and the system to which they relate.

Principle #2: An integrated approach to planning among water, wastewater, and storm water systems is desirable given the inherent relationship among these services.

Principle #3: Revenues collected for the provision of water services should ultimately be used to meet the needs of those services.

Principle #4: Life-cycle planning with mid-course corrections is preferable to planning over the short-term, or not planning at all.

Principle #5: An asset management plan is a key input to the development of a financial plan.

Principle #6: A sustainable level of revenue allows for reliable service that meets or exceeds environmental protection standards, while providing sufficient resources for future rehabilitation and replacement needs.

Principle #7: Ensuring users pay for the services they are provided leads to equitable outcomes and can improve conservation. In general, metering and the use of rates can help ensure users pay for services received.

Principle #8: Financial plans are "living" documents that require continuous improvement. Comparing the accuracy of financial projections with actual results can lead to improved planning in the future.

Principle #9: Financial plans benefit from the close collaboration of various groups, including engineers, accountants, auditors, utility staff, and municipal council.

1.1.2. Operations

The Municipality has five (5) municipal drinking water systems; Beardmore, Caramat, Geraldton, Longlac and Nakina. The five (5) drinking water systems are not connected and each system consists of a water treatment plant (WTP) and a distribution system. The Municipality owns all buildings, facilities and equipment that are part of the drinking water system with all five (5) of the systems being operated by the Ontario Clean Water Agency. OCWA Operators are responsible for such aspects as the treatment operation and control of all valves, pumping stations, reservoirs and disinfection equipment. In addition to this, Operators also are responsible for both preventative and unplanned maintenance of the aforementioned elements. Municipal staff within the Public Services department are responsible for the distribution systems including watermains and hydrants.

1.1.3. Engineering

The Environmental Services Division is provided with engineering services through many third-party engineering firms. Overall responsibility for the capital projects falls under the Public Services Department of which the Environmental Services Division is part of. This work can include life-cycle renewal of watermains, capital projects for pumping stations like expansion or refurbishment and system improvements to increase water quality or pressure as well as other engineering projects. The Public Services Department is also responsible for maintaining the Tangible Capital Asset database, Capital Plan and Long-Term Forecast in conjunction with the Municipality's Corporate Services Department.

1.2. Historical Perspective

1.2.1. Overview

The Municipality of Greenstone is located in northwestern Ontario, approximately 270 km northeast of Thunder Bay. The Municipality is comprised of six (6) wards, five (5) of which have municipal drinking water systems; Beardmore, Caramat, Geraldton, Longlac and Nakina.

1.2.1.1 Beardmore

The Beardmore Drinking Water System (DWS) consists of a surface water sourced package treatment plant, including intake, SCADA (Supervisory Control and Data Acquisition) system, backwash system, low and high lift works, on-site storage, emergency power and chemical addition.

The intake consists of an intake crib with a design capacity of 1360 m3/day and an intake pipe. Water is drawn from the Blackwater River. The low lift works consist of two (2) 4 stage vertical turbine pumps; each rated at 15.8 L/s at a total dynamic head of 26.5 m.

The pumps deliver raw water to a package plant with a capacity of 1363 m3/day. The plant contains a draft tube flocculator, solids contact clarifier with tube settlers and a two (2) compartment dual media rapid sand filter (sand/anthracite). The plant is accompanied by an automatic backwash system with a total volume of 12 m3. The backwash system also has a 27 m3 wastewater storage tank that pumps wastewater with a sewage pump to the sanitary sewer system.

The SCADA system includes monitoring of two (2) turbidity meters, one (1) pH monitor, one (1) chlorine analyzer and one (1) chlorine residual recorder.

The Beardmore distribution system is comprised of 100 mm and 150 mm diameter Polyvinyl Chloride (PVC) pipes.

1.2.1.2 Caramat

The Caramat Drinking Water System consists of a 61 m intake pipe from inlet bell to wet well drawing water from Caramat Lake. There are two (2) low lift pumps that are each rated at 0.87 L/s at a total dynamic head of 40.5 m.

The low lift pumps provide water to a filtration system consisting of two trains each equipped with a roughing filter, slow sand filter and Granular Activated Carbon (GAC) contactor. Each filter is rated at 0.43 L/s. The water receives primary chlorination from two sodium hypochlorite metering pumps, capable of pumping 0.4 L/hr. The water has ozone applied from six (6) ozone generators in two ozone contactors each with a volume of 145 L.

The treated water enters the clear well which is comprised of two (2) concrete tanks with a total volume of 57 m3. Two (2) high lift pumps (duty/standby) each rated at 2.48 L/s pump water to the distribution system. The finished water is chlorinated again prior to distribution.

The SCADA system in Caramat consists of the monitoring of an online chlorine analyzer, a magnetic flow meter, and oxygen sensors.

The Caramat distribution system is primarily comprised of 150 mm diameter PVC pipes.

1.2.1.3 Geraldton

The Geraldton Water Treatment plant draws water from an intake structure in Cecile Lake. There are three (3) high lift pumps each rated at 34.7 L/s at a total dynamic head of 12.95 m.

The raw water is treated in two treatment units in parallel consisting of flocculation tanks, settling chambers equipped with tube settlers, and a mixed media filter tank.

The plant is also equipped with backwash pumps and a backwash storage tank that holds process water before a sludge transfer pump transfers the wastewater to a lagoon for settling.

Disinfection occurs from two gas chlorinators complete with 22.7 kg/day capacity rotameters. Water is stored in a 556 m3 reservoir consisting of two clear well compartments. Three (3) high lift pumps distribute water to the distribution system. Each pump is rated at 34.7 L/s at a total dynamic head of 52.43 m.

The monitoring equipment at the Geraldton WTP consists of two (2) continuous turbidimeters, one (1) continuous online free chlorine residual analyzer, and three flow meters measuring the in-plant domestic use, the flow to the distribution system and the raw water flow rate.

The Geraldton distribution system is comprised of approximately 19 km of Cast Iron pipes, 5 to 6 km of Ductile Iron Pipes, and a small amount of PVC pipes.

1.2.1.4 Longlac

The Longlac Drinking Water System consists of an intake crib, found in Long Lake, containing a 2.4 m pre-cast concrete pipe with a capacity of 6050 m3/day. Three (3) single stage vertical turbine pumps, each rated at 34 L/s at a total dynamic head of 12.92 m pump the raw water to the water treatment plant. Alum, a polymer and orthophosphate are added to the stream to aid in the filtration/coagulation process.

The Longlac WTP contains a package plant with a capacity of 4050 m3/day, with flocculation, solids contact clarifier with tube settlers and two (2) compartment dual media rapid sand filter.

The plant is equipped with a 16 m3 backwash storage tank along with a wastewater tank that stores the processed waste until it is pumped by waste transfer pumps to the sanitary sewer system.

The monitoring equipment at the Longlac WTP consists of two (2) continuous online monitoring turbidimeters, a continuous online chlorine analyzer, a phosphate analyzer and three (3) flow meters for the influent flow, in plant domestic use and the effluent flow.

The distribution system in Longlac comprises approximately 5 km of PVC and 11 km of Ductile Iron pipes.

1.2.1.5 Nakina

The Nakina WTP draws its raw water from one of two wells, each capable of 18.9 L/s at a total dynamic head of 27.4 m. The wells are equipped with 15 HP vertical turbine pumps. Sodium hypochlorite is added as the primary and secondary disinfectant.

There are two (2) chemical pumps for primary disinfection, operating as duty/standby, each capable of pumping 3.6 L/hr.

There are two (2) chemical pumps for secondary disinfection, operating as duty/standby. The duty pump is capable of pumping 0.59 L/hr while the standby pump is capable of pumping 1.1 L/hr.

Water is stored in a 1592 m3 twin celled reservoir. Four (4) high lift pumps pump the water from the clear well to the distribution system. Three (3) of the pumps are rated at 18.9 L/s at a total dynamic head of 52.43 m with 25 HP motors and one pump is rated at 99.6 L/s at a total dynamic head of 41.45 m with a 75 HP motor.

The Nakina WTP is also equipped with turbidity meter, on-line chlorine residual analyzer, as well as raw water and treated water flow meters.

The Nakina distribution system contains approximately 10 km of pipes, consisting primarily of PVC.

1.2.2. Water By-Laws

By-law 18-20 was approved in April 2018 to establish a Water & Sewer Infrastructure Maintenance Policy. The policy outlines municipal maintenance responsibilities and service standards with respect to water, sanitary sewer and storm water infrastructure.

Greenstone recently passed By-Law 25-47 in September 2025, which establishes a Water and Wastewater Billing and Collection Policy. This policy outlines the billing and collection process of water and wastewater accounting for the Municipality of Greenstone. Also, in September 2025, By-law 25-48 was approved establishing a Water Meter Installation, Maintenance and Replacement. This policy establishes responsibilities for the Municipality and its property owners which require water meters for the installation, maintenance and replacement of water meters and related equipment.

2. WATER SYSTEM NEEDS AND REVENUE REQUIREMENTS

The Municipality of Greenstone's distribution systems contain over 53 km of watermains, 297 hydrants, 5 pump houses, 6 water storage locations, and hundreds of valves, as well as approximately 2,000 water services and 200 water meters. The average age of water distribution system components is approximately 51 years old with some components over 80 years old.

2.1. Capital Activities

The 10-year Capital Plan identifies four capital activities listed below to mitigate maintenance problems, health concerns, performance deficiencies and firefighting deficiencies, including:

1. Treatment Plant Equipment replacements to address aging infrastructure and maintain MECP requirements;
2. Pump Station Equipment replacements to address aging infrastructure and maintain MECP requirements;
3. Watermain replacement to address watermain breaks and corrosion potential; and
4. Watermain replacement to address undersized mains and substandard mains due to changing municipal and MECP requirements.

Furthermore, the Municipality will be undertaking a Water and Wastewater Master Plan that will include a Water Modeling Study. Based on the outcomes there may be replacement of mains identified through this process.

2.1.1. Asset Management

To enable the delivery of safe drinking water to all, the water system has significant assets, including: five (5) Water Treatment Plants; four (4) water storage facilities; two (2) water storage towers; five (5) water pumping stations; 53.4 kilometers of watermains; and thousands of connections, fire hydrants and valves. These assets are referred to as capital.

In October 2025, PSD CityWide completed an updated Asset Management Plan (AMP) for the Municipality. Included in this plan were the assets used by the Environmental Services Division to treat and supply water at a value of $155,955.000 as per table 1 below highlighting the cost for each system.

Table 1

Beardmore	**$ 15,376,734**
Caramat	**$ 5,061,291**
Geraldton	**$ 77,959,543**
Longlac	**$ 36,408,614**
Nakina	**$ 21,148,817**

The AMP outlined that 45% of these assets were considered in good or very good condition, 34% of the assets in fair condition, and 21% of the assets being in poor or very poor condition. For the most part, the AMP has used aged based condition rating as there is no reliable method to test the underground infrastructure without digging up test pits.

The AMP identified that although Greenstone is in a manageable position with the majority of the water assets being either in fair or better condition; the 21% in poor or worse condition, equates to an estimated $33.04 million worth of assets requiring rehabilitation or replacement work at that time. The AMP identified an annual funding gap of $2.6 million. This amount does not include specific assets such as water meter replacements, required system upgrades, or development related works.

The chart below outlines the necessary replacement requirements over the next 10 years based on the approved 2026 budget which used data from the Facility Condition Assessment, OCWA long term equipment replacement plan and AMP for system infrastructure.

Beardmore	**2026**	**2027**	**2028**	**2029**	**2030**
Facility Condition Assessment Needs	$ -	$ 17,830	$ 50,910	$ 563,980	$ 117,490
OCWA Equipment Replacement Needs	$ 184,000	$ 95,000	$ 40,000	$ 195,000	$ 135,000
Water Distribution System Needs	$ -	$ 124,010	$ 124,010	$ 124,010	$ 124,010
Total Needs	**$ 184,000**	**$ 236,840**	**$ 214,920**	**$ 882,990**	**$ 376,500**
	2031	**2032**	**2033**	**2034**	**2035**
Facility Condition Assessment Needs	$ 8,490	$ -	$ -	$ 11,140	$ 27,550
OCWA Equipment Replacement Needs	$ 110,000	$ 18,000	$ 10,000	$ 22,000	$ 87,000
Water Distribution System Needs	$ 124,010	$ 124,010	$ 124,010	$ 124,010	$ 124,010
Total Needs	**$ 242,500**	**$ 142,010**	**$ 134,010**	**$ 157,150**	**$ 238,560**

Caramat	**2026**	**2027**	**2028**	**2029**	**2030**
Facility Condition Assessment Needs	$ 58,950	$ -	$ -	$ 56,860	$ 9,900
OCWA Equipment Replacement Needs	$ 62,000	$ 22,000	$ 45,000	$ 27,000	$ 57,000
Water Distribution System Needs	$ -	$ 33,670	$ 33,670	$ 33,670	$ 33,670
Total Needs	**$ 120,950**	**$ 55,670**	**$ 78,670**	**$ 117,530**	**$ 100,570**
	2031	**2032**	**2033**	**2034**	**2035**
Facility Condition Assessment Needs	$ -	$ -	$ -	$ -	$ 305,450
OCWA Equipment Replacement Needs	$ 45,000	$ 27,500	$ -	$ 15,000	$ 34,000
Water Distribution System Needs	$ 33,670	$ 33,670	$ 33,670	$ 33,670	$ 33,670
Total Needs	**$ 78,670**	**$ 61,170**	**$ 33,670**	**$ 48,670**	**$ 373,120**

Geraldton	2026	2027	2028	2029	2030
Facility Condition Assessment Needs	$ 100,660	$ 45,880	$ 110,120	$ 1,412,560	$ 118,560
OCWA Equipment Replacement Needs	$ 85,000	$ 90,000	$ 97,000	$ 30,000	$ 32,000
Water Distribution System Needs	$ -	$ 759,280	$ 759,280	$ 759,280	$ 759,280
Total Needs	**$ 185,660**	**$ 895,160**	**$ 966,400**	**$ 2,201,840**	**$ 909,840**
	2031	**2032**	**2033**	**2034**	**2035**
Facility Condition Assessment Needs	$ -	$ -	$ -	$ -	$ -
OCWA Equipment Replacement Needs	$ 45,000	$ 30,000	$ 25,000	$ 37,000	$ 50,000
Water Distribution System Needs	$ 759,280	$ 759,280	$ 759,280	$ 759,280	$ 759,280
Total Needs	**$ 804,280**	**$ 789,280**	**$ 784,280**	**$ 796,280**	**$ 809,280**

Longlac	2026	2027	2028	2029	2030
Facility Condition Assessment Needs	$ 209,300	$ -	$ 117,610	$ 1,063,830	$ 2,320
OCWA Equipment Replacement Needs	$ 285,000	$ 60,000	$ 512,000	$ 50,000	$ 55,000
Water Distribution System Needs		$ 321,225	$ 321,225	$ 321,225	$ 321,225
Total Needs	**$ 494,300**	**$ 381,225**	**$ 950,835**	**$ 1,435,055**	**$ 378,545**
	2031	**2032**	**2033**	**2034**	**2035**
Facility Condition Assessment Needs	$ -	$ -	$ -	$ -	$ 25,530
OCWA Equipment Replacement Needs	$ 45,000	$ 58,000	$ -	$ -	$ 110,000
Water Distribution System Needs	$ 321,225	$ 321,225	$ 321,225	$ 321,225	$ 321,225
Total Needs	**$ 366,225**	**$ 379,225**	**$ 321,225**	**$ 321,225**	**$ 456,755**

Nakina	2026	2027	2028	2029	2030
Facility Condition Assessment Needs	$ 56,370	$ 23,975	$ 29,440	$ 252,015	$ 61,750
OCWA Equipment Replacement Needs	$ 50,000	$ 112,000	$ 50,000	$ 135,000	$ 10,000
Water Distribution System Needs		$ 196,090	$ 196,090	$ 196,090	$ 196,090
Total Needs	**$ 106,370**	**$ 332,065**	**$ 275,530**	**$ 583,105**	**$ 267,840**
	2031	**2032**	**2033**	**2034**	**2035**
Facility Condition Assessment Needs	$ -	$ -	$ -	$ -	$ 1,940
OCWA Equipment Replacement Needs	$ 35,000	$ 122,000	$ -	$ -	$ 60,000
Water Distribution System Needs	$ 196,090	$ 196,090	$ 196,090	$ 196,090	$ 196,090
Total Needs	**$ 231,090**	**$ 318,090**	**$ 196,090**	**$ 196,090**	**$ 258,030**

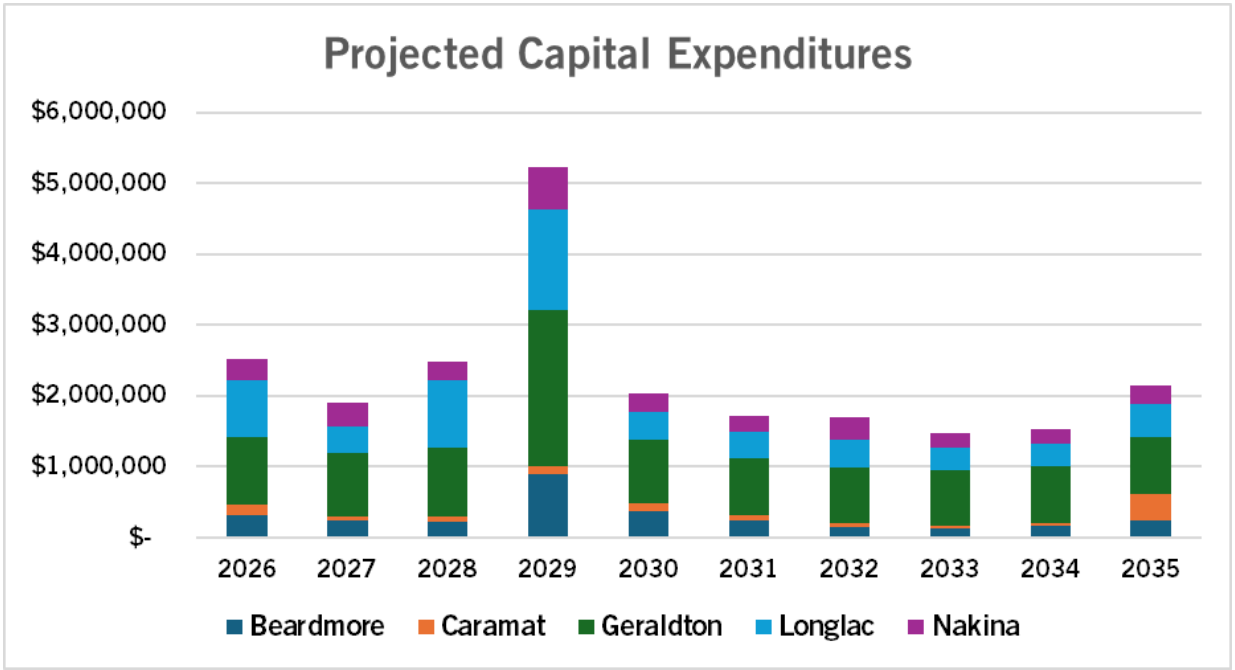
The updated plan has used available detailed asset condition data, long range infrastructure strategies, current technical and financial practices, and levels of service to establish an AMP with a goal to maintain, upgrade and operate Greenstone's physical assets in a cost-effective manner. With over 53km of watermains, the cost-effective rehabilitation will be prioritized based on the age, material type, size, and pressure related issues, as well as the integration with road resurfacing, road reconstruction work and other underground utilities including wastewater, natural gas, hydro, phone and cable lines.

The Municipality of Greenstone's 10 Year User Rate Supported Capital Plan was compiled and established by gathering information on all Environmental Services water assets through the TCA and Asset Management process. A combination of external and internal condition assessments were performed for the water treatment plants, watermains, pumping stations, the storage reservoirs and standpipes, and all other buildings, machinery and equipment resulting in the determination of maintenance and renewal needs up to 2035. This plan does not illustrate any requirements regarding user rates for projects related to growth of the system through potential development charge expansions and local service extensions.

Over the next ten years, there are significant capital costs required to upgrade and maintain Greenstone's water system. On average, approximately $2.6M of capital investments would be required each year. These expenditures will help to ensure the delivery of safe drinking water to residents of all five of Greenstone's systems in the short term and the long term and will be performed in a cost-effective manner through priority planning and integration with other Municipal department upgrades.

Figure 1 below summarizes the type and amount of expenditure required each year to renew or rehabilitate the existing infrastructure within the Municipality of Greenstone 10 Year Capital Plan.

FIGURE 1



The Public Services Department will prioritize the replacement of watermains with the completion of the upcoming Water and Wastewater Master Plan. This broad-based project will use data about all the watermains in Greenstone and rate them based on several attributes. The attributes may include factors such as age, number of breaks, pipe material, presence of lead services, hydraulics and other industry standard or legislated factors. Once the water renewal priorities are established, consultations will be held internally to include roads, planning, development and fire service needs so that the timing of the works can be coordinated to save on overall construction costs and minimize social disruption.

2.1.2. System Improvements

While it is important to maintain the system in working condition, it also at times becomes necessary or desirable to improve the system. Some of these improvements are driven by senior government legislation while others are driven by needs at the local level or incorporating best practices and/or industry standards.

A system wide Water Master Servicing Plan will be completed in 2026-2027 and will include a water modeling project. This report will provide information allowing Greenstone to determine appropriate locations of strategic infrastructure such as pump stations, storage reservoirs and watermain replacement or upgrades to reduce system constraints. Also, the report will provide important data in determining potential deficiencies in fire flows and growth servicing capacities. The Master Plan will assist the Environmental Services Division to develop long term plans and strategies for watermain replacements, upgrades and/or looping to ensure adequate flow levels are obtained.

Numerous upgrades have been completed to the various Supervisory Control and Data Acquisition (SCADA) systems including Nakina in 2020, Beardmore in 2022, Geraldton in 2023 and Longlac in 2026. The SCADA system records levels, pressures, water quality parameters, trending, equipment starts and stops, generates alarms and allows operators to view and operate a Water Plant or remotely by laptop.

In 2025, the Longlac WTP began an upgrade to replace the existing conventional filters with new media and backflow capabilities. The project will be completed in November 2026 and will include installation of air scour capabilities for both filters.

Starting in the summer of 2026, Greenstone will begin the replacement of all aged water meters that were originally installed 15+ years ago. This program will replace older manual water read meters with new radio reading coding meters, reducing the meter reading process and human resources required to complete the task. There are approximately 150 commercial and institutional meters which are to be replaced between 2026 and 2027.

2.1.3. Growth

The purpose of a Development Charge Background Study and By-law is to determine costs and timing of Municipal-initiated infrastructure works in conjunction with the approval of development applications. The study identifies priority areas for growth over the 1 to 5, 6 to 10, 11 to 15, 16 to 20, and 21 plus year time periods. The costs of water projects related to growth are funded by various sources but divided into two main groups, growth and non-growth. Growth is generally the larger of the two groups and is funded through Development Charges. User fee projects are funded through the Environmental Services Division capital budget, meaning these costs are funded by the ratepayer and directly impact on this Financial Plan.

Greenstone does not currently have Development Charges.

2.2. Operations and Maintenance

Operating expenses typically detail the on-going, day-to-day expenses associated with the production and treatment of water. Items such as contracted services, wages, benefits, chemicals, and utility costs are included in the systems operating expenses.

Maintenance is generally divided into two major categories, preventative maintenance and unplanned maintenance. These two categories are described in more detail below.

2.2.1. Preventative Maintenance

Preventative maintenance represents a proactive approach to maintaining the water distribution system. Acts of preventative maintenance often address issues before they cause a major problem or breakdown and can result in significant cost savings. Below are some of the key programs that fall under this heading.

- Regular inspection of controlled and metered flushing stations.
- Hydrant maintenance is conducted and is comprised of two components:
    1. Annual Maintenance, and
    2. Frost Checks during freezing months.
- Valves are exercised to ensure functionality and identify deficiencies.
- The Supervisory Control and Data Acquisition (SCADA) system equipment and station pumps undergo life cycle maintenance based on manufacturers' specifications or as required by the regulations.
- Reservoir inspections are performed by contractors using remote operated vehicles (ROV's), at a minimum frequency of every five (5) years. Reservoir cleaning is scheduled based on these inspections.

2.2.2. Unplanned Maintenance

Unplanned maintenance typically consists of repairing leaks or other deficiencies (e.g. damaged hydrants) that are reported by the public, other utilities, or Municipal staff. For facilities, required maintenance work may be identified by Operators during regular visits to the facilities. Often unplanned maintenance can be costly and disruptive for the customers, which is why significant effort and focus is put on preventative maintenance.

2.3. Source Water Protection

There are no source water protection plans for any of the Greenstone facilities. There was a well head protection plan for the Nakina Well field completed in 2008. The Greenstone distribution systems and WTP's have been identified as Low Risk.

2.4. Ontario's Lead Action Plan

Ontario Regulation 453/07 also contains requirements for municipalities to include in their Financial Plans the costs associated with replacing lead service pipes that are part of the drinking-water system. The Municipality has conducted lead sampling as per Provincial Legislation. There are no known or expected future lead issues within the system.

3. FINANCIAL MODEL AND BUDGET PROCESS

3.1. Financial Model

In November 2025 Council approved the Asset Management Plan as completed by PSD CityWide. This plan gave a snapshot of where the Municipality is with regard to its linear infrastructure, including roads, water mains and wastewater mains. This model will continue to be updated and improved and will become the backbone to the capital budget as well as the operating maintenance budget.

3.2. Infrastructure Deficit

An infrastructure deficit is the difference between infrastructure funding needs and reserves or anticipated revenue generation. This is often referred to as an infrastructure gap. Like many other municipalities, the Municipality of Greenstone has a significant infrastructure deficit. Staff are aware and have studied this deficit and there are currently long-term plans being carried out to close that funding gap over time.

The 2021 Water Financial Plan, as completed by the Ontario Clean Water Agency (OCWA), identified that capital expenditure needs amounted to $1,040,000 annually. Through the work completed for the 2022 AMP update, the funding requirement increased to $1,237,400 annually which resulted in staff recommending the need for annual water rate increases of 1.1% dedicated to capital renewal.

By 2025, the most recent AMP concluded that the funding requirement had increased to $2,401,000 annually and included the need for a 3.1% annual increase dedicated for asset renewal over the next 15 years. In 2025, Greenstone contributed $765,100, which is roughly $1.6M lower than the 2025 recommendation.

3.3. Budget Process

The rates charged for the Water Service support costs that can be broken into two broad types of expenditures, Capital and Operating. In the budget process these two expenditures are approved by Council at the same time and venue.

3.3.1. Operating Budget Process

Operating Costs are generally those costs that relate to the operational issues of supply, distribution, and purchase of water for the current year including the contracted services, staff, supplies and other costs required for management and maintenance of meters, pumping stations, pipes, and reservoirs. These expenditures do not increase the value of the system or the life of the system but are required to ensure the reliable delivery of safe clean water to the community and achieve the anticipated life of the infrastructure components. It is generally accepted that due to the immediate benefit and short term impact of operating expenditures, they will be funded through the collection of user rates within the year the costs are incurred.

The Water Operating Budget can be divided into the following categories:

- Contracted Services (OCWA)
- Transfer from Public Works (Salaries, Wages & Benefits for internal staff)
- Insurance, Utilities, etc.
- Treatment and Distribution Costs
- Equipment and Vehicle Costs
- Financial and Interest Expenses

In addition to these categories the Income Statement for the Environmental Services Division will include amortization of Tangible Capital Assets (TCA) consistent with PSAB Section 3150.

The operating budgets are typically driven by inflation and in some cases changes in operations. Interest expenses are driven by the planned borrowings to support the Capital Plan. The annual budget is developed through consultation with the various stakeholders, and a public participation process is undertaken prior to approval by Council.

3.3.2. Capital Budget Process

Capital Costs are those expenditures which are believed to increase the value of the system, improve the system, replace existing assets and/or extend the lifespan of those assets.

The Municipality of Greenstone's 10 Year User Rate Supported Capital Plan is developed based on various studies such as the Asset Management Plan and Facility Condition Assessments. On an annual basis, projects are reviewed and adjusted to reflect changes in the background information, inflationary impacts, changing priorities within the Municipality and coordination with construction plans of other Service Areas, primarily Roads and Wastewater. The resulting annual Capital Budgets are approved by Council following the public participation process.

3.4. Revenues and Rates

Currently the rates are structured into two components; fixed and consumption charges. The fixed charge is a flat rate billed to all customers based on the equivalent number of residential connections on a property. The second component is a consumption charge which is billed only to specific commercial, industrial, institutional and multi-residential properties based on the actual amounts of water used.

Annual rates are based on the funding needs for both the Operating and Capital budgets. The need to build adequate Reserve Funds and to maintain appropriate levels of debt are also built into the rate.

4. CAPITAL FINANCING

The expenditure required to maintain, improve and grow the water supply and distribution system represent more than one third of the total revenues collected from water rates.

4.1. Financing Options

During the budget process Corporate Services looks at all funding sources to cover the estimated capital expenditure for the current year. The sources available to the Municipality include:

- Annual user-fees
- Reserve Funds
- Local Improvement Charges
- Federal/Provincial Grants
- Canada-Community Building Fund (formerly Federal Gas Tax)

4.2. Inter-Generational Equity

A guiding principle for financing decisions is the concept of generational equity for municipal capital works intended to equitably distribute the costs across present and future ratepayers. This means that the generation which will receive the most benefit of the work should bear the majority of the cost of the works. Some of the means to achieve this include:

- Paying for replacement and renewal works through Pay-as-You-Go financing;
- Annually placing money into reserves to offset the infrastructure gap;
- Issuing debt for only long-term projects with significant future years of benefit.

4.3. Reserve Funds Policy

Currently the Municipality maintains one reserve and one reserve fund for the Water System. The reserve is used to smooth out year-to-year annual requirements; by utilizing this reserve the Municipality is able to smooth out the charge levied on the users of the system. The reserve fund, generated through any annual surplus contributions from the system, has been established for the funding of capital projects. The main purpose for this reserve fund is to fund the replacement and rehabilitation of water assets as well as fund the larger non-growth related projects.

Greenstone currently does not administer a Development Charge (DC) water reserve fund which would be used for growth related projects.

4.4. Growth Pays for Growth

The prime guiding principle of a Development Charges (DC) By-law is that growth should pay for growth. Although the Municipality currently does not administer a DC program, the outcomes of the Water and Wastewater Master Plan may include the development of such. A background study would allocate water distribution works required to build out

of the community in the various service areas, setting aside all non-growth benefit amounts. The portion of water supply system non-growth expenditures must be supported by the water rate through the pay-as-you-go approach or through contributions to reserves.

4.5. Debt Management

The overall goal of the Municipality to properly manage debt should be to eliminate the use of debt financing to fund the "average" capital budget. Debt financing should ultimately be used exclusively to fund large, extraordinary works, or to mitigate the impact of a larger than average total capital budget.

The Environmental Services Division has two outstanding debts.

- The 2013 Caramat Water Treatment Plant loan had an outstanding balance of $937,500 ending 2025. The loan is fully financed through user rates and is slated to be paid in 2034.
- The 2014/2016 Water Main Relining Project had an outstanding balance of $183,800 as at the end of 2025. The loan is fully financed through user rates and is slated to be paid in 2026.

Further debt of approximately $3.99 million is expected to be entered into in 2026 with the completion of the Geraldton and Longlac Water Tower Refurbishment (2024) and the Longlac Water Treatment Plant Filter Project (2026).

Long term plans also shown that there will be significant debt potentially incurred on projects beyond 2028 to complete linear infrastructure renewal projects in conjunction with wastewater and road rehabilitation programs.

4.6. Senior Government Funding

4.6.1. Canada-Community Building Fund (Federal Gas Tax)

Prior to 2026 there has been no allocation of the Municipality's CCBF to the User Rate Budget. As part of the 2025 Asset Management Plan process, the recommendation to allocate future funding is directed fully towards road rehabilitation capital projects.

4.6.2. Infrastructure/Stimulus Funding

The Municipality has been successful in the past obtaining infrastructure renewal funding through various Provincial and Federal programs. The current grant structure typically responds favorably to projects that are construction ready. A strategy contained in the 10-year Capital Plan is to ensure that there is money available to allow projects to undergo study and preliminary design to ensure the Municipality has projects that are considered construction ready under grant qualifications. Although a plan has been established to ensure viability of the system, senior government funding will help alleviate pressures on the ratepayer and ultimately help close the infrastructure gap.

5. FINANCIAL STATEMENTS

5.1. Format

In June 2006, the Public Sector Accounting Board (PSAB) approved PSAB 3150, requiring municipalities to report Tangible Capital Assets (TCA) in their Statement of Financial Position effective January 1, 2009. Starting with the 2009 audited financial statements, all municipalities moved to a full accrual financial statement format. This change required the inclusion of tangible capital assets, related accumulated amortization, removal of capital and reserve and reserve fund statements, introduction of accumulated surplus including all reserve and reserve funds balances. The attached forecasted financial statements have been prepared under these requirements as well as following Ontario Regulation 453/07.

5.1.1. Financial Information

At the time of preparation of this plan The Municipality of Greenstone had finalized the 2024 TCA entries, and the audit of TCA processes had occurred. Estimates have been used to create the baseline for 2025 as the audit of the TCA additions and disposals for 2025 had not occurred at the time of preparing this report.

The 10-year forecast is based on reasonable assumptions for the starting point of these documents which is 2026. The future year assumptions are derived from the Long-Term Financial Model for User Rates which includes elements from the 2026 Approved Budget, OCWA 10 Year Capital Plan, Asset Management Plan, Facility Condition Assessment and Water Operating Budget Forecast.

5.2. Statement of Operations

Municipality of Greenstone Water Division - Statement of Operations

($ THOUSANDS)	Approved*	Forecasted								
	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Revenue										
Water User Charges	$2,163.47	$2,284.24	$2,395.90	$2,511.75	$2,632.11	$2,763.72	$2,901.90	$3,046.00	$3,199.35	$3,359.31
Water Metered Charges	$471.94	$497.60	$521.55	$546.88	$572.85	$601.49	$631.57	$663.15	$696.30	$731.12
Ginoogaming Metered Water Charges	$154.53	$162.90	$170.80	$179.13	$187.60	$196.98	$206.83	$217.17	$228.03	$239.43
Long Lake #58 Metered Water Charges	$164.48	$173.38	$181.88	$190.70	$199.75	$209.74	$220.22	$231.24	$242.80	$254.94
Ginoogaming/Long Lake #58 W/S Agreement	$48.00	$48.00	$48.00	$48.00	$48.00	$48.00	$48.00	$48.00	$48.00	$48.00
Fees & Charges	$50.00	$50.00	$50.00	$50.00	$50.00	$50.00	$50.00	$50.00	$50.00	$50.00
Government Transfers - Provincial & Federal Grants	$0.00	$1,433.95	$1,433.95	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Other Revenues	$12.00	$10.00	$9.00	$8.00	$7.50	$7.50	$7.50	$7.50	$7.50	$7.50
Total Revenue	$3,064.42	$4,660.07	$4,811.08	$3,534.46	$3,697.81	$3,877.43	$4,066.02	$4,263.06	$4,471.98	$4,690.30
Expenses										
OCWA Water Operating Charges	$1,555.05	$1,601.70	$1,649.75	$1,699.25	$1,750.23	$1,802.73	$1,856.81	$1,912.52	$1,969.89	$2,028.99
Contractors	$26.50	$26.50	$27.00	$27.00	$27.50	$27.50	$28.00	$28.00	$28.50	$28.50
Repairs & Maintenance	$86.50	$87.50	$88.50	$89.50	$90.50	$91.50	$92.50	$93.50	$94.50	$95.50
Utilities	$36.95	$38.10	$39.25	$40.40	$41.55	$43.00	$44.51	$46.07	$47.68	$49.35
Municipal Wages & Equipment	$127.49	$130.94	$134.47	$138.10	$141.83	$146.08	$150.47	$154.98	$159.63	$164.42
Municipal Property Taxes	$43.98	$45.53	$47.13	$48.78	$50.48	$52.24	$54.07	$55.96	$57.92	$59.95
Amortization (estimated)	$1,121.54	$1,205.65	$1,296.07	$1,393.28	$1,497.78	$1,610.11	$1,730.87	$1,860.68	$2,000.23	$2,110.25
Total Expenses	$2,998.00	$3,135.91	$3,282.17	$3,436.31	$3,599.86	$3,773.17	$3,957.23	$4,151.71	$4,358.36	$4,536.95
Annual Surplus (Deficit)	$66.42	$1,524.16	$1,528.91	$98.15	$97.95	$104.26	$108.79	$111.35	$113.62	$153.35
Annual Surplus (Deficit)	$66.42	$1,524.16	$1,528.91	$98.15	$97.95	$104.26	$108.79	$111.35	$113.62	$153.35
Accumulated Surplus - beginning of year	$0.00	$66.42	$1,595.33	$1,693.48	$1,791.43	$1,895.69	$2,004.48	$2,115.83	$2,229.45	$2,382.80
Accumulated Surplus - end of year	$66.42	$1,590.58	$3,124.24	$1,791.63	$1,889.39	$1,999.95	$2,113.28	$2,227.18	$2,343.08	$2,536.15

*2026 amounts are approved budget figures only

5.3. Statement of Financial Position

Municipality of Greenstone Water Division - Statement of Financial Position

($ THOUSANDS)	Approved*	Forecasted								
	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Financial Assets										
Cash, Receivables and Investments	$1,376.34	$1,094.99	$1,671.39	$1,745.64	$1,088.96	$361.47	$49.46	-$279.73	$1,155.64	$1,156.46
Total Financial Assets	$1,376.34	$1,094.99	$1,671.39	$1,745.64	$1,088.96	$361.47	$49.46	-$279.73	$1,155.64	$1,156.46
Financial Liabilities										
Accounts Payable and Deferred Revenue**	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Long Term Liabilities***	$4,695.67	$4,442.89	$4,178.19	$3,901.02	$3,610.77	$6,656.09	$6,176.69	$7,108.98	$6,515.03	$6,015.55
Total Financial Liabilities	$4,695.67	$4,442.89	$4,178.19	$3,901.02	$3,610.77	$6,656.09	$6,176.69	$7,108.98	$6,515.03	$6,015.55
Net Financial Assets (Net Debt)	-$3,319.33	-$3,347.90	-$2,506.80	-$2,155.38	-$2,521.81	-$6,294.62	-$6,127.22	-$7,388.71	-$5,359.39	-$4,859.10
Non Financial Assets										
Prepaid Expenses	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Tangible Capital Assets (estimated)	$74,818.20	$76,866.84	$79,430.87	$84,643.07	$86,716.04	$88,578.48	$90,211.43	$91,860.38	$93,479.47	$95,691.90
Accumulated Depreciation (estimated)	-$38,333.94	-$39,539.59	-$40,835.66	-$42,228.94	-$43,726.72	-$45,336.83	-$47,067.69	-$48,928.38	-$50,928.61	-$53,038.86
Total Non-Financial Assets	$17,001.40	$21,478.50	$24,592.80	$27,399.00	$30,432.00	$36,873.00	$40,090.20	$44,451.70	$48,095.70	$51,699.00
Accumulated Surplus	$13,682.07	$18,130.60	$22,086.00	$25,243.62	$27,910.19	$30,578.38	$33,962.98	$37,062.99	$42,736.31	$46,839.90

*2026 amounts are approved budget figures only

**Accounts Payable and accrued liabilities related to the Water Services are integrated into the Municipality's accounts payable system and cannot be easily identified. For the purposes of these projections, it is assumed that expenses are paid immediately.

***See Schedule of Projected Liabilities for full detail.

5.4. Statement of Cash Flow

Municipality of Greenstone Water Division - Statement of Cash Flow

($ THOUSANDS)	Approved*	Forecasted							
	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
OPERATING TRANSACTIONS										
Projected Annual Surplus (Deficit)	$66.42	$1,524.16	$1,528.91	$98.15	$97.95	$104.26	$108.79	$111.35	$113.62	$153.35
Items not involving cash:										
Amortization	$1,121.54	$1,205.65	$1,296.07	$1,393.28	$1,497.78	$1,610.11	$1,730.87	$1,860.68	$2,000.23	$2,110.25
Prepaids, accounts payable, deferred revenue, capital WIP	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Cash provided by operating transactions	$1,187.95	$2,729.81	$2,824.98	$1,491.43	$1,595.73	$1,714.37	$1,839.66	$1,972.03	$2,113.85	$2,263.59
FINANCING TRANSACTIONS										
Proceeds from long-term debt	$3,993.00	$0.00	$0.00	$3,349.25	$0.00	$0.00	$0.00	$1,433.95	$0.00	$0.00
Repayment of long-term debt	-$160.60	-$252.78	-$264.70	-$277.17	-$290.25	-$303.93	-$479.41	-$501.66	-$593.95	-$499.48
Cash provided (used) by financing transactions	$3,832.40	-$252.78	-$264.70	$3,072.08	-$290.25	-$303.93	-$479.41	$932.29	-$593.95	-$499.48
CAPITAL TRANSACTIONS										
Capital Asset Purchases										
Distribution System Replacements	$445.00	$1,433.95	$1,433.95	$1,433.95	$1,433.95	$1,433.95	$1,433.95	$1,433.95	$1,433.95	$1,433.95
Facility Rehabilitation & Replacement	$3,993.00	$87.69	$308.08	$3,349.25	$310.02	$8.49	$0.00	$0.00	$11.14	$360.48
Water Treatment Plant Equipment & Machinery	$863.70	$379.00	$744.00	$437.00	$289.00	$280.00	$255.50	$35.00	$74.00	$341.00
Cash used for capital transactions	$5,301.70	$1,900.64	$2,486.03	$5,220.20	$2,032.97	$1,722.44	$1,689.45	$1,468.95	$1,519.09	$2,135.43
Net change in cash and cash equivalents	-$281.35	$576.40	$74.25	-$656.68	-$727.49	-$312.01	-$329.20	$1,435.37	$0.81	-$371.32
Cash and Cash equivalents, beginning of year	$1,376.34	$1,094.99	$1,671.39	$1,745.64	$1,088.96	$361.47	$49.46	-$279.73	$1,155.64	$1,156.46
Cash and Cash equivalents, end of year	$1,094.99	$1,671.39	$1,745.64	$1,088.96	$361.47	$49.46	-$279.73	$1,155.64	$1,156.46	$785.14

*2026 amounts are approved budget figures only

5.5. Schedule of Projected Liabilities

Municipality of Greenstone Water Division - Schedule of Projected Liabilities

($ THOUSANDS)	Approved*	Forecasted							
	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
LIABILITES										
Existing Debentures**										
Opening	$863.27	$785.28	$703.32	$617.18	$526.66	$431.52	$331.54	$226.47	$116.05	$0.00
Repayments	-77.99	-81.96	-86.14	-90.52	-95.14	-99.98	-105.07	-110.42	-116.05	$0.00
Balance	$785.28	$703.32	$617.18	$526.66	$431.52	$331.54	$226.47	$116.05	$0.00	$0.00
New Debentures***										
Opening	$0.00	$3,910.39	$3,739.57	$3,561.01	$3,374.36	$3,179.25	$6,324.55	$5,950.22	$6,992.93	$6,515.03
Repayments	-$82.61	-$170.82	-$178.56	-$186.65	-$195.11	-$203.95	-$374.34	-$391.24	-$477.90	-$499.48
New Debentures	$3,993.00	$0.00	$0.00	$0.00	$0.00	$3,349.25	$0.00	$1,433.95	$0.00	$0.00
Balance	$3,910.39	$3,739.57	$3,561.01	$3,374.36	$3,179.25	$6,324.55	$5,950.22	$6,992.93	$6,515.03	$6,015.55
TOTAL										
Opening	$863.27	$4,695.67	$4,442.89	$4,178.19	$3,901.02	$3,610.77	$6,656.09	$6,176.69	$7,108.98	$6,515.03
Repayments	-$160.60	-$252.78	-$264.70	-$277.17	-$290.25	-$303.93	-$479.41	-$501.66	-$593.95	-$499.48
New Debentures	$3,993.00	$0.00	$0.00	$0.00	$0.00	$3,349.25	$0.00	$1,433.95	$0.00	$0.00
Balance	$4,695.67	$4,442.89	$4,178.19	$3,901.02	$3,610.77	$6,656.09	$6,176.69	$7,108.98	$6,515.03	$6,015.55

*2026 amounts are approved budget figures only

**Currently, Water Services holds one debenture with payments slated to end in 2028 and two more scheduled to be finalized in 2026 with 15 and 20 year terms.

***Water Services may require new debt to pay for some future capital costs. All new debt has been assumed to bear a 4.5% interest rate payable over 15 years.

5.6. Debenture and Loan Schedule

Greenstone Water - Debenture and Loan Schedule

($ THOUSANDS)	Approved*	Forecasted								
	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Caramat WTP (2008/09)										
Capital Repayment	$77.99	$81.96	$86.14	$90.52	$95.14	$99.98	$105.07	$110.42	$116.05	$0.00
Interest Payment	$42.45	$38.48	$34.30	$29.92	$25.30	$20.46	$15.37	$10.02	$0.00	$0.00
Total Payment	$120.44	$120.44	$120.44	$120.44	$120.44	$120.44	$120.44	$120.44	$116.05	$0.00
Water Towers (2026)										
Capital Repayment	$59.49	$122.96	$128.44	$134.17	$140.16	$146.41	$152.94	$159.76	$166.88	$174.33
Interest Payment	$54.99	$106.01	$100.53	$94.80	$88.81	$82.56	$76.03	$69.21	$62.09	$54.64
Total Payment	$114.48	$228.97	$228.97	$228.97	$228.97	$228.97	$228.97	$228.97	$228.97	$228.97
Longlac WTP (2026)										
Capital Repayment	$23.12	$47.86	$50.12	$52.48	$54.95	$57.54	$60.25	$63.08	$66.05	$69.16
Interest Payment	$34.92	$68.21	$65.95	$63.59	$61.12	$58.53	$55.82	$52.99	$50.02	$46.91
Total Payment	$58.04	$116.07	$116.07	$116.07	$116.07	$116.07	$116.07	$116.07	$116.07	$116.07
WTP Facility Rehabilitations (2031)										
Capital Repayment	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$161.15	$168.40	$175.98	$183.89
Interest Payment	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$147.29	$140.03	$132.46	$124.54
Total Payment	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$308.43	$308.43	$308.43	$308.43
Water Main Replacement (2033)										
Capital Repayment	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$68.99	$72.10
Interest Payment	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$63.06	$59.95
Total Payment	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$132.05	$132.05