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INFRASTRUCTURE, DEVELOPMENT & OPERATIONS RATE SUPPORTED BUDGET

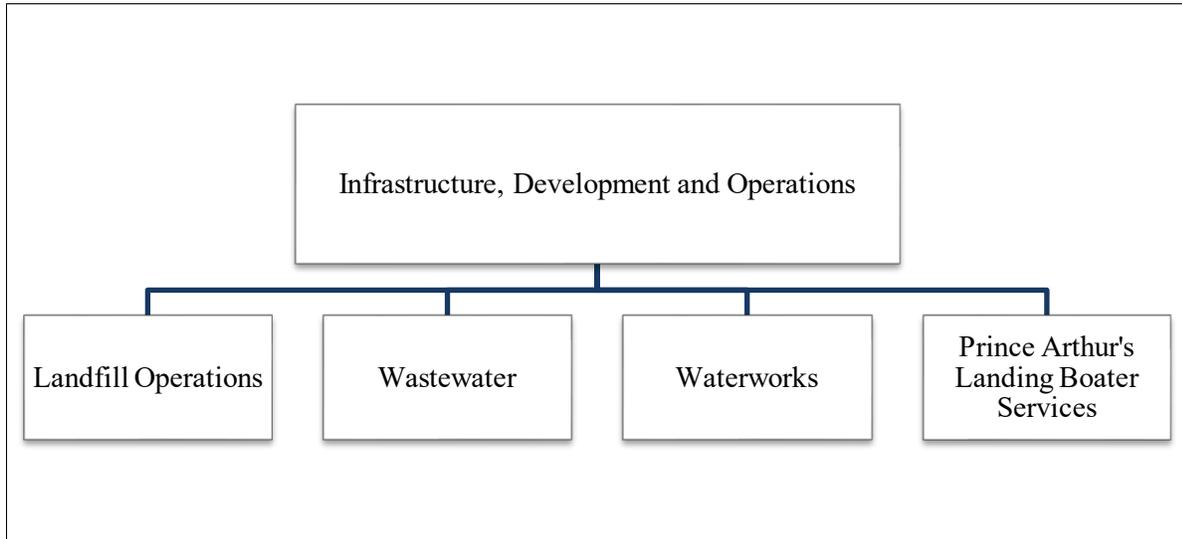
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INFRASTRUCTURE, DEVELOPMENT & OPERATIONS RATE SUPPORTED BUDGET

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INFRASTRUCTURE, DEVELOPMENT AND OPERATIONS RATE SUPPORTED BUDGET OVERVIEW



Infrastructure, Development and Operations is responsible for the planning, construction, and maintenance of rate supported infrastructure and related operations in the City of Thunder Bay.

Services

Landfill Operations – Landfill Site operations, including gas collection system.

Wastewater – Water Pollution Control Plant, wastewater treatment and sewage collection system operations and maintenance, sanitary/storm sewer separation projects and revenue collected partially funds stormwater services. Carries out sewer service connections and construction of new sewer systems.

Waterworks – Bare Point Water Treatment Plant and water distribution system operations and maintenance. Carries out water quality sampling, water service connection, construction of new distribution systems, and repairs, tests, and replaces water meters. The Compliance and Quality Control section provides laboratory testing services, administers the Municipal Drinking Water Licensing Program and ensures the ongoing planning, evaluation, management and provision of education, training, and quality assurance for the Environment Division.

Prince Arthur's Landing Boater Services – Boater services at Marina Park, operated by Parks and Open Spaces.

Infrastructure Development & Operations Rate Supported Budget Summary

Proposed Budget	2024 (in \$000s)	2023 (in \$000s)	\$ Change (in \$000s)	% Change
Operating				
Gross	\$43,749.7	\$42,619.8	\$1,129.9	2.7%
Net	(\$12,984.6)	(\$12,591.2)	(\$393.4)	3.1%
Capital				
Gross	\$24,838.1	\$24,610.3	\$227.8	0.9%
Net	\$24,038.1	\$22,922.3	\$1,115.8	4.9%

Staffing Complement	2024 FTE	2023 FTE	Change	% Change
Full Time Equivalents	135.0	135.0	0.0	0.0%
Part Time Equivalents	11.9	11.4	0.5	4.4%

Opportunities, Issues and Strategic Initiatives

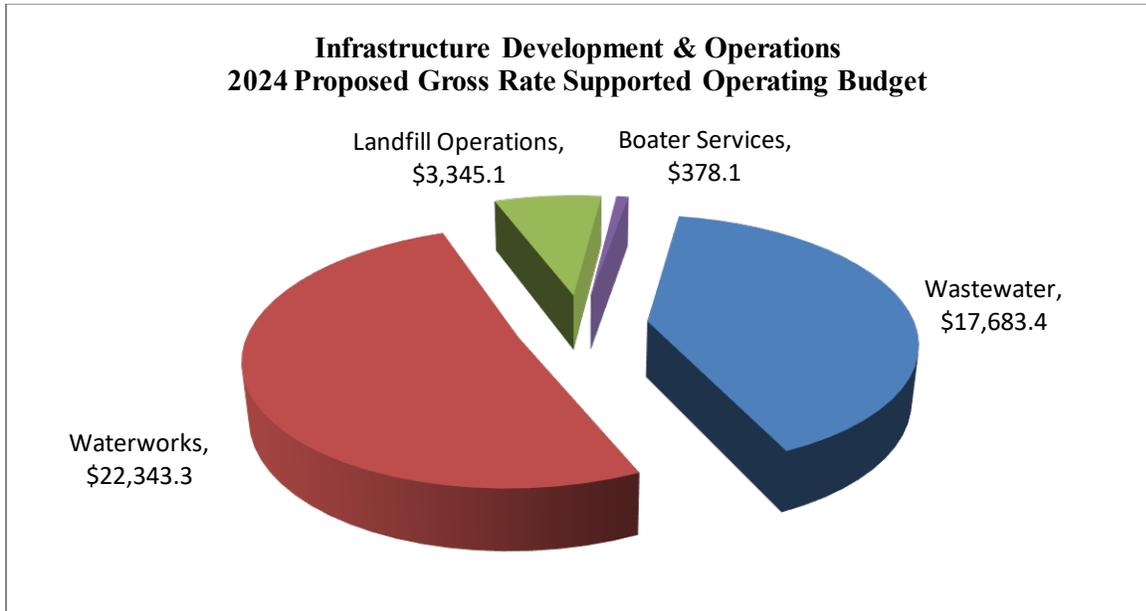
- The budget for the Water program has been prepared consistent with the Drinking Water System Financial Plan approved in July 2018 and forecasts revenues consistent with projected levels of consumption. In accordance with Ontario Regulation 453/07, this plan funds necessary work, both operating and capital, and maintains affordable water rates over the long term. A review and update of the financial plan is scheduled for the end of 2023;
- The Wastewater program has a financial plan following the same principles as the Drinking Water System Financial Plan, the Wastewater System Financial Plan was updated and approved in 2022. The Wastewater program has been prepared consistent with the financial plan;
- Lead service replacement program will continue in 2024 and increase over time;
- Conduct a review of the Drinking Water System rated capacity to plan for future growth;
- Water services fleet has been reduced. In 2023, the 24 year old aged water delivery truck was decommissioned and put up for auction. The plan is to not replace the vehicle. Water delivery services will be contracted out when required;
- Pending approval from council, the updated Solid Waste Financial Plan provides the basis for the Landfill budget;
- Landfill revenues have significantly declined since the onset of the COVID-19 Pandemic. For the operation to be financially sustainable, cost for handling and disposal of waste must be recovered from all users crossing the scale. This includes waste collected at the curb by city waste packers and other city operations. Further compounding losses are attributed to declining revenues as increased diversion through recycling grows, light weighting of commercial products and packaging and increased competition in the marketplace. The landfill will need to recover costs from the tax levy going forward;

- Completion of 2023 capital construction projects for new infrastructure along with the Sub-Division Takeover of Parkdale Stage 7 and Mount Forest Stages 5a and 6 require an expansion of 0.5 FTE to ensure staff and resources are available to maintain this new infrastructure.

Operating Budget Highlights

Proposed 2024 Gross Rate Supported Operating Budget

The Department proposes a 2024 Gross Operating Budget for Rate Supported programs of **\$43.7 million** (2023 - \$42.6 million), broken down by Program as follows:



2024 Net Budget Compared to 2023

Landfill Operations

Overall, the Department proposes an increase to net income for the Landfill program of **\$46,000**, or **14.5%**, primarily due to:

Category	2024 Budget	2023 Budget	\$ Net Budget Impact Increase (Decrease)	% Increase (Decrease)	Explanation
Gross expenses	\$3,345.1	\$3,379.8	(\$34.7)	(1.0%)	Increases in salary and purchased services offset by decreases in financial and materials.
Revenues	(\$4,449.0)	(\$5,174.5)	\$725.5	(14.0%)	Rate increase on tipping fees. Reduction in revenues per updated Landfill Solid Waste Financial Plan
Interfunctional Transfers and Transfers to Own	\$740.1	\$1,476.9	(\$736.8)	(49.9%)	2024 budget does not reflect capturing all waste crossing the scales at the landfill from City Departments. This transfer supports that lost revenue.
Total Net Revenue	(\$363.8)	(\$317.8)	(\$46.0)	14.5%	

Waterworks

Overall, the Water Authority proposes an increase to net income of **\$52,000**, or **0.7%**, primarily due to:

Category	2024 Budget	2023 Budget	\$ Net Budget Impact Increase (Decrease)	% Increase (Decrease)	Explanation
Gross expenses	\$22,343.3	\$21,460.1	\$883.2	4.1%	Expansion for sub-division takeover, salary increases, membrane repairs, cybersecurity, lead sampling program and utility cuts.
Revenues	(\$35,513.0)	(\$34,481.0)	(\$1,032.0)	3.0%	Rate increase on water billings in accordance with Financial Plan
Interfunctional Transfers and Transfers to Own	\$5,404.7	\$5,307.9	\$96.8	1.8%	Increases in program support and tax funded programs.
Total Net Revenue	(\$7,765.0)	(\$7,713.0)	(\$52.0)	0.7%	

Wastewater

Overall, the Department proposes an increase to net income for the Wastewater program of **\$283,000**, or **6.4%**, primarily due to:

Category	2024 Budget	2023 Budget	\$ Net Budget Impact Increase (Decrease)	% Increase (Decrease)	Explanation
Gross expenses	\$17,683.4	\$17,405.5	\$277.9	1.6%	Expansion for new sanitary sewers as part of sub-division takeover, salary increases, and increases in financial expenses.
Revenues	(\$28,246.7)	(\$27,429.2)	(\$817.5)	3.0%	Rate increase on Wastewater billings net of adjustments for historical revenue patterns.
Interfunctional Transfers and Transfers to Own	\$5,860.1	\$5,603.5	\$256.6	4.6%	Increases to taxes, facilities, tax funded program areas and systems.
Total Net Revenue	(\$4,703.2)	(\$4,420.2)	(\$283.0)	6.4%	

Prince Arthur's Landing Boater Services

Overall, the Department proposes an increase to net income for the Boater Services program of **\$12,400**, or **8.9%**, primarily due to:

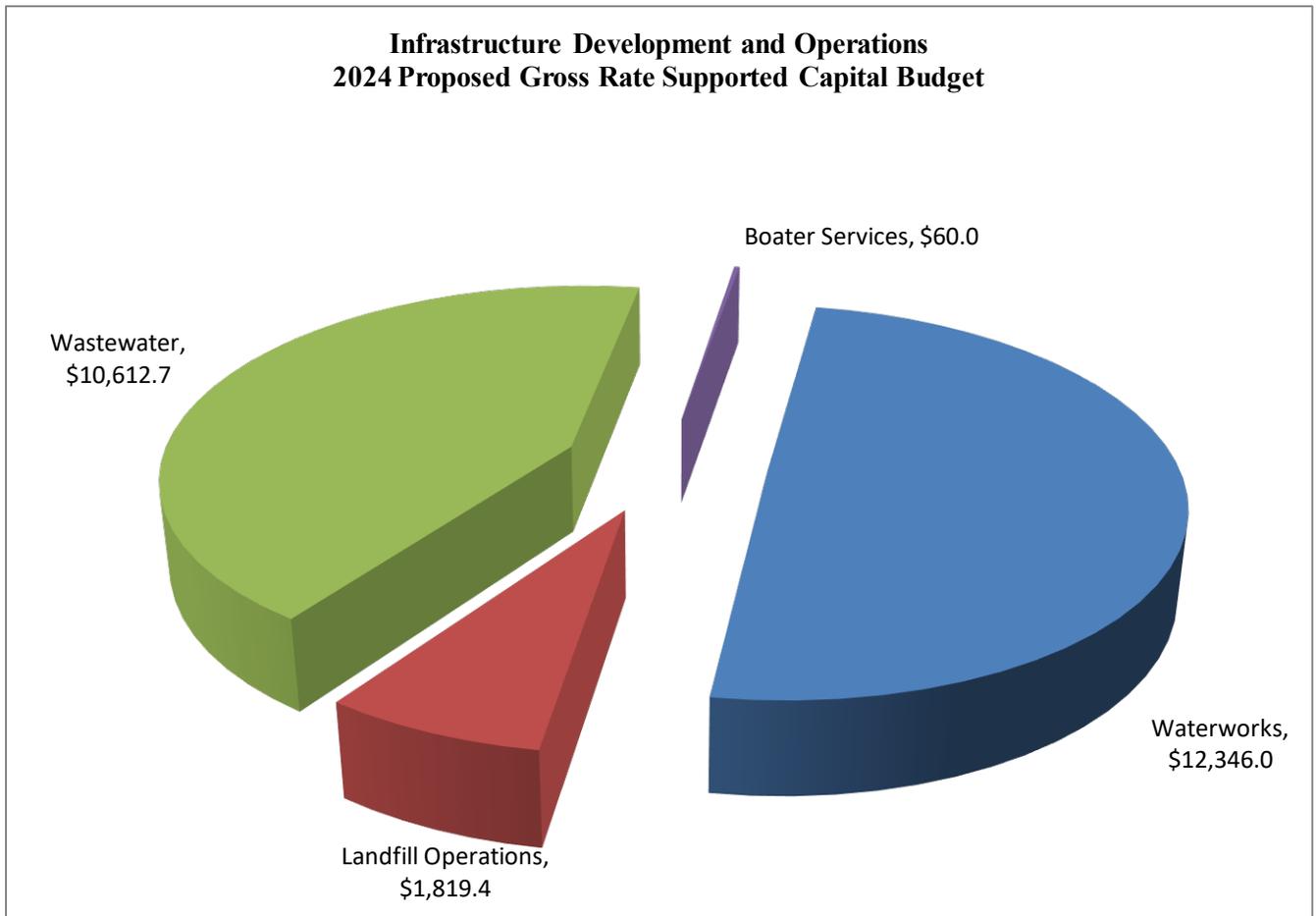
Category	2024 Budget	2023 Budget	\$ Net Budget Impact Increase (Decrease)	% Increase (Decrease)	Explanation
Gross expenses	\$378.1	\$374.5	\$3.6	1.0%	Salary increases and construction financing.
Revenues	(\$633.1)	(\$608.6)	(\$24.5)	4.0%	Rate increase on seasonal and visitor docking fees.
Interfunctional Transfers and Transfers to Own	\$102.9	\$94.4	\$8.5	9.0%	Increase in program support, facilities and systems from supporting program areas.
Total Net Revenue	(\$152.1)	(\$139.7)	(\$12.4)	8.9%	

Proposed 2024 Capital Budget Highlights

The proposed Rate Supported Capital budget is **\$24.8 million** (2023 - \$24.6 million). The proposed Capital Budget includes the following key projects:

- Storm and sanitary sewer separation projects including on Balmoral Street, and retiring the regulating manhole at Victoria & Hardy in accordance with the Pollution Prevention Control Plan;
- Lead Replacement program;
- Fuel tank replacement at Marina.

The proposed Rate Supported Capital Budget of **\$24.8 million** is broken down by Program as follows:



City of Thunder Bay
BUDGET RECAP (\$000'S)

Infrastructure, Development & Operations Rate Supported

2024 BUDGET

	2023 FT FTE	2023 PT FTE	2024 FT FTE	2024 PT FTE	2023 Approved Budget	2023 Estimated Actuals	2024 Base	2024 Base vs 2023 % Increase	One Time	User Fee Increase	Reduction	Expansion	2024 Requested Budget	2024 vs 2023 \$ Change	2024 vs 2023 % Change
FINANCIAL RESOURCES															
Infrastructure, Development & Operations															
Personnel Services	135.0	11.4	135.0	11.9	15,478.5	14,448.8	15,734.4	1.7%				27.8	15,762.2	283.7	1.8%
Purchased Services					2,264.1	2,833.1	2,886.1	27.5%					2,886.1	622.0	27.5%
Rents & Financial Expense					18,102.9	17,753.5	18,075.1	(0.2%)					18,075.1	(27.8)	(0.2%)
Materials					6,774.3	6,551.4	7,026.3	3.7%					7,026.3	252.0	3.7%
Gross Expenditures	135.0	11.4	135.0	11.9	42,619.8	41,586.8	43,721.9	2.6%				27.8	43,749.7	1,129.9	2.7%
User Fees & Service Charges					(67,650.8)	(66,615.9)	(66,836.8)	(1.2%)		(1,962.5)			(68,799.3)	(1,148.5)	1.7%
Sale of Publications, Equip					(2.5)		(2.5)						(2.5)		
Other Revenues					(40.0)	(71.7)	(40.0)						(40.0)		
Revenues					(67,693.3)	(66,687.6)	(66,879.3)	(1.2%)		(1,962.5)			(68,841.8)	(1,148.5)	1.7%
Subtotal	135.0	11.4	135.0	11.9	(25,073.5)	(25,100.8)	(23,157.4)	(7.6%)		(1,962.5)		27.8	(25,092.1)	(18.6)	0.1%
Interfunctional Transfers					12,447.5	11,286.8	12,822.7	3.0%	(750.0)				12,072.7	(374.8)	(3.0%)
Transfers to Own Funds					34.8	8.9	34.8						34.8		
Net Cost (Income)	135.0	11.4	135.0	11.9	(12,591.2)	(13,805.1)	(10,299.9)	(18.2%)	(750.0)	(1,962.5)		27.8	(12,984.6)	(393.4)	3.1%

City of Thunder Bay
BUDGET RECAP (\$000'S)

Landfill	2024 BUDGET															
	2023	2023	2024	2024	2023	2023	2024	2024 Base					2024	2024 vs	2024 vs	
FINANCIAL RESOURCES	FT	PT	FT	PT	Approved	Estimated	Base	vs 2023	One	User Fee	Reduction	Expansion	Requested	2023	2023	
	FTE	FTE	FTE	FTE	Budget	Actuals		% Increase	Time	Increase			Budget	\$ Change	% Change	
Infrastructure, Development & Operations																
Personnel Services	11.0	2.4	11.0	2.4	1,133.9	1,133.9	1,149.2	1.3%					1,149.2	15.3	1.3%	
Purchased Services					291.8	291.8	313.6	7.5%					313.6	21.8	7.5%	
Rents & Financial Expense					1,856.1	1,856.1	1,801.0	(3.0%)					1,801.0	(55.1)	(3.0%)	
Materials					98.0	98.0	81.3	(17.0%)					81.3	(16.7)	(17.0%)	
Gross Expenditures	11.0	2.4	11.0	2.4	3,379.8	3,379.8	3,345.1	(1.0%)					3,345.1	(34.7)	(1.0%)	
User Fees & Service Charges					(5,172.0)	(3,572.0)	(4,334.0)	(16.2%)		(112.5)			(4,446.5)	725.5	(14.0%)	
Sale of Publications, Equip					(2.5)		(2.5)						(2.5)			
Other Revenues																
Revenues					(5,174.5)	(3,572.0)	(4,336.5)	(16.2%)		(112.5)			(4,449.0)	725.5	(14.0%)	
Subtotal	11.0	2.4	11.0	2.4	(1,794.7)	(192.2)	(991.4)	(44.8%)		(112.5)			(1,103.9)	690.8	(38.5%)	
Interfunctional Transfers					1,474.7	741.4	1,487.9	0.9%	(750.0)				737.9	(736.8)	(50.0%)	
Transfers to Own Funds					2.2	2.2	2.2						2.2			
Net Cost (Income)	11.0	2.4	11.0	2.4	(317.8)	551.4	498.7	(256.9%)	(750.0)	(112.5)			(363.8)	(46.0)	14.5%	

Landfill

USER FEES

Consistent with the Solid Waste Financial Plan, Tipping Fees, Multi-residential, Asbestos, International waste and grit will increase an average of 3% in 2024. The \$10 minimum charge will remain unchanged, as will the rates for Contaminated Waste. The estimated revenue increase will have a net budget impact of (\$112,500).

ONE-TIME

Per the updated Landfill Solid Waste Financial Plan addressing a cost recovery (handling and disposal) of waste brought to the Landfill by the City's waste collection packers. Net budget impact of (\$750,000).

Total Landfill

(750.0)

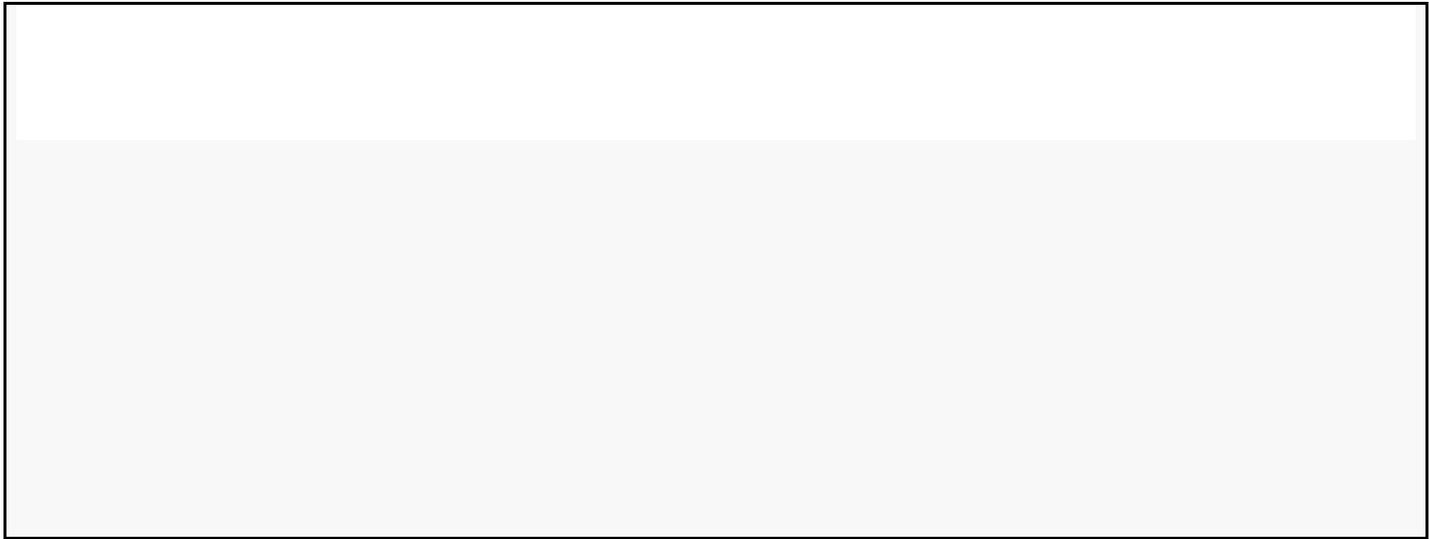
(112.5)

**CITY OF THUNDER BAY
CAPITAL DIVISIONAL SUMMARY 2024 - 2026
Gross Expense and Funding by Category (\$000's)**

	Pages	2024 Gross Expense	2024 Net From Reserve F d	2025 Gross Expense	2025 Net From Reserve F d	2026 Gross Expense	2026 Net From Reserve F d
Solid Waste							
Landfill Site	7-11 to 7-12	1,438.7	0.0	2,846.0	0.0	123.2	123.2
Landfill Fleet	7-13 to 7-14	380.7	0.0	140.0	0.0	58.0	58.0
Total Solid Waste		1,819.4	0.0	2,986.0	0.0	181.2	181.2

CITY OF THUNDER BAY
Capital Project Detail Sheet
2024 - 2026 Capital Budget Forecast

Project Name :	Landfill Site	
Department :	IOR Infrastructure & Operations - Rate	Project ID : IOR-SOW-0001-LS-P
Division :	Solid Waste	Parent ID : IOR-SOW-0001-LS-P
Divisional Category :	Landfill Site	Requested Year : 2024
Project Classification :	Legislated	Completion Year : On Going



PROJECT BUDGET

	2024	2025	2026	Total
Expenditures				
IOR-SOW-0001-LS-001 L/FILL - Process Improvements	10,800	33,000	11,200	55,000
IOR-SOW-0001-LS-002 L/FILL - Infrastructure Improvements	107,900	109,900	112,000	329,800
IOR-SOW-0001-LS-008 L/FILL - Gas System Expansion		105,800		105,800
IOR-SOW-0001-LS-004 L/FILL - East Cell Expansion - Phase II	1,320,000			1,320,000
IOR-SOW-0001-LS-009 L/FILL - Surface & Storm Water Management		249,300		249,300
IOR-SOW-0001-LS-011 West Cell Capping		1,028,000		1,028,000
IOR-SOW-0001-LS-014 Leachate Treatment Expansion - Phase II (b)		1,320,000		1,320,000
Expenditures Total	1,438,700	2,846,000	123,200	4,407,900
Financing				
Debenture	1,320,000	1,675,100		2,995,100
Other - Other Revenue	118,700	1,170,900		1,289,600

CITY OF THUNDER BAY
Capital Project Detail Sheet
2024 - 2026 Capital Budget Forecast

Project Name :	Landfill Site	Project ID : IOR-SOW-0001-LS-P
Department :	IOR Infrastructure & Operations - Rate	Parent ID : IOR-SOW-0001-LS-P
Division :	Solid Waste	Requested Year : 2024
Divisional Category :	Landfill Site	Completion Year : On Going
Project Classification :	Legislated	

PROJECT BUDGET

	2024	2025	2026	Total
Financing				
Reserve & Reserve Funds			123,200	123,200
Financing Total	1,438,700	2,846,000	123,200	4,407,900

OPERATING EXPANSION

No Operating Impact

CITY OF THUNDER BAY
Capital Project Detail Sheet
2024 - 2026 Capital Budget Forecast

Project Name :	Landfill Fleet Replacement	Project ID : IOR-SOW-0002-LF-P
Department :	IOR Infrastructure & Operations - Rate	Parent ID : IOR-SOW-0002-LF-P
Division :	Solid Waste	Requested Year : 2024
Divisional Category :	Landfill Fleet	Completion Year : On Going
Project Classification :	Cyclical Asset Replacement	

PROJECT DETAILS

Project Description and Justification

Involves the replacement of existing equipment according to the Capital Budget Replacement Schedule and provides for new equipment. The replacement program is based on criteria which includes: quantitative cost analysis (lifecycle costing), replacement policy, condition assessment (equipment appraisal, repair history and usage) and operational needs. The Solid Waste area includes the replacement of dozers, dump trucks, compactors, vehicles and equipment used in the operation of the landfill site.

Consequences of Not Funding

Increased maintenance costs on outdated equipment and possible operational inefficiencies.

PROJECT BUDGET

	2024	2025	2026	Total
Expenditures				
IOR-SOW-0002-LF-002 L/FILL - Vehicle and Equipment Replacement	380,700	140,000	58,000	578,700
Expenditures Total	380,700	140,000	58,000	578,700
Financing				
Other - Other Revenue	380,700	140,000		520,700
Reserve & Reserve Funds			58,000	58,000
Financing Total	380,700	140,000	58,000	578,700

OPERATING EXPANSION

CITY OF THUNDER BAY
Capital Project Detail Sheet
2024 - 2026 Capital Budget Forecast

Project Name :	Landfill Fleet Replacement	
Department :	IOR Infrastructure & Operations - Rate	Project ID : IOR-SOW-0002-LF-P
Division :	Solid Waste	Parent ID : IOR-SOW-0002-LF-P
Divisional Category :	Landfill Fleet	Requested Year : 2024
Project Classification :	Cyclical Asset Replacement	Completion Year : On Going

OPERATING EXPANSION

No Operating Impact

**CITY OF THUNDER BAY
CAPITAL FORECAST DIVISIONAL SUMMARY
Gross Expense (\$000's)**

	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
	Gross	Gross	Gross	Gross	Gross	Gross	Gross	Gross	Gross	Gross
	Expense	Expense	Expense	Expense	Expense	Expense	Expense	Expense	Expense	Expense
Solid Waste										
Landfill Site	625.5	127.9	248.8	156.9	282.9	2,577.1	293.7	169.1	305.0	1,295.2
Landfill Fleet	13.7	511.5	1,356.3	102.6	0.0	117.8	255.4	0.0	1,263.9	60.8
Total Solid Waste	639.2	639.4	1,605.1	259.5	282.9	2,694.9	549.1	169.1	1,568.9	1,356.0

City of Thunder Bay
BUDGET RECAP (\$000'S)

Wastewater

2024 BUDGET

	2023 FT	2023 PT	2024 FT	2024 PT	2023 Approved Budget	2023 Estimated Actuals	2024 Base	2024 Base vs 2023 % Increase	One Time	User Fee Increase	Reduction	Expansion	2024 Requested Budget	2024 vs 2023 \$ Change	2024 vs 2023 % Change
FINANCIAL RESOURCES															
Infrastructure, Development & Operations															
Personnel Services	47.0	4.4	47.0	4.6	5,260.2	4,760.2	5,366.3	2.0%				13.8	5,380.1	119.9	2.3%
Purchased Services					1,267.7	1,264.7	1,267.7						1,267.7		0.0%
Rents & Financial Expense					7,407.3	7,325.8	7,501.4	1.3%					7,501.4	94.1	1.3%
Materials					3,470.3	2,829.8	3,534.2	1.8%					3,534.2	63.9	1.8%
Gross Expenditures	47.0	4.4	47.0	4.6	17,405.5	16,180.5	17,669.6	1.5%				13.8	17,683.4	277.9	1.6%
User Fees & Service Charges					(27,429.2)	(27,429.0)	(27,429.2)			(817.5)			(28,246.7)	(817.5)	3.0%
Other Revenues						(0.2)									
Revenues					(27,429.2)	(27,429.2)	(27,429.2)			(817.5)			(28,246.7)	(817.5)	3.0%
Subtotal	47.0	4.4	47.0	4.6	(10,023.7)	(11,248.7)	(9,759.6)	(2.6%)		(817.5)		13.8	(10,563.3)	(539.6)	5.4%
Interfunctional Transfers					5,596.8	5,338.5	5,853.4	4.6%					5,853.4	256.6	4.6%
Transfers to Own Funds					6.7	6.7	6.7						6.7		
Net Cost (Income)	47.0	4.4	47.0	4.6	(4,420.2)	(5,903.5)	(3,899.5)	(11.8%)		(817.5)		13.8	(4,703.2)	(283.0)	6.4%

Wastewater

USER FEES

Sewer Surcharge rate will remain at 90% of Water billings. Revenue on customer accounts subject to Sewer Surcharge will increase based on the Water rate increase of 3.0%. Additionally, any Sewer Surcharge fees or other services will increase by 3.0%. The net budget impact on revenue is forecast to be (\$817,500) for 2024.

EXPANSION

Completion of 2023 capital construction projects along with the Sub-Division Takeover of Parkdale Stg 7 and Mount Forest Stg 5a &6 requires an expansion of 0.2 FTE to ensure staff and resources are available to maintain 1.4 km of Storm Sewer on Balmoral Ave and 0.04 km of new Sanitary on Coady Ave., Parkdale and Mount Forest will require resources to maintain 35 new catch basins, 26 new storm maintenance holes, 85 new storm sewer connections, 1.5 km storm mains, 7 sanitary maintenance holes, 55 sanitary service connections, and 0.46 km sanitary mains. Resulting in a gross and net budget impact of \$13,800.

	Net Change FT FTE	Net Change PT FTE	One Time Gross	One Time Net	Reduction Gross	Reduction Net	User Fees Gross	User Fees Net	Expansions Gross	Expansions Net
Total Wastewater		0.2						(817.5)	13.8	13.8

**CITY OF THUNDER BAY
CAPITAL DIVISIONAL SUMMARY 2024 - 2026
Gross Expense and Funding by Category (\$000's)**

	Pages	2024 Gross Expense	2024 Net From Reserve F d	2025 Gross Expense	2025 Net From Reserve F d	2026 Gross Expense	2026 Net From Reserve F d
Wastewater							
Sanitary Network Expansion	7-19 to 7-20	200.0	200.0	1,500.0	1,500.0	50.0	50.0
Sanitary Innovations, Prog & Tech	7-21 to 7-22	143.2	143.2	130.9	130.9	137.2	137.2
Sanitary Fleet	7-23	219.4	219.4	121.4	121.4	849.2	849.2
Sanitary Sewer Rehabilitation	7-24 to 7-25	5,739.8	3,339.8	6,681.8	3,729.8	7,033.3	4,033.3
Water Pollution Control Plant	7-26 to 7-27	2,010.3	2,010.3	2,833.6	2,833.6	2,389.5	2,389.5
Pollution Prevention Control Plan	7-28 to 7-29	2,000.0	600.0	1,000.0	552.0	0.0	0.0
Sanitary Sewer Professional Fees	7-30 to 7-31	300.0	300.0	200.0	200.0	200.0	200.0
Total Wastewater		10,612.7	6,812.7	12,467.7	9,067.7	10,659.2	7,659.2

CITY OF THUNDER BAY
Capital Project Detail Sheet
2024 - 2026 Capital Budget Forecast

Project Name :	Sanitary Sewage System: Network Expansion, Subdivision Oversizing	
Department :	IOR Infrastructure & Operations - Rate	Project ID : IOR-SAN-0001-NE-P
Division :	Wastewater	Parent ID : IOR-SAN-0001-NE-P
Divisional Category :	Sanitary Network Expansion	Requested Year : 2024
Project Classification :	New Projects	Completion Year : On Going

PROJECT DETAILS

Project Description and Justification

Construction of new sanitary mains to meet demand. Network expansion includes Local Improvements and oversize contributions for new development. Planned development in 2024 on Burwood Road requires the City to contribute over-sizing funds for new trunk sewer construction.

Consequences of Not Funding

Failure to comply with Local Improvements petition for sanitary services. It could also restrict additional growth and future subdivision development.

PROJECT BUDGET

	2024	2025	2026	Total
Expenditures				
IOR-SAN-0001-NE-001 Subdivision Oversizing	200,000		50,000	250,000
IOR-SAN-0001-NE-005 Pool 6 Servicing		1,500,000		1,500,000
Expenditures Total	200,000	1,500,000	50,000	1,750,000
Financing				
Reserve & Reserve Funds	200,000	1,500,000	50,000	1,750,000
Financing Total	200,000	1,500,000	50,000	1,750,000

OPERATING EXPANSION

CITY OF THUNDER BAY
Capital Project Detail Sheet
2024 - 2026 Capital Budget Forecast

Project Name :	Sanitary Sewage System: Network Expansion, Subdivision Oversizing	
Department :	IOR Infrastructure & Operations - Rate	Project ID : IOR-SAN-0001-NE-P
Division :	Wastewater	Parent ID : IOR-SAN-0001-NE-P
Divisional Category :	Sanitary Network Expansion	Requested Year : 2024
Project Classification :	New Projects	Completion Year : On Going

OPERATING EXPANSION

No Operating Impact

CITY OF THUNDER BAY
Capital Project Detail Sheet
2024 - 2026 Capital Budget Forecast

Project Name :	Innovations, Programs & Technological Upgrades	
Department :	IOR Infrastructure & Operations - Rate	Project ID : IOR-SAN-0002-NI-P
Division :	Wastewater	Parent ID : IOR-SAN-0002-NI-P
Divisional Category :	Sanitary Innovations, Prog & Tech	Requested Year : 2024
Project Classification :	New Projects	Completion Year : On Going

PROJECT DETAILS

Project Description and Justification

Review processes and procedures, implement changes, and invest in new technology to improve efficiencies and meet changing demands. Upgrade computer infrastructure, hardware and software.

Consequences of Not Funding

Non-compliance of provincial legislation could lead to the municipality being charged by the provincial legislating body. New processes and procedures would not be investigated which could result in additional expenses or lost savings.

PROJECT BUDGET

	2024	2025	2026	Total
Expenditures				
IOR-SAN-0002-NI-001 Plant and Program Technology	29,000	40,000	40,000	109,000
IOR-SAN-0002-NI-002 Auger machine/hand rod equipment, C snake DVD	25,000	20,000	22,000	67,000
IOR-SAN-0002-NI-003 Wastewater Innovations Program Efficiency	69,200	50,900	55,200	175,300
IOR-SAN-0002-NI-004 Backflow Preventors - replacement of old inventory	20,000	20,000	20,000	60,000
Expenditures Total	143,200	130,900	137,200	411,300
Financing				
Reserve & Reserve Funds	143,200	130,900	137,200	411,300
Financing Total	143,200	130,900	137,200	411,300

CITY OF THUNDER BAY
Capital Project Detail Sheet
2024 - 2026 Capital Budget Forecast

Project Name :	Innovations, Programs & Technological Upgrades	
Department :	IOR Infrastructure & Operations - Rate	Project ID : IOR-SAN-0002-NI-P
Division :	Wastewater	Parent ID : IOR-SAN-0002-NI-P
Divisional Category :	Sanitary Innovations, Prog & Tech	Requested Year : 2024
Project Classification :	New Projects	Completion Year : On Going

OPERATING EXPANSION

No Operating Impact

CITY OF THUNDER BAY
Capital Project Detail Sheet
2024 - 2026 Capital Budget Forecast

Project Name :	Sanitary: Fleet Replacement	Project ID : IOR-SAN-0003-FR-P
Department :	IOR Infrastructure & Operations - Rate	Parent ID : IOR-SAN-0003-FR-P
Division :	Wastewater	Requested Year : 2024
Divisional Category :	Sanitary Fleet	Completion Year : On Going
Project Classification :	Cyclical Asset Replacement	

PROJECT DETAILS

Project Description and Justification

Replacement of existing equipment according to the Capital Budget Replacement Schedule and provides for new equipment within the areas under the jurisdiction of the Community Services Department. The replacement program is based on criteria which includes: quantitative cost analysis (lifecycle costing), replacement policy, condition assessment (equipment appraisal, repair history and usage) and operational needs. Includes the purchase of various backhoes, loaders, trucks, pumps, tools, etc. which are required for the operations area and the Water Pollution Control Plant.

Consequences of Not Funding

Increased operating costs and downtime along with reduced reliability.

PROJECT BUDGET

		2024	2025	2026	Total
Expenditures					
IOR-SAN-0003-FR-002 Vehicle Replacement		219,400	121,400	849,200	1,190,000
Expenditures Total		219,400	121,400	849,200	1,190,000
Financing					
Reserve & Reserve Funds		219,400	121,400	849,200	1,190,000
Financing Total		219,400	121,400	849,200	1,190,000

OPERATING EXPANSION

No Operating Impact

CITY OF THUNDER BAY
Capital Project Detail Sheet
2024 - 2026 Capital Budget Forecast

Project Name :	Sanitary Sewer Rehabilitation	Project ID : IOR-SAN-0004-SA-P
Department :	IOR Infrastructure & Operations - Rate	Parent ID : IOR-SAN-0004-SA-P
Division :	Wastewater	Requested Year : 2024
Divisional Category :	Sanitary Sewer Rehabilitation	Completion Year : On Going
Project Classification :	Asset Maintenance	

PROJECT DETAILS

Project Description and Justification

Sanitary collection system renewal through replacement and rehabilitation of sanitary sewers, maintenance holes and lining of sanitary services. This program also includes flushing, cleaning and closed circuit tv inspections completed annually.

Consequences of Not Funding

Continued deterioration of assets. Maintenance costs will increase and service to public will be interrupted. Blockage or failure of sections of sanitary sewer could result in release of raw sewage and environmental violations and reduced public confidence in the City's sanitary system.

PROJECT BUDGET

	2024	2025	2026	Total
Expenditures				
IOR-SAN-0004-SA-006 House Lateral Lining	150,000	150,000	150,000	450,000
IOR-SAN-0004-SA-003 Sanitary Sewer Unspecified	1,389,800	1,336,800	2,788,300	5,514,900
IOR-SAN-0004-SA-004 Sanitary Sewer Lining	100,000	2,000,000		2,100,000
IOR-SAN-0004-SA-005 Maintenance hole and Appurtenance	150,000		150,000	300,000
IOR-SAN-0004-SA-014 Knight St - Dawson to River			245,000	245,000
IOR-SAN-0004-SA-020 Regent St - Van Norman to Red River		250,000		250,000
IOR-SAN-0004-SA-019 College St - Hebert to Red River		350,000		350,000
IOR-SAN-0004-SA-018 Memorial Ave - Queen to Inchiquin		195,000		195,000
IOR-SAN-0004-SA-045 Sanitary Sewer Cleaning and Inspection	1,500,000	1,500,000	1,500,000	4,500,000
IOR-SAN-0004-SA-076 Brock St - Brown to Heath		500,000		500,000
IOR-SAN-0004-SA-058 Burwood Sanitary Extension - Central to Oliver	300,000			300,000

CITY OF THUNDER BAY
Capital Project Detail Sheet
2024 - 2026 Capital Budget Forecast

Project Name :	Sanitary Sewer Rehabilitation	Project ID : IOR-SAN-0004-SA-P
Department :	IOR Infrastructure & Operations - Rate	Parent ID : IOR-SAN-0004-SA-P
Division :	Wastewater	Requested Year : 2024
Divisional Category :	Sanitary Sewer Rehabilitation	Completion Year : On Going
Project Classification :	Asset Maintenance	

PROJECT BUDGET

	2024	2025	2026	Total
Expenditures				
IOR-SAN-0004-SA-073 College St - Hebert to Van Norman	350,000			350,000
IOR-SAN-0004-SA-075 Current Ave and Current Bay	500,000			500,000
IOR-SAN-0004-SA-077 Dease St - May to Simpson	750,000			750,000
IOR-SAN-0004-SA-065 Excess Soil Regulatory Requirements	50,000	50,000	50,000	150,000
IOR-SAN-0004-SA-078 Finlayson St - May to Simpson			750,000	750,000
IOR-SAN-0004-SA-081 Forest St - Harold to Norah	250,000			250,000
IOR-SAN-0004-SA-072 Leith St - May to Archibald		350,000		350,000
IOR-SAN-0004-SA-066 Leith St - May to Simpson			600,000	600,000
IOR-SAN-0004-SA-079 Monitoring & Reinforcement Trunk Sewer			800,000	800,000
IOR-SAN-0004-SA-080 Simpson St - Rowand to Dease	250,000			250,000
Expenditures Total	5,739,800	6,681,800	7,033,300	19,454,900
Financing				
Debenture	2,400,000	2,952,000	3,000,000	8,352,000
Reserve & Reserve Funds	3,339,800	3,729,800	4,033,300	11,102,900
Financing Total	5,739,800	6,681,800	7,033,300	19,454,900

OPERATING EXPANSION

No Operating Impact

CITY OF THUNDER BAY
Capital Project Detail Sheet
2024 - 2026 Capital Budget Forecast

Project Name :	Water Pollution Control Plant	Project ID : IOR-SAN-0005-WP-P
Department :	IOR Infrastructure & Operations - Rate	Parent ID : IOR-SAN-0005-WP-P
Division :	Wastewater	Requested Year : 2024
Divisional Category :	Water Pollution Control Plant	Completion Year : On Going
Project Classification :	Asset Maintenance	

PROJECT DETAILS

Project Description and Justification

Replacement and rehabilitation of existing plant infrastructure. Includes a Preventative Maintenance Program which involves repairs and replacement to buildings, equipment and pumping stations. The budget for Plant and Process reflects an estimate of the impact of rehabilitation work done to date and renewal work required based on an annual assessment of assets.

Consequences of Not Funding

Increased risk to public health, safety, and the environment. Failure to fund could result in non-compliance of provincial and/or federal regulations. Increased maintenance costs of deteriorated facilities, equipment, and structures and possible service disruptions.

PROJECT BUDGET

	2024	2025	2026	Total
Expenditures				
IOR-SAN-0005-WP-001 Atlantic Ave - WPCP Process	675,500	1,169,800	1,181,000	3,026,300
IOR-SAN-0005-WP-002 Atlantic Ave - WPCP Electrical	52,800	61,800	89,500	204,100
IOR-SAN-0005-WP-003 Atlantic Ave - WPCP Building & Grounds	372,000	897,000	157,000	1,426,000
IOR-SAN-0005-WP-004 Atlantic Ave - WPCP Instrumentation	265,000	110,000	205,000	580,000
IOR-SAN-0005-WP-005 Atlantic Ave - WPCP HVAC	30,000	30,000	29,200	89,200
IOR-SAN-0005-WP-006 Sewage Pumping Stations - All groups	100,000	50,000	50,000	200,000
IOR-SAN-0005-WP-007 Atlantic Ave - WPCP Professional fees	315,000	315,000	315,000	945,000
IOR-SAN-0005-WP-008 Atlantic Ave - WPCP Unplanned repairs	200,000	200,000	200,000	600,000
IOR-SAN-0005-WP-009 Atlantic Ave - WPCP Generator Standby Power			162,800	162,800
Expenditures Total	2,010,300	2,833,600	2,389,500	7,233,400
Financing				

CITY OF THUNDER BAY
Capital Project Detail Sheet
2024 - 2026 Capital Budget Forecast

Project Name :	Water Pollution Control Plant	Project ID : IOR-SAN-0005-WP-P
Department :	IOR Infrastructure & Operations - Rate	Parent ID : IOR-SAN-0005-WP-P
Division :	Wastewater	Requested Year : 2024
Divisional Category :	Water Pollution Control Plant	Completion Year : On Going
Project Classification :	Asset Maintenance	

PROJECT BUDGET

	2024	2025	2026	Total
Financing				
Reserve & Reserve Funds	2,010,300	2,833,600	2,389,500	7,233,400
Financing Total	2,010,300	2,833,600	2,389,500	7,233,400

OPERATING EXPANSION

No Operating Impact

CITY OF THUNDER BAY
Capital Project Detail Sheet
2024 - 2026 Capital Budget Forecast

Project Name :	Pollution Prevention Control Plan	Project ID : IOR-SAN-0006-PP-P
Department :	IOR Infrastructure & Operations - Rate	Parent ID : IOR-SAN-0006-PP-P
Division :	Wastewater	Requested Year : 2024
Divisional Category :	Pollution Prevention Control Plan	Completion Year : On Going
Project Classification :	Asset Maintenance	

PROJECT DETAILS

Project Description and Justification

To comply with the Pollution Prevention Control Plan (PPCP) recommendations as set out in Report 99.059. This report outlines a long range plan for combined sewer separation. Capital improvements to comply with Ministry of the Environment, Conservation and Parks regulations. Plan implementation will relieve loading to the WPCP and reduce treatment costs. For 2024, 40% of the project funding will come from the Disaster Mitigation and Adaptation Fund (DMAF).

Consequences of Not Funding

Non-compliance with the Ministry regulations. Increased potential for flooding and back-ups and associated liabilities, and continued increase in treatment costs of operating the Water Pollution Control Plant.

PROJECT BUDGET

	2024	2025	2026	Total
Expenditures				
IOR-SAN-0006-PP-031 Storm Separation Unspecified	500,000	920,000		1,420,000
IOR-SAN-0006-PP-058 Balmoral - Victoria to Miles	750,000			750,000
IOR-SAN-0006-PP-065 Banning - Midblock Laneway to Cornwall	150,000			150,000
IOR-SAN-0006-PP-057 Front Street - Angus to City Yard	100,000			100,000
IOR-SAN-0006-PP-056 Knight Street		80,000		80,000
IOR-SAN-0006-PP-061 Prospect - Hebert to Van Norman	200,000			200,000
IOR-SAN-0006-PP-064 Retire Regulating MH Victoria and Hardisty	300,000			300,000
Expenditures Total	2,000,000	1,000,000		3,000,000
Financing				
Subsidy - Federal Grants	800,000	400,000		1,200,000
Debenture	600,000	48,000		648,000

CITY OF THUNDER BAY
Capital Project Detail Sheet
2024 - 2026 Capital Budget Forecast

Project Name :	Pollution Prevention Control Plan	Project ID : IOR-SAN-0006-PP-P
Department :	IOR Infrastructure & Operations - Rate	Parent ID : IOR-SAN-0006-PP-P
Division :	Wastewater	Requested Year : 2024
Divisional Category :	Pollution Prevention Control Plan	Completion Year : On Going
Project Classification :	Asset Maintenance	

PROJECT BUDGET

	2024	2025	2026	Total
Financing				
Reserve & Reserve Funds	600,000	552,000		1,152,000
Financing Total	2,000,000	1,000,000		3,000,000

OPERATING EXPANSION

	2024	2025	2026	Total
Personnel Services	400	2,000		2,400
Expenses	400	2,000		2,400
Net Cost (Income)	400	2,000		2,400

CITY OF THUNDER BAY
Capital Project Detail Sheet
2024 - 2026 Capital Budget Forecast

Project Name :	Sanitary: Professional Fees, Studies & Miscellaneous	
Department :	IOR Infrastructure & Operations - Rate	Project ID : IOR-SAN-0007-PS-P
Division :	Wastewater	Parent ID : IOR-SAN-0007-PS-P
Divisional Category :	Sanitary Sewer Professional Fees	Requested Year : 2024
Project Classification :	New Projects	Completion Year : On Going

PROJECT DETAILS

Project Description and Justification

Studies and reports by engineering, legal, accounting or other professionals. This will include the review of legislation and regulations to determine compliance issues and implementation strategies. Pre-engineering design costs for in-house staff to prepare designs for upcoming capital projects related to the waste water network. Structural inspections of waste water physical plants are required on an ongoing basis to ensure structural integrity. Studies to improve infrastructure continue to be done to provide further direction to this program.

Consequences of Not Funding

Loss of opportunities for process and program improvements. Pre-engineering work is required to ensure that regular asset maintenance can be carried out in a timely manner. Various capital work would not be carried out without the required analysis.

PROJECT BUDGET

	2024	2025	2026	Total
Expenditures				
IOR-SAN-0007-PS-001 Pre-Engineering Design & Contract Admin	150,000	150,000	150,000	450,000
IOR-SAN-0007-PS-002 Professional Fees for Studies	150,000	50,000	50,000	250,000
Expenditures Total	300,000	200,000	200,000	700,000
Financing				
Reserve & Reserve Funds	300,000	200,000	200,000	700,000
Financing Total	300,000	200,000	200,000	700,000

OPERATING EXPANSION

CITY OF THUNDER BAY
Capital Project Detail Sheet
2024 - 2026 Capital Budget Forecast

Project Name :	Sanitary: Professional Fees, Studies & Miscellaneous	
Department :	IOR Infrastructure & Operations - Rate	Project ID : IOR-SAN-0007-PS-P
Division :	Wastewater	Parent ID : IOR-SAN-0007-PS-P
Divisional Category :	Sanitary Sewer Professional Fees	Requested Year : 2024
Project Classification :	New Projects	Completion Year : On Going

OPERATING EXPANSION

No Operating Impact

**CITY OF THUNDER BAY
CAPITAL FORECAST DIVISIONAL SUMMARY
Gross Expense (\$000's)**

	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
	Gross	Gross	Gross	Gross	Gross	Gross	Gross	Gross	Gross	Gross
	Expense	Expense	Expense	Expense	Expense	Expense	Expense	Expense	Expense	Expense
Wastewater										
Sanitary Network Expansion	63.1	64.3	65.5	66.8	68.0	69.3	70.7	72.0	73.4	74.8
Sanitary Innovations, Prog & Tech	143.9	147.9	154.6	120.2	122.5	124.8	110.0	110.0	110.0	110.0
Sanitary Fleet	778.8	396.1	163.8	117.5	129.3	0.0	356.1	266.4	36.7	299.0
Sanitary Sewer Rehabilitation	6,934.2	7,421.0	7,583.0	8,561.2	8,750.3	8,916.6	6,702.5	6,902.5	6,850.0	7,500.0
Water Pollution Control Plant	2,711.6	2,734.0	3,307.0	1,874.5	2,721.8	2,634.9	2,058.8	2,309.0	2,444.0	2,115.0
Sanitary Sewer Professional Fees	252.4	257.2	262.1	267.1	272.2	277.3	282.6	288.0	293.5	299.0
Total Wastewater	10,884.0	11,020.5	11,536.0	11,007.3	12,064.1	12,022.9	9,580.7	9,947.9	9,807.6	10,397.8

City of Thunder Bay
BUDGET RECAP (\$000'S)

Waterworks

2024 BUDGET

	2023 FT	2023 PT	2024 FT	2024 PT	2023 Approved Budget	2023 Estimated Actuals	2024 Base	2024 Base vs 2023 % Increase	One Time	User Fee Increase	Reduction	Expansion	2024 Requested Budget	2024 vs 2023 \$ Change	2024 vs 2023 % Change
FINANCIAL RESOURCES															
Infrastructure, Development & Operations															
Personnel Services	75.8	3.9	75.8	4.1	8,927.0	8,427.0	9,059.1	1.5%				14.1	9,073.2	146.2	1.6%
Purchased Services					704.2	1,276.1	1,304.4	85.2%					1,304.4	600.2	85.2%
Rents & Financial Expense					8,800.2	8,533.3	8,732.2	(0.8%)					8,732.2	(68.0)	(0.8%)
Materials					3,028.7	3,418.7	3,233.5	6.8%					3,233.5	204.8	6.8%
Gross Expenditures	75.8	3.9	75.8	4.1	21,460.1	21,655.1	22,329.2	4.0%				14.1	22,343.3	883.2	4.1%
User Fees & Service Charges					(34,441.0)	(35,009.5)	(34,464.0)	0.1%		(1,009.0)			(35,473.0)	(1,032.0)	3.0%
Other Revenues					(40.0)	(71.5)	(40.0)						(40.0)		
Revenues					(34,481.0)	(35,081.0)	(34,504.0)	0.1%		(1,009.0)			(35,513.0)	(1,032.0)	3.0%
Subtotal	75.8	3.9	75.8	4.1	(13,020.9)	(13,425.9)	(12,174.8)	(6.5%)		(1,009.0)		14.1	(13,169.7)	(148.8)	1.1%
Interfunctional Transfers					5,282.3	5,114.8	5,379.1	1.8%					5,379.1	96.8	1.8%
Transfers to Own Funds					25.6		25.6						25.6		
Net Cost (Income)	75.8	3.9	75.8	4.1	(7,713.0)	(8,311.1)	(6,770.1)	(12.2%)		(1,009.0)		14.1	(7,765.0)	(52.0)	0.7%

Waterworks

USER FEES

Water billings, fixed and variable, will increase 3.0% in 2024 consistent with the Water Authority Financial Plan. The increase will be applied to all charges paid by customers for water services. The projected net budget impact on revenue is forecast to be an increase of (\$1,009,000) in revenues.

EXPANSION

Sub-Division Takeover of Parkdale Stg 7 and Mount Forest Stg 5a &6 requires an expansion of 0.2 FTE to ensure staff and resources are available to maintain 1.5 km water main, 11 hydrants and 85 water service connections. Resulting in a gross and net budget impact of \$14,100.

Total Waterworks

0.2

(1,009.0)

14.1

14.1

**CITY OF THUNDER BAY
CAPITAL DIVISIONAL SUMMARY 2024 - 2026
Gross Expense and Funding by Category (\$000's)**

	Pages	2024 Gross Expense	2024 Net From Reserve F d	2025 Gross Expense	2025 Net From Reserve F d	2026 Gross Expense	2026 Net From Reserve F d
Waterworks							
Plants, Pumping Stations & Reservoirs	7-36 to 7-37	1,819.0	1,819.0	2,458.0	2,458.0	2,605.0	2,605.0
Water Innovations, Prog & Tech	7-38 to 7-39	1,370.0	1,370.0	1,070.0	1,070.0	1,280.0	1,280.0
Water Fleet	7-40	392.0	392.0	731.0	731.0	512.0	512.0
Watermain Replace / Rehabilitation	7-41 to 7-42	8,150.0	3,550.0	8,900.0	4,300.0	9,467.0	4,867.0
Water Network Expansion	7-43 to 7-44	250.0	250.0	50.0	50.0	50.0	50.0
Water Professional Fees	7-45 to 7-46	365.0	365.0	365.0	365.0	365.0	365.0
Total Waterworks		12,346.0	7,746.0	13,574.0	8,974.0	14,279.0	9,679.0

CITY OF THUNDER BAY
Capital Project Detail Sheet
2024 - 2026 Capital Budget Forecast

Project Name :	Treatment Plants, Pump Stations, Reservoirs & Structures	
Department :	IOR Infrastructure & Operations - Rate	Project ID : IOR-WAW-0001-TP-P
Division :	Waterworks	Parent ID : IOR-WAW-0001-TP-P
Divisional Category :	Plants, Pumping Stations & Reservoirs	Requested Year : 2024
Project Classification :	Legislated	Completion Year : On Going

PROJECT DETAILS

Project Description and Justification

Replacement or rebuilding of equipment and improvements to the buildings and grounds of existing water treatment plants, pumping stations and reservoirs.

Consequences of Not Funding

Increased risk to public health, safety, and the environment. Failure to fund could result in non-compliance of provincial and/or federal regulations. Increased maintenance costs of deteriorated facilities, equipment, and structures and possible service disruptions.

PROJECT BUDGET

	2024	2025	2026	Total
Expenditures				
IOR-WAW-0001-TP-001 Bare Point WTP Process	701,500	1,885,800	1,981,300	4,568,600
IOR-WAW-0001-TP-002 Bare Point WTP Electrical	120,000	40,000	50,000	210,000
IOR-WAW-0001-TP-003 Bare Point WTP HVAC	20,000	20,000	20,000	60,000
IOR-WAW-0001-TP-004 Bare Point WTP Instrumentation	45,000	45,000	45,000	135,000
IOR-WAW-0001-TP-005 Bare Point WTP Buildings and Grounds	85,000	30,000	30,000	145,000
IOR-WAW-0001-TP-006 Pumping Stations and Reservoirs Process	86,000	22,200	48,200	156,400
IOR-WAW-0001-TP-007 Pumping Stations and Reservoirs Electrical	115,000	9,000	10,000	134,000
IOR-WAW-0001-TP-008 Pumping Stations and Reservoirs HVAC			5,500	5,500
IOR-WAW-0001-TP-009 Pumping Stations and Reservoirs Instrumentation	20,000	6,000		26,000
IOR-WAW-0001-TP-010 Pumping Stations and Reservoirs Bldg/Grnds	226,500		15,000	241,500
IOR-WAW-0001-TP-011 Bare Point WTP Professional fees	200,000	200,000	200,000	600,000

CITY OF THUNDER BAY
Capital Project Detail Sheet
2024 - 2026 Capital Budget Forecast

Project Name :	Treatment Plants, Pump Stations, Reservoirs & Structures	
Department :	IOR Infrastructure & Operations - Rate	Project ID : IOR-WAW-0001-TP-P
Division :	Waterworks	Parent ID : IOR-WAW-0001-TP-P
Divisional Category :	Plants, Pumping Stations & Reservoirs	Requested Year : 2024
Project Classification :	Legislated	Completion Year : On Going

PROJECT BUDGET

	2024	2025	2026	Total
Expenditures				
IOR-WAW-0001-TP-012 Bare Point WTP Unplanned repairs	200,000	200,000	200,000	600,000
Expenditures Total	1,819,000	2,458,000	2,605,000	6,882,000
Financing				
Reserve & Reserve Funds	1,819,000	2,458,000	2,605,000	6,882,000
Financing Total	1,819,000	2,458,000	2,605,000	6,882,000

OPERATING EXPANSION

No Operating Impact

CITY OF THUNDER BAY
Capital Project Detail Sheet
2024 - 2026 Capital Budget Forecast

Project Name :	Water: Innovations, Programs & Technological Upgrades		
Department :	IOR Infrastructure & Operations - Rate	Project ID :	IOR-WAW-0002-NI-P
Division :	Waterworks	Parent ID :	IOR-WAW-0002-NI-P
Divisional Category :	Water Innovations, Prog & Tech	Requested Year :	2024
Project Classification :	Work in Progress	Completion Year :	On Going

PROJECT DETAILS

Project Description and Justification

Project includes studies, programs and equipment. Project expenses relate to the implementation of legislative changes. A large component addresses water conservation, water quality, backflow prevention and lead reduction initiatives. This will also include projects to promote energy efficiency, wise use of water and source water protection. Annual funding for computer infrastructure, hardware and software. Equipment needed in operations and engineering field work related to waterworks.

Consequences of Not Funding

Increased costs in locating information and time delays in responding to operational issues. Poor record keeping can result in costly delays to repairs. Data maintenance costs will continue to be high and data will be maintained manually which allows for errors, creates access problems and is costly. Improved level of accuracy and preventative maintenance planning would result from better data which will not be possible without automation.

PROJECT BUDGET

	2024	2025	2026	Total
Expenditures				
IOR-WAW-0002-NI-001 Program Technology & Equipment	20,000	20,000	80,000	120,000
IOR-WAW-0002-NI-002 Water Use Innovation Program Efficiency	100,000	150,000	200,000	450,000
IOR-WAW-0002-NI-004 Large Water Meter Replacement Program	100,000	100,000	100,000	300,000
IOR-WAW-0002-NI-006 Water Fill Stations	150,000	150,000	150,000	450,000
IOR-WAW-0002-NI-011 Lead Reduction Program	1,000,000	650,000	750,000	2,400,000
Expenditures Total	1,370,000	1,070,000	1,280,000	3,720,000
Financing				
Reserve & Reserve Funds	1,370,000	1,070,000	1,280,000	3,720,000
Financing Total	1,370,000	1,070,000	1,280,000	3,720,000

CITY OF THUNDER BAY
Capital Project Detail Sheet
2024 - 2026 Capital Budget Forecast

Project Name :	Water: Innovations, Programs & Technological Upgrades	
Department :	IOR Infrastructure & Operations - Rate	Project ID : IOR-WAW-0002-NI-P
Division :	Waterworks	Parent ID : IOR-WAW-0002-NI-P
Divisional Category :	Water Innovations, Prog & Tech	Requested Year : 2024
Project Classification :	Work in Progress	Completion Year : On Going

OPERATING EXPANSION

No Operating Impact

CITY OF THUNDER BAY
Capital Project Detail Sheet
2024 - 2026 Capital Budget Forecast

Project Name :	Waterworks Fleet Replacement	Project ID : IOR-WAW-0003-FW-P
Department :	IOR Infrastructure & Operations - Rate	Parent ID : IOR-WAW-0003-FW-P
Division :	Waterworks	Requested Year : 2024
Divisional Category :	Water Fleet	Completion Year : On Going
Project Classification :	Cyclical Asset Replacement	

PROJECT DETAILS

Project Description and Justification

Involves the replacement of existing equipment according to the Capital Budget Replacement Schedule and provides for new equipment within the areas under the jurisdiction of the Community Services Department. The replacement program is based on criteria which includes: quantitative cost analysis (lifecycle costing), replacement policy, condition assessment (equipment appraisal, repair history and usage), and operational needs. For Waterworks, the fleet replacement program involves the purchase of various backhoes, vehicles, pumps, jackhammers, tools, etc. required for the maintenance of the water system including the water treatment plant.

Consequences of Not Funding

Increased maintenance costs of outdated equipment and possible inefficiencies in providing adequate response in critical repair situations.

PROJECT BUDGET

	2024	2025	2026	Total
Expenditures				
IOR-WAW-0003-FW-001 Equipment Replacement and Refurbishing	392,000	731,000	512,000	1,635,000
Expenditures Total	392,000	731,000	512,000	1,635,000
Financing				
Reserve & Reserve Funds	392,000	731,000	512,000	1,635,000
Financing Total	392,000	731,000	512,000	1,635,000

OPERATING EXPANSION

No Operating Impact

CITY OF THUNDER BAY
Capital Project Detail Sheet
2024 - 2026 Capital Budget Forecast

Project Name :	Watermain Replacement & Rehabilitation	
Department :	IOR Infrastructure & Operations - Rate	Project ID : IOR-WAW-0004-WR-P
Division :	Waterworks	Parent ID : IOR-WAW-0004-WR-P
Divisional Category :	Watermain Replace / Rehabilitation	Requested Year : 2024
Project Classification :	Asset Maintenance	Completion Year : On Going

PROJECT DETAILS

Project Description and Justification

Water Distribution system renewal through replacement and rehabilitation of water mains and appurtenances, looping to address water quality and fire flows, and removal of lead services.

Consequences of Not Funding

Continued deterioration of assets. Maintenance costs will increase and service to the public will be interrupted. Increased boil water advisories and liability associated with reduced fire flows. Reduced public confidence in the City as the Drinking Water Authority.

PROJECT BUDGET

	2024	2025	2026	Total
Expenditures				
IOR-WAW-0004-WR-001 Cathodic Protection	100,000	100,000	100,000	300,000
IOR-WAW-0004-WR-003 Kerr Hydrant Replacement	125,000	125,000	125,000	375,000
IOR-WAW-0004-WR-013 Lead Service Replacement Program	750,000	750,000	750,000	2,250,000
IOR-WAW-0004-WR-017 Cleaning and Cement Mortar Lining	2,500,000	2,500,000	2,500,000	7,500,000
IOR-WAW-0004-WR-038 Valves and Chambers	250,000	250,000	250,000	750,000
IOR-WAW-0004-WR-056 Utility Cut Restoration	100,000	100,000	100,000	300,000
IOR-WAW-0004-WR-004 Looping Program - Water Quality and Flow	150,000	205,000	150,000	505,000
IOR-WAW-0004-WR-002 Unspecified Watermain Replace / Rehab	145,000	1,365,000	2,992,000	4,502,000
IOR-WAW-0004-WR-005 Commerce St - Mountdale to Walsh			525,000	525,000
IOR-WAW-0004-WR-018 Knight St - Dawson to River			225,000	225,000
IOR-WAW-0004-WR-027 Luci Crt - Isabella to Moodie		315,000		315,000

CITY OF THUNDER BAY
Capital Project Detail Sheet
2024 - 2026 Capital Budget Forecast

Project Name :	Watermain Replacement & Rehabilitation	
Department :	IOR Infrastructure & Operations - Rate	Project ID : IOR-WAW-0004-WR-P
Division :	Waterworks	Parent ID : IOR-WAW-0004-WR-P
Divisional Category :	Watermain Replace / Rehabilitation	Requested Year : 2024
Project Classification :	Asset Maintenance	Completion Year : On Going

PROJECT BUDGET

	2024	2025	2026	Total
Expenditures				
IOR-WAW-0004-WR-088 Regent St - Van Norman to Red River Rd		450,000		450,000
IOR-WAW-0004-WR-130 Balmoral St - Miles to Victoria	175,000			175,000
IOR-WAW-0004-WR-141 Brock St - Brown to Heath		500,000		500,000
IOR-WAW-0004-WR-139 College St - Hebert to Van Norman	350,000			350,000
IOR-WAW-0004-WR-142 Cumberland St - Villa to McVicar Crk		325,000		325,000
IOR-WAW-0004-WR-140 Current Ave, Current Bay and Richard St	500,000			500,000
IOR-WAW-0004-WR-144 Dease St - Balmoral to Conservatory	300,000			300,000
IOR-WAW-0004-WR-147 Dease St - Simpson to May	750,000			750,000
IOR-WAW-0004-WR-127 Excess Soil Regulatory Requirements	45,000	35,000		80,000
IOR-WAW-0004-WR-146 Finlayson St - Simpson to May			750,000	750,000
IOR-WAW-0004-WR-135 Juniper Dr		800,000		800,000
IOR-WAW-0004-WR-120 Leith St - May to Archibald		350,000		350,000
IOR-WAW-0004-WR-136 Leith St - Simpson to May			500,000	500,000
IOR-WAW-0004-WR-145 Mooney Ave - Burbidge to Mooney			300,000	300,000
IOR-WAW-0004-WR-124 Phillips St - Phillips to McAuliff		730,000		730,000
IOR-WAW-0004-WR-134 Poplar Ave	800,000			800,000
IOR-WAW-0004-WR-143 Simpson St - Rowand to Dease	750,000			750,000
IOR-WAW-0004-WR-137 Victoriaville Demo & Reconstruction	360,000			360,000
IOR-WAW-0004-WR-129 Water Street - Cumberland to Bay			200,000	200,000
Expenditures Total	8,150,000	8,900,000	9,467,000	26,517,000
Financing				
Debenture	4,600,000	4,600,000	4,600,000	13,800,000
Reserve & Reserve Funds	3,550,000	4,300,000	4,867,000	12,717,000
Financing Total	8,150,000	8,900,000	9,467,000	26,517,000

OPERATING EXPANSION

	2024	2025	2026	Total
Personnel Services	300	2,000		2,300
Expenses	300	2,000		2,300
Net Cost (Income)	300	2,000		2,300

CITY OF THUNDER BAY
Capital Project Detail Sheet
2024 - 2026 Capital Budget Forecast

Project Name :	Water: Network Expansion	Project ID : IOR-WAW-0005-NE-P
Department :	IOR Infrastructure & Operations - Rate	Parent ID : IOR-WAW-0005-NE-P
Division :	Waterworks	Requested Year : 2024
Divisional Category :	Water Network Expansion	Completion Year : On Going
Project Classification :	New Projects	

PROJECT DETAILS

Project Description and Justification

Construction of new watermains to meet demand. Network expansions include subdivision oversizing and Local Improvements.

Consequences of Not Funding

Restricts development and ability to make system improvements. Could negatively impact Local Improvements.

PROJECT BUDGET

	2024	2025	2026	Total
Expenditures				
IOR-WAW-0005-NE-001 Water: Subdivision Oversizing	250,000	50,000	50,000	350,000
Expenditures Total	250,000	50,000	50,000	350,000
Financing				
Reserve & Reserve Funds	250,000	50,000	50,000	350,000
Financing Total	250,000	50,000	50,000	350,000

OPERATING EXPANSION

	2024	2025	2026	Total
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CITY OF THUNDER BAY
Capital Project Detail Sheet
2024 - 2026 Capital Budget Forecast

Project Name :	Water: Network Expansion	Project ID : IOR-WAW-0005-NE-P
Department :	IOR Infrastructure & Operations - Rate	Parent ID : IOR-WAW-0005-NE-P
Division :	Waterworks	Requested Year : 2024
Divisional Category :	Water Network Expansion	Completion Year : On Going
Project Classification :	New Projects	

OPERATING EXPANSION

	2024	2025	2026	Total
Personnel Services	1,100			1,100
Expenses	1,100			1,100
Net Cost (Income)	1,100			1,100

CITY OF THUNDER BAY
Capital Project Detail Sheet
2024 - 2026 Capital Budget Forecast

Project Name :	Professional Fees, Studies & Miscellaneous	
Department :	IOR Infrastructure & Operations - Rate	Project ID : IOR-WAW-0006-PW-P
Division :	Waterworks	Parent ID : IOR-WAW-0006-PW-P
Divisional Category :	Water Professional Fees	Requested Year : 2024
Project Classification :	Asset Maintenance	Completion Year : On Going

PROJECT DETAILS

Project Description and Justification

Involves studies and reports by engineering, legal, accounting or other professionals. This will include the review of legislation and regulations to determine compliance issues and implementation strategies. Pre-engineering design costs for in-house staff to prepare designs for upcoming capital projects related to the water network. Structural inspections of waterworks physical plants are required on an ongoing basis to ensure structural integrity. Studies to improve infrastructure continue to be done to provide further direction to this program.

Consequences of Not Funding

If structures are not inspected and deterioration is allowed to occur, tunnels and other assets may fail. Pre-engineering work is required to ensure that regular asset maintenance can be carried out in a timely manner. Various capital work would not be carried out without the required information analysis.

PROJECT BUDGET

	2024	2025	2026	Total
Expenditures				
IOR-WAW-0006-PW-001 Professional Fees for Studies, DWQMS, Audit	175,000	175,000	175,000	525,000
IOR-WAW-0006-PW-002 Pre-Engineering Design & Contract Admin	140,000	140,000	140,000	420,000
IOR-WAW-0006-PW-006 Water Model Updates	50,000	50,000	50,000	150,000
Expenditures Total	365,000	365,000	365,000	1,095,000
Financing				
Reserve & Reserve Funds	365,000	365,000	365,000	1,095,000
Financing Total	365,000	365,000	365,000	1,095,000

OPERATING EXPANSION

CITY OF THUNDER BAY
Capital Project Detail Sheet
2024 - 2026 Capital Budget Forecast

Project Name :	Professional Fees, Studies & Miscellaneous	
Department :	IOR Infrastructure & Operations - Rate	Project ID : IOR-WAW-0006-PW-P
Division :	Waterworks	Parent ID : IOR-WAW-0006-PW-P
Divisional Category :	Water Professional Fees	Requested Year : 2024
Project Classification :	Asset Maintenance	Completion Year : On Going

OPERATING EXPANSION

No Operating Impact

**CITY OF THUNDER BAY
CAPITAL FORECAST DIVISIONAL SUMMARY
Gross Expense (\$000's)**

	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
	Gross									
	Expense									
Waterworks										
Plants, Pumping Stations & Reservoirs	2,670.4	2,547.0	2,712.3	4,447.9	2,850.4	2,865.4	2,845.4	3,525.4	3,625.4	1,925.4
Water Innovations, Prog & Tech	1,250.0	1,250.0	1,250.0	1,050.0	1,000.0	1,100.0	1,100.0	600.0	600.0	600.0
Water Fleet	101.0	187.0	166.0	1,230.0	460.0	945.0	618.0	636.0	166.0	429.0
Watermain Replace / Rehabilitation	12,136.0	11,003.0	9,610.0	10,721.6	9,771.6	9,703.6	10,583.6	8,017.6	8,312.6	8,460.6
Water Network Expansion	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
Water Professional Fees	415.0	415.0	415.0	415.0	315.0	315.0	315.0	315.0	315.0	315.0
Total Waterworks	16,622.4	15,452.0	14,203.3	17,914.5	14,447.0	14,979.0	15,512.0	13,144.0	13,069.0	11,780.0

City of Thunder Bay
BUDGET RECAP (\$'000'S)

Prince Arthur's Landing - Boater Services

2024 BUDGET

FINANCIAL RESOURCES	2023	2023	2024	2024	2023	2023	2024	2024 Base	One	User Fee	Reduction	Expansion	2024	2024 vs	2024 vs
	FT	PT	FT	PT	Approved	Estimated	Base	vs 2023					Time	Increase	Requested
	FTE	FTE	FTE	FTE	Budget	Actuals		% Increase					Budget	\$ Change	% Change
Infrastructure, Development & Operations															
Personnel Services	1.2	0.8	1.2	0.8	157.5	127.5	159.9	1.5%					159.9	2.4	1.5%
Purchased Services					0.4	0.4	0.4						0.4		0.0%
Rents & Financial Expense					39.3	38.4	40.5	3.1%					40.5	1.2	3.1%
Materials					177.3	204.9	177.3						177.3		0.0%
Gross Expenditures	1.2	0.8	1.2	0.8	374.5	371.2	378.1	1.0%					378.1	3.6	1.0%
User Fees & Service Charges					(608.6)	(605.3)	(609.6)	0.2%		(23.5)			(633.1)	(24.5)	4.0%
Revenues					(608.6)	(605.3)	(609.6)	0.2%		(23.5)			(633.1)	(24.5)	4.0%
Subtotal	1.2	0.8	1.2	0.8	(234.1)	(234.1)	(231.5)	(1.1%)		(23.5)			(255.0)	(20.9)	8.9%
Interfunctional Transfers					94.1	92.2	102.6	9.0%					102.6	8.5	9.0%
Transfers to Own Funds					0.3		0.3						0.3		
Net Cost (Income)	1.2	0.8	1.2	0.8	(139.7)	(141.9)	(128.6)	(7.9%)		(23.5)			(152.1)	(12.4)	8.9%

Prince Arthur's Landing - Boater Services

USER FEES

A 5% increase in rentals (docking) has been included in the 2024 budget. The estimated revenue from the increase results in a net budget impact of (\$23,500).

	Net Change	Net Change	One Time	One Time	Reduction	Reduction	User Fees	User Fees	Expansions	Expansions
	FT FTE	PT FTE	Gross	Net	Gross	Net	Gross	Net	Gross	Net
Total Prince Arthur's Landing - Boater Services								(23.5)		

**CITY OF THUNDER BAY
CAPITAL DIVISIONAL SUMMARY 2024 - 2026
Gross Expense and Funding by Category (\$000's)**

	Pages	2024 Gross Expense	2024 Net From Reserve F d	2025 Gross Expense	2025 Net From Reserve F d	2026 Gross Expense	2026 Net From Reserve F d
Prince Arthur's Landing - Boater Services							
Capital Maintenance	7-51	60.0	60.0	60.0	60.0	60.0	60.0
Total Prince Arthur's Landing - Boater Services		60.0	60.0	60.0	60.0	60.0	60.0

CITY OF THUNDER BAY
Capital Project Detail Sheet
2024 - 2026 Capital Budget Forecast

Project Name :	Boater Services - Infrastructure Maintenance		
Department :	IOR Infrastructure & Operations - Rate	Project ID :	IOR-PAL-0001-WF-P
Division :	Prince Arthur's Landing - Boater Services	Parent ID :	IOR-PAL-0001-WF-P
Divisional Category :	Capital Maintenance	Requested Year :	2024
Project Classification :	Cyclical Asset Replacement	Completion Year :	On Going

PROJECT DETAILS

Project Description and Justification

Core funding for capital maintenance items that are identified as part of operations including inspections and minor adjustments to dock facilities. Examples of work done include replacement of corroded anchor cables, realignment of shifted anchor systems, replacement of deteriorated floats and dock platform structural repairs and repairs to fuel system. Surveys of past and present marina users indicate that safety of the existing docks is a priority item. Future assessments and studies may identify major repairs to dock facilities or work related to other marina infrastructure (building and piers).

Consequences of Not Funding

Equipment and facilities will deteriorate. Docks that have deteriorated pose a safety hazard and are a risk management concern. Potential for removing faulty docks from service with resultant loss in overall dock inventory and possible decrease in revenue. Significant customer dissatisfaction will occur.

PROJECT BUDGET

	2024	2025	2026	Total
Expenditures				
IOR-PAL-0001-WF-001 Capital Maintenance	60,000	60,000	60,000	180,000
Expenditures Total	60,000	60,000	60,000	180,000
Financing				
Reserve & Reserve Funds	60,000	60,000	60,000	180,000
Financing Total	60,000	60,000	60,000	180,000

OPERATING EXPANSION

No Operating Impact

**CITY OF THUNDER BAY
CAPITAL FORECAST DIVISIONAL SUMMARY
Gross Expense (\$000's)**

	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
	Gross									
	Expense									
Prince Arthur's Landing - Boater Services										
Capital Maintenance	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
Total Prince Arthur's Landing - Boater Services	60.0									