



Wastewater Summary

CATEGORY DESCRIPTION

(For detailed project listing see attached)

	2014 REQUEST	2015 OUTLOOK	2016 OUTLOOK	2017 OUTLOOK	2018 OUTLOOK
Previous Council Approvals	\$ 6,811,965	\$ 10,344,485	\$ 6,789,055	\$ 6,820,217	\$ 6,903,002
Wastewater Collection					
Condition Assessment - Sewer System	\$ 700,000	\$ 725,000	\$ 925,000	\$ 725,000	\$ 925,000
Sewer System Rehabilitation	\$ 200,000	\$ 625,000	\$ 625,000	\$ 625,000	\$ 625,000
Sewer Priority Projects	\$ 3,256,325	\$ 11,206,234	\$ 3,811,207	\$ 1,623,711	\$ 1,586,416
Collection System - Other	\$ 288,816	\$ 210,829	\$ 210,000	\$ 210,000	\$ 250,000
Wastewater Plants					
Wastewater Treatment Plants - North	\$ 400,000	\$ 450,000	\$ 200,000	\$ 2,000,000	\$ 1,000,000
Wastewater Treatment Plants - South	\$ 1,100,000	\$ 625,000	\$ 5,020,000	\$ 18,650,000	\$ 100,000
Plants - Lift Stations	\$ 730,000	\$ 9,230,000	\$ 3,230,000	\$ 1,230,000	\$ 720,000
Plants - System Wide	\$ 1,190,000	\$ 1,600,000	\$ 870,000	\$ 595,000	\$ 555,000
Wastewater General					
Wastewater - Strategic Initiatives	\$ 1,045,000	\$ 455,000	\$ 185,000	\$ 65,000	\$ 25,000

PROJECT COSTS

	\$ 15,722,106	\$ 35,471,548	\$ 21,865,262	\$ 32,543,928	\$ 12,689,418
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PROJECT FINANCING

Reserves: Capital	\$ -	\$ (400,000)	\$ -	\$ -	\$ -
Reserves: Gas Tax	\$ -	\$ (1,960,000)	\$ (1,960,000)	\$ (1,960,000)	\$ (1,960,000)
Capital Envelopes: Future Years or Debt Financing	\$ -	\$ (15,775,000)	\$ (2,221,983)	\$ (12,546,983)	\$ 7,686,266

CAPITAL ENVELOPE (WWW User Fees)

	\$ 15,722,106	\$ 17,336,548	\$ 17,683,279	\$ 18,036,945	\$ 18,397,684
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Priority Setting:

Sanitary sewer priority projects are determined based on a review of:

- A) Condition: Camera inspections of the sanitary sewers are conducted to determine pipes that are in need of repair / replacement.
- B) Operational Issues: Groundwater Infiltration into aging infrastructure and sagged systems of sewer that require frequent maintenance are prioritized for repair / replacement.
- C) Capacity: Flow capacity is analysed for new and future growth conditions and upsizing is completed as required.

When a roads or watermain priority project is identified, all of the above criteria are reviewed to determine if associated sanitary sewer replacement / upgrades are required.

The following is the basis for prioritizing Water and Wastewater Facility Projects:

- Legislation / Compliance
- Health & Safety
- Protecting Public Health
- Maintenance / Renewal / Replacement of Existing Capital Assets
- Enhancing Productivity
- Protection of the Environment



Wastewater Detail

PROJECT DESCRIPTION	PROJECT TYPE R (Renewal) E (Expansion) N (New)	2014 REQUEST	2015 OUTLOOK	2016 OUTLOOK	2017 OUTLOOK	2018 OUTLOOK
PREVIOUS COUNCIL APPROVALS						
Biosolids Management (Annual Debt Payment)	N	\$ 2,200,000	\$ 2,200,000	\$ 2,200,000	\$ 2,200,000	\$ 2,200,000
Bio Solids Phase - In (Construction)	N	\$ 2,626,000	\$ 3,978,520	\$ 4,058,090	\$ 4,139,252	\$ 4,222,037
Walden WWTP Expansion Upgrades (Design & Contract Administration / Inspection)	R	\$ 1,040,000	\$ 3,660,000			
Sudbury WWTP Upgrades - Headhouse Construction & Standby Power Design (\$4,000,000 Internal Financing 2014 to 2023)	N,R,E	\$ 480,965	\$ 480,965	\$ 480,965	\$ 480,965	\$ 480,965
Sudbury WWTP Upgrades - Standby Power (Design & Contract Administration / Inspection)	R,N	\$ 340,000				
Kingsway - Levesque Lift Station	E	\$ 100,000				
Computerized Maintenance Management System (CMMS) Contribution - Corporate Initiative	N	\$ 25,000	\$ 25,000	\$ 50,000		
SUBTOTAL PREVIOUS COUNCIL APPROVALS		\$ 6,811,965	\$ 10,344,485	\$ 6,789,055	\$ 6,820,217	\$ 6,803,002
Condition Assessment - Sewer System						
Sewer Inspection Program (Closed-Circuit Television, Zoom Camera, Cleaning)	R	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000
Sanitary Rock Tunnel Inspections (Contribution to Reserve Fund)	R	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000
Sewer Assessment in Proximity to Waterways	R		\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000
Inflow / Infiltration Assessment (Reduction)	R			\$ 200,000		\$ 200,000
SUBTOTAL - Condition Assessment - Sewer System		\$ 700,000	\$ 725,000	\$ 925,000	\$ 725,000	\$ 925,000
Sewer System Rehabilitation						
Sewer System Annual Repairs (Flushing Program Reduction)	R	\$ 200,000	\$ 125,000	\$ 125,000	\$ 125,000	\$ 125,000
Sewer Rehabilitation (Lining)	R		\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000
SUBTOTAL - Sewer System Rehabilitation		\$ 200,000	\$ 625,000	\$ 625,000	\$ 625,000	\$ 625,000
Sewer Priority Projects						
Gatchell Outfall Sewer - (Design, Contract Administration & Inspection)	R	\$ 1,000,000				
Gatchell Outfall Sewer - (Construction)	R		\$ 5,000,000			
Funding from Future Year Envelopes (2016 - 2025)			\$ (4,500,000)	\$ 541,086	\$ 541,086	\$ 541,086
Gatchell Outfall Sewer - Financing in Budget Year			\$ 500,000	\$ 541,086	\$ 541,086	\$ 541,086
Dollard Avenue - Madison Avenue to End	R	\$ 400,000				
Charette Avenue Sewers	R	\$ 350,000				
Ellen Street - St. Agnes Street to Laurier Street	R	\$ 325,000				
System Improvements (Development Related)	R, E	\$ 300,000	\$ 300,000	\$ 300,000	\$ 300,000	\$ 300,000
Second Avenue (Sudbury) - Donna Drive to 200 m North of Kenwood	R	\$ 200,000				
Combined Sewer Investigation	R	\$ 150,000	\$ 50,000	\$ 50,000	\$ 50,000	
Elgin Street - Ste. Anne Road to Elm Street	R	\$ 150,000				
Afton Avenue - Hawthorne Drive to Gemmell Street	R	\$ 125,000				
Preliminary Design for Subsequent Years	R	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000
Lively Sanitary Sewer Upgrades - Construction	R		\$ 4,200,000			
Funding from Future Year Envelopes (2016 - 2017)			\$ (3,275,000)	\$ 1,775,000	\$ 1,500,000	
Lively Sanitary Sewer - Financing in Budget Year			\$ 925,000	\$ 1,775,000	\$ 1,500,000	
Development Projects (Valleyview) (Design, Contract Administration & Inspection)	N		\$ 500,000			
Development Projects (Valleyview) (Construction)	N			\$ 2,000,000		
Funding from Future Year Envelopes (2017 - 2018)				\$ (2,000,000)	\$ 1,000,000	\$ 1,000,000
Valleyview - Financing in Budget Year				\$ -	\$ 1,000,000	\$ 1,000,000



Wastewater Detail

PROJECT DESCRIPTION	PROJECT TYPE					
	R (Renewal)	2014 REQUEST	2015 OUTLOOK	2016 OUTLOOK	2017 OUTLOOK	2018 OUTLOOK
	E (Expansion)					
	N (New)					
Moonlight Avenue - Bancroft Drive to Kingsway	R		\$ 500,000			
Yale Street - Marcel Street to Regent Street	R		\$ 175,000			
Second Avenue (Coniston) - Hwy 17 to Balsam Street	R		\$ 100,000			
Barbara Street - Yale Street to Arnold Street	R		\$ 50,000			
Davidson Street - College Street to MacKenzie Street	R		\$ 50,000			
Barry Downe Road - Westmount Avenue to Kingsway	R		\$ 50,000			
Rehabilitation of Backyard Sewermain (Various Locations)	R			\$ 500,000	\$ 500,000	\$ 500,000
Lorne Street - Martindale Road to Logan Avenue	R,N			\$ 300,000		
Gutcher Avenue - Mary Street to Irving Street	R			\$ 225,000		
Fairburn Street - Barry Downe Road to East End	R			\$ 150,000		
Various Sewer with Roads Priority Projects	R				\$ 500,000	\$ 500,000
Contingency - Sewer and Sewer with Watermain Priority Projects	R	\$ 206,325	\$ 181,234	\$ 236,207	\$ 223,711	\$ 236,416
SUBTOTAL - Sewer Priority Projects		\$ 3,256,325	\$ 11,206,234	\$ 3,811,207	\$ 1,623,711	\$ 1,586,416
Collection System - Other						
Collection Support - Contract Support	N	\$ 243,816	\$ 210,829	\$ 210,000	\$ 210,000	\$ 250,000
Collection Health & Safety Equipment (Trench Box / Confined Space Entry / Depot Improvements)	N	\$ 35,000				
Depot Remediation (W & WW Design Share)	R	\$ 10,000				
SUBTOTAL - Collection System - Other		\$ 288,816	\$ 210,829	\$ 210,000	\$ 210,000	\$ 250,000
Wastewater Treatment Plants - North						
Valley East WWTP Upgrades - Capital Needs Study (including Standby Power)	R	\$ 200,000				
Valley East WWTP Upgrades - Concrete Rehabilitation (3 Phases)	R,N	\$ 100,000				
Chelmsford Lagoon Upgrades - Cleaning / Brush Clearing	R	\$ 100,000				
Valley East WWTP Upgrades - Capital Needs Design, Contract Administration and Inspection	R		\$ 450,000		\$ 2,000,000	\$ 1,000,000
Chelmsford WWTP - UV Disinfection System Replacement	R			\$ 200,000		
SUBTOTAL - Wastewater Treatment Plants - North		\$ 400,000	\$ 450,000	\$ 200,000	\$ 2,000,000	\$ 1,000,000
Wastewater Treatment Plants - South						
Sudbury WWTP Equipment Upgrades (Blowers and unplanned Repairs)	R	\$ 800,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000
Walden WWTP Clarifier Rehabilitation - Engineering & Construction	R	\$ 300,000				
Coniston WWTP Upgrades	R		\$ 500,000			
Wanapitei Lagoon - Cell #1 Cleaning	R		\$ 25,000	\$ 150,000		
Sudbury WWTP Upgrades -Standby Power (Construction)	R, N			\$ 4,700,000		
Funding from Future Year Envelopes (Internal or Debt Financing - \$3,500,000 from 2017 to 2018)				\$ (3,500,000)	\$ 750,000	\$ 2,750,000
Sudbury WWTP Upgrades -Standby Power Construction - Financing in Budget Year				\$ 1,200,000	\$ 750,000	\$ 2,750,000
Sudbury WWTP - Parking Lot and Entrance Upgrades	R			\$ 70,000	\$ 550,000	
Walden WWTP Expansion - Construction	N,R,E				\$ 18,000,000	
Funding from Future Envelopes					\$ (1,000,000)	\$ 1,000,000
Funding from Future Year Envelopes (Debt Financing - \$16,300,000 from 2018 to 2032 - \$1,415,249 Annually)					\$ (16,300,000)	\$ 1,415,249
Walden WWTP Expansion Construction - Financing in Budget Year					\$ 700,000	\$ 2,415,249
SUBTOTAL - Wastewater Treatment Plants - South		\$ 1,100,000	\$ 625,000	\$ 5,020,000	\$ 18,650,000	\$ 100,000



Wastewater Detail

PROJECT DESCRIPTION	PROJECT TYPE					
	R (Renewal)	2014 REQUEST	2015 OUTLOOK	2016 OUTLOOK	2017 OUTLOOK	2018 OUTLOOK
	E (Expansion)					
	N (New)					
Plants - Lift Stations						
Lift Station Upgrades / Standby Power - Various Locations	N	\$ 500,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 500,000
Lift Station Upgrades - Pump Replacements	R	\$ 210,000	\$ 210,000	\$ 210,000	\$ 210,000	\$ 210,000
Lift Station Upgrades - Inflow Protection	N	\$ 20,000	\$ 20,000	\$ 20,000	\$ 20,000	\$ 10,000
St. Charles Lift Station Upgrades (Construction)	R, N		\$ 8,000,000			
Funding from Future Year Envelopes (Internal Debt Financing - \$8,000,000 from 2016 to 2030)			\$ (8,000,000)	\$ 961,931	\$ 961,931	\$ 961,931
St. Charles Lift Station Upgrades (Construction) - Financing in Budget Year			\$ -	\$ 961,931	\$ 961,931	\$ 961,931
Main Street Lift Station (Chelmsford) - Construction	E			\$ 2,000,000		
SUBTOTAL - Plants - Lift Stations		\$ 730,000	\$ 9,230,000	\$ 3,230,000	\$ 1,230,000	\$ 720,000
Plants - System Wide						
Various Plant Repairs / Equipment Upgrades / Operational Support	R	\$ 350,000	\$ 350,000	\$ 350,000	\$ 250,000	\$ 250,000
Annual SCADA/Communication Upgrades	R,N	\$ 250,000	\$ 250,000	\$ 275,000	\$ 275,000	\$ 275,000
SCADA, Controls & Instrumentation Systems Master Plan (50% W & WW)	R,N	\$ 250,000	\$ 250,000			
Upgrading Primary Systems (Lagoons) to Secondary Treatment	N	\$ 100,000	\$ 100,000	\$ 100,000		
Health and Safety Inspections and Upgrades (PSH & S Reviews)	R	\$ 75,000	\$ 50,000	\$ 50,000		
Consultants Procedural Manual for W&WW Facilities (50% W & WW)	N	\$ 50,000				
Operating Manuals & As-Builts	R,N	\$ 40,000	\$ 60,000	\$ 40,000	\$ 40,000	
Roofing and Fencing	R	\$ 40,000	\$ 40,000	\$ 30,000	\$ 30,000	\$ 30,000
Facilities Design Manual (50% W & WW)	N	\$ 35,000				
Meatbird Transfer Station - Decommissioning	R		\$ 400,000			
Security Improvements (Card Access, Surveillance etc.)	N		\$ 100,000	\$ 25,000		
SUBTOTAL - Plants - System Wide		\$ 1,190,000	\$ 1,600,000	\$ 870,000	\$ 595,000	\$ 555,000
Wastewater - Strategic Initiatives						
AVL (Automatic Vehicle Locator) Software and Capital Equipment (W & WW – 40% / 60%)	N	\$ 440,000	\$ 20,000	\$ 20,000		
Frobisher Depot Upgrades	R	\$ 150,000				
Energy Saving Initiatives (Collection & Distribution and Plants)	R	\$ 100,000	\$ 200,000			
Asset Management Plan (Detailed) (50% W & WW)	N	\$ 100,000				
Plant Process / Energy Optimization Studies	R	\$ 60,000	\$ 75,000			
Trench Rescue Training	N	\$ 50,000				
Asset Management Software (for Capital Project Planning)	N	\$ 50,000				
GIS - Various Equipment & Software	N	\$ 25,000	\$ 35,000	\$ 40,000	\$ 40,000	
National W & WW Benchmarking Initiative (Distribution & Collection and Plants)	N	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000
Environmental Management System Implementation	N	\$ 25,000				
Locates	N	\$ 20,000				
Demand - Side Management (Wet Weather Flow Reduction)	N		\$ 100,000	\$ 100,000		
SUBTOTAL - Wastewater - Strategic Initiatives		\$ 1,045,000	\$ 455,000	\$ 185,000	\$ 65,000	\$ 25,000
TOTAL - Wastewater		\$ 15,722,106	\$ 35,471,548	\$ 21,865,262	\$ 32,543,928	\$ 12,689,418

INCREMENTAL OPERATING BUDGET IMPACT:

AVL Units \$ 24,000



Unfunded Capital Projects

Wastewater

PROJECT DESCRIPTION	TYPE	COST
	R (Renewal)	
	E (Expansion)	
	N (New)	
Fielding Road Sewer Servicing and Walden WWTP Upgrades	E	\$ 18,020,000
Ramsey Lake South Shore Servicing (Construction)	E	\$ 3,000,000
Maley Drive Extension - Sanitary Sewer	R	\$ 1,500,000
Jacob Street Lift Station	E	\$ 1,200,000
Boland, Lancaster, Windsor Booster (Construction - Will Include Sanitary Sewer Upgrades)	R	\$ 500,000
Lift Station Electrical Drawings	R	\$ 300,000
Manhole Rehabilitation	R	\$ 250,000
Copper Cliff Forcemain	N	TBD
Depot Upgrades (Note 1)	R	TBD
TOTAL UNFUNDED PROJECTS		\$ 24,770,000

TBD - To be determined