

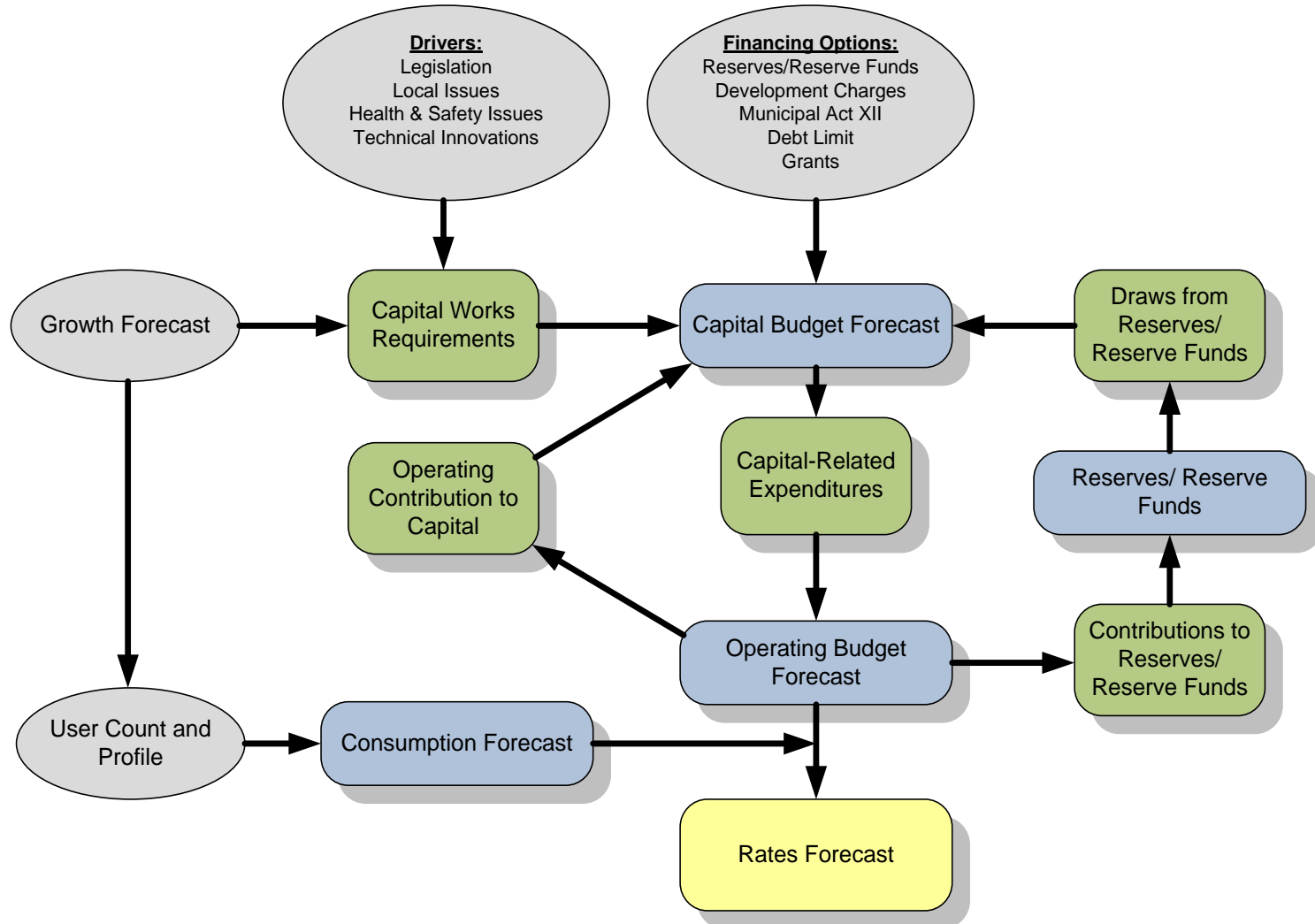


Township of South Stormont 2019 Water and Wastewater Rate Study

Committee of the Whole

November 26, 2019

Rate Study Methodology



Water and Wastewater Customer Growth

2019-2029



Description	Customer Count			Consumption/Flows (m ³)		
	2011-2018 Average Annual Growth	2019	2029	Consumption per User ²	2019 Total ¹	2029 Total
Water						
Long Sault/Ingleside Water System						
Residential	37	1,920	2,286	182	405,532	472,315
Non-Residential	1	90	100	416	138,632	142,792
Lactalis	-	1	1		545,862	545,862
Eamers Corners - St. Andrews West Water System						
Residential	6	648	707	176	130,655	140,999
Non-Residential		16	16	494	8,909	8,909
Newington Water System						
Residential		99	99	180	17,640	17,640
Non-Residential		4	4	494	1,976	1,976
Total - Water						
Residential	43	2,667	3,092	181	553,827	630,955
Non-Residential	1	110	120	430	149,517	153,677
Wastewater						
Long Sault Sewer System						
Residential	22	796	1,020	182	168,127	208,926
Non-Residential	1	35	43	416	53,912	57,032
Ingleside Sewer System						
Residential	8	705	784	182	148,906	163,266
Non-Residential	0.3	36	39	416	55,453	56,493
Lactalis	-	1	1	-	545,862	545,862
Total - Wastewater						
Residential	30	1,501	1,804	182	317,033	372,192
Non-Residential	1	71	81	416	109,365	113,525

Capital Needs Forecast

2020-2029 (2019\$)



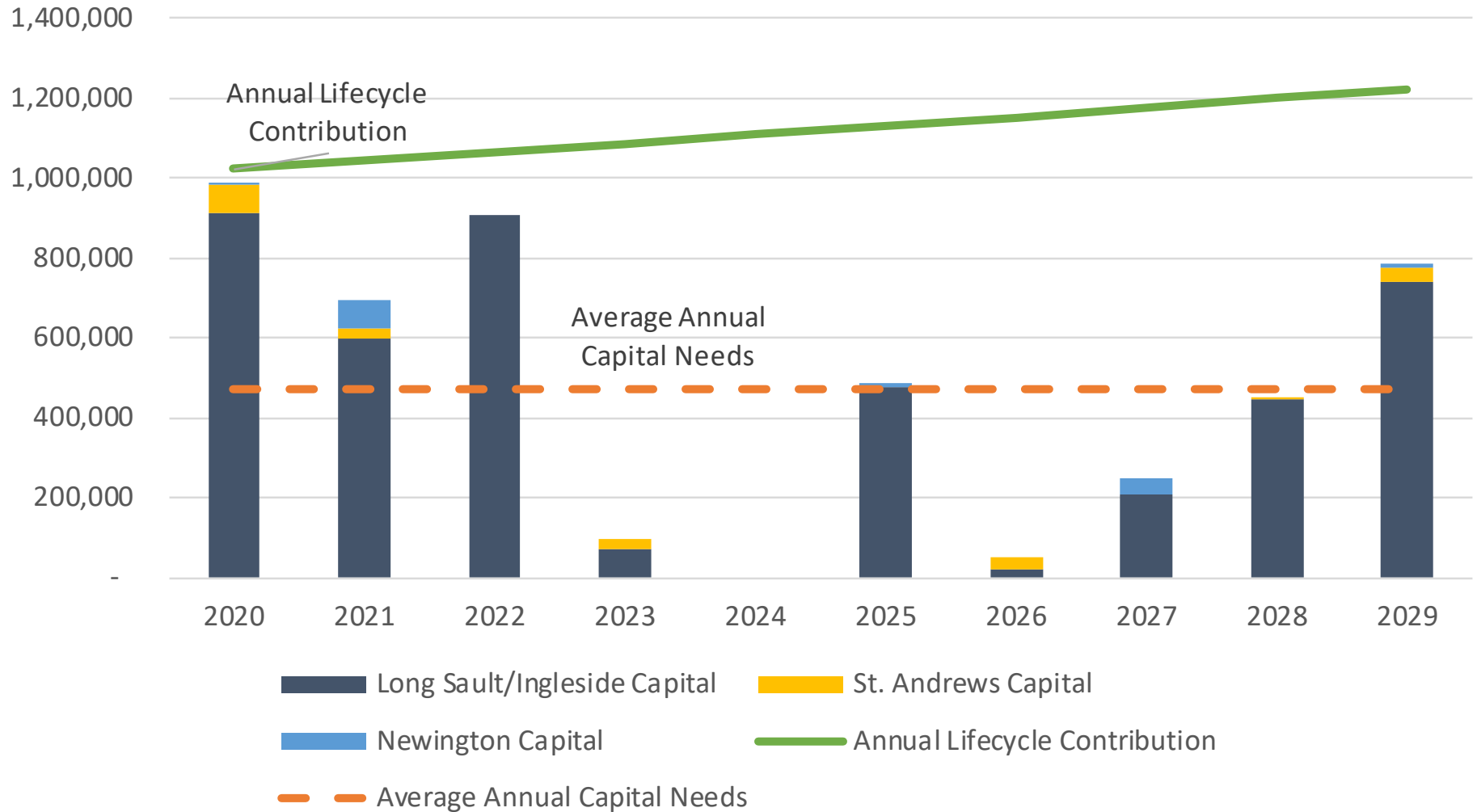
Average Annual Capital Needs		
Service Area	2020-2029 Budget	Full Lifecycle Replacement
Water		
Long Sault/Ingleside Water System	399,475	832,685
Eamers Corners - St. Andrews West Water System	17,335	125,039
Newington Water System	13,372	46,370
Water Total	430,182	1,004,093
Wastewater		
Long Sault Sewer System	816,007	527,074
Ingleside Sewer System	3,203,402	857,807
Wastewater Total	4,019,409	1,384,881
Total	4,449,591	2,388,974

Major projects include:

- Ingleside WWTP - \$30 million in 2023 (2/3 grant funding anticipated)

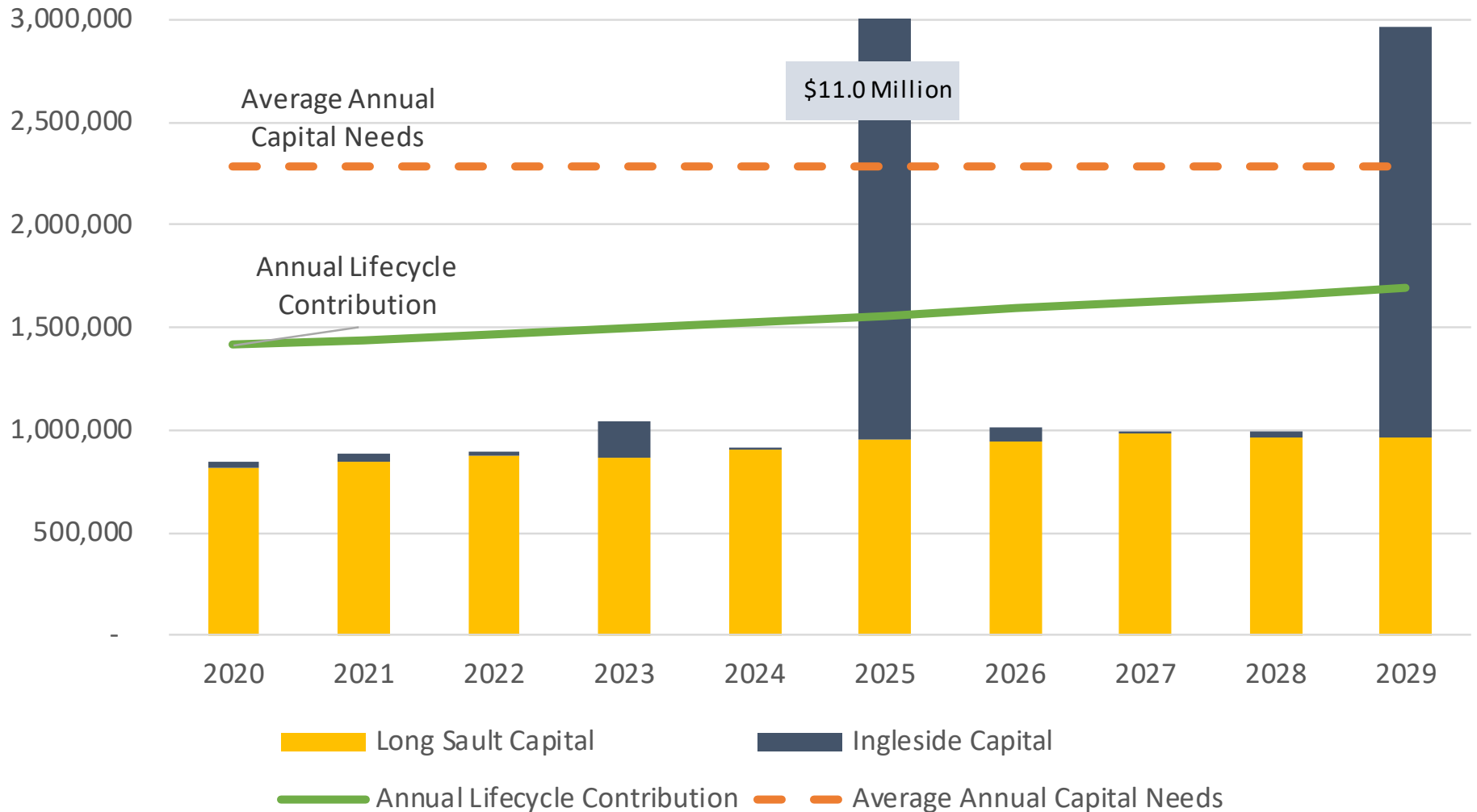
Water Capital Needs and Funding Plan

Inflated



Wastewater Capital Needs and Funding Plan

Inflated



Ingleside WWTP needs of \$11 million in 2025 exclude \$21.7 million to be funded through provincial grants

Water and Wastewater Capital Funding Plan



Principles

- Consistent with Township Asset Management Principles, funding plan developed to reach **full lifecycle funding** levels by 2029 to:
 - Align recovery of costs associated with use of asset from benefitting users;
 - Provide for the sustainable maintenance, rehabilitation, and replacement of the water and wastewater systems;
 - Reduce financial risk; and provide stable rate increases; and
 - Balance ability to pay with expected levels of service

Water and Wastewater Capital Funding Plan

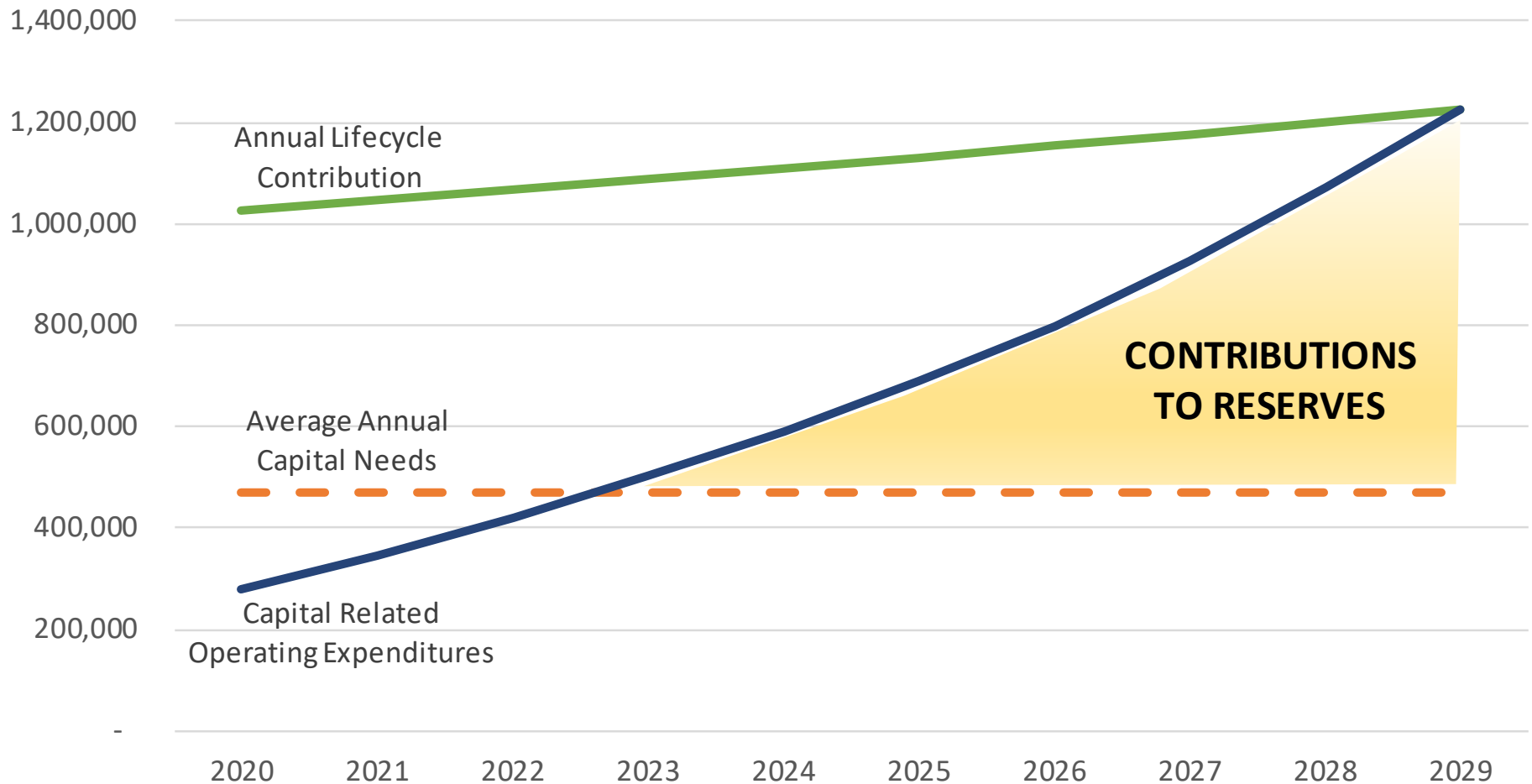
2020-2029



- Capital needs to be funded through projected rate revenues and reserves, with debt required for:
 - \$10.1 million wastewater debt between 2025 to 2029
- Two thirds grant funding for Ingleside WWTP
- All new connections to systems to pay water and wastewater capital levies (Approximately \$120,000 annually for water and \$49,000 for wastewater)
- By 2029, reserve fund balances would increase from \$2.8 million currently to \$4.9 million for water and decrease from \$3.7 million to \$0 for wastewater

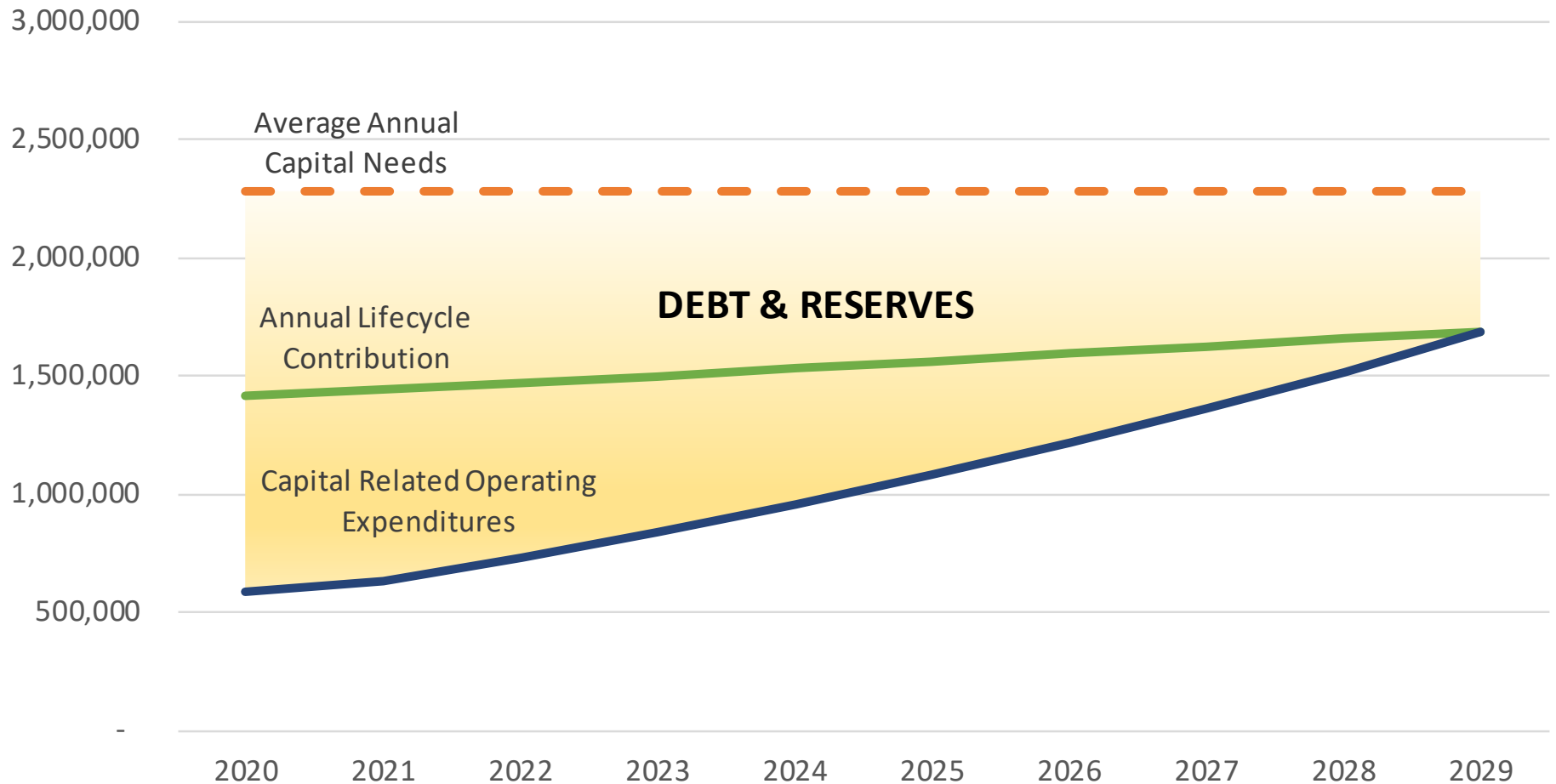
Water Capital Funding Plan

2020-2029



Wastewater Capital Funding Plan

2020-2029



Operating Budget Forecast

2020-2029



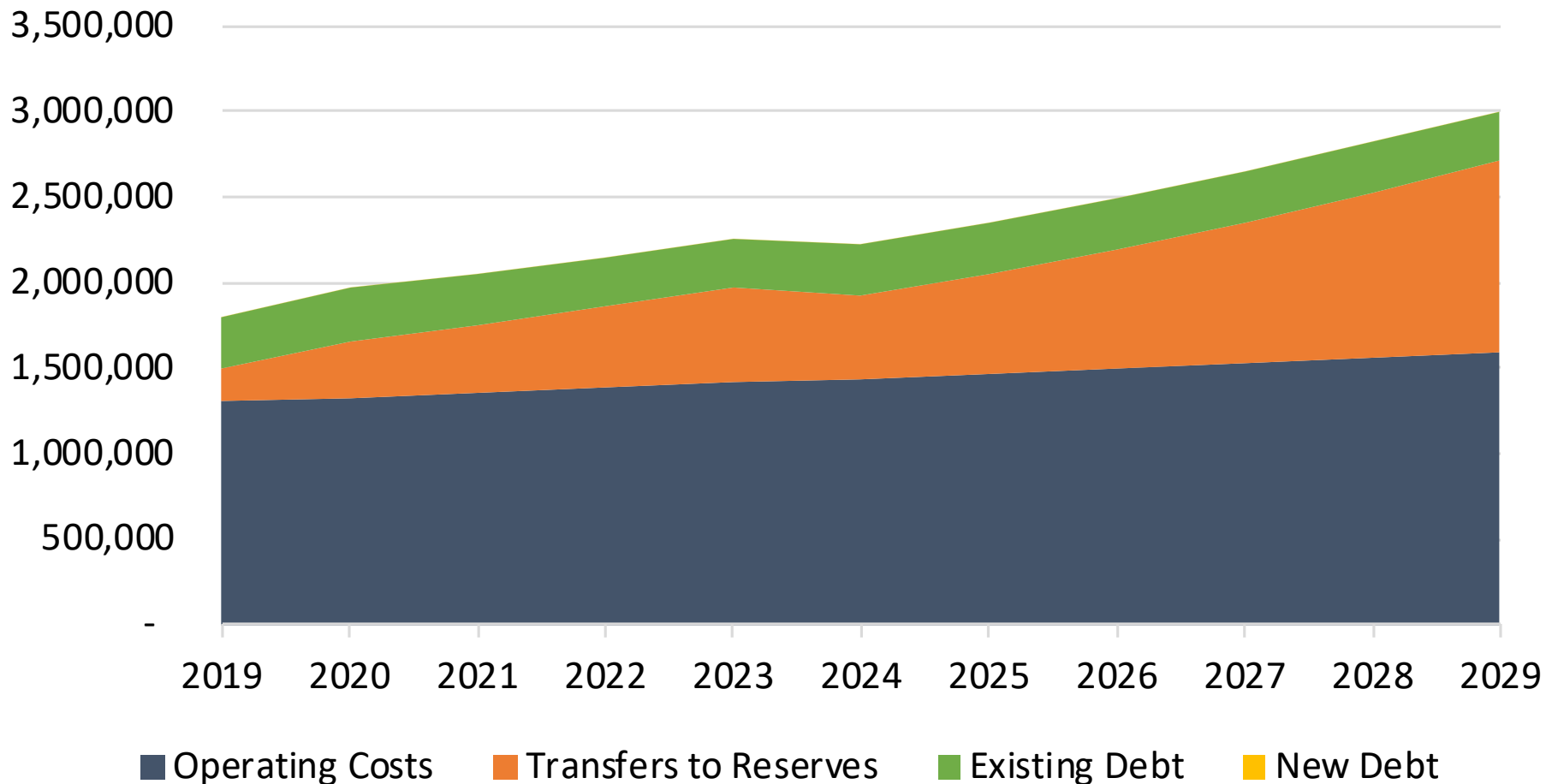
- Water and Wastewater Operating Budget Forecast based on two components:
 - Operating expenditures (i.e. 2019 Operating Budget, plus inflation)
 - Water - \$1.3 million (2019) to \$1.6 million (2029)
 - Wastewater - \$2.1 million (2019) to \$2.6 million (2029)
 - Capital-related expenditures (based on capital funding plan)
 - Water - \$768,000 (2019) to \$1.4 million (2029)
 - Wastewater - \$582,000 (2019) to \$1.7 million (2029)

Annual Water Operating Expenditures

2019-2019



Water Expenditures

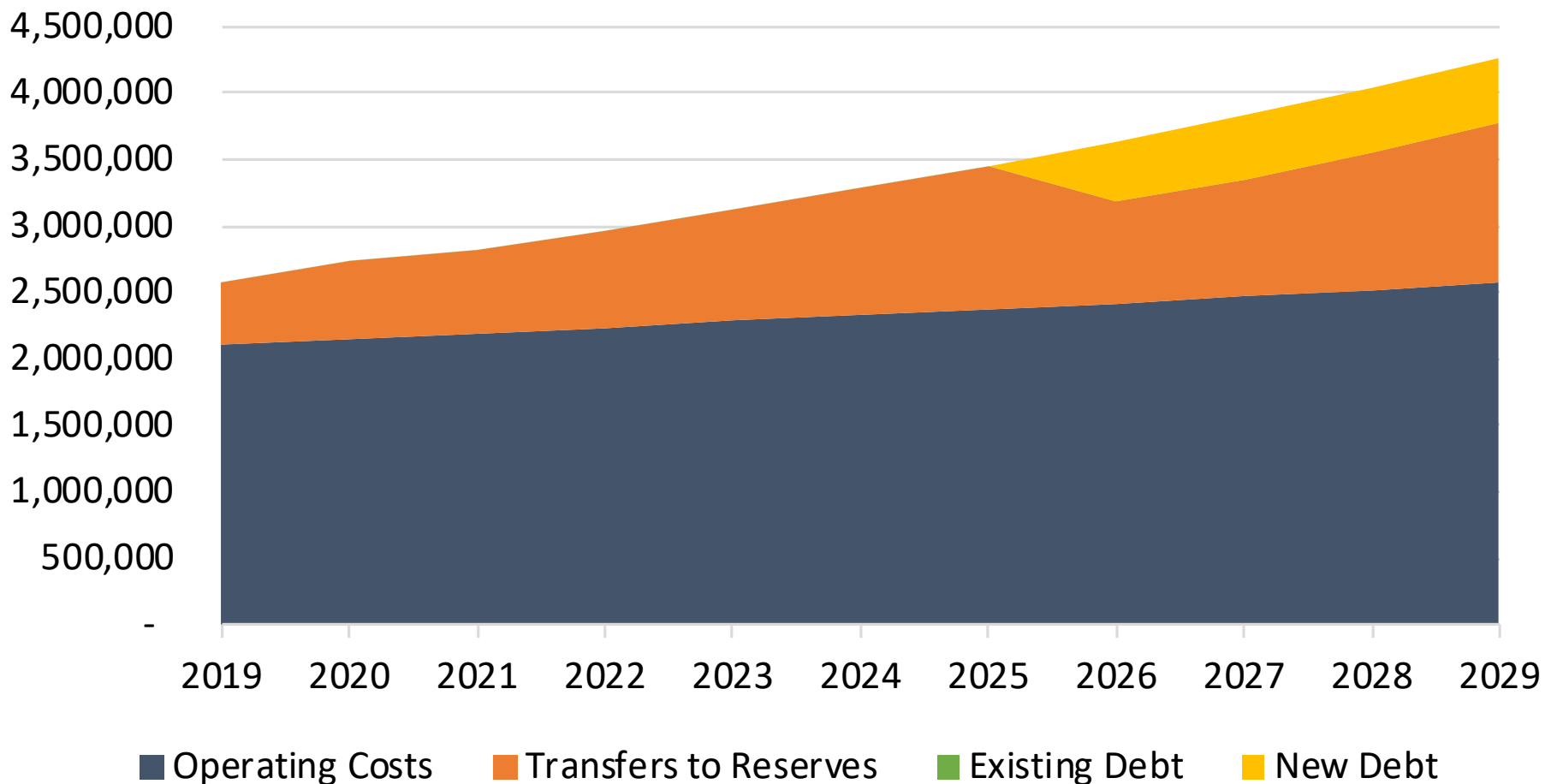


Annual Wastewater Operating Expenditures

2019-2019



Wastewater Expenditures



Water and Wastewater Rate Structures



- Funding plans developed based on moving towards uniform rate structures across the Township water systems
 - Wastewater rates currently equal for Long Sault and Ingleside systems
- Removal of special area tax levy with corresponding rate increases to offset revenue loss
- Uniform rate structures across multiple systems recommended to:
 - Address equity and affordability issues of providing service through multiple systems;
 - Provide sustainable funding for systems with less economies of scale; and
 - Improve administrative ease of implementation

Water Rate Projections

Uniform Rates, 2020-2029



Water Rates	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
<u>Consumptive Rates (\$/m³)</u>											
<u>Long Sault/Ingleside</u>											
Residential	1.029	1.099	1.173	1.252	1.337	1.428	1.525	1.628	1.738	1.856	1.982
Non-residential	1.029	1.099	1.173	1.252	1.337	1.428	1.525	1.628	1.738	1.856	1.982
Large Industrial (>6,000 m3)	0.822	0.878	0.937	1.000	1.068	1.141	1.218	1.301	1.388	1.483	1.583
% Increase		6.8%	6.7%	6.7%	6.8%	6.8%	6.8%	6.8%	6.8%	6.8%	6.8%
<u>Eamers Corners/St. Andrews</u>											
Residential	1.597	1.597	1.597	1.597	1.597	1.597	1.597	1.628	1.738	1.856	1.982
Non-residential	1.597	1.597	1.597	1.597	1.597	1.597	1.597	1.628	1.738	1.856	1.982
% Increase		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.9%	6.8%	6.8%	6.8%
<u>Newington</u>											
Residential		1.982	1.982	1.982	1.982	1.982	1.982	1.982	1.982	1.982	1.982
Non-residential		1.982	1.982	1.982	1.982	1.982	1.982	1.982	1.982	1.982	1.982
% Increase		n/a	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Wastewater Rate Projections

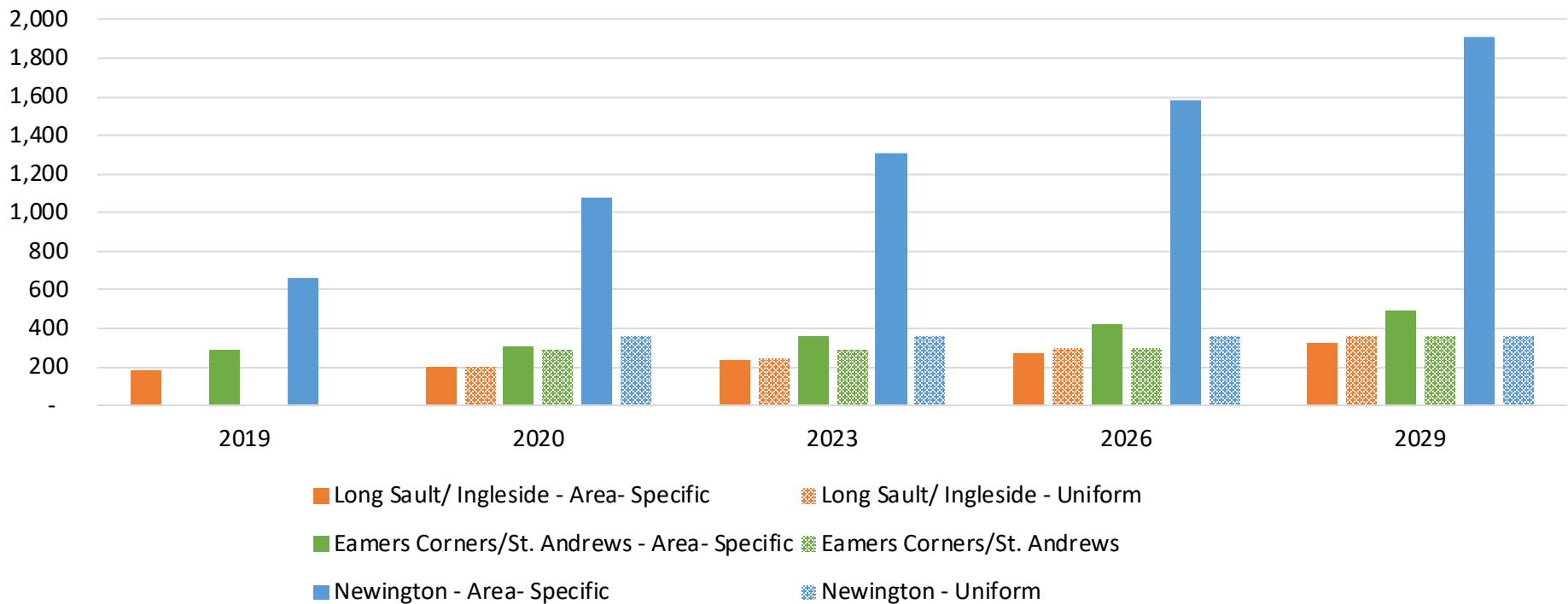
Uniform Rates, 2020-2029



Wastewater Rates	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
<u>Flow Rates (\$/m³)</u>											
<u>Long Sault</u>											
Residential	2.315	3.493	3.702	3.923	4.158	4.407	4.671	4.950	5.246	5.560	5.893
Non-residential	2.315	3.493	3.702	3.923	4.158	4.407	4.671	4.950	5.246	5.560	5.893
Large Industrial (>6,000 m3)	1.850	2.791	2.958	3.135	3.323	3.522	3.733	3.956	4.192	4.443	4.709
% Increase		50.9%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%
<u>Ingleside</u>											
Residential	2.315	3.493	3.702	3.923	4.158	4.407	4.671	4.950	5.246	5.560	5.893
Non-residential	2.315	3.493	3.702	3.923	4.158	4.407	4.671	4.950	5.246	5.560	5.893
Large Industrial (>6,000 m3)	1.850	2.790	2.957	3.134	3.322	3.520	3.731	3.954	4.191	4.442	4.708
% Increase		50.9%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%

Annual Water Bill Impacts per Average Residential User

182 m³ Annual Water Consumption



Residential Customer Water Bill Impacts

Recommended vs. Current Rate Structure



Customer Type	Water Consumption (m ³)	Area	Annual Water Bill (\$)				
			2019	2020	2029	Average Annual Increase	2029 Difference vs. Current Rate Structure
Residential Unit (Small)	116	Long Sault / Ingleside	119	127	230	11	23
Multiple Dwelling Unit		Eamers Corners/St. Andrews	185	185	230	4	(84)
		Newington	441	230	230	(21)	(1,046)
Residential Unit (Small)	121	Long Sault / Ingleside	158	169	305	15	30
		Eamers Corners/St. Andrews	246	246	305	6	(111)
		Newington	661	305	305	(36)	(1,608)
Residential Unit (Medium)	182	Long Sault / Ingleside	187	200	361	17	35
		Eamers Corners/St. Andrews	291	291	361	7	(132)
		Newington	661	361	361	(30)	(1,553)
Residential Unit (Large)	243	Long Sault / Ingleside	250	267	482	23	47
		Eamers Corners/St. Andrews	388	388	482	9	(176)
		Newington	661	482	482	(18)	(1,432)

Non-Residential Customer Water Bill Impacts

Recommended vs. Current Rate Structure



Customer Type	Water Consumption (m ³)	Area	Annual Water Bill (\$)				
			2019	2020	2029	Average Annual Increase	2029 Difference vs. Current Rate Structure
Non-Residential (Average)	416	Long Sault / Ingleside	428	457	825	40	81
		Eamers Corners/St. Andrews	664	664	825	16	(301)
		Newington	991	825	825	(17)	(2,046)
Non-Residential (Large)	8,714	Long Sault / Ingleside	7,163	7,650	13,797	663	1,357
		Ingleside	7,163	7,650	13,797	663	1,357
Lactalis	710,031	Ingleside	583,645	623,349	1,124,183	54,054	110,603

Water and Wastewater Bill Impacts



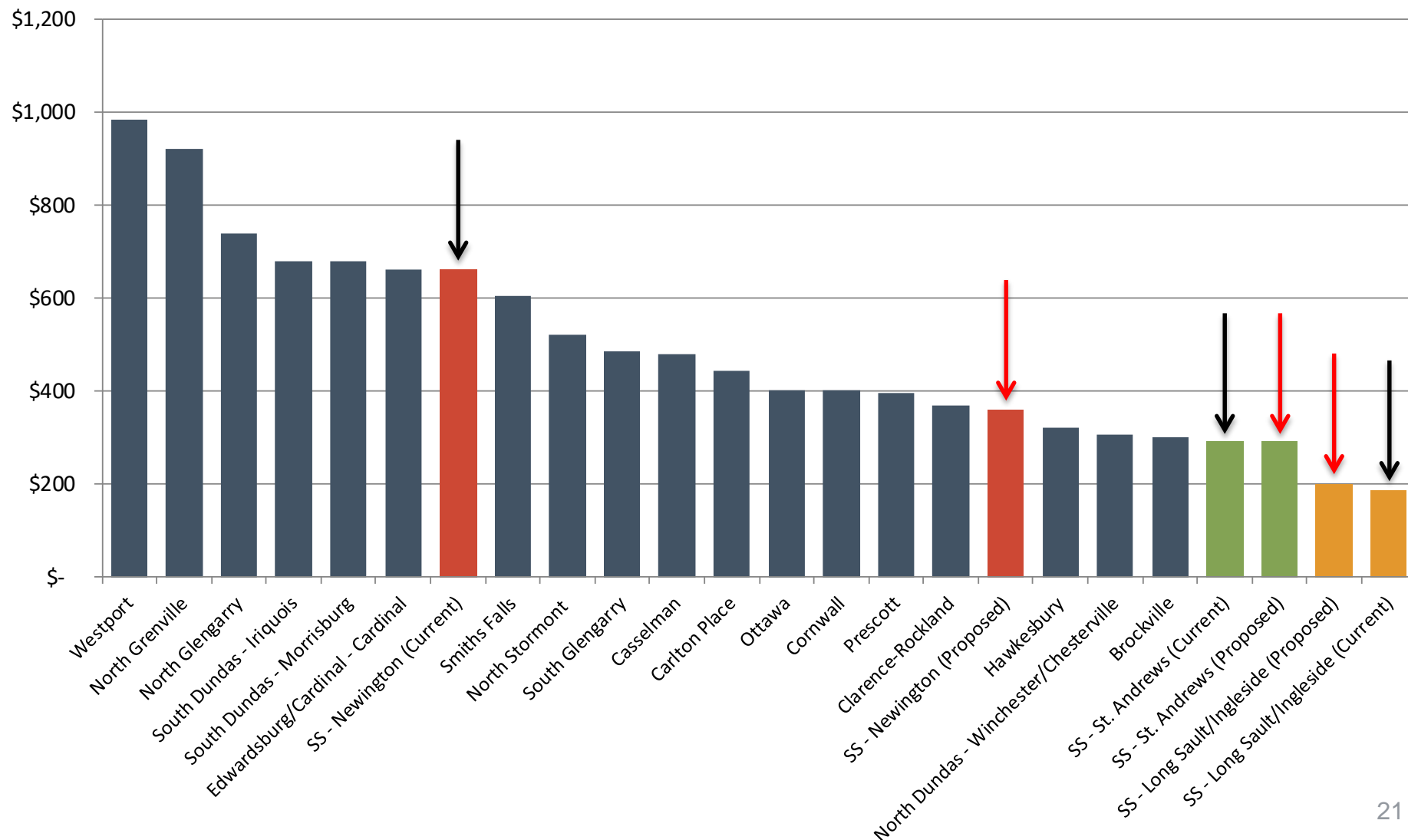
Customer Type	Water Consumption (m ³)	Area	Annual Water and Wastewater Bill			
			2019	2020	2029	Average Annual Increase
Residential Unit (Small) <i>High Density</i>	116	Long Sault	378	355	609	23
		Ingleside	348	355	609	26
Residential Unit (Small)	121	Long Sault	583	556	953	37
		Ingleside	539	556	953	41
Residential Unit (Medium)	182	Long Sault	877	836	1,433	56
		Ingleside	811	836	1,433	62
Residential Unit (Large)	243	Long Sault	1,171	1,116	1,914	74
		Ingleside	1,083	1,116	1,914	83
Non-Residential (Average)	416	Long Sault	2,529	1,910	3,276	75
		Ingleside	1,816	1,910	3,276	146
Non-Residential (Large)	8,714	Long Sault	24,421	31,974	54,834	3,041
		Ingleside	23,709	31,965	54,818	3,111
Lactalis	710,031	Ingleside	1,585,705	1,645,449	2,345,783	76,008

Municipal Comparison – Residential Water Bills

182 m³ Annual Water Consumption



Average Annual Residential Water Bill Based on 182 Cubic Metres of Consumption



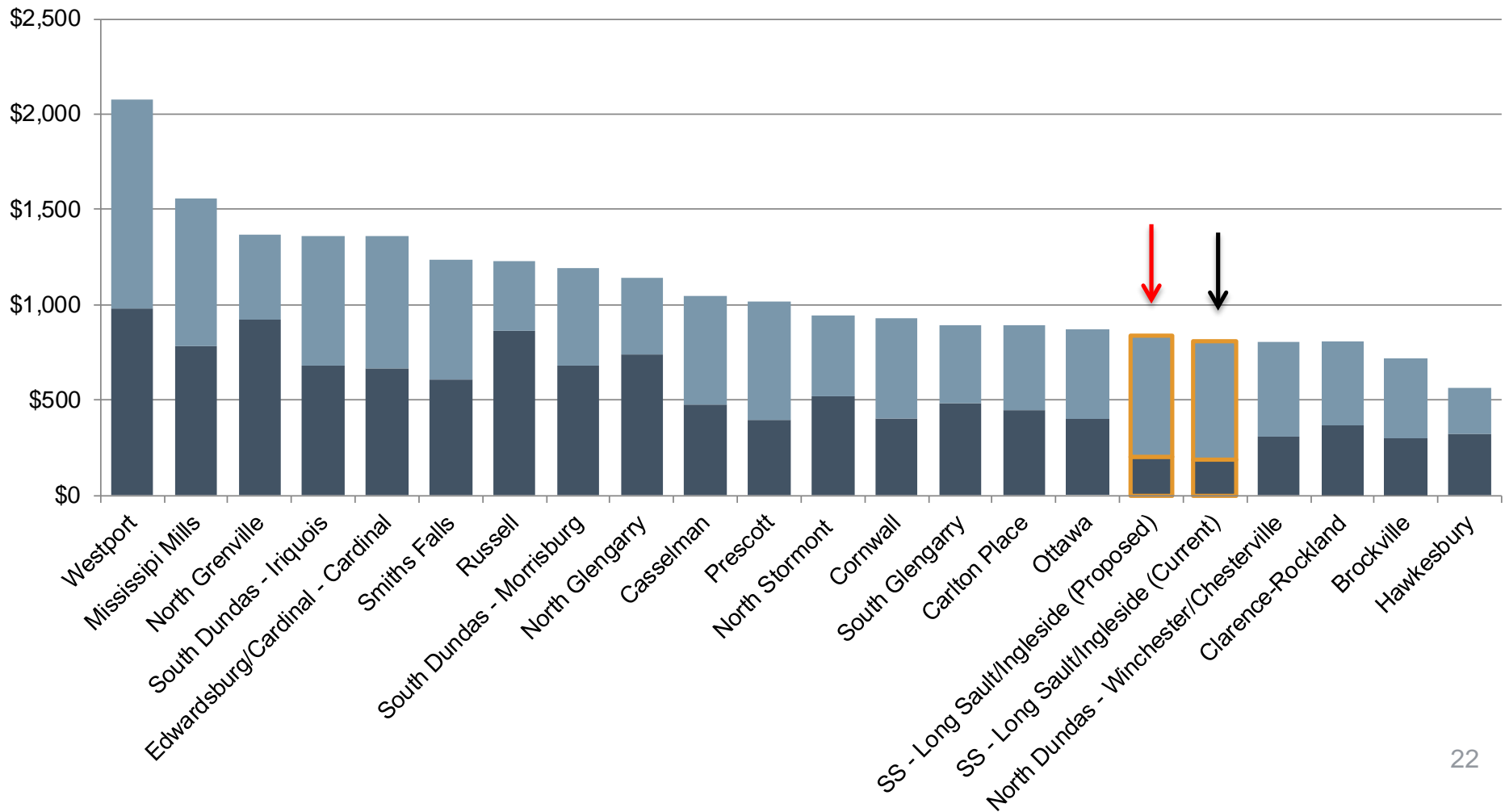
Municipal Comparison – Residential Water and Wastewater Bills

182 m³ Annual Water Consumption



Average Annual Residential Water and Wastewater Bill Based on 182 Cubic Metres Consumption

■ Water ■ Wastewater



Next Steps



- Receive input from Council on proposed rate structure and funding plan
- Prepare final report and presentation of recommended rates to Council for approval (December 11, 2019)