



Municipality of South Huron Water and Wastewater Rate Study & Financial Plan Update

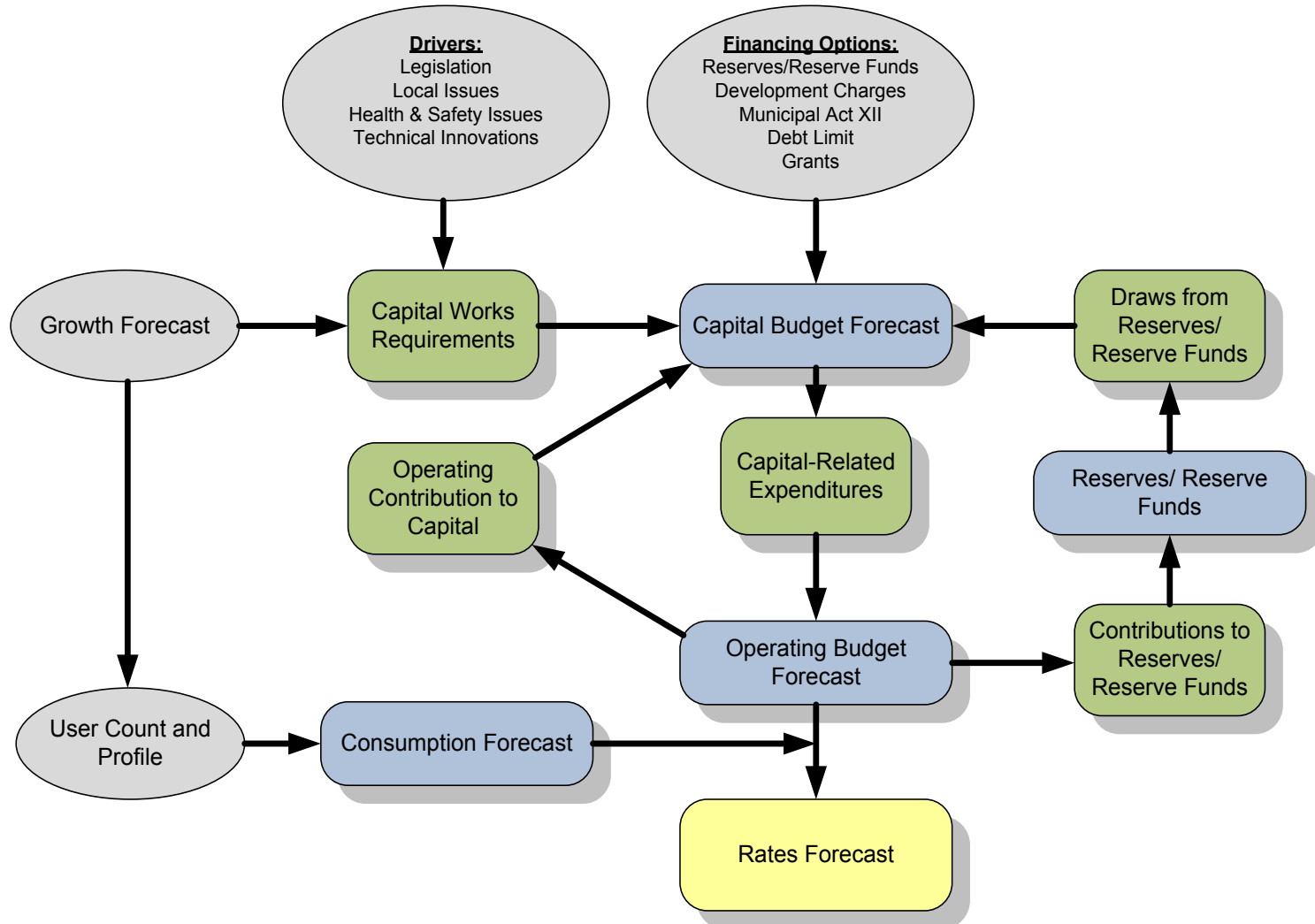
Council Meeting
February 4, 2019

Introduction



- Watson and Associates Economists Ltd. (Watson) was retained by the Municipality of South Huron (Municipality) to update the 2011 Water and Wastewater Rate Study and Water Financial Plan
- Review Included:
 - Update of water demand assumptions based on analysis of historical consumption patterns and recent trends;
 - Building a capital program that blends lifecycle needs (2016 Asset Management Plan) with specific needs identified by staff and the 2017 Water and Wastewater Master Plan;
 - Forecast annual operating cost and rate-based funding requirements;
 - Assess adequacy of current water/wastewater rates in addressing long-term financial plan needs;
 - Recommend water and wastewater rates for the 2018-2032 period, including updates to the Exeter-Hensall base charge; and
 - Providing impact assessment on rate payers

Rate Study Methodology



Historical Context



- In 2011 Council adopted a rate forecast for the 2011-2017 period, maintaining the principles established in by Council in 2008, namely:
 - Uniform quarterly base charge and consumptive water and wastewater rates for Exeter and Stephen customers;
 - Exeter-Hensall quarterly base charge to recover annual debt repayment, based on proportionate share of max. day design flows;
 - Quarterly base charges imposed on multi-tenant customers on a per unit basis at 75% of single family dwelling rate, reflecting lower occupancy;
 - Quarterly base charges imposed on year-round land lease properties on per unit basis at single family dwelling rate;
 - Quarterly base charges for all other customers imposed on graduated basis, determined by water service size; and
 - Municipal Act Capital Charge recoveries for debt financed growth related infrastructure

Sample of 2018 Quarterly Water and Sewer Bill

Exeter



THE MUNICIPALITY OF SOUTH HURON

UTILITY BILLING



Box 759 - 322 Main Street S
Exeter, On N0M 1S6
Phone # 519-235-0310 or 1-877-204-0747

Account Number 0XX000.0X

Name

Service Address

Billing Period 02/01/2018 to 05/01/2018
mm/dd/yyyy mm/dd/yyyy

Number of Billing Days 90

Current Reading

Previous Reading

Consumption

Description

Amount

5000

5042

42

WTR CONS CHG @ 1.76/M3

\$73.48

SWR CONS CHG @ 1.81/M3

\$75.57

Operations

Capital/Debt

WATER BASE CHARGE

\$60.70

SEWER BASE CHARGE

\$20.20

PIPELINE DEBT CHG

\$83.90

Current Charges

\$313.85

Balance Forward

\$0.00

Penalty

\$0.00

AMOUNT DUE

\$313.85

Exeter-Hensall Debt
Repayment

Annual Bill - \$1,255

Sample of 2018 Quarterly Water and Sewer Bill

Stephen



THE MUNICIPALITY OF SOUTH HURON

UTILITY BILLING



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Exeter, On N0M 1S6
Phone # 519-235-0310 or 1-877-204-0747

Account Number 0XX000.0X

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Service Address

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Current Reading

Previous Reading

Consumption

Description

Amount

5000

5042

42

WTR CONS CHG @ 1.76/M3

\$73.48

SWR CONS CHG @ 1.81/M3

\$75.57

Operations

Capital/Debt

WATER BASE CHARGE

\$60.70

SEWER BASE CHARGE

\$20.20

PIPELINE DEBT CHG

\$4.80

Current Charges

\$234.75

Balance Forward

\$0.00

Penalty

\$0.00

AMOUNT DUE

\$234.75

Exeter-Hensall Debt
Repayment

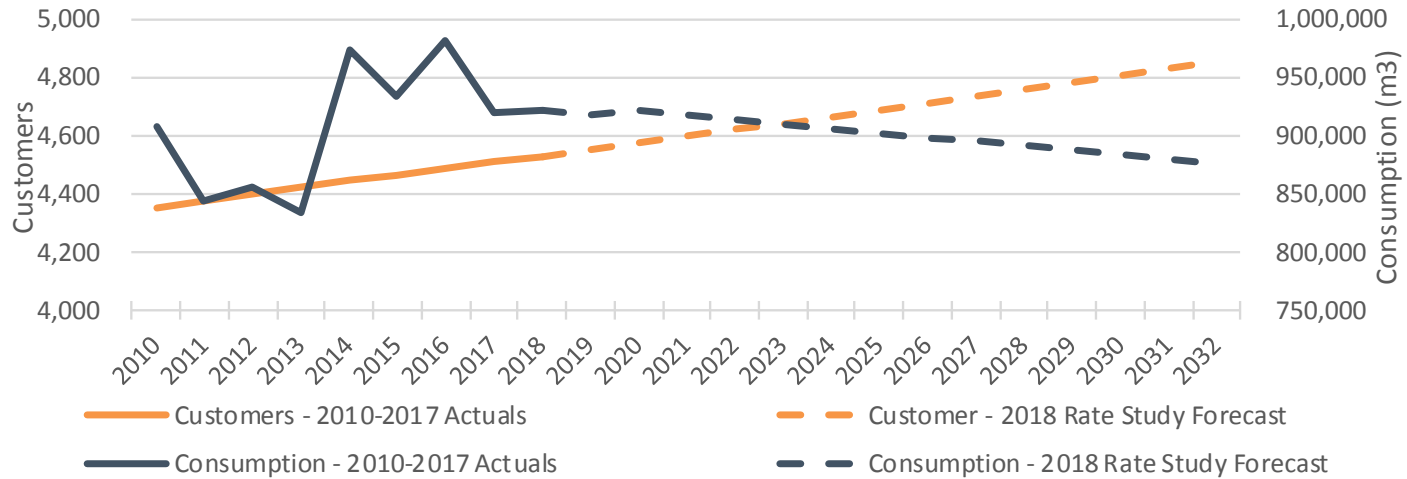
Annual Bill - \$939



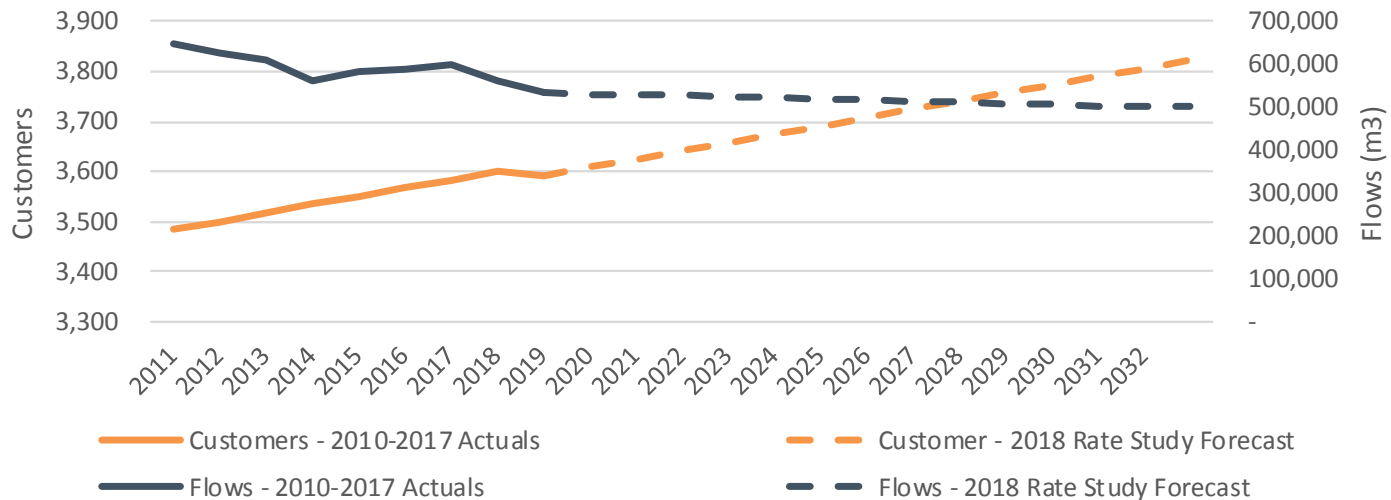
Customer Profile and Consumption Growth

2019-2032 Forecast Assumptions

Water Customers and Consumption



Wastewater Customers and Flows



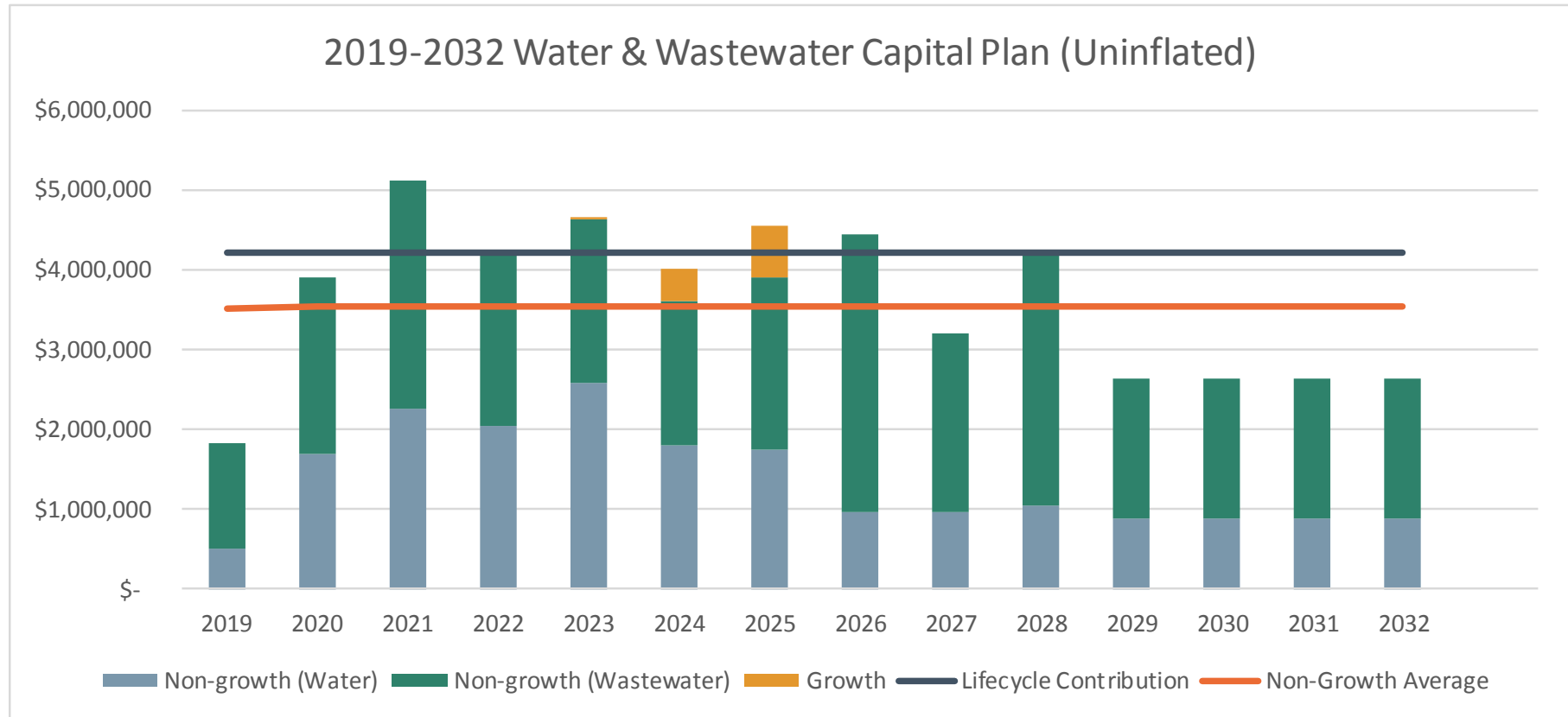
Water and Wastewater Capital Needs Forecast

2019-2032 Forecast Assumptions



- Annual lifecycle contribution based on 2016 AMP, plus attribution for urban road reconstruction (30% wastewater and 20% water), and Exeter Wastewater Treatment Plant (WWTP) replacement in 2040 at mechanical treatment plant cost estimate
 - Water at \$2.2 million and wastewater at \$2.0 million, annually
- Forecast average annual capital spending generally at annual lifecycle levels (i.e. water - \$2.2 million, wastewater - \$1.4 million), including:
 - Grand Bend Sewer
 - Treatment Plant, EA, and Pumping Station complete
 - Trunk Sewer proposed for 2023 subject to Council approval (no rate impact)
 - Exeter WWTP
 - Rehabilitation of Sewage Lagoon Sand Filters in 2020-2021 (\$1.5 million)
 - UV Treatment for Winter Discharge in 2022 (\$400,000)

Water and Wastewater Capital Needs Forecast 2019-2032



Water and Wastewater Capital Funding Sources

2019-2032 Forecast Assumptions



- Funding Options
 - Current Reserve Funds
 - Water \$8.3 million, Wastewater - \$0.5 million
 - Existing Annual Debt Repayment
 - \$1.8 million water and wastewater, debt repayment represent 10% of own source revenues
 - Total municipal debt repayment \$2.1 million for all services including water and wastewater, 12% of own source revenues (*currently rated as high risk*)
 - Annual debt repayment limit regulated at 25% of own source revenues
 - No additional debt financing has been recommended to maintain the Municipality's debt capacity for other municipal services and in recognition of the current risk rating regarding municipal borrowing
 - Development Charges – limited development charge funding
 - Grants – no additional grant funding assumed



Water and Wastewater Capital Funding Plan

2019-2032 Forecast (inflated\$)

	Scenario 1 (2019-2032)	
	Water	Wastewater
Capital Expenditures	38,023,000	22,716,000
Capital Financing		
Provincial/Federal Grants	-	-
Development Charges Reserve Fund	-	-
Non-Growth Related Debenture Requirements	-	-
Growth Related Interim Funding	1,259,500	-
Water/Wastewater Reserve	36,763,500	21,019,000
Municipal Act Capital Charge		1,697,000
Total Capital Financing	38,023,000	22,716,000

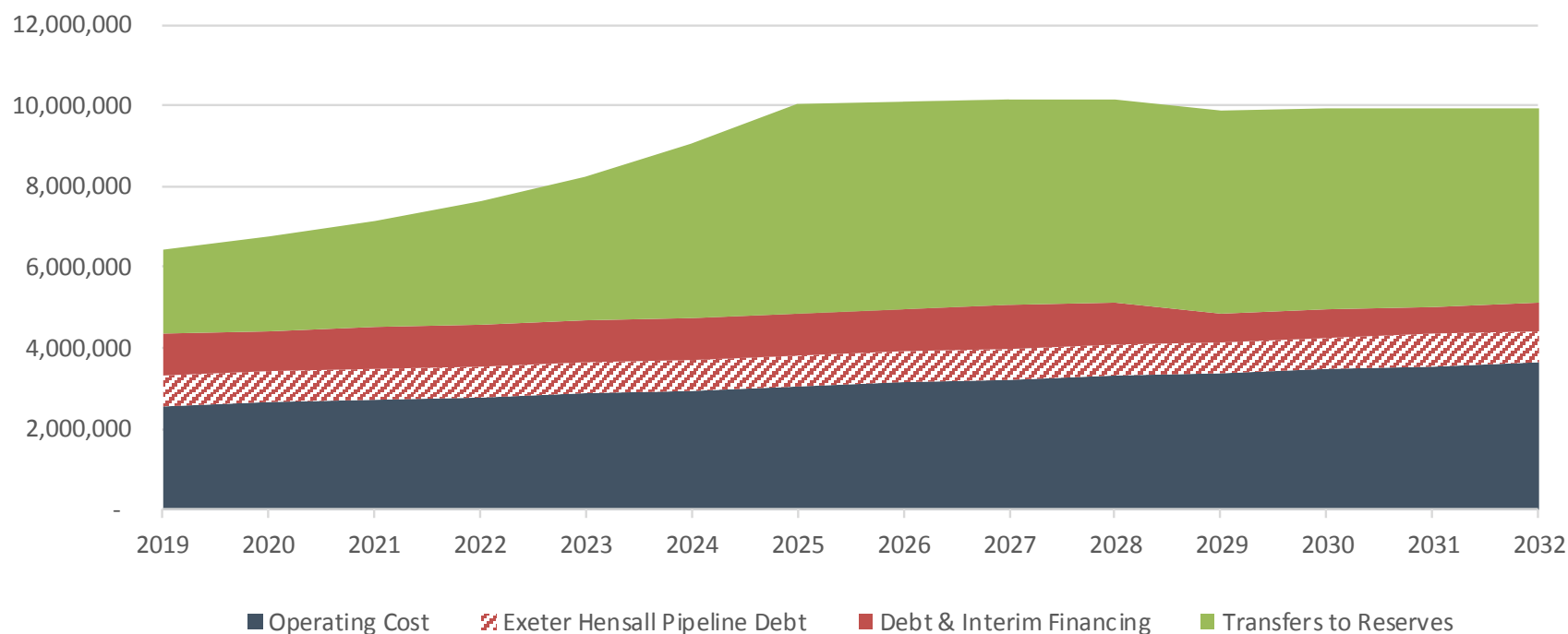
- Exeter-Hensall debt repayment (\$767,000 annually)
 - \$261,000 annually to be recovered from D.C.s
 - Quarterly debt charge re-calculated to fund annual non-growth component (\$506,000) and interim D.C. financing (\$240,000)
- Existing Capital Charge debt repayments maintained
- Grand Bend Trunk Sewer assumed to be fully capital charge funded

Water and Wastewater Net Operating Expenditure Forecasts

2019-2032 (inflated\$)



Operating Costs - Water and Wastewater Scenario 1



Water and Wastewater Rate Recommendations



- Recommendation is to maintain current practice of charging:
 - Uniform quarterly base charge and consumptive water and wastewater rates for Exeter and Stephen customers;
 - Quarterly Base Charges
 - Designed to recover annual lifecycle costs of capital;
 - Multi-tenant customers charged 75% of single family dwelling rate, reflecting lower occupancy; and
 - Imposed on year-round land lease properties on per unit basis at single family dwelling rate
 - Consumptive Rates designed to recover annual operating costs of services
 - Exeter-Hensall quarterly base charge to recover annual debt repayment costs

Sample of 2019 Quarterly Water and Sewer Bill



Exeter

THE MUNICIPALITY OF SOUTH HURON

UTILITY BILLING



Box 759 - 322 Main Street S
Exeter, On N0M 1S6
Phone # 519-235-0310 or 1-877-204-0747

Account Number 0XX000.0X

Name

Service Address

Billing Period 02/01/2019 to 01/05/2019
mm/dd/yyyy mm/dd/yyyy

Number of Billing Days 90

Current Reading

Previous Reading

Consumption

Description

Amount

5000

5042

42

WTR CONS CHG @ 1.77/M3

\$73.90

SWR CONS CHG @ 1.81/M3

\$75.57

Operations

Capital/Debt

WATER BASE CHARGE

\$67.20

SEWER BASE CHARGE

\$27.81

PIPELINE DEBT CHG

\$69.51

Current Charges

\$313.99

Balance Forward

\$0.00

Penalty

\$0.00

AMOUNT DUE

\$313.99

Exeter-Hensall Debt
Repayment

Annual Bill - \$1,256
(\$1 increase compared to 2018)

Sample of 2019 Quarterly Water and Sewer Bill



Stephen

THE MUNICIPALITY OF SOUTH HURON

UTILITY BILLING



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Phone # 519-235-0310 or 1-877-204-0747

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Current Reading	Previous Reading	Consumption	Description	Amount
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5000

5042

42

WTR CONS CHG @ 1.77/M3

\$73.90

SWR CONS CHG @ 1.81/M3

\$75.57

Operations

Capital/Debt

WATER BASE CHARGE

\$67.20

SEWER BASE CHARGE

\$27.81

PIPELINE DEBT CHG

\$3.99

Current Charges

\$248.47

Balance Forward

\$0.00

Penalty

\$0.00

AMOUNT DUE

\$248.47

Exeter-Hensall Debt
Repayment

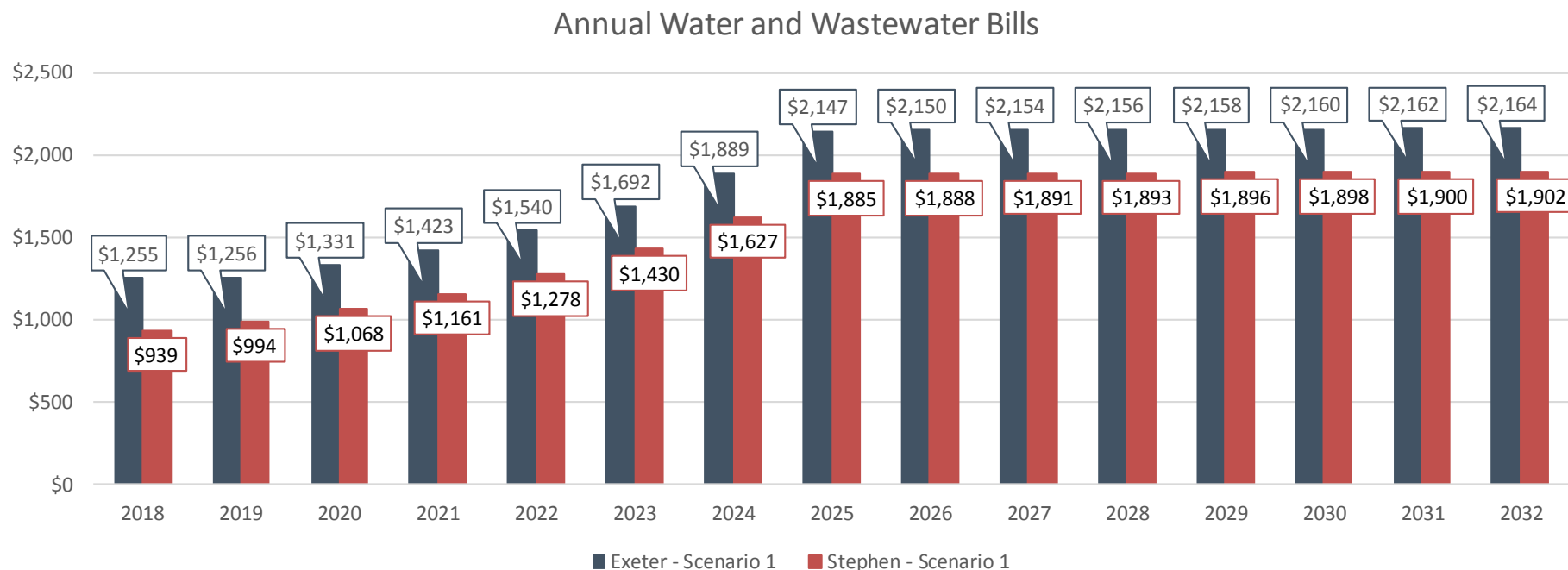
Annual Bill - \$994

(\$55 increase compared to 2018)

Annual Customer Water and Wastewater Bill Impacts



Scenario Comparison – based on 167 m³ of usage and 19mm Service Size

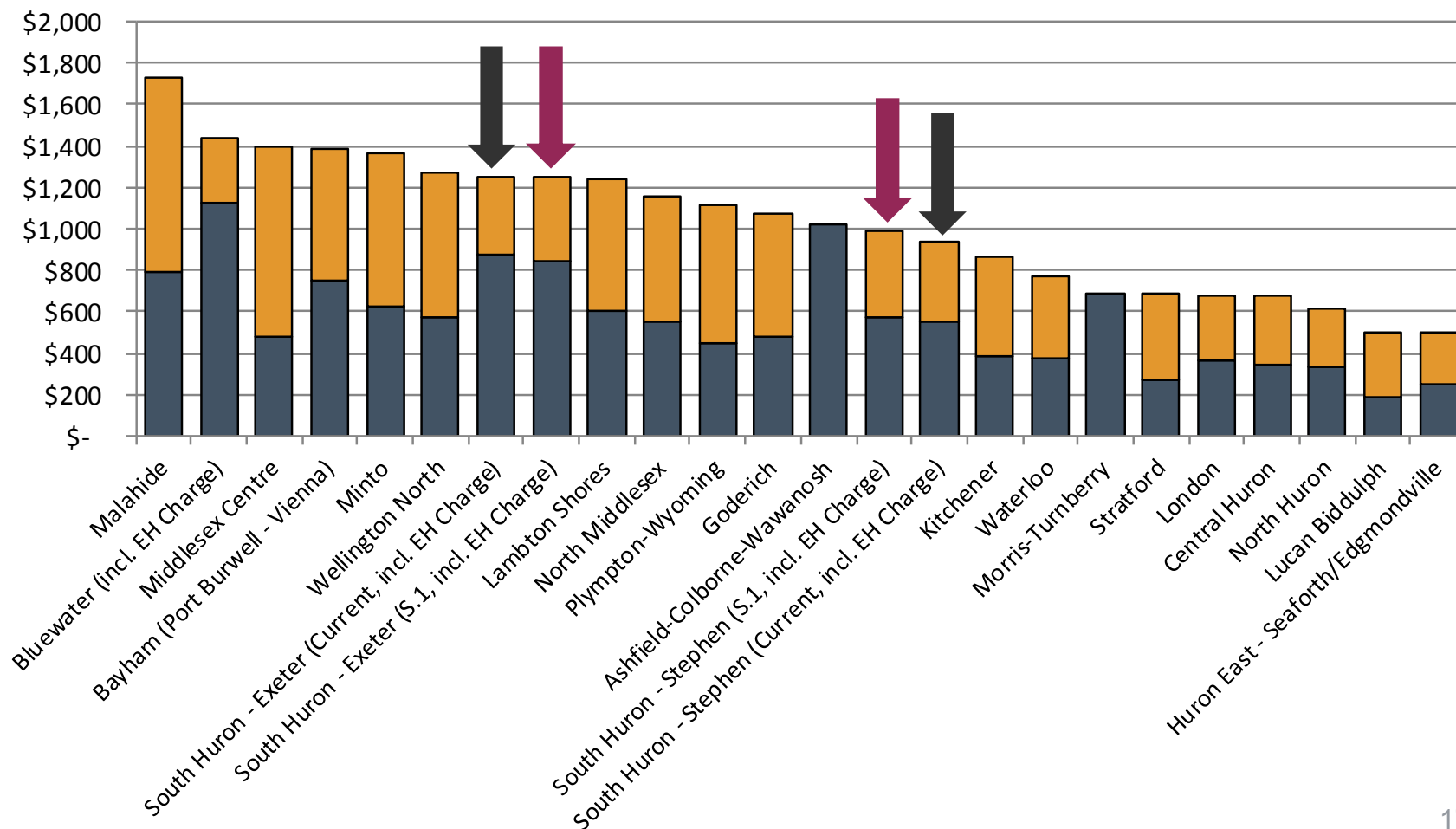


Municipal Comparison of Annual Water and Wastewater Bill



Average Annual Residential Water and Wastewater Bill Based on 167 Cubic Metres of Consumption

Wastewater Water



Recommendations



- Recommendations for Council's consideration include:
 - That Council provide for the recovery of all water and wastewater costs through full cost recovery rates;
 - Council to adopt water and wastewater rate by-law, based on rate projections presented herein;
 - That Council direct staff to consider the results of the rate study update in future amendments to the Municipality's asset management plan; and
 - Council to adopt O.Reg 453/07 Water Financial Plan for submission to Province with Drinking Water License