

# **The City of Port Colborne**

## **2019**

**PROPOSED WATER AND WASTEWATER  
BUDGET AND RATES**

# Fixed vs Usage Charge

- Water and Wastewater operations incur both fixed and usage (variable) costs. The only true usage cost is related to the purchase of water that flows through a customer's meter and the treatment of wastewater which is billed to the customer.
- City Operating Cost - 29% allocated to usage rate although are fixed costs
- City Capital/Debt Cost - 24% allocated to the fixed charge
- Region Water Purchases - 47% - 52% are a fixed cost and unbilled water - 48% is actually a true usage cost

# Water Budget Costs

|                                |                    |            |
|--------------------------------|--------------------|------------|
| • City Operating               | \$1,504,796        | 29%        |
| • City Capital/Debt            | \$1,217,630        | 24%        |
| • Region fixed/unbilled        | \$1,231,740        | 24%        |
| • <u>Region Usage (billed)</u> | <u>\$1,143,600</u> | <u>23%</u> |
| ➤ Total Fixed Costs            | \$2,449,370        | 48%        |
| ➤ <u>Total Variable Costs</u>  | <u>\$2,648,396</u> | <u>52%</u> |

Average Resident Usage of .75 m<sup>3</sup> per day

|                       |                 |     |
|-----------------------|-----------------|-----|
| ❖ Annual fixed charge | \$384.65        | 52% |
| ❖ Annual usage charge | <u>\$358.89</u> | 48% |
|                       | \$743.54        |     |

# Issues Affecting 2019 Budget

- 2018 water deficit funded – \$281,000 budgeted capital not allocated to capital reserves
- 2018 wastewater deficit funded – \$435,000 budgeted capital not allocated to capital reserves (\$160,000 Wastewater Reconciliation)
- Increasing annual capital allocation of funds by 2% to 5% - no increase in 2019
- Region's budget increase – water 2.77% and wastewater 6.65%
- Increased costs – Region increase for water purchases 2.47% and wastewater treatment 4.01% - City water operator for 9 months phased in from 2018 plus 2.5% cost of living

# Issues Affecting 2019 Budget

- Actual annual water revenue not meeting projected annual revenue - \$275,000 - water rates too low (water sales declined)
- Wastewater Rate Stabilization Reserve - \$200,000 allocated to 2019 budget
- Wastewater flows are very unpredictable – extraneous flows are mainly due to weather and are lost revenue
- Wastewater revenues currently not meeting projected revenue - \$673,000 – rates are too low
- Wastewater meter sales have declined from 1.8m<sup>3</sup> to 1.2m<sup>3</sup>

# Issues Affecting 2019 Budget

- Industrial facilities reducing/eliminating wastewater flows – from 50% to 6%
- Impacts rates to generate revenues which offset extraneous flows cost
- Major industrial customer came off the wastewater system in 2017 - \$600,000 – 2018 effect is \$900,000
- More extensive Storm Sewer Systems may reduce sources of extraneous flows
- New 10 year Water Financial Plan required in 2019

# Mitigation of Changes

- Staff ongoing monitoring of flows and planning infrastructure replacements, meter installations, private service leakage and Region trunk mains review
- Phasing in actual unbilled water and extraneous flows in wastewater
- Phasing in known sales revenue shortfalls
- No increase to capital contributions
- Phased in the addition of one Certified Water/Wastewater Operator to operating budget – 2018 (3 months) and 2019 (9 months)
- Applying Wastewater rate stabilization reserve to capital for \$200,000
- Cost of living increase at 2.5% for City portion of operations

# Operating Budget Water and Wastewater

- ❖ Total annual increase to an average residential user  
is \$69.42 or \$5.78 a month – 4.49%
- Water fixed and usage increase – 3.54%  
Annual increase is \$25.42 or \$2.12 a month
- Wastewater fixed and usage increase – 5.33%  
Annual increase is \$44.00 or \$3.66 a month



# Water Operations

## Usage Rates

- Usage rate increase \$1.274 to \$1.311 – 2.89%
- Water Financial Plan rate for 2019 – \$1.348
- Ave annual increase - \$10.09 or \$0.84 a month

## Fixed Service Charge

- Capital rate increase \$369.33 to \$384.65 – 4.15%
- Ave annual increase - \$15.33 or \$1.28 a month

## Blended Change

- Water fixed and usage increase – 3.54%  
Annual increase is \$25.42 or \$2.12 a month

# Water Operations

- Regional water purchase increase - \$58,583 to \$2,375,340 (47% of budget)
- City operating increase - \$108,170 (new operator) at \$1,455,196 (29% of budget)
- City capital decrease - \$100
- to \$1,217,630 (24% of budget)
- Total Net Increase in Operating/Capital Costs is 3.41% (\$166,653)
- Non billable water loss between 27% & 40%  
- budgeted 36%
- 3 year average water volume purchase 3,080,817m<sup>3</sup>
- Budgeted fixed costs at 48%
- Budgeted Regional costs fixed at 52%

# Water Rates Comparison for 2019

|  | Water Financial Plan | Proposed Rates |
|--|----------------------|----------------|
| Usage Cost per m3                      | 1.348                | 1.311          |
| Annual Usage Cost<br>- 0.75 m3 per day | 369.02               | 358.89         |
| Annual Fixed Charge                    | <u>345.01</u>        | <u>384.65</u>  |
| Total Annual Cost                      | 714.03               | 743.54         |

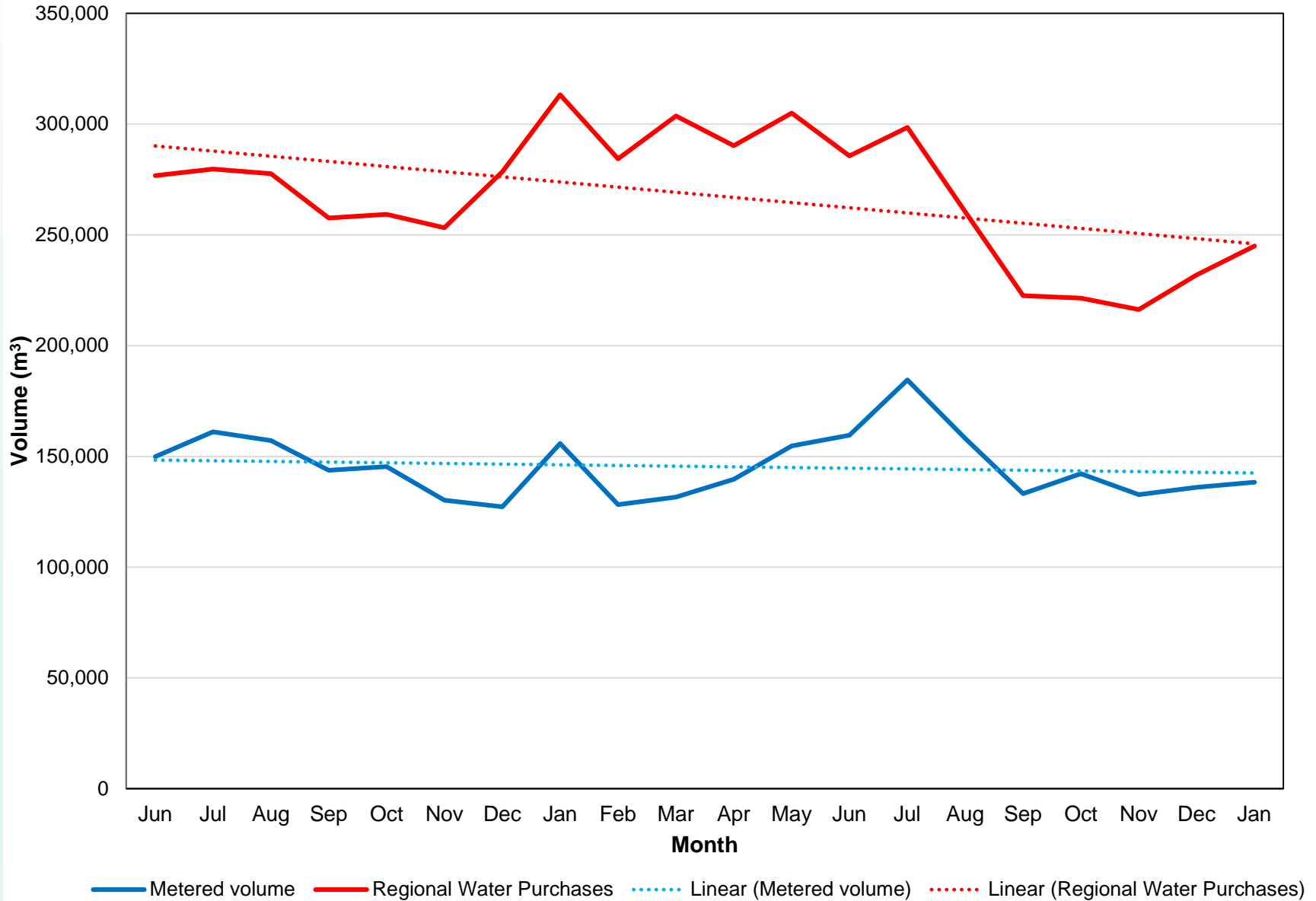
# Water Rate Calculation

|  | Total Costs | Consumption Costs | Fixed Costs   |
|--|-------------|-------------------|---------------|
| Amortization/Capital                     | 497,320     |                   | 497,320       |
| Rate Stabilization/Capital               | 285,930     |                   | 285,930       |
| Contract Services                        | 153,729     | 153,729           |               |
| Salaries and benefits                    | 785,775     | 785,775           |               |
| Regional Water Purchases                 | 2,375,340   | 1,143,600         | 1,231,740     |
| Interdepartmental                        |             |                   |               |
| Administration                           | 264,060     | 180,942           | 83,118        |
| Fleet Charges                            | 61,701      | 61,701            |               |
| Long term debt                           | 70,000      |                   | 70,000        |
| New Long term debt                       | 364,380     | 68,791            | 295,589       |
| General Admin                            | 43,459      | 43,459            |               |
| Materials and supplies                   |             |                   |               |
| Utilities and telephone                  | 8,721       | 8,721             |               |
| Repairs and Maintenance                  | 109,738     | 109,738           |               |
| Materials, parts and supplies            | 49,513      | 49,513            |               |
| Other                                    | 10,000      | 10,000            |               |
| Small Tools/Equipment                    | 18,100      | 18,100            |               |
|  | 5,097,766   | 2,634,069         | 2,463,697     |
| Other Revenues                           | - 49,600    | - 49,600          | -             |
|  | 5,048,166   | 2,584,469         | 2,463,697     |
| Estimated Annual Water Sold - m3         |             | 1,971,723         |               |
| Total Customers                          |             |                   | 6,405         |
| <b>Water Usage Rate</b>                  |             | <b>1.311</b>      |               |
| <b>Annual Water Service Fixed Charge</b> |             |                   | <b>384.65</b> |

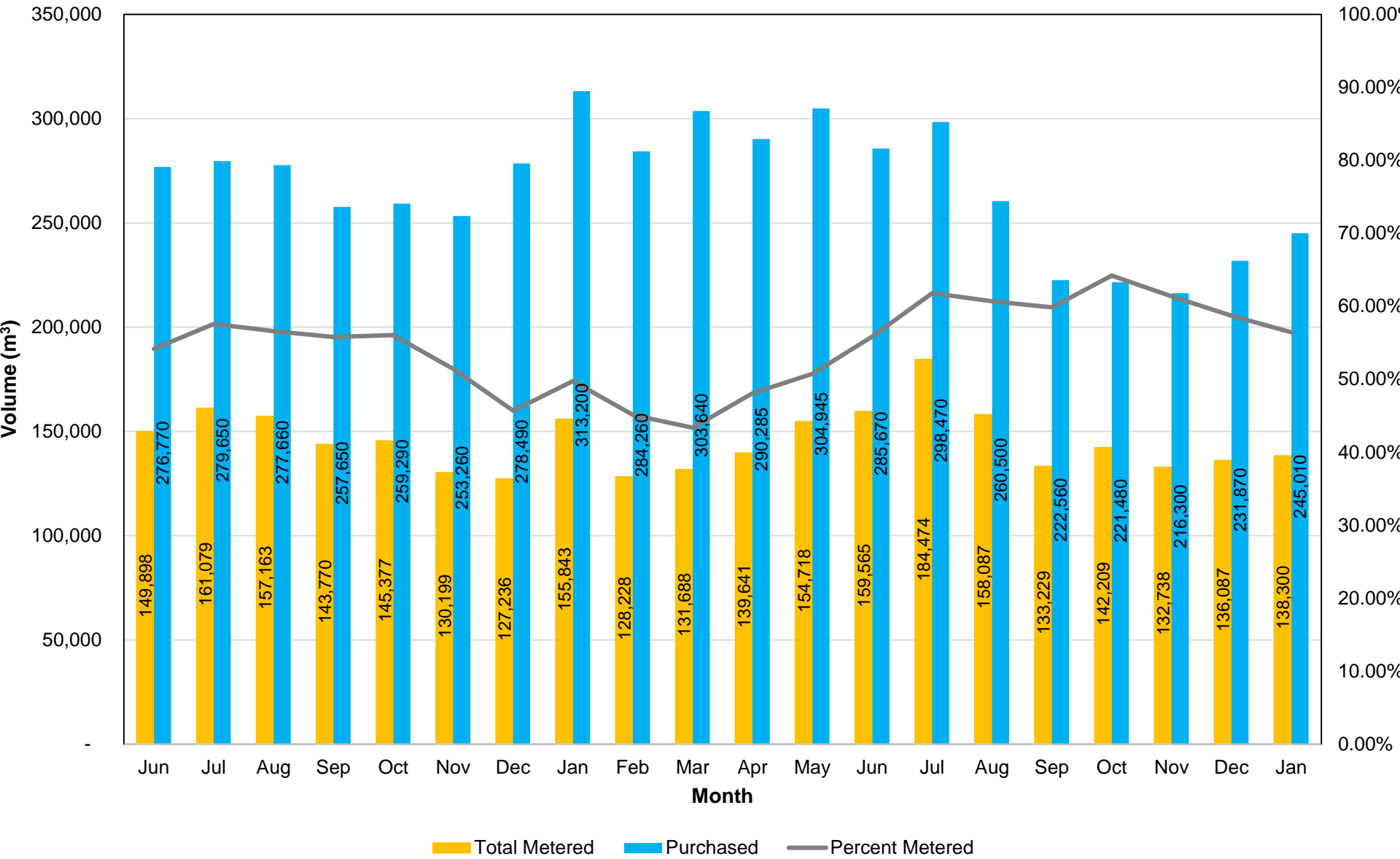
# Water Capital Program

- Current contributions - \$1,217,630
  - Rate Stabilization - \$285,930
  - Capital Projects - \$356,851
  - Debt - \$434,380
  - Equipment - \$53,101
  - Water Meters - \$87,368
- Proposed annual increase of \$ NIL
- Annual requirement based on replacement cost is \$2.3 million
- Annual Amortization of capital assets is \$600,000

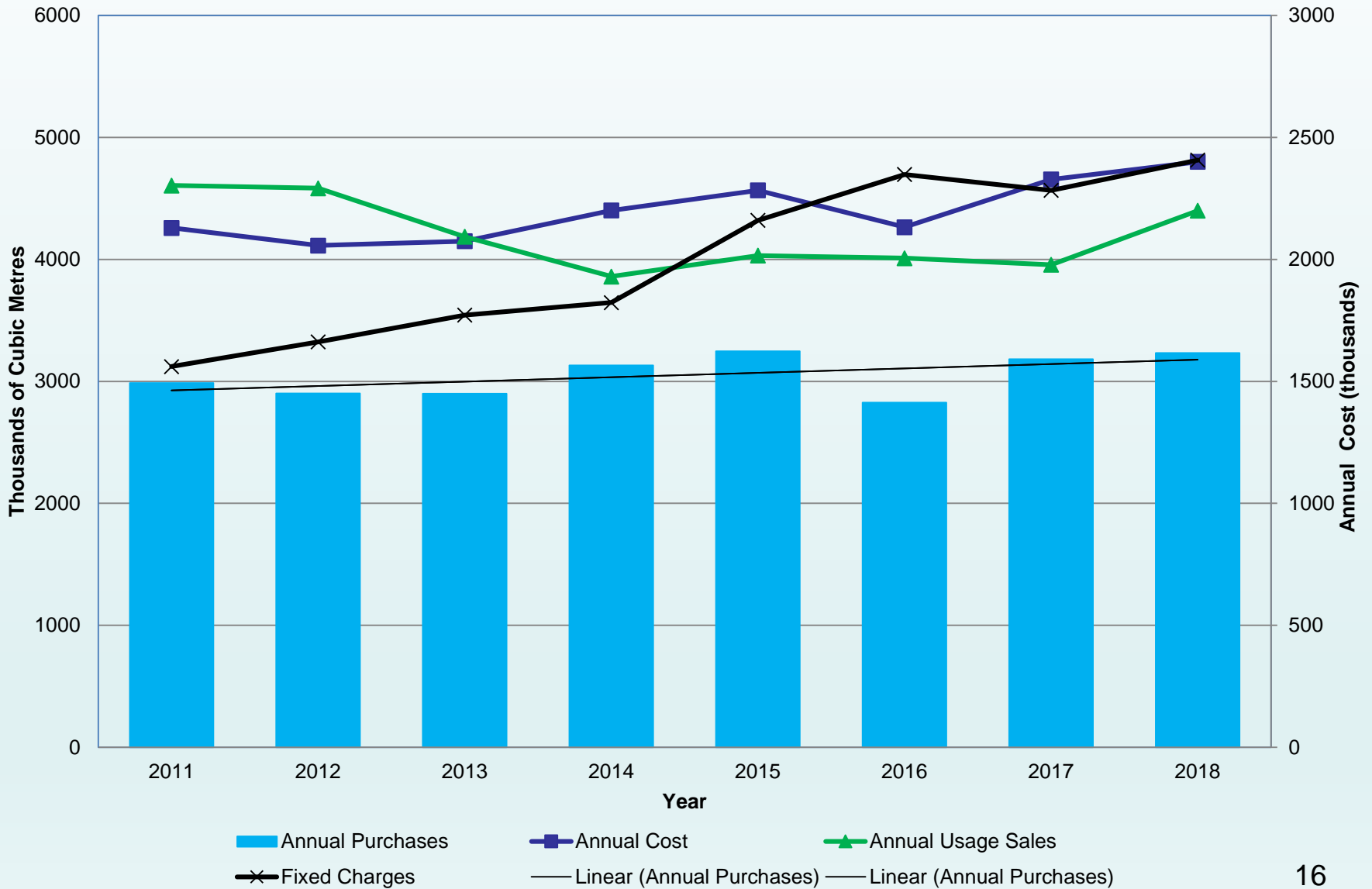
# Monthly Regional Water Purchases vs. Monthly Metered Consumption June 2017 to January 2019



## Volume purchased from RMON vs. Volume metered June 2017 to January 2019



# Annual Water Volumes Sales and Regional Costs 2011 - 2018





# Wastewater Operations

## Usage Rates

- Usage rate increase \$1.295 to \$1.336 – 3.14%
- Ave annual increase - \$11.13 or \$0.93 a month

## Fixed Service Charge

- Capital rate increase \$471.98 to \$504.86
- Ave annual increase - \$32.88 or \$2.74 a month

## Blended Change

- Wastewater fixed and usage increase – 5.33%  
Annual increase is \$44.01 or \$3.67 a month

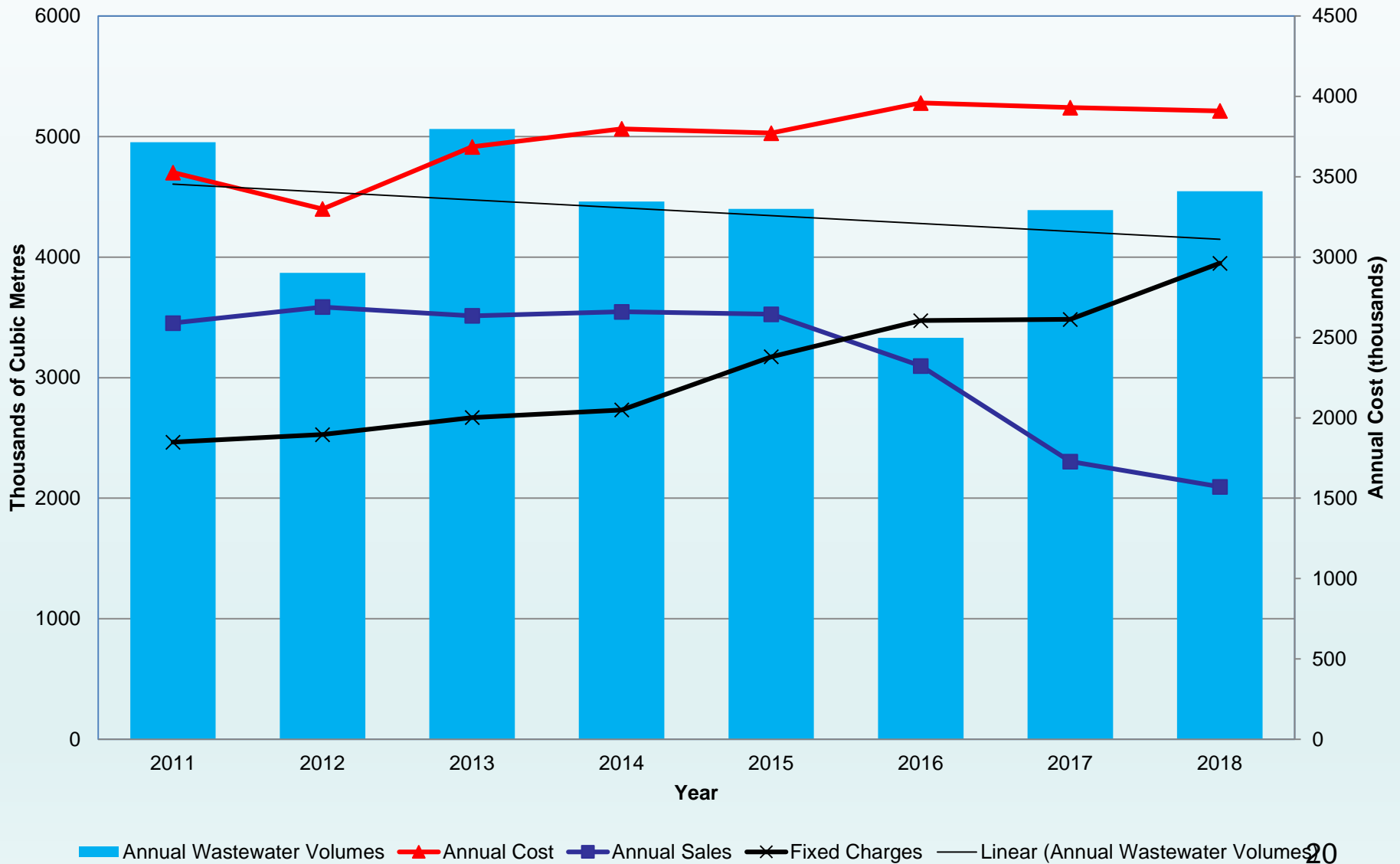
# Wastewater Operations

- Regional fixed cost increase - \$167,079  
to \$4,076,742 (72% of budget)
- City operating increase - \$17,789  
to \$863,584 (15% of budget)
- City capital increase - \$0  
to \$751,930 (13% of budget)
- Total Net Increase in Operating/Capital Costs is 3.36% (\$184,868)
- Regional 3 year rolling average of flows 3,944,000 m<sup>3</sup>
- Non billable flows estimated between 45% and 68%  
- budgeted 56%
- Budgeted City costs at 28%
- Budgeted Regional costs fixed at 72%

# Wastewater Capital Program

- Current contributions - \$751,930
  - Rate Stabilization - \$206,357
  - Capital Projects - \$508,853
  - Equipment - \$36,720
- Proposed annual increase of \$ NIL
- Annual requirement based on replacement cost is \$1.2 million
- Annual Amortization for capital assets is \$400,000

# Annual Wastewater Volumes Sales and Regional Costs 2011 - 2018



CITY OF PORT COLBORNE  
RESERVES AND RESERVE FUNDS  
December 31, 2018

**WATER**

|                                |                |                       |
|--------------------------------|----------------|-----------------------|
| Development charges            | -              |                       |
| SCADA Water Study              | 39,935         |                       |
| Water Rate Stabilization       | 4,248          |                       |
| Water Equipment Replacement    | 70,109         |                       |
| Drainage Water Quality         | 80,420         |                       |
| Bulk Water Station Replacement | 269,692        |                       |
| Water Meter Replacements       | 67,515         |                       |
| Meter Pits                     | 174,361        |                       |
| Water Capital Projects         | <u>214,442</u> |                       |
|                                |                | <u><u>920,722</u></u> |

**WASTEWATER**

|                                 |                |                       |
|---------------------------------|----------------|-----------------------|
| Development charges             | 6,581          |                       |
| Sewer Rate Stabilization        | 72,554         |                       |
| Sewer Operations-TV Inspections | 160,290        |                       |
| Sewer Equipment Replacement     | 49,743         |                       |
| CSO Sewer Program               | 344,997        |                       |
| Sewer Capital Projects          | <u>284,210</u> |                       |
|                                 |                | <u><u>918,375</u></u> |

# Proposed Annual 2019 Rates

| 2018 annual cost | 2018 rate            | Item               | 2019 rate            | 2019 annual cost | Annual Increase | Increase    |
|------------------|----------------------|--------------------|----------------------|------------------|-----------------|-------------|
| \$               | \$                   |                    | \$                   | \$               | \$              | %           |
| <b>1544.55</b>   |                      |                    |                      | <b>1613.97</b>   | <b>69.42</b>    | <b>4.49</b> |
| 348.74           | 1.274/m <sup>3</sup> | Water usage rate   | 1.311/m <sup>3</sup> | 358.82           | 10.09           | 2.89        |
| 369.33           | 369.33               | Water fixed charge | 384.65               | 384.65           | 15.33           | 4.15        |
| 354.50           | 1.295/m <sup>3</sup> | Sewer usage rate   | 1.336/m <sup>3</sup> | 365.64           | 11.13           | 3.14        |
| 471.98           | 471.98               | Sewer fixed charge | 504.86               | 504.86           | 32.88           | 6.97        |

# Proposed Quarterly 2019 Rates

| 2018 cost per quarter | 2018 rate            | Item               | 2019 rate            | 2019 cost per quarter | Quarterly Increase | Increase    |
|-----------------------|----------------------|--------------------|----------------------|-----------------------|--------------------|-------------|
| \$                    | \$                   |                    | \$                   | \$                    | \$                 | %           |
| <b>386.14</b>         |                      |                    |                      | <b>403.49</b>         | <b>17.35</b>       | <b>4.49</b> |
| 87.18                 | 1.274/m <sup>3</sup> | Water usage rate   | 1.311/m <sup>3</sup> | 89.71                 | 2.53               | 2.89        |
| 92.33                 | 369.33               | Water fixed charge | 384.65               | 96.16                 | 3.83               | 4.15        |
| 88.63                 | 1.295/m <sup>3</sup> | Sewer usage rate   | 1.336/m <sup>3</sup> | 91.41                 | 2.78               | 3.14        |
| 118.00                | 471.98               | Sewer fixed charge | 504.86               | 126.21                | 8.21               | 6.97        |

# Proposed Monthly 2019 Rates

| 2018 cost per month | 2018 rate            | Item               | 2019 rate            | 2019 cost per month | Monthly Increase | Increase    |
|---------------------|----------------------|--------------------|----------------------|---------------------|------------------|-------------|
| \$                  | \$                   |                    | \$                   | \$                  | \$               | %           |
| <b>128.71</b>       |                      |                    |                      | <b>134.50</b>       | <b>5.79</b>      | <b>4.49</b> |
| 29.06               | 1.274/m <sup>3</sup> | Water usage rate   | 1.311/m <sup>3</sup> | 29.90               | 0.84             | 2.89        |
| 30.78               | 369.33               | Water fixed charge | 384.65               | 32.05               | 1.28             | 4.15        |
| 29.54               | 1.295/m <sup>3</sup> | Sewer usage rate   | 1.336/m <sup>3</sup> | 30.47               | 0.93             | 3.14        |
| 39.33               | 471.98               | Sewer fixed charge | 504.86               | 42.07               | 2.74             | 6.97        |



|                            |                         | Original Proposed Budget     |                   | Proposed Budget                   |                   |                    |                 |
|----------------------------|-------------------------|------------------------------|-------------------|-----------------------------------|-------------------|--------------------|-----------------|
| Average User               | .75 Cubic Meter Per Day | Add Operator Cost for 9 mths |                   | Reduced Operator Cost for Vacancy |                   |                    |                 |
| Annual Change              |                         | \$ 69.42                     | 4.49%             | \$ 61.54                          | 3.98%             |                    |                 |
| Water Usage Rate           |                         | \$ 10.09                     | 2.89%             | \$ 4.68                           | 1.34%             |                    |                 |
| Water Service Fixed Charge |                         | \$ 15.33                     | 4.15%             | \$ 15.33                          | 4.15%             |                    |                 |
| Sewer Usage Rate           |                         | \$ 11.13                     | 3.14%             | \$ 8.65                           | 2.44%             |                    |                 |
| Sewer Service Fixed Charge |                         | \$ 32.88                     | 6.97%             | \$ 32.88                          | 6.97%             |                    |                 |
|                            |                         |                              |                   |                                   |                   | <b>2018</b>        |                 |
|                            |                         |                              |                   |                                   |                   | <b>Annual Cost</b> | <b>Rate</b>     |
| <b>Annual Cost</b>         |                         |                              | <b>\$1,613.97</b> |                                   | <b>\$1,606.09</b> | <b>\$1,544.55</b>  |                 |
| Water Usage Rate           |                         | <b>\$1.311</b>               | \$358.82          | <b>\$1.291</b>                    | \$353.42          | <b>\$348.74</b>    | <b>\$1.274</b>  |
| Water Service Fixed Charge |                         | <b>\$384.65</b>              | \$384.65          | <b>\$384.65</b>                   | \$384.65          | <b>\$369.33</b>    | <b>\$369.33</b> |
| Sewer Usage Rate           |                         | <b>\$1.336</b>               | \$365.64          | <b>\$1.327</b>                    | \$363.16          | <b>\$354.50</b>    | <b>\$1.295</b>  |
| Sewer Service Fixed Charge |                         | <b>\$504.86</b>              | \$504.86          | <b>\$504.86</b>                   | \$504.86          | <b>\$471.98</b>    | <b>\$471.98</b> |

# Proposed Quarterly 2019 Rates

| 2018 cost per quarter | 2018 rate            | Item               | 2019 rate            | 2019 cost per quarter | Quarterly Increase | Increase    |
|-----------------------|----------------------|--------------------|----------------------|-----------------------|--------------------|-------------|
| \$                    | \$                   |                    | \$                   | \$                    | \$                 | %           |
| <b>386.14</b>         |                      |                    |                      | <b>401.52</b>         | <b>15.38</b>       | <b>3.98</b> |
| 87.18                 | 1.274/m <sup>3</sup> | Water usage rate   | 1.291/m <sup>3</sup> | 88.35                 | 1.17               | 1.34        |
| 92.33                 | 369.33               | Water fixed charge | 384.65               | 96.16                 | 3.83               | 4.15        |
| 88.63                 | 1.295/m <sup>3</sup> | Sewer usage rate   | 1.327/m <sup>3</sup> | 90.79                 | 2.16               | 2.44        |
| 118.00                | 471.98               | Sewer fixed charge | 504.86               | 126.22                | 8.22               | 6.97        |