

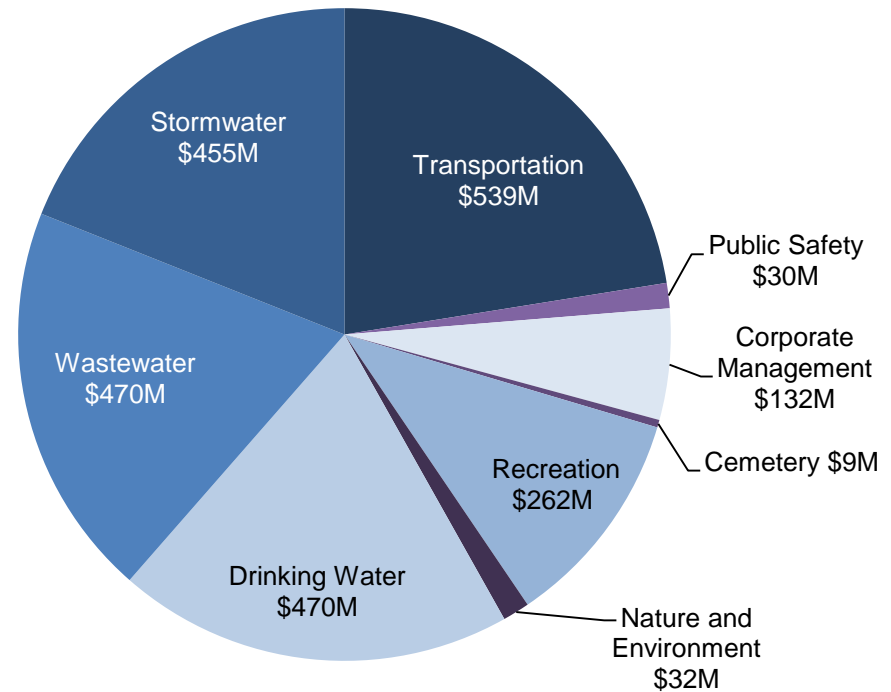


2017 Infrastructure Status and Outlook

Infrastructure - \$2.4B

1000 lane km Roads
24 Bridges and major culverts
677 km Sidewalks and walkways
326 km Bike lanes and trails
519 km Water pipes
523 km Wastewater pipes
364 km Stormwater pipes
88 Stormwater ponds
46 Buildings and 80 other structures
63,000 Trees
413 hectares of Parkland
216 Vehicles

Replacement Value - \$2.4B



Canadian Infrastructure Report Card (2016): Municipal governments own nearly 60% of Canada's core public infrastructure with estimated value of \$1.1 trillion.

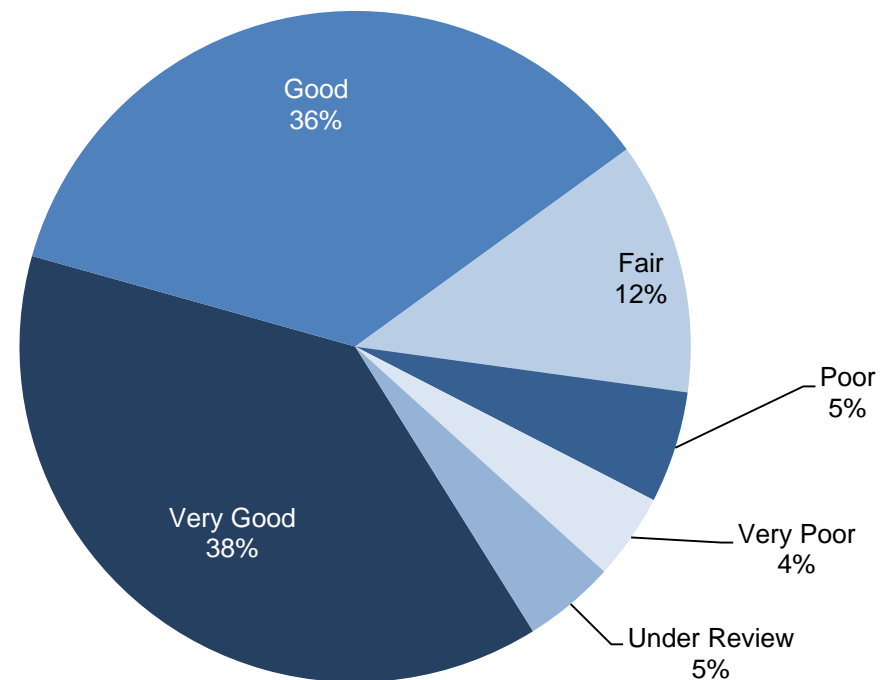
Current State – Good



Goal : to keep our infrastructure in a state of good repair

- to provide reliable and efficient services,
- to build new infrastructure for service improvements and to support future growth,
- to implement priorities identified by the City's strategic plan *Cambridge Connected*

Infrastructure Condition



Canadian Infrastructure Report Card (2016):

66% of core infrastructure owned by Canadian municipalities are in good or very good condition.

Proposed Capital Investment

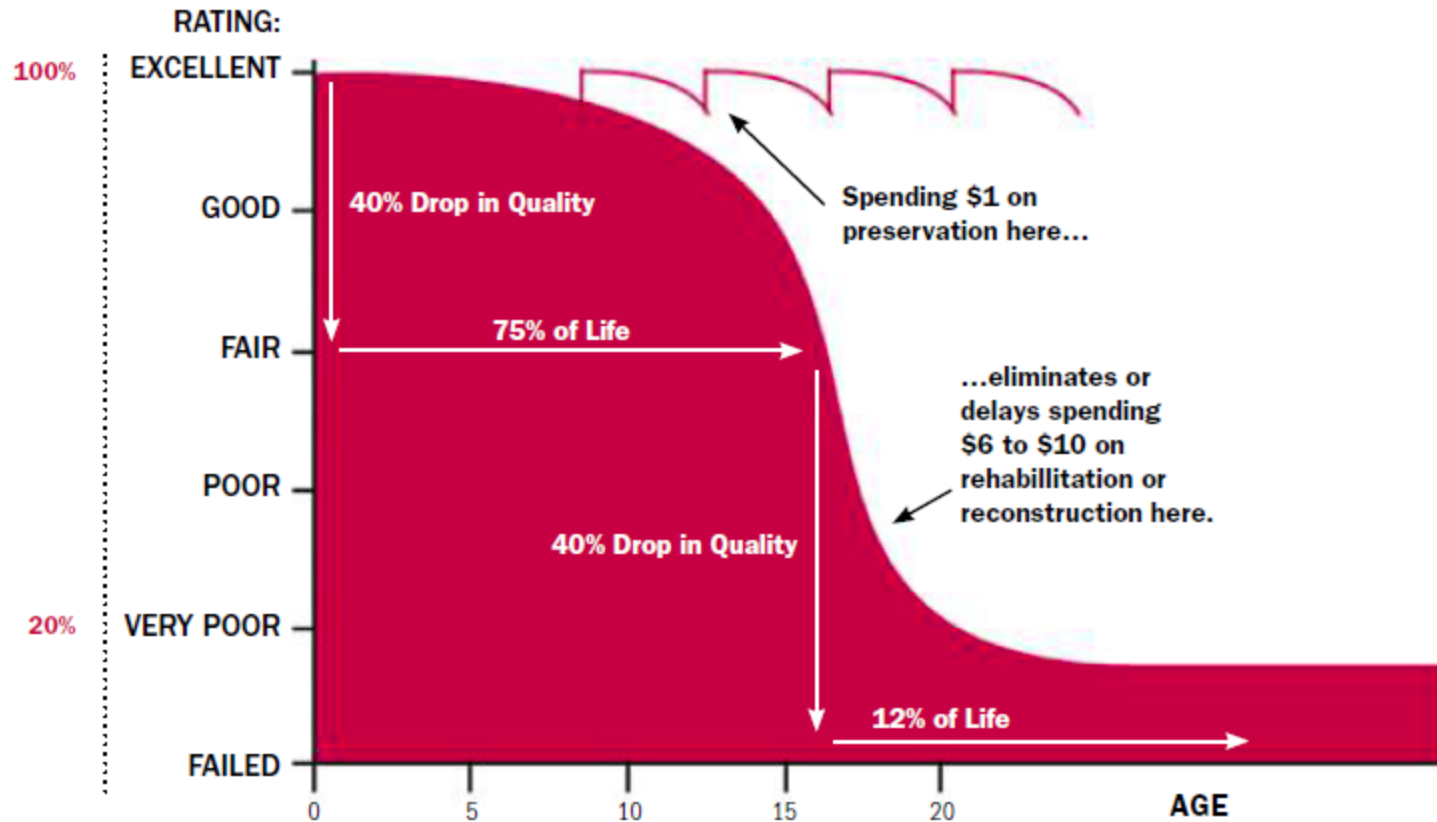
- \$432M - Proposed 2018-2027 capital budget
 - \$270M to maintain existing infrastructure
 - \$162M to build new infrastructure
- \$145M Infrastructure Gap
 - \$100M for transportation and stormwater infrastructure
 - \$45M for facilities, sports and recreation Infrastructure

Infrastructure Reinvestment

Infrastructure	Target Reinvestment Rate* Lower Rate - Upper Rate	Proposed 2018-2027 Capital Budget Cambridge
Potable Water	1.0%-1.5%	1.5%
Wastewater	1.0%-1.3%	1.0%
Stormwater	1.0%-1.3%	0.6%
Roads	2.0%-3.0%	0.9%
Bridges/Culverts	1.0%-1.5%	1.6%
Buildings	1.7%-2.5%	0.8%
Sports & Recreations	1.7%-2.5%	1.6%

* Target Average Annual Reinvestment - Source: Canadian Infrastructure Report Card 2016

Asset Degradation Curve



Source: Canadian Infrastructure Report Card (2016)

Water and Wastewater System Challenges - 2009

City dollars leaking out water pipes

There was an excellent presentation by Mike Haisser, director of asset management and support services at the City of Cambridge, during a council meeting on Nov. 8.

His presentation was rock solid on the current state of our infrastructure. The simplified story is about how long our infrastructure assets can last and the required maintenance along with the associated cost.

I equate our city story to having a beautiful home and landscape on the outside, but a broken furnace or leaky pipes on the inside. Final home inspection revealed...

There is a growing gap in infrastructure that has been brought on by the system aging faster than the maintenance or replacement. The result is a \$54-million backlog in the water system and \$17 million in our sewer system. In addition to the backlog, we are paying out more

than \$6 million a year because of water seepage and issues with the sewer system. The water leak alone is equivalent to the water needed for 12,000 homes. With the current backlog, it will take up to 15 years to catch up.

This is not an issue that we can take on lightly. It is what we are leaving to our children. We are great on the outside, but falling apart on the inside.

As a parent, would you advise your children to buy a home with leaky pipes? We need to make the repair of our infrastructure a top priority and accelerate the backlog timeframe.

So what can we do? Through our vote on Oct. 25, we directed council to continue to do more of the same. That may not have been our intent, but through lack of voter turnout, that was the message. There has been a ton of criticism about past spending and we cannot

move forward with the same attitudes. However, we can move forward with the same elected people if we, the citizens, change our attitudes and get involved.

Now is the time for every taxpayer to speak up and claim their voice. The city is coming up to budget time and our councillors and mayor will make financial decisions on how our tax dollars will be spent in the coming year. They need to hear from you. So I am asking you to phone, write, text or email the people who represent you.

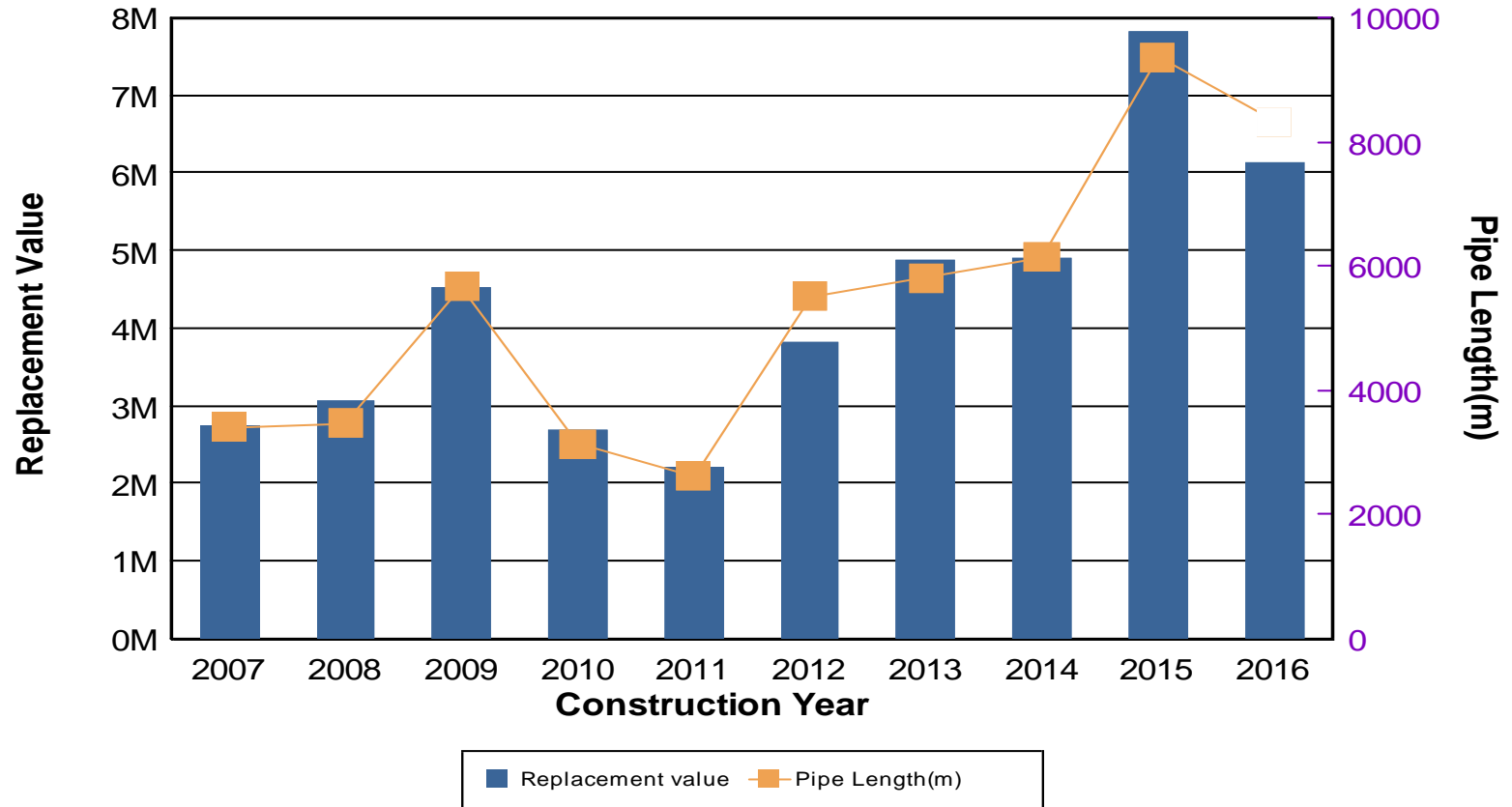
Ask for a public meeting to hear the details on our infrastructure, to hear the city financial priorities and then for an opportunity to provide input before the budget process starts.

My approach would be very lean or tight controls on spending over the next four years, and if it is not "mission critical", then postpone. This is not the time for frivolous spending. We need every penny possible being spent on bringing our water and sewers back to acceptable levels. If we fixed our leaky pipes, we would have enough cash in three years to pay cash for Drayton Theatre.



Water System Renewal

Water System Replacement

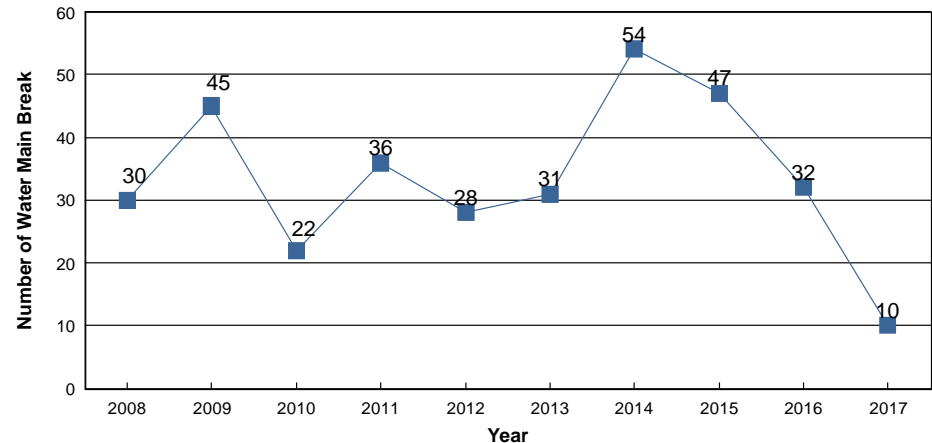


54 km renewed (2008-2017) of total 519 km water main owned by the City

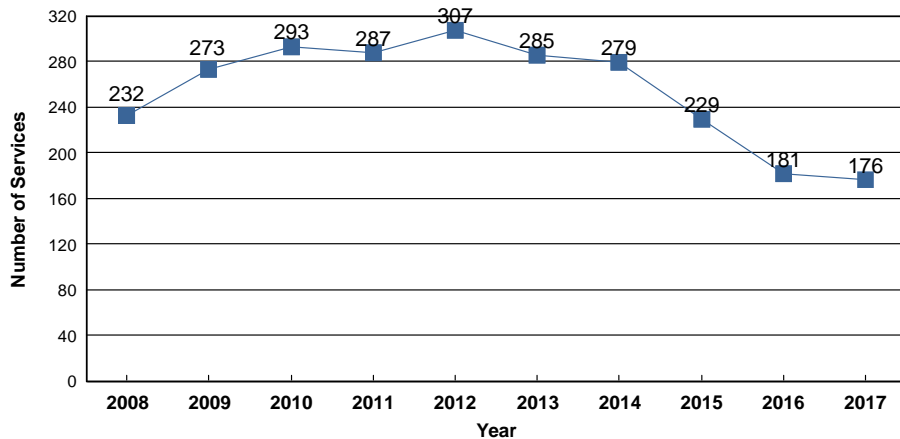
Return on Investment (Water)

- Reverse trend on main breaks and service breaks
- Improved response time to repair breaks (reduce water loss)

Water Main Breaks



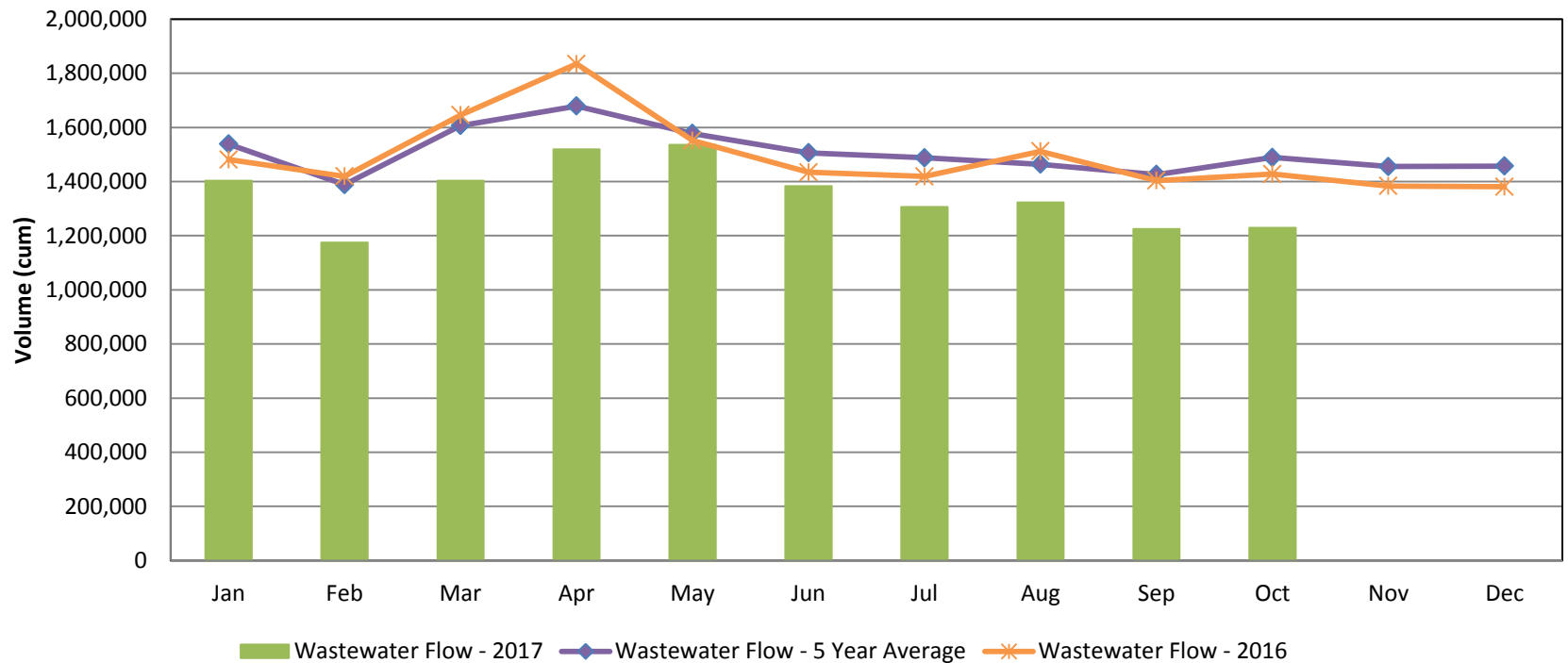
Water Service Repaired / Replaced



- Main break cost \$8-10K each
- Service break cost \$4-6K each
- Water losses – reduced from 24.6 to 19.5%

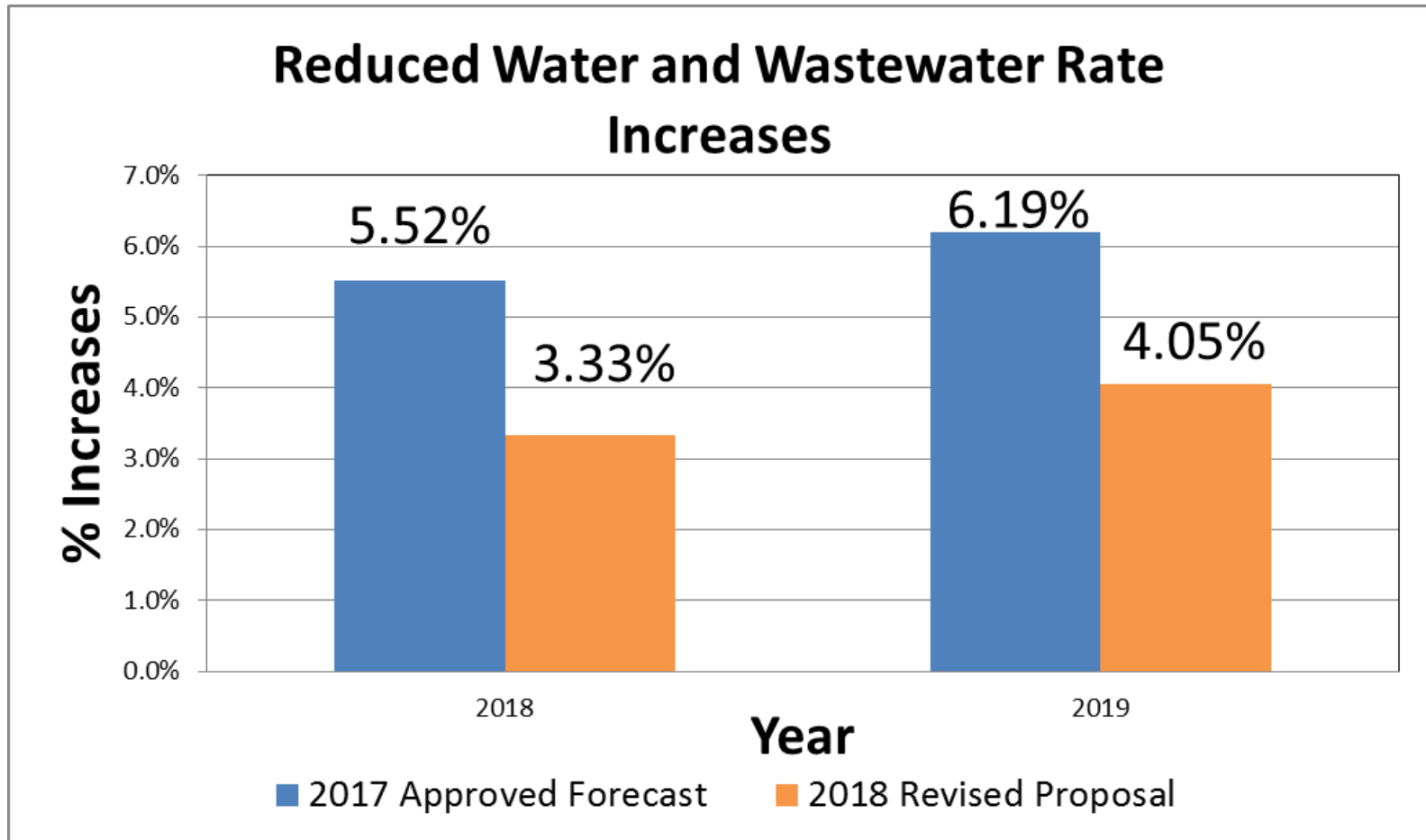
Return on Investment (Wastewater)

Wastewater Treatment
5 Year Average - Regional Invoice



1.6M (10%) cubic meter less wastewater flow

User Rate Impact



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