



2016 Fraser Water/Sewer Study Committee

8-16-2016

Fraser Water/Sewer Residential quick facts

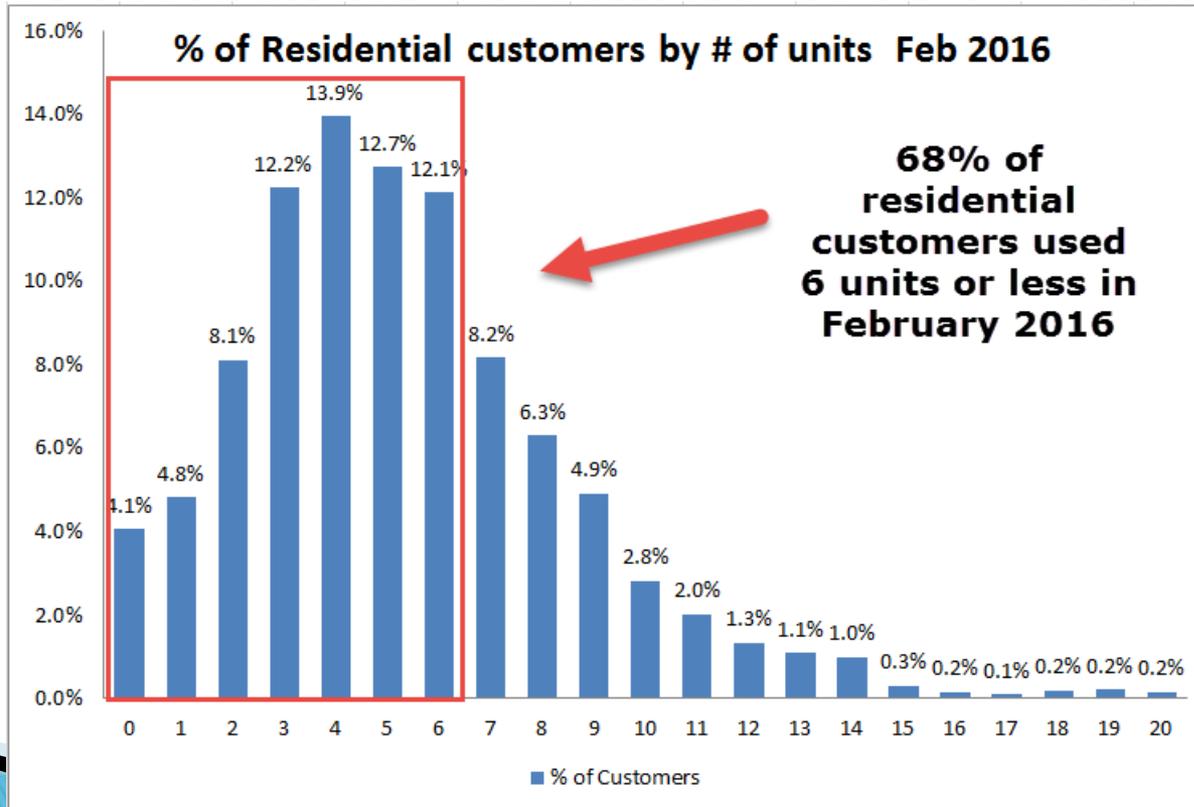
- ▶ *A unit of water is 748 gallons*
- ▶ *Currently each unit costs \$14.70, or \$.02 per gallon*
- ▶ *The “average” household uses about 2 units per person, per month – or about 50 to 75 gallons per day, per person*
- ▶ *Examples of usage and cost*



Type	Gallons Used	Water Cost
Brush teeth	1 gallon	\$.02
Flush old style toilet	3.5 gallons/flush	\$.07
Flush newer style toilet	2 gallons/flush	\$.04
5 gallon bucket	5 gallons	\$.10
10 minute shower @ 2.5 gallons per minute	25 gallons/shower	\$.50
Wash clothes	30 gallons (non-HE)	\$.60
Lawn Sprinkler zone	7–10 gallons/minute	.20 per minute w/o 2 nd meter

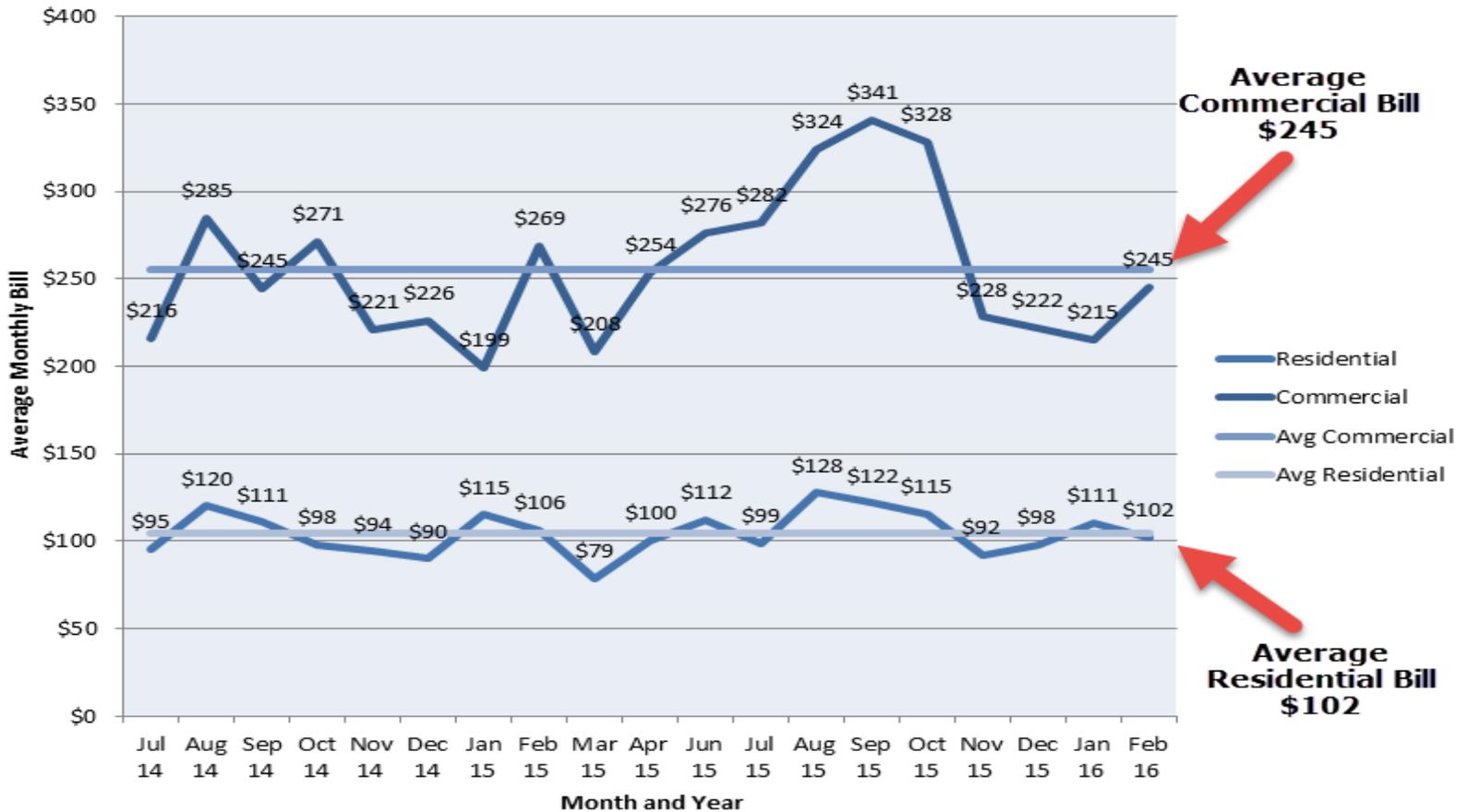
Fraser Water/Sewer Quick facts

- ▶ *68% of residential customers used 6 units or less in Feb 2016*
- ▶ *90% of residential customers used 10 units or less*



Fraser Water/Sewer Quick facts

Average Monthly Bill by Customer Type Jul 14-Feb 16



How to understand your residential water bill - City of Fraser 2016

Single Meter System

Step 1 - Calculate inside water costs (shower, toilet, cooking, laundry, etc)

Inside Water for household use

	Billed Units	Rate	Charge
Water Cost	4	\$3.54	\$14.16
Sewer Cost	4	\$1.21	\$4.84
Ready to Serve	4	\$9.95	\$39.80
Total Inside Water	Units @	\$14.70	\$58.80
Gallons	3000		

Step 2 - Adding it All Up

Adding it All Up	Billed Unit/Qty	Rate	Total
Total Inside Water Cost	4	\$14.70	\$58.80
Recycling	1	\$1.67	\$1.67
Meter Charge	1	\$1.50	\$1.50
Total Amount Due			\$61.97

As shown on Bill

Item Name	Billed Usage	Amount
10-WATER USAGE	4	\$14.16
50-SEWER TREATMENT	4	\$4.84
70-RECYCLING	0	\$1.67
METER CHARGE	1	\$1.50
READY TO SERVE	0	\$39.80
<i>Total from Bill</i>		\$61.97

Step 1 - Calculate Net Inside Usage (shower, toilet, cooking, laundry, etc)

Inside Water		Units
	10-WATER USAGE	26
Subtract	11-SPRINKLER	-23
	Net Inside Usage	3

Step 2 - Calculate inside water costs (shower, toilet, cooking, laundry, etc)

Inside Water for household use

	Billed Units	Rate	Charge
Water Cost	3	\$3.54	\$10.62
Sewer Cost	3	\$1.21	\$3.63
Ready to Serve	3	\$9.95	\$29.85
Total Inside Water	3 Units @	\$14.70	\$44.10
Gallons	2250		

Step 3 - Calculate sprinkler/2nd meter water costs

Sprinkler/2nd Meter

	Billed Units	Rate	Charge
Water Cost	23	\$3.54	\$81.42
Sewer Cost	None	None	None
Ready to Serve - Irrigation	23	\$2.00	\$46.00
Total Sprinkler/2nd Meter	23 Units @	\$5.54	\$127.42
Gallons	17250		

Step 4 - Adding it All Up

Adding it All Up	Billed Unit/Qty	Rate	Total
Total Inside Water Cost	3	\$14.70	\$44.10
Total Sprinkler/2nd Meter	23	\$5.54	\$127.42
Recycling	1	\$1.67	\$1.67
Meter Charges	2	\$1.99	\$3.98
Total Amount Due			\$177.17

Billing Detail

Item Name	Billed Usage	Amount
10-WATER USAGE	26	\$92.04
11-SPRINKLER	23	\$127.42
2ND METER CHARGE	0	\$1.99
30-SPRINKLER DISCT	23	(\$81.42)
31-SEWER DISCOUNT	23	(\$27.83)
50-SEWER TREATMENT	26	\$31.46
70-RECYCLING	0	\$1.67
METER CHARGE	0	\$1.99
READY TO SERVE	0	\$29.85
	<i>Total from Bill</i>	\$177.17

Results from informal online water usage survey

Fraser Water/Sewer

(not a scientific sampling)

Water Usage Survey Summary

Unscientific Survey based on 40 optional responses

Results								
	Number of Responses	Total Jan WA Units	Average of Jan WA Units	Average Household Size	Average Units/Person)	Avg Gallons Per Person	Highest Jan WA Units	Highest Avg Units/Person
Total	40	230	5.8	3.0	2.09	1,562	12	5.0

- January reported units and household size data used
- Average Units reports was 5.8 across 40 responses
- Average Usage per household member is 2.09 across 40 responses
- Highest usage reported was 12 units
- Highest average usage per household member was 5.0 units

Water Usage Survey Summary

Unscientific Survey based on 40 optional responses

Results								
CLOTHES WASHER TYPE	Number of Responses	Total Jan WA Units	Average of Jan WA Units	Average Household Size	Average Units/Person n)	Avg Gallons Per Person	Highest Jan WA Units	Highest Avg Units/Person
Washer Type								
HE - High Efficiency	21	129	6.1	3.0	2.13	1,592	12	4.5
Standard	19	99	5.5	2.9	1.94	1,450	10	5.0
Grand Total	40	228	5.8	3.0	2.04	1,525	12	5.0

Fraser Water/Sewer Key Water Wasters

The Fraser DPW provided a few key things to think when looking at ways to save water and reduce your bills

- Furnace Humidifiers – if the humidity is set too high, these can use a significant amount of water. (Turn them off in the Summer too)
- Water-based backup sump pumps – these can be expensive to operate in the event of a power outage. They often stick in the “on” position, and if you aren’t home, can run up huge bills.
- Leaking toilets are the #1 unseen user of extra water. If they are leaking, you are literally flushing money down the toilet.
- Automatic Irrigation Systems – set your timing properly per zone to avoid overwatering and extra costs
- Shorter showers, low-flow showerheads, updated toilets can all save significant money

Fraser Water/Sewer Study Committee

Proposed Objectives

- **Financial**
 - Provide transparency on total costs to provide water/sewer services
 - Explain GLWA vs. other outside agency fixed costs
 - Explain fixed vs. variable commodity costs
 - Look into options to reduce/slow growth in system costs
- **Billing & Rate structure**
 - How does our rate structure compare to other communities
- **Information & Education**
 - Provide tools for water/sewer customers to monitor and reduce their own usage
 - Invoice improvement possibilities?
 - How do we reduce confusion on bills and provide easy-to-find answers to common questions
- **Customer Service**
 - How can we create a consistent customer service experience
 - Do we have an email address just for water/sewer inquiries?
 - Advertise the “Report a Problem” option to the city website

Note: This committee will not recommend a new water rate structure for council consideration. The goal is to provide a framework of facts, as well as water customer feedback to the administration and council.

Fraser Water/Sewer Study Committee

Progress to Date (as of 8/16/2016)

- ▶ Began gathering data for use by the committee
- ▶ Established database of historical water usage and cost information
- ▶ Started preliminary analysis of usage and costs over time
- ▶ Met with DPW staff to discuss their goals and objectives in improving customer satisfaction with Fraser's water utility service
- ▶ Outlined preliminary goals/objectives for committee consideration
- ▶ Presently 4 resident volunteers, with other invitations pending

Fraser Water/Sewer Study Committee

Next Steps

- Seek members of the public, business, council, administration, and other stakeholders interested in working on committee
 - Four residents have volunteered for committee
 - Contact Michael Lesich at mlesich@micityoffraser.com
 - Contact City Manager's Office @ (586) 293-3100
- Hold initial organizational meeting before Labor Day
- Define initial goals and objectives as committee
- Report back to council and public at council meetings, committee meetings, and updates as required