Flint Residential Water Rate Analysis KWA Subcommittee of FWICC

May 13, 2016

KWA Subcommittee Was Assigned Two Tasks

- Understand the drivers of water rates in Flint, the outlook for rates during the next three to five years, and what can be done to mitigate rate increases (today).
- With the FWICC Infrastructure Committee, jointly explore Flint's options for both primary and back-up water sources (in progress).

Today's Discussion Focuses on Four Key Questions

- 1. How did Flint Water rates get to the level they are now?
- 2. What are the largest cost drivers of Flint's existing rates?
- 3. Why are Flint's rates so much higher than other comparable communities?
- 4. What will Flint's rates look like going forward?

Key Takeaways

- Average residential water bills in Flint have doubled since 2009.
- Without a change in basic operations or outside financial assistance, average bills could double within the next five years.
- Flint's average water bills are currently three times higher than a selected peer group.
- The high relative bills are largely due to funding both wholesale water purchases and running a water treatment plant, higher transfers to the city's general fund, fixed system costs with a declining customer base, and the high proportion of non-revenue water.
- Even at current levels, Flint's rates do not over costs (i.e. deficit).
- Collectively, we need to continue to explore ways to reduce future rate increases – including reducing operating costs closer to industry averages and finding creative ways to bring in non-City financial assistance.

Average Household Water Bills Have Nearly Doubled in the Last Seven Years



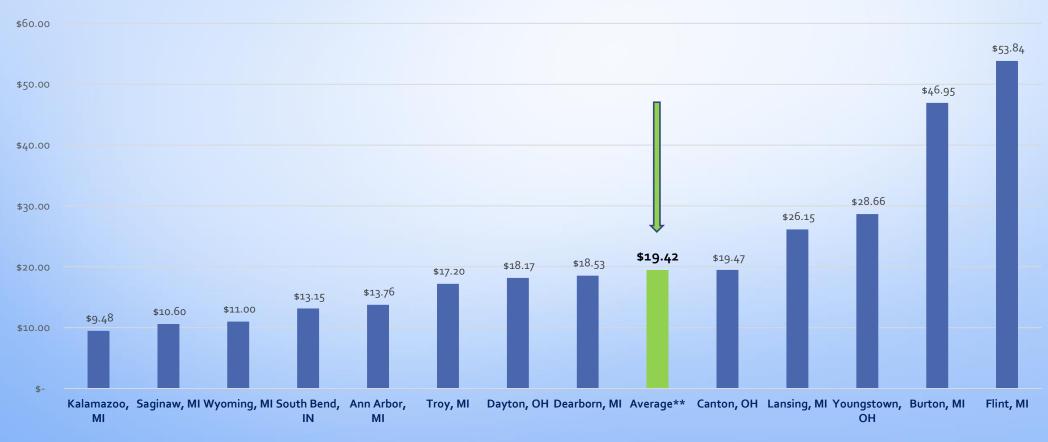
What Has Driven the Nearly Doubling of Average Water Bills Since 2009?

- Many years of no rate increases even though costs were rising;
- Continuing loss of customers and declining average consumption, coupled with a high fixed cost business;
- Increased costs for wholesale water purchases.

Nearly Two-Thirds of the Total Average Bill Is Driven By Basic Operating Costs Wholesale Water Purchases

Cost Driver	Typical Customer (Monthly)	Total Estimate Costs	%
Operating Costs (Personnel, etc.)	\$18.56	\$15.3 Million	35%
GLWA Purchases Billed to Customers	\$12.95	\$10.7 Million	24%
Capital Costs	\$8.66	\$7.1 Million	16%
Transfers to Other City Funds	\$7.54	\$6.2 Million	14%
Retiree Healthcare	\$3.19	\$2.7 Million	6%
Non-Revenue Water	\$2.94	\$2.4 Million	5%
Total	\$53.84	\$44.4 Million	100%

Flint Water Bills Are Almost Three Times Higher Than Peer Group



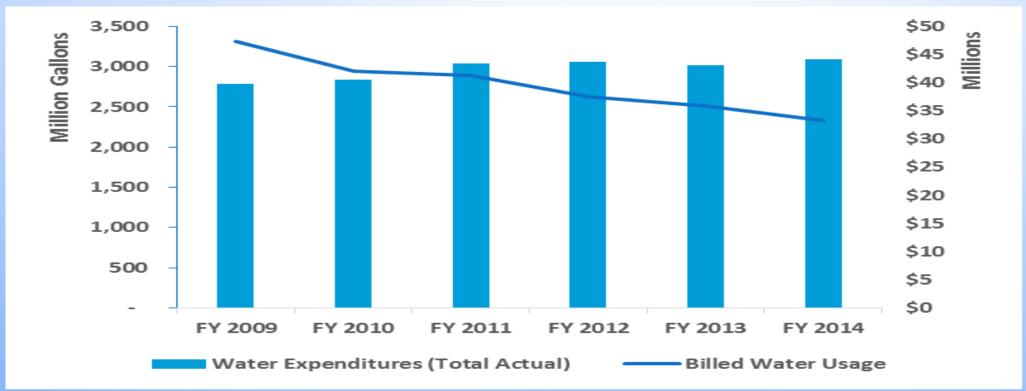
^{**} Average Does Not Include Flint

High Relative Bills in Flint Are Driven By Six Major Factors

- Water supply and treatment costs
- System size
- Population decline
- Transfers to other city funds
- Non-revenue water
- Retiree healthcare

Annual Usage Has Declined, While Expenditures Have Remained Flat

Annual Billed Water Usage vs. Total Budget



Key Cost Driver Versus Peer Water Systems

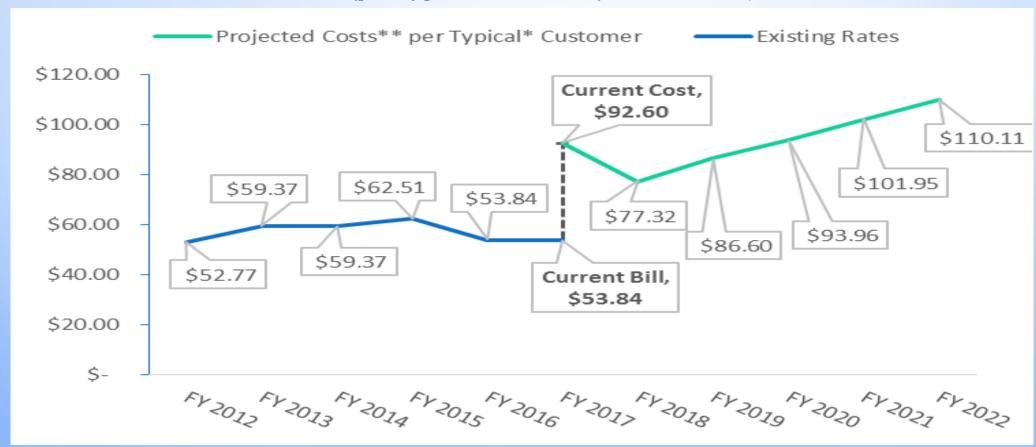
Cost Driver	Typical Flint Bill	Peer Average Bill	Difference
Operating Costs	\$18.56	\$7.36	\$11.21
Water Supply	\$15.89	\$6.64	\$9.25
Capital Costs	\$8.66	\$3.56	\$5.09
Transfers to Other City Funds	\$7.54	\$1.31	\$6.24
Retiree Healthcare	\$3.19	\$.56	\$2.63
Total	\$53.84	\$19.42	\$34.42

Current Rates Are Not Sufficient To Support Current System Costs

Cost Driver	Current Typical Bill	Current Cost	Difference
Operating Costs	\$18.56	\$31.93	\$13.37
Water Supply	\$15.89	\$27.32	\$11.44
Capital Costs	\$8.66	\$14.88	\$6.23
Transfers to Other City Funds	\$7.54	\$12.98	\$5.43
Retiree Healthcare	\$3.19	\$5.49	\$2.30
Total	\$53.84	\$92.60	\$34.42

Without Changes In the Underlying Costs Structure or Outside Assistance, Flint Water Bills Could Double

Flint Water Costs* (per Typical** Customer) Five-Year Projection



Additional Work Is Needed To Bring Down Future Bills to Modest Increases

- Without action bills may increase from \$54 to \$110 over the next five years.
- Normal 4% annual increases would equate to an average bill in 2022 of \$65.50.
- What can be done?
 - Reduce operating costs closer to peer averages.
 - Invest in the water distribution system to 'right size' and reduce nonrevenue losses.
 - Find low cost, no cost, infrastructure financing
 - Reduce transfers to other City funds.
 - Ensure high quality, low risk, and lower cost Flint water supply.