



City of Flint

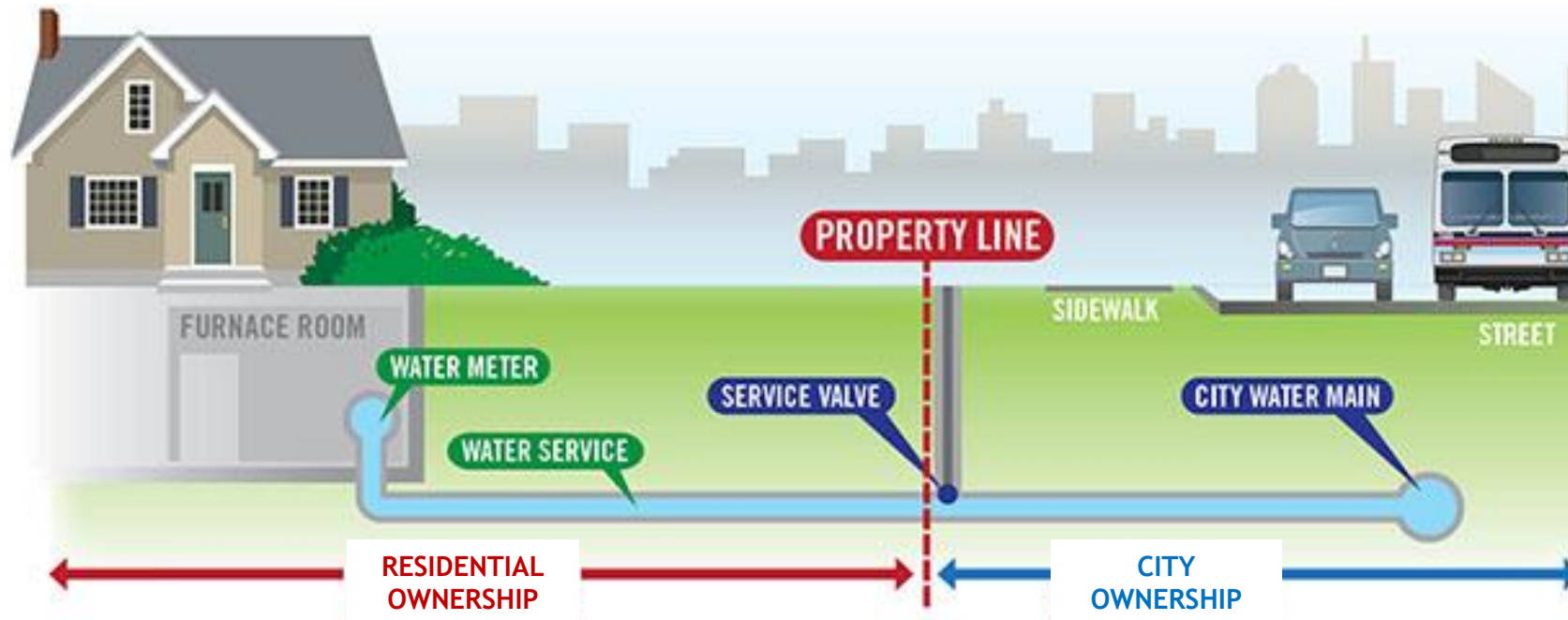
Water System Update

September 2015

Overview

- Recent Concerns/Typical Household Service-lines
- Water System Roles and Responsibilities
- Other City Actions
- Lead and Copper Solutions
- Infrastructure Planning Documents
- Revenue Streams
- Utility Planning Documents

Typical Household Service Lines



Water System Roles & Responsibilities

Environmental Protection Agency (EPA) –

Agency of the U.S. Government who's mission is to protect human health and the environment.

Department Environmental Quality (DEQ) –

Agency of the state of Michigan charged with promoting wise management of the state's air, land and water resources to support a sustainable environment.

Lockwood, Andrews, & Newnam (LAN) –

Firm procured by the City of Flint to provide professional engineering services in the design and development of the Flint water plant.

City of Flint Utilities Division -

Owner and day to day operator of the Flint water system.

- State Licensed F-1 Operator - Oversees Water Plant Operations
- State Licensed S-1 Operator - Oversees Distribution System

Other City Actions

- Consulted with Various Industry Experts
- Developed a Written and Prioritized Infrastructure Plan
- Developed a Successful Implementation Plan for TTHM
- Developed a Draft Corrosion Optimization Plan Ready to present to the DEQ
- Developed Advisory Committees which Include EPA and DEQ Representatives
- We Expect the Committees to Remain Intact through the Transition to KWA

Lead & Copper Solutions

Short Term:

Flushing – If there is a concern, flush your pipes before drinking, and only use cold water for cooking and drinking.

Public Education - The City has produced an FAQ sheet that details EPA recommended measures to help reduce the risk of lead exposure and will maintain increased educational efforts.

Mid Term:

Corrosion Optimization – A corrosion optimization plan has been drafted by the engineering team and will be submitted to the DEQ for approval.

Testing – The City continues to encourage water testing to all residents. This will help build confidence and will provide more data to be reviewed.

Long Term:

Change lead service lines – The City is actively reviewing options that would allow for all lead service lines to be changed over time.

Infrastructure Planning Documents

50 Year Master Plan - [Section 8](#)

10 Year Rate Study - [Raftelis](#)

5 Year Capital Improvement Plan [Section 6 - Pages 47 - 68](#)

2 Year Budget - [Submitted to Treasury](#)

2013 Water Reliability Study - [ROWE / Potter Engineering](#)

FY 2016 DPW/Utility Objectives and Tasks

Revenue Streams

- ❑ Maintenance Budget
- ❑ Capital Improvement Plan
- ❑ DEQ Funding Opportunities
 - ❖ **DWRF** - (Drinking water Revolving Loan) *Specific to Water Projects*
 - ❖ **SRF** - (Sewer Revolving Loan) *Specific to Sewer Projects*
 - ❖ **SAW** - (Stormwater, Asset Management, and Wastewater Grant)
 - ❖ **SWQIF** - (Strategic Water Quality Initiatives)
 - ❖ **S2** - (Grant for engineering towards SAW/SWQIF)

Utility Project Status

| PROJECT | COST | STATUS |
|---|--------------------|-------------------------------|
| Installation on Granulated Activated Carbon | \$1,600,000 | Completed |
| Valve cycling over 5000 valves (over 2/3 of system) to help water flow | \$400,000 | Completed |
| Installation of over 9000 irregular reading meters for more accuracy | \$2,500,000 | 1/3 Complete |
| Leak detection on 600 miles of distribution main to identify water loss | \$900,000 | 1/2 Complete |
| Construction of load-out facility to eliminate the use of the incinerator | \$1,100,000 | 2/3 Complete |
| SCADA system upgrades | \$848,000 | 1/2 Complete |
| Hydraulic model of distribution system | \$45,000 | Being filled with data |
| 100's of main break repairs | | Ongoing |
| Dozens of valve replacements | | Ongoing |
| 7- Mile pipe replacement | | Delayed |
| Total | \$7,393,000 | |