Water System Improvement Plan 2014-2019

	Duningt	Segment		Longth	Customers	Improvement	Estimated cost						F din c
	Project	From	То	Length	Affected	Туре	2014	2015	2016	2017	2018	2019	Funding
1	Adams St. onramp	Adams St.	Ninth St.	36 ft		Water line replacement	\$36,500.00						Water fund
2	Large Meter Replacement					Upgrade of commercial meters	\$200,00.00						Customer
3	Fixed Base Meter Reading System					Upgrade of meter reading system	\$210,000.00						Water Fund
4	Harvard	Lovers Lane	Cul-de-sac	1450 ft	87	Water line replacement	\$167,169.25						Infrastructure fund
5	Buena Vista	900 Buena Vista	Sheffield	1,700 ft	78	Water line replacement	\$89,976.00						Water fund/ ARC(150K)/ OPWC(60K)
6	Residential Meter Replacement					Upgrade of residential meters		\$1,000,000.00					Water fund/short term loan
7	Lauretta/St. Charles	Garfield	Lauretta/St. Charles West	5,100 ft	159	Water line replacement		\$454,198.00					Infrastructure fund/Debt financing
8	Aberdeen/Bryden/ East Carlton	Efts	Lovers Lane	3,985 ft	168	Water line replacement		\$416,347.20					Infrastructure fund/Debt financing
9	CR26/Fernwood Industrial Park	Fernwood Rd.	700 ft into entrance	1,700 ft		Water line replacement			\$254,585.00				Infrastructure fund/Debt financing
10	Marina	Under Veterans	Marina	1,300		Water line replacement			\$189,810.00				Infrastructure fund/Grant
11	Water Distribution System Analysis					Analysis of water system		\$75,000.00					Water fund
12	Fire Hydrant Replacement					Replacing broken hydrants (12/year)	\$50,000.00	\$50,000.00	\$50,000.00	\$50,000.00	\$50,000.00	\$50,000.00	Water fund
13	Valve Replacement					Replacing broken valves for isolation	\$25,000.00	\$25,000.00	\$25,000.00	\$25,000.00	\$25,000.00	\$25,000.00	Water fund
14	8 - 20" & 16 - 6" Valves on Sunset	Pico	Lovers Lane			Replacing broken valves for isolation			\$685,908.00				Infrastructure fund/Debt financing
15	Lovers Lane/Ft. Steuben Dr.	Teresa	Preston	1600 ft		Water line replacement			\$221,908.00				Infrastructure fund/Debt financing
16	Sunset/Lovers Lane	Sunset intersection	Teresa	2,900 ft		Water line replacement				\$635,448.00			Infrastructure fund/Debt financing

Total	\$703,645.25	\$2,020,545.20	\$1,427,211.00	\$710,448.00	\$75,000.00	\$75,000.00
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Notes

- 1 A break occurred in the area at the bottom of the onramp. A leak survey was done and verified that the leak was under the pavement. A proactive approach was decided to replace this section of line to avoid any similar breaks that would require excavating the onramp numerous times.
- This is currently being undertaken by Neptune Meters. All commercial meters that have not been upgraded will be changed at the cost of the customer. All meters will have radio read capabilities.
- This is a radio read system that will be able to eventually read all meters within the city. This will enable the utility office to have real-time numbers on all meters.
- 4 This line was chosen because there were 4 active breaks and 9 street patches from past breaks when plans were being made for resurfacing
- An existing sub-standard water line exists in this area of Buena Vista and Sheffield. After 19 water breaks since 2010 and issues with water demand, this area has been selected for replacement with a 6" water line.
- 6 This is the final phase of the meter upgrade program that the city has initiated. These meters will have the radio read capability. This will be a cost to the city.
- This line has experienced 24 breaks since 2010 and affects approximately 159 people. Many of the breaks that have occurred have resulted in property damage and claims against the city.
- 8 These three streets have combined for 45 breaks since 2010, are still highly active break areas, and affect approximately 168 people.
- **9** This line has had 15 breaks since 2010 and affects the Fernwood Industrial Park. A new water line to this area should help with any future economic development.
- 10 This is an improvement to an existing line and a possible grant oppurtunity is available. This should help with any development.
- A water distribution analysis will provide an overview of the entire water system from the water intakes in the river to the furthest customer that we provide water to. This will show any inefficiencies and give us a focus on where we need to concentrate our resources.
- Fire hydrant replacement needs to be addressed. Our goal is to replace at least one broken hydrant per month. This is a start on a maintenance program that has been neglected.
- Valve replacement needs to be addressed. We have many valves in our system that do not work. This leads to difficulties isolating water line breaks for repair. Valve replacement is another part of our distribution system that has been neglected.
- Our current isolation valves for the 20" water line on Sunset to the west city limits are not reliable and if we have a major break on this line, system depressurization will occur. Replacing these valves will allow greater reliability in emergencies and reduce the affect to customers if these emergencies occur.
- 15 As part of the road replacement project, water lines will need to be relocated.
- **16** As part of the intersection improvements, water lines and valves will need to be relocated.
- * This is an aggressive CIP. The water infrastructure fund will generate approximately \$332,000.00 per year. Unless a loan is obtained, we will need

to scale this back a bit. An affordable length of water line replacement would be about 1800 feet which could be paid out of the water infrastructure fund.

Grant and Funding Resouces

OWDA	The OWDA helps communities maintain affordable water and/or sewer rates by providing reduced rate loans for drinking water or wastewater systems development or improvement
OEPA	Ohio EPA funding includes the state revolving funds for drinking water and wastewater, and grants for water pollution prevention and wetlands protection
OPWC	The OPWC provides financing for public infrastructure improvements through the State Capital Improvement Program (SCIP). SCIP is a grant/loan program for roads, bridges, water supply, wastewater treatment, stormwater collection, and solid waste disposal.
CDBG	The Community Development Block Grant (CDBG) program is a flexible program that provides communities with resources to address a wide range of unique community development needs.