



City of Stanton

Drinking Water State Revolving Fund (DWSRF) Project Planning Document Public Meeting May 9, 2023

Agenda

1. DWSRF Plan Overview
2. Statement of Need
3. Recommended Improvements
4. Anticipated Project and User Costs
5. Environmental Impacts, Mitigation, and Benefits of the Projects
6. Questions
7. Vote on Resolution



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DRINKING WATER STATE REVOLVING FUND OVERVIEW

Drinking Water State Revolving Fund (DWSRF)

Jointly administered loan program:

- Michigan Department of Environment, Great Lakes, and Energy (EGLE)
- Michigan Municipal Bond Authority (MFA)

Funding for drinking water infrastructure projects to resolve current needs:

- 20-year loan with low interest rates
- Project grant - EGLE has yet to determine the max. percentage



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STATEMENT OF NEED

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Need for DWSRF Projects

- **Decreased System Reliability**
 - Aging water mains
 - History of water main breaks
- **Lead and Galvanized Service Line Replacement**
 - Required as per 2018 Michigan Lead and Copper Rule
- **Took advantage of Michigan Municipal League Foundation Grant (MI Water Navigator)**
- **Setting City up for potential low interest financing / loan forgiveness possibilities**

Aging Water Main Infrastructure

- Useful life of ductile iron water main is approx. 50 years – over 70% of City’s system.
- Useful life of associated hydrants and valves is approx. 30 years.
- Over 80% of the City’s water mains are over 30 years old.

Average Age of Water Mains (years)	Approx. Percentage of Water Main
0-25	15%
25-50	53%
50 and older	32%

History of Water Main Breaks

- Many unreliable, problematic, or undersized water mains.
- Improvements will increase reliable water transmission capacity and create more consistent and reliable water supply.

Time Period	Number of Water Main Breaks
2017-2019	7
2020-2023	5
Total	13

Lead and Galvanized Service Line Replacement

2018 State of Michigan Lead and Copper Rule requires that all water suppliers **MUST** do each of the following:

- Replace all lead service lines.
- Replace all galvanized service lines that are or were attached to a lead service line.

This City has identified 46 galvanized service lines which likely would have previously been connected to a lead service line.



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RECOMMENDED IMPROVEMENTS

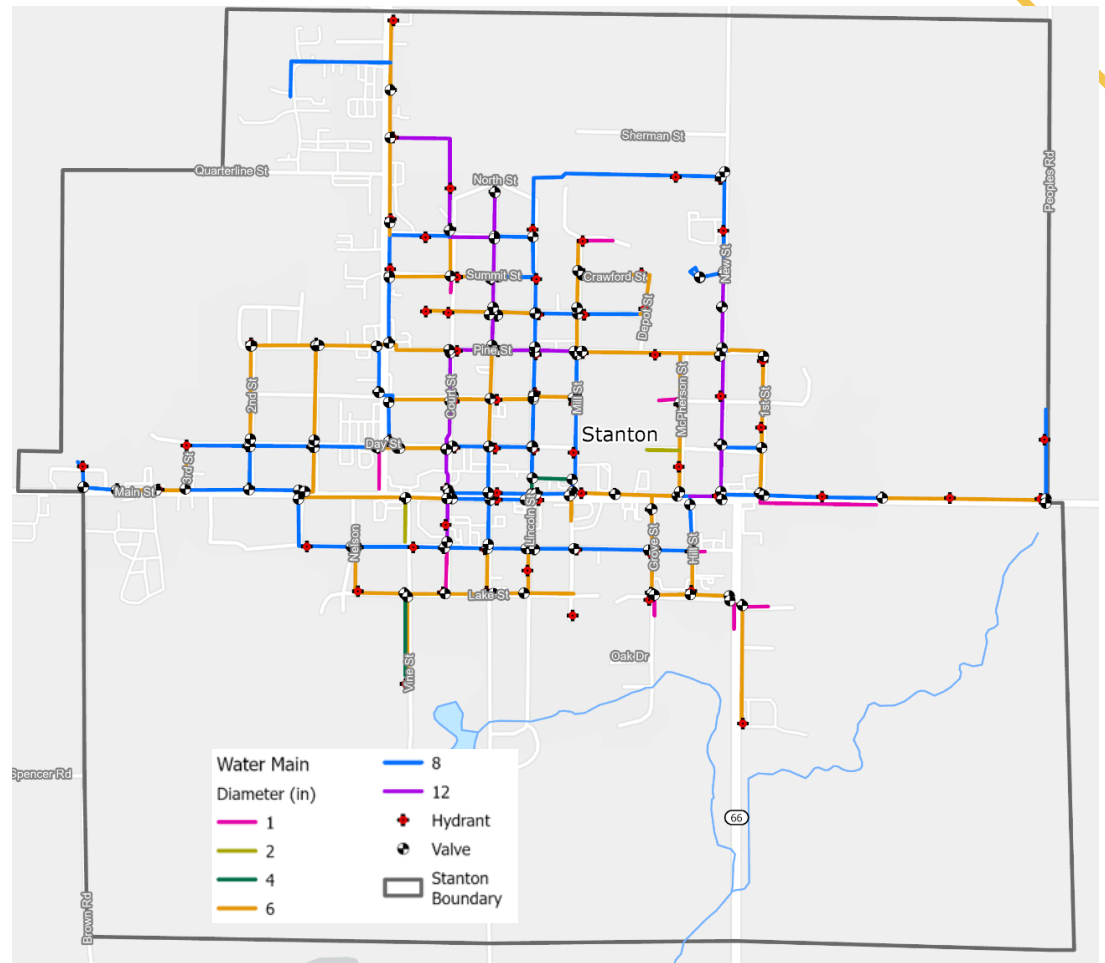
DWSRF Project Development

Factors that serve as the basis for identifying the proposed projects:

- Water main is not functioning optimally
 - Frequent Breakage
- Water main approaching the end of useful life
- Undersized water mains

Existing Water Distribution System

- 2 groundwater supply wells
- 1 elevated storage tank
- Over 12 miles of water transmission and distribution mains



DWSRF Project Alternatives

The water main project alternatives considered:

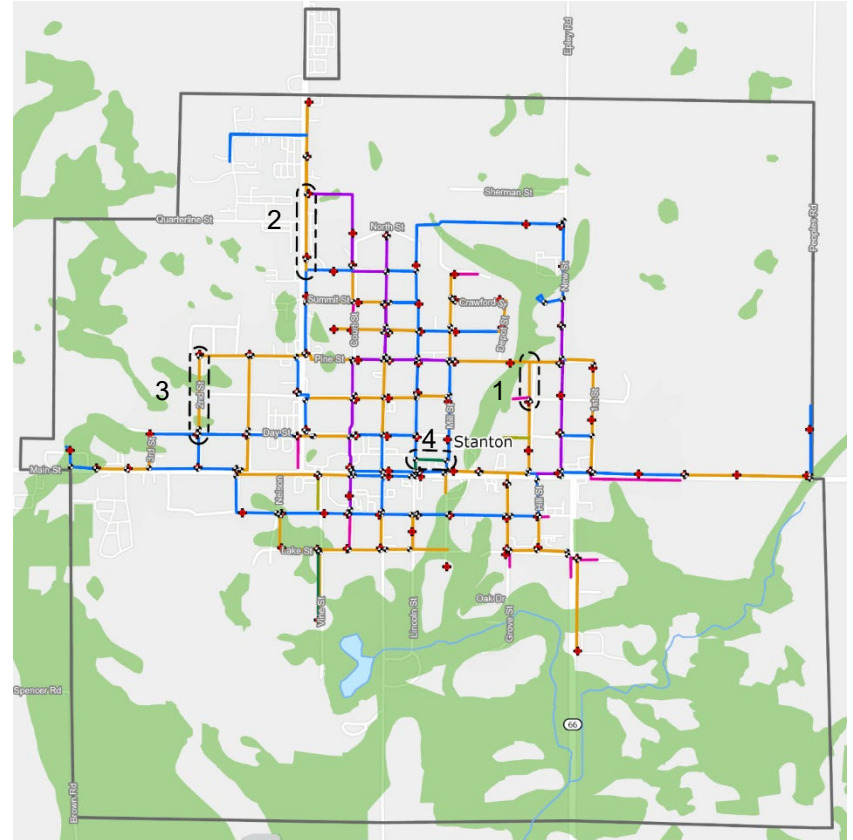
- **No Action**
 - Could result in more breaks and O&M costs
 - Leaves system vulnerable to pressure loss and contamination
- **Regional Connection and Operational Optimization**
 - Would not address breaks or lead service line replacements
- **Water Main Replacements via Open Cut or Directional Drilling**

Proposed DWSRF Water Main Improvements

Water main replacement projects:

1. McPherson Street from Bradford to Pine Street
2. North State Street north of Cedar Street
3. 2nd Street from Day Street to Pine Street
4. The alley north of Main Street between Lincoln Street and Mill Street

Replacement of 46 known galvanized service lines (scattered throughout the City).





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ANTICIPATED PROJECT AND USER COSTS

DWSRF Project Cost Comparison

	Alternative 1: Open Cut Installation	Alternative 2: Directional Drilling Installation
McPherson Steet Capital Cost	\$500,000	\$600,000
North State Street Capital Cost	\$890,000	\$1,080,000
2nd Street Capital Cost	\$760,000	\$940,000
Alley north of Main Street Capital Cost	\$390,000	\$460,000
Service Line Replacements	\$423,200	

DWSRF Project Cost Opinion and User Cost

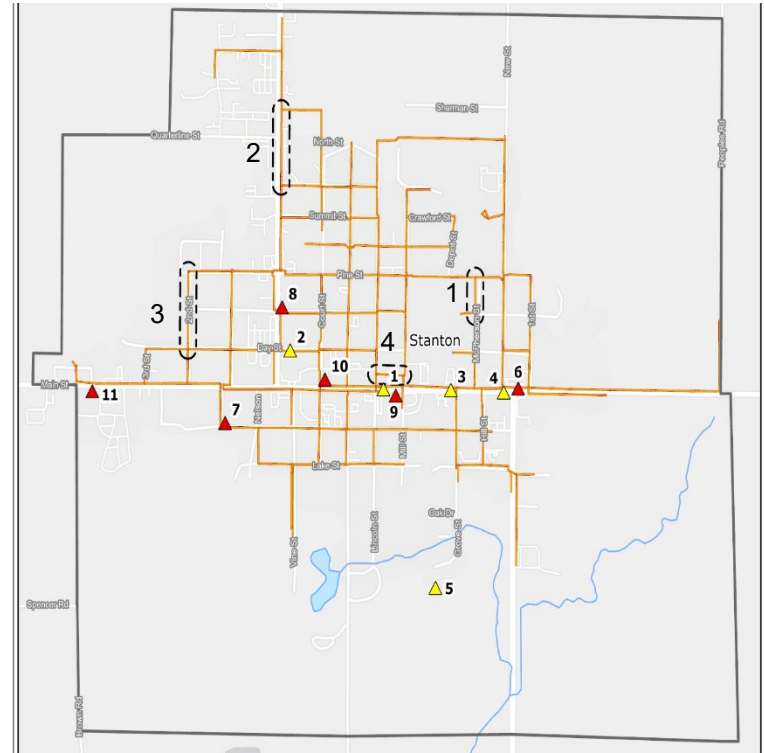
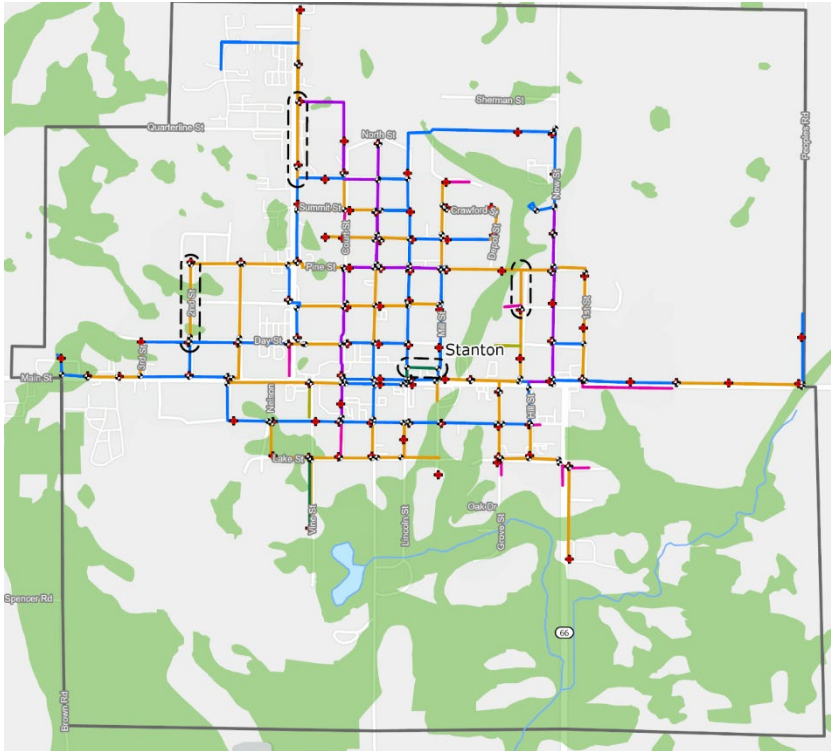
	DWSRF Loan (All Directional Drilling)	Est. Annual Household Payment (1,348/2.4)	Est. Quarterly Household Payment
McPherson Steet Capital Cost	\$600,000	\$86.00	\$21.50
North State Street Capital Cost	\$1,080,000	\$127.00	\$31.75
2nd Street Capital Cost	\$940,000	\$110.00	\$27.50
Alley north of Main Street Capital Cost	\$460,000	\$54.00	\$13.50
Service Line Replacements (no options)	\$423,200	\$50.00	\$12.50
Total	3,503,200	\$427.00	\$106.75



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ENVIRONMENTAL IMPACTS, MITIGATION, AND BENEFITS OF THE PROJECTS

Directional Drill Recommended Due to the Proximity to Wetlands and Contaminants



Environmental Impacts and Mitigation

Impacts during construction:

- Moderate traffic disruption throughout select neighborhoods
- Moderate and temporary noise, dust, and traffic disruption
- Short periods of time where residents may be asked to not use water
- No impact to sensitive species is anticipated

Mitigation during construction:

- Traffic control and typical work hours
- Soil erosion and sedimentation control
- Associated surface restoration

Benefits of DWSRF Project

- Increase the reliability and functionality of the drinking water system.
- Increase the useful life of the drinking water infrastructure.
- Comply with the 2018 Lead and Copper Rule.
- Address needs before they become issues = cost savings.



Questions and Answers

Please state name and home address for the record.

Vote on Resolution

