

# City of Bangor Drinking Water State Revolving Fund

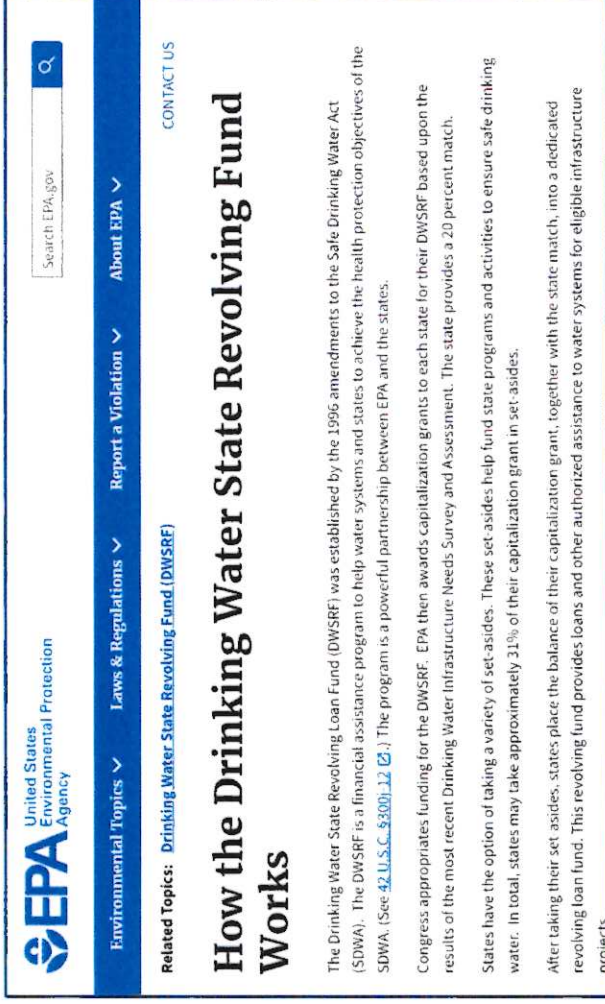
Proposed Project Plan Overview  
Monday, May 18<sup>th</sup>, 2026

Madelyn Landry, EIT



# Outline

- Drinking Water State Revolving Fund Program Background
- Bangor Water System
- Selected Projects
- Project Costs and Funding
- Anticipated Schedule
- Social & Environmental Impacts
- Questions



The screenshot shows the EPA website page for the Drinking Water State Revolving Fund (DWSRF). The page features the EPA logo, navigation menus for 'Environmental Topics', 'Laws & Regulations', 'Report a Violation', and 'About EPA', and a search bar. The main heading is 'How the Drinking Water State Revolving Fund Works'. Below the heading, there is a 'Related Topics' section with a link to 'Drinking Water State Revolving Fund (DWSRF)'. The main text explains that the DWSRF was established by the 1996 amendments to the Safe Drinking Water Act (SDWA) and is a financial assistance program to help water systems and states achieve the health protection objectives of the SDWA. It also mentions that the program is a partnership between EPA and the states, and that EPA awards capitalization grants to each state for their DWSRF based upon the results of the most recent Drinking Water Infrastructure Needs Survey and Assessment. The text states that the state provides a 20 percent match, and that states have the option of taking a variety of set-asides. These set-asides help fund state programs and activities to ensure safe drinking water. In total, states may take approximately 31% of their capitalization grant in set-asides. After taking their set-asides, states place the balance of their capitalization grant, together with the state match, into a dedicated revolving loan fund. This revolving fund provides loans and other authorized assistance to water systems for eligible infrastructure projects.



# DWSRF Background

- Michigan Department of Environment, Great Lakes, and Energy (**EGLE**) administers a financing program for water suppliers:

- Drinking Water State Revolving Fund (**DWSRF**)
  - Low-interest loans & grants
  - Lead Service Line Replacement funds available



MICHIGAN DEPARTMENT OF  
ENVIRONMENT, GREAT LAKES, AND ENERGY



# How to Apply for DWSRF Funds

- Municipalities can apply annually
- Must complete a Project Plan Report
  - Study of your water system, replacement needs, and associated costs
  - Good for 5 years on file with EGLE
- EGLE scores projects and distributes available loan and grant funds



## City of Bangor Drinking Water State Revolving Fund Project Plan

Prepared By

 **ABONMARCHE**

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May 3, 2023



# Benefits of the DWSRF Program



- **2.00 – 2.50% interest rates**
  - Municipal bond rates around 4.00 – 4.30%
- **Grant and Principal Forgiveness Opportunities**
  - Will find out any opportunities when project funding list is released
- **Project Plan is good for 5 years**
  - Can resubmit for 5 years if funding package does not fit Bangor's needs



# Evaluating Bangor's Water System

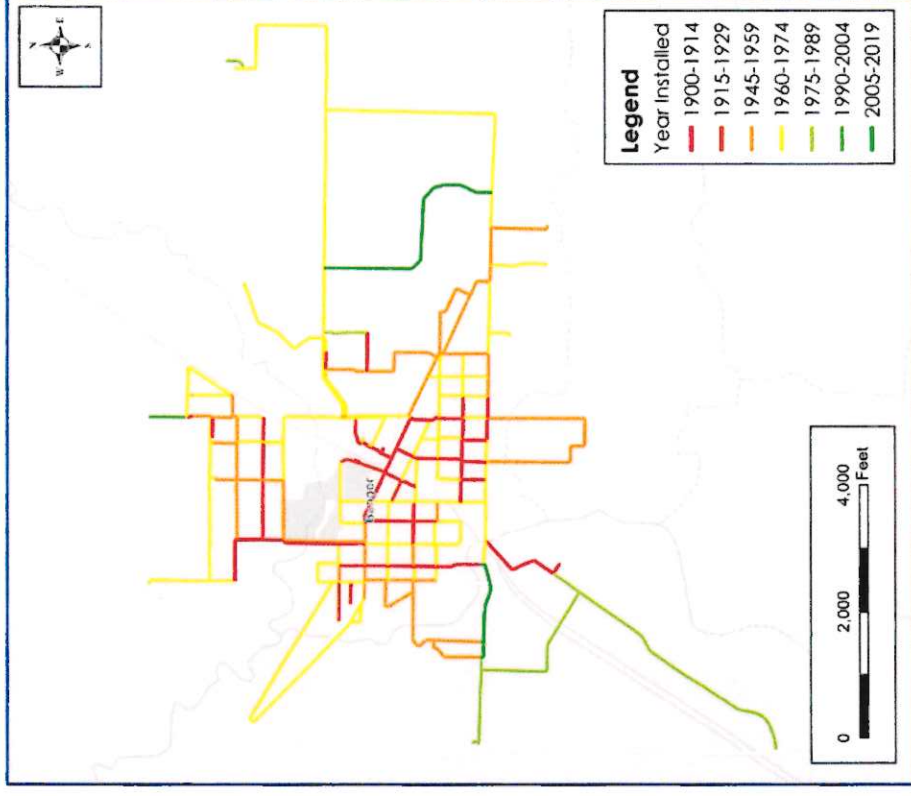
Four major components make up Bangor's water system:

1. Water Mains
2. Water Storage Tanks
3. Water Supply Wells
4. Water Service Lines



# Evaluation – Water Mains

- **23 miles of water main**
  - 14% undersized
  - 85% older than 50 years in age
- **Improvement Options**
  - Option 1: Replace existing water mains with ductile iron piping utilizing trenching methods
    - Selected due to durability, cost, and familiarity with method
  - Option 2: Use trenchless installation methods
  - Option 3: Replace mains with plastic piping
  - Option 4: No action



## Projects - Water Main

- **Alexander Street**
  - Replacement of 2,350 feet of 4-inch cast iron main from the early 1900s
- **Charles Street**
  - Abandonment of 300 feet of 2-inch steel water main installed in 1962



## Evaluation - Storage

- **300,000-gallon storage tank**
  - Installed in 1973
  - Provides water storage for fire protection and improves system pressure
- **Improvement Options**
  - Option 1: Implement recommended repairs
    - Selected due to cost and effectiveness
  - Option 2: Install a new water storage tank
  - Option 3: No action



## Projects - Storage

- **Inspected in 2023 by Dixon Engineering**
- **Completion of Recommended Repairs**
  - Replace Exterior Coating
  - Replace Interior Coating
  - Foundation Improvements
  - Safety Improvements
  - Improvements for EGLE Compliance



16) Wet interior roof with center column and channel supports. Rust bleedthrough present along stiffeners.



17) Rusting along the lap seams and roof plate to channel gap.



18) Rust bleedthrough on a roof plate.

Excerpt from Dixon Engineering Report



## Evaluation - Wells

- **4 active wells provide water for the system**

- Water is treated at each well

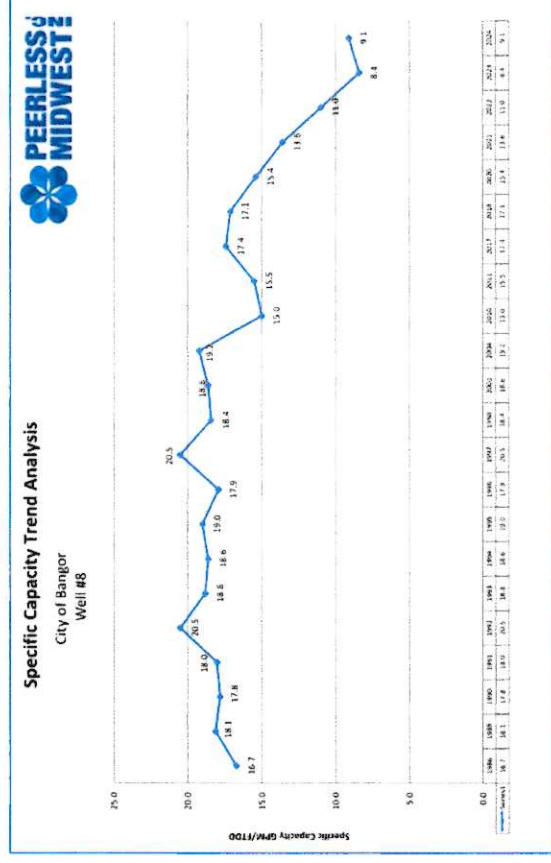
- **Improvement Options**

- Option 1: Implement recommended repairs
  - Selected due to cost and effectiveness
- Option 2: Install all new water supply wells
- Option 3: No action



## Projects - Wells

- Inspected by Peerless Midwest, required improvements by EGLE
- **Completion of Recommended Repairs**
  - Full chemical treatment system replacement
  - Backup generator and automatic transfer switch
  - Chemical injector reconfiguration
  - Secondary chemical containment and separation

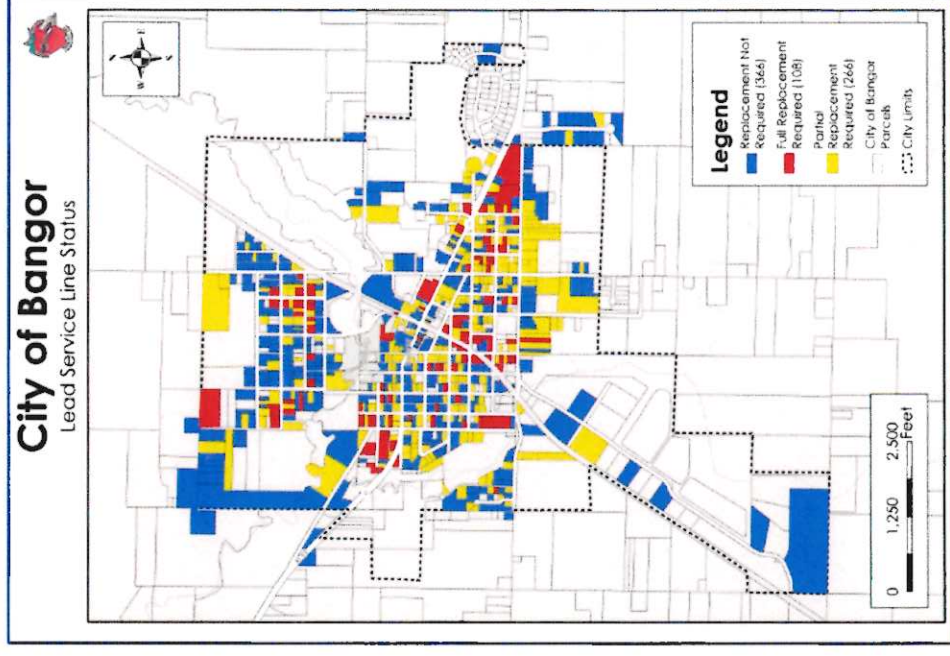


Excerpt from Peerless Midwest Report



## Evaluation – Service Lines

- **374 known lead service lines**
  - All lead and galvanized lines need to be replaced by 2037
- **Improvement Options**
  - Option 1: Replace lines with copper
    - Selected due to durability, service life, and familiarity with material
  - Option 2: Replace lines with plastic piping
  - Option 3: Do nothing



# Projects – Service Lines

- **Replacement of about 50% of known lead services**
- **Full Lead Service Line Replacements**
  - 50 Services
  - Replacement of service lines that have been identified as lead or previously connected to lead on both public and private side of the service line.
- **Partial Lead Service Line Replacements**
  - 130 Services
  - Replacement of service lines that have been identified as requiring only one side of the service line to be replaced.



# Cost Breakdown

## • Water Main Projects

- Alexander Street – Washington to Arlington
- Charles Street – Abandon Dead End

## • Water Supply Improvements

- Well pump overhauls, treatment system replacements, electrical upgrades

## • Water Storage Improvements

- Ground Storage Tank Improvements

## • Lead Service Line Replacements

- 50 full service line replacements
- 130 partial service line replacements

Description	Est. Construction Cost	DWSRF Eligible Cost*
FY 2027 Water Supply Estimate	\$271,000	\$231,000
FY 2027 Water Storage Estimate	\$648,000	\$648,000
FY 2027 Water Distribution Estimate	\$2,219,169	\$2,219,169
FY 2027 Lead Service Line Estimates	\$1,617,150	\$1,492,150
<b>Total Fiscal Year 2027 Water Project Costs:</b>	<b>\$4,755,319</b>	<b>\$4,590,319</b>



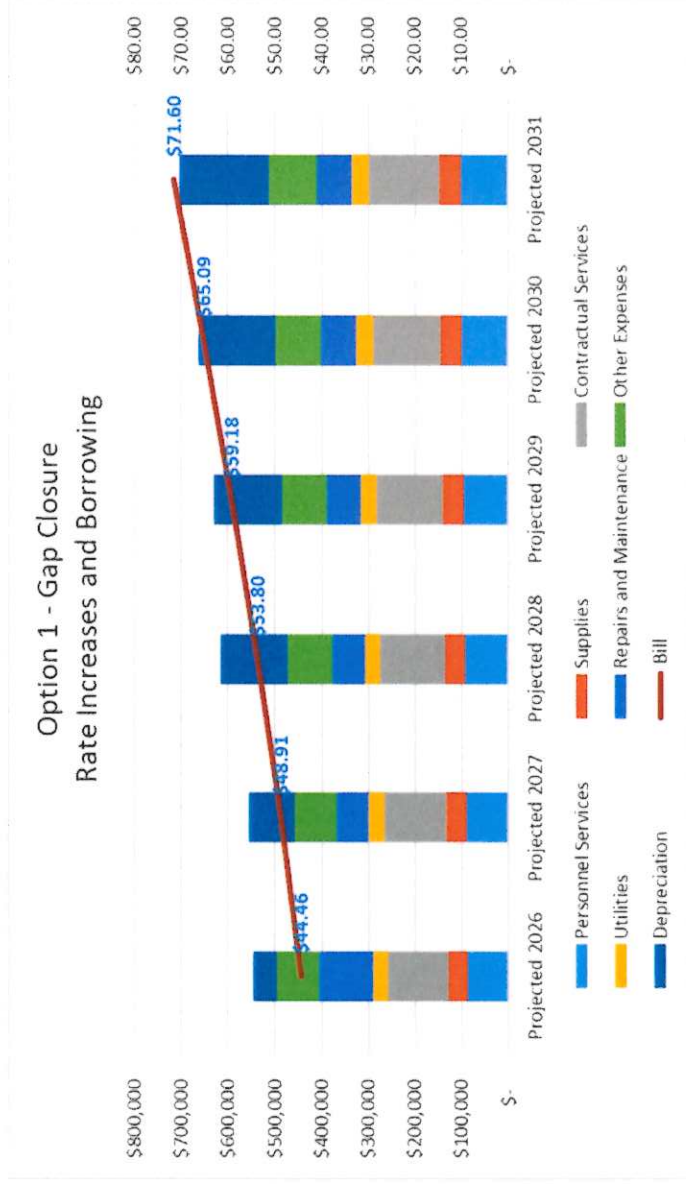
## Bangor Project Plan Report Findings

- Requested funds for FY2027: **\$4,530,319.00**
- NOTE: no financial obligation by applying to the DWSRF program at this time.
- “Tossing your hat into the ring” to gain access to potential grant and low interest loan opportunities
- Even if you receive notice of funding, you do not have to continue.
- If the city chooses to not continue, they will be less likely to receive funding opportunities next year



# Financial Impacts

- This request was included in the 5-Year Rate Study presented to council on 2/17/26
  - Rate study proposed 10% rate increases for the next 5 years
  - Does not account for any grants or loan forgiveness



AVG customer using 6,000 gallons per month  
No debt to a debt payment of \$353,452

Graph from Utility Financial Report



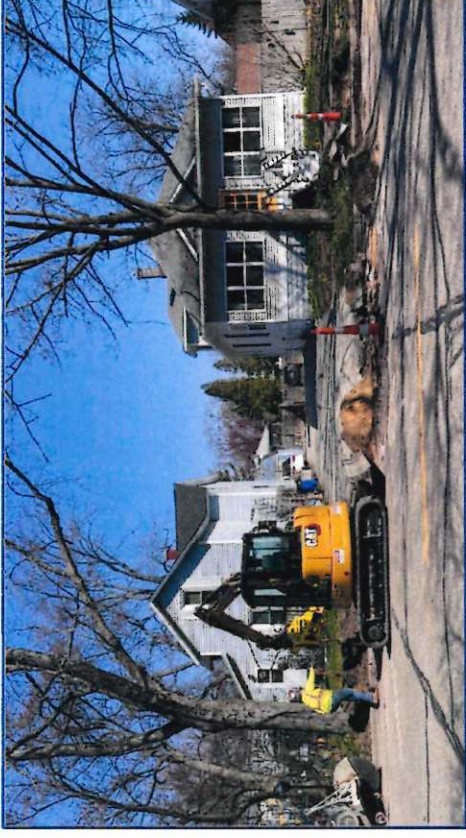
# Anticipated Schedule

Description	Activity	Time Frame
Submit DWSRF Project Plan	Planning	June 2026
Project Plan on PPL	Funding	September 2026
Water Supply Improvements	Design	2027
	Construction	2028
Charles Street 2" Water Main Removal Project	Design	2027
	Construction	2028
Water Storage Improvements	Construction	2028
5-Year Lead Service Line Replacements	Design	2027
	Construction	2028
Alexander Street Water Main Replacement Project	Design	2027
	Construction	2028



# Social & Environmental Impacts

- No long-term impacts to natural areas or sensitive species or ecosystems
- Temporary construction impacts within the road right-of-way
- Temporary construction impacts on private property for water service replacements
  - Proper communication and restoration efforts will happen to minimize disturbance to residents



## Next Steps

1. Council passes resolution adopting the Project Plan.
2. Abonmarche incorporates any changes from this Public Meeting and submits plan to EGLE June 1, 2026.
3. EGLE scores all Project Plans and creates draft ranked funding list.
  - Draft list expected August 2026.
4. Notice of Funding to be expected September 2026.



# Questions or Comments?

