

# City of Millwood Water and Wastewater Infrastructure Budgeting

## City Council Meeting

November 12, 2024

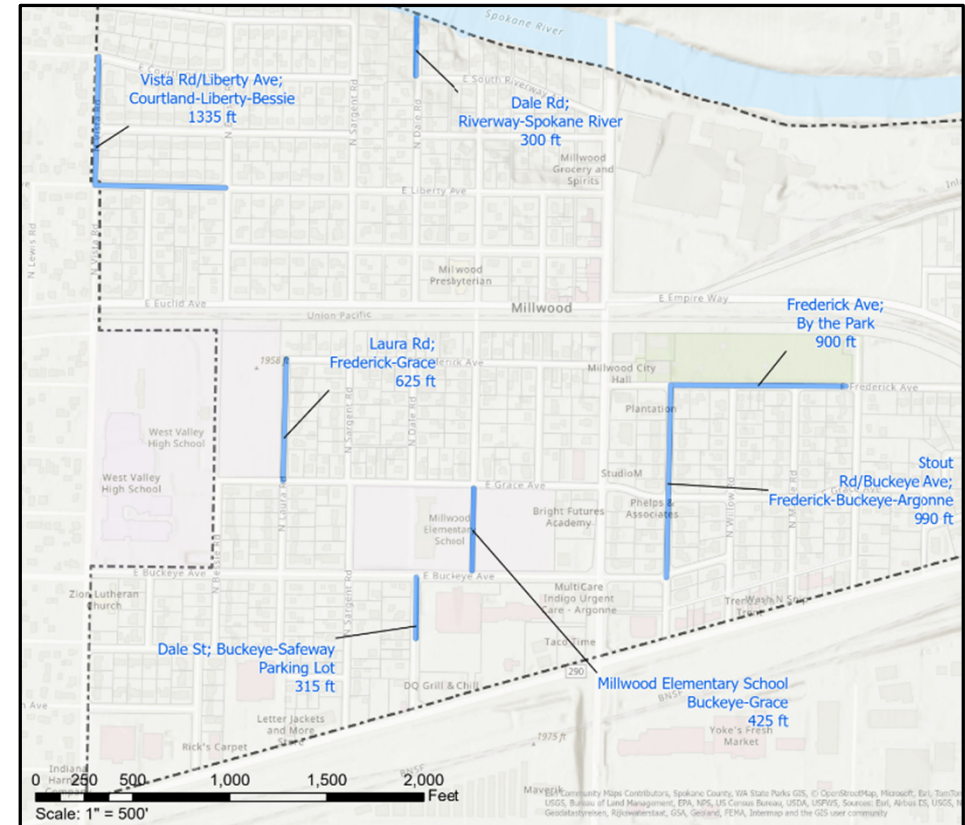


# Purpose

- Summarize budget recommendations for priority utility projects in 2025
  - Cast Iron Water Main Replacement
  - Water Master Plan and GIS
  - Sewer Master Plan

# Cast Iron Water Main Replacement

- ~4,700 LF of cast iron water main in the system
  - Over 70 years old, beyond useful life
- Main breaks and repairs are increasing
  - Potential for contamination to enter the system
  - Contributes to the system's 18% loss
    - Above Washington's 10% standard



# Cast Iron Water Main Replacement

- City is using available capital improvement funding (~approximately \$70,000 per year) to replace the cast iron mains, 300'-1,000' feet at a time.
- 2024 Grace waterline project averaged \$633/foot
- At current annual funding, it will take the City well over 20 years to finish replacing the cast iron.
- Cost efficiency to design and build (or replace) longer segments of waterline.



# Cast Iron Water Main Replacement

Consider replacing remaining cast iron pipe as one or two project(s) rather than 5-10 separate projects.

## Pros

- Anticipate overall cost savings of 15-20%
- Additional savings in interim repair costs
- Reduces liability associated with main breaks

## Cons

- Requires loan
- Opinion of Probable Project Costs for remainder is \$2.6 million (including 20% contingency)

# Cast Iron Water Main Replacement

- Potential Funding Sources (low interest loans):
  - Washington State Public Works Board (Currently 1.71% for 20 years)
  - Drinking Water State Revolving Fund
- Must have current, approved Water System Plan including the project for which funds will be requested
- Competitive loans and based on need:
  - Applicants who show “readiness to proceed” are ranked higher than other applicants.

# Cast Iron Water Main Replacement

- Potential Funding Strategy for 2025:
  - Budget \$25,000 to complete the Water System Plan Update (including GIS mapping of the water system)
  - Budget \$200,000 to complete environmental and design phase services for full replacement of the cast iron mains.
  - Apply for PWB and/or DWSRF funds for full replacement of the cast iron mains

# Water Master Plan and GIS-Other Benefits

- Existing Water Master Plan:
  - Approved by DOH in 2018; “expires” in 2028
  - Public Works Board requires a Plan current within 5 years to qualify for their funds.
- CIP is somewhat dated due to extreme inflation after COVID.
  - Updating the CIP for current pricing will provide a more accurate cost basis to the City in seeking funding.
- Develop Water System GIS
  - Many benefits to the City, particularly accessing system details and managing the asset
    - Accessible in the field
    - Captures institutional knowledge
  - Adds points for the City’s funding applications



# Sewer Master Plan

- System installed in early 1990s; anticipated useful life of 75 years (60% of the useful life remaining)
- No current Sewer Master Plan or formal capital improvement plan
  - Full assessment has not been completed since system installation
- An approved, adopted Sewer Master Plan will be an asset in managing system priorities, setting rates, and addressing future issues that may arise with Treatment
- Recommended budget for Sewer Master Plan: \$60,000 in 2025 budget

# 2025 Budget Summary

- Cast Iron Water Main Replacement \$225,000
  - Water Master Plan/GIS Update
  - Environmental/Design for Replacement
- Sewer Master Plan \$60,000



Questions