

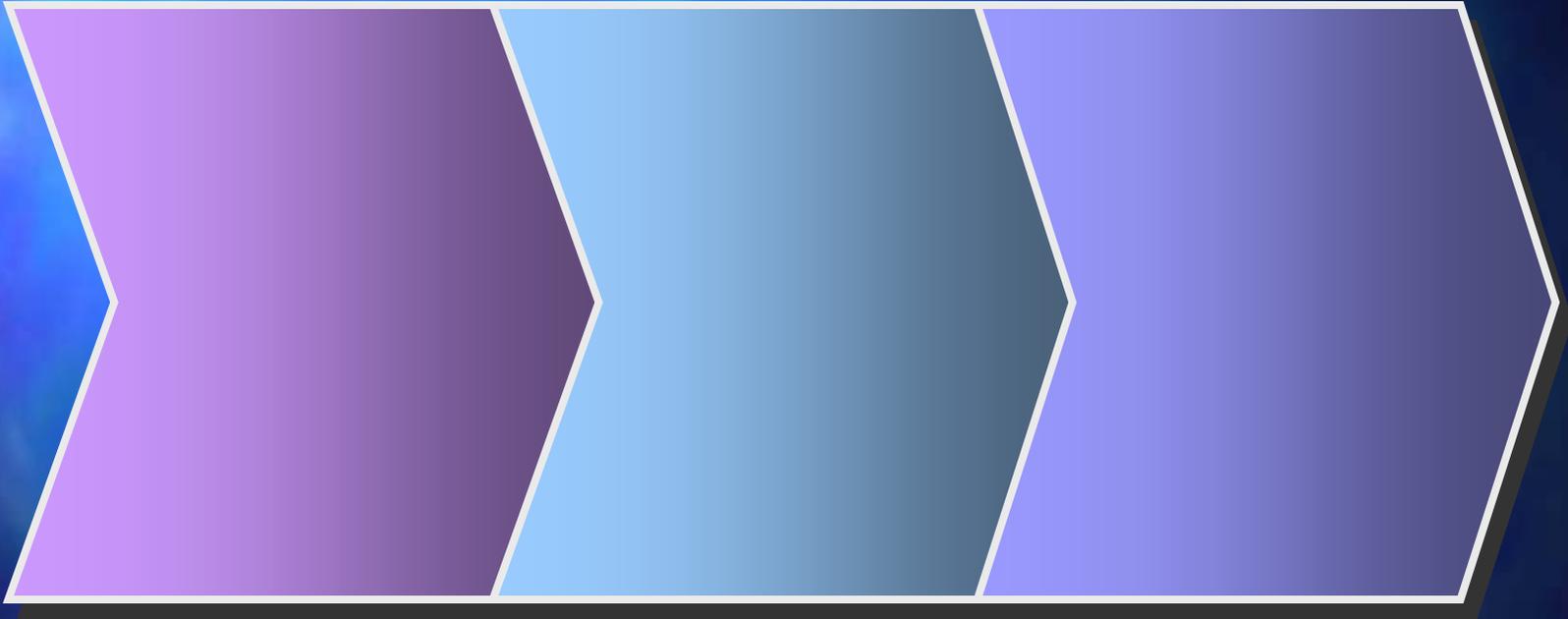
Town of Bethlehem

Department of Public Works

Asset Management

Capital Plan

Financial Analysis



Asset Management

- A comprehensive and structured approach to the long term management of assets as tools for the efficient and effective delivery of community benefits

Why Asset Management?

- Aging Infrastructure
 - -Many assets reaching end of useful life
- Increased Public Awareness
 - -Sewer and water line failures
- Reduced funding
- Plan for future demand

Asset Management

- Inventory all assets
- Assess Condition
- Perform Risk Assessment
- Develop Integrated Management Strategy

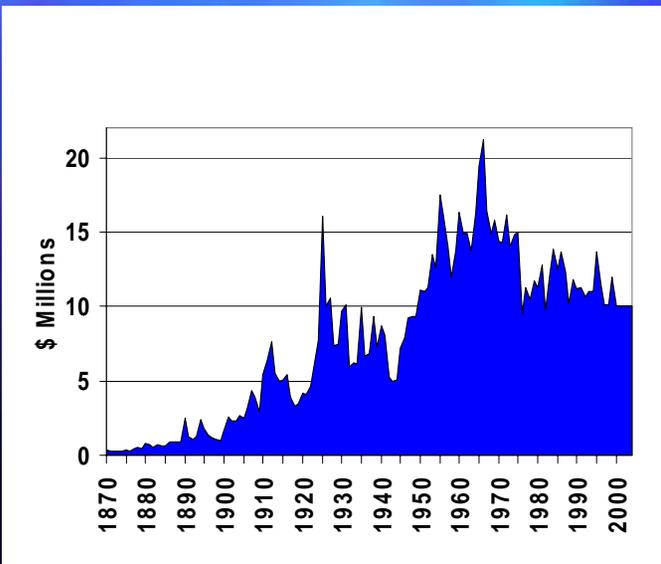
DPW Assets

- Water mains
- Over 1,000,000 feet

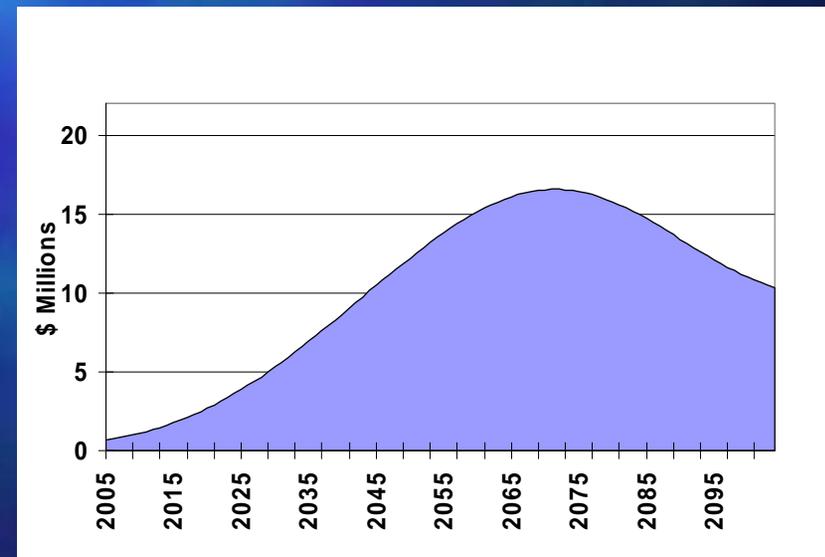


Replacement needs reflect an echo of earlier demographic waves

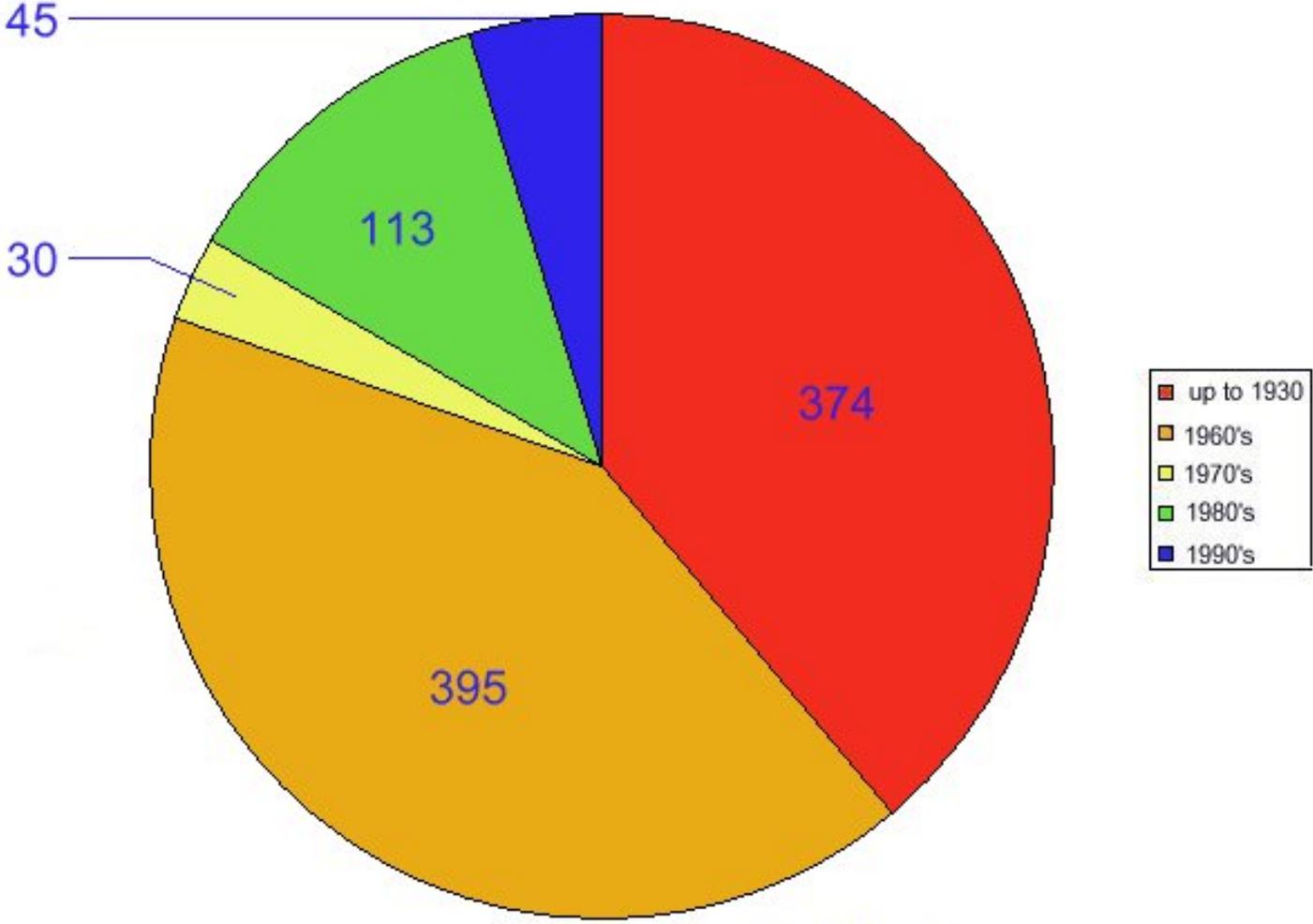
Water Main Construction



Future Pipeline Replacement Needs

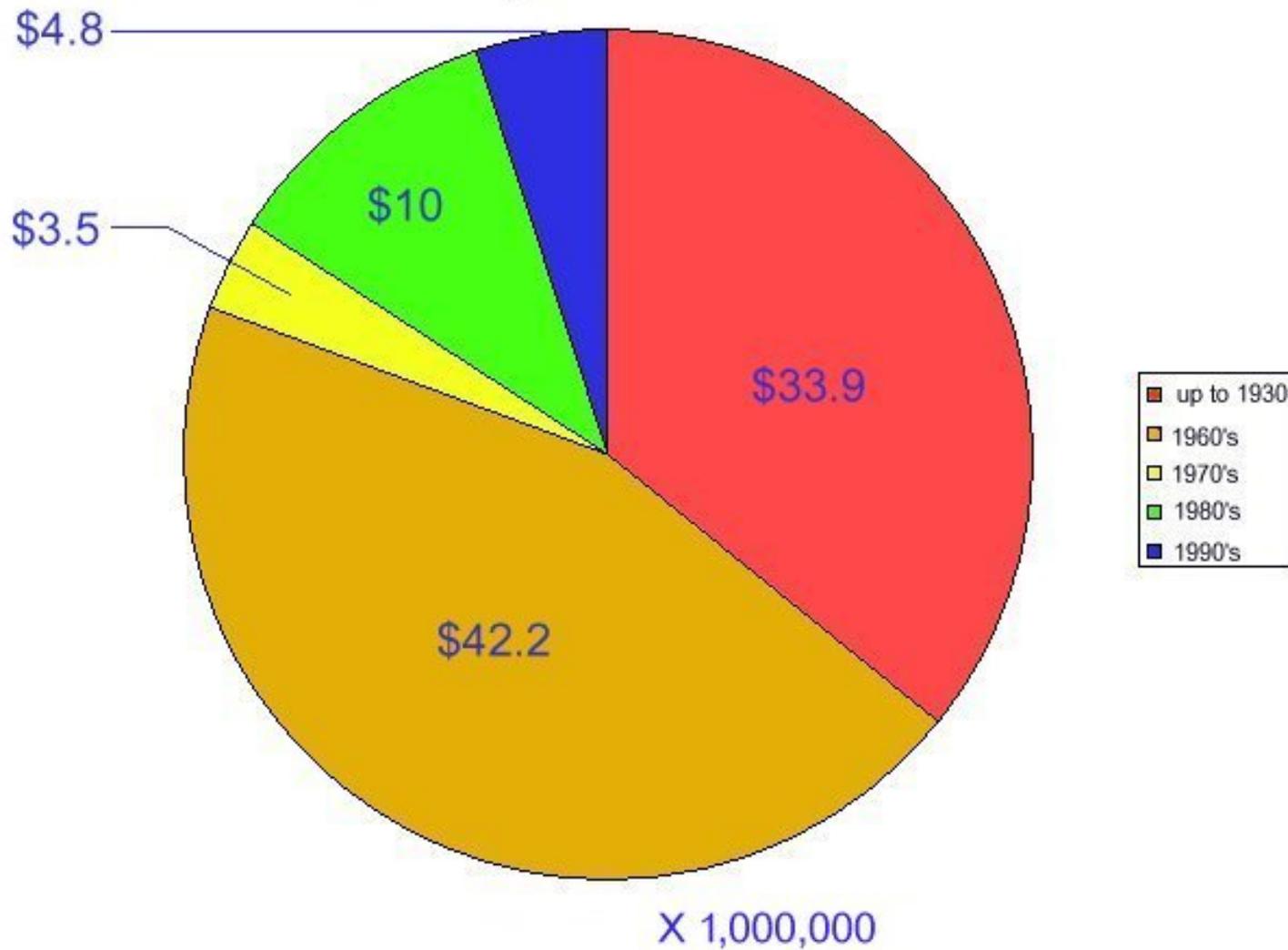


Amount of Water Pipe Installed During Various Decades



thousands of feet

Present Replacement Value of Water Pipe Installed During Various Decades



DPW Assets

- Water Tanks
- Kenwood – 1928
- Selkirk – 1964
- Elm Ave – 1979
- Park – 1984
- New Scotland - 1984



DPW Assets

- Sewer Mains
- Over 900,000 feet



Sewer Line Infiltration



DPW Assets

- Water Filtration Plant-New Salem
- -1.1 billion gallon reservoir
- -Filtration Plant 5MGD , 50 years old and at end of useful life



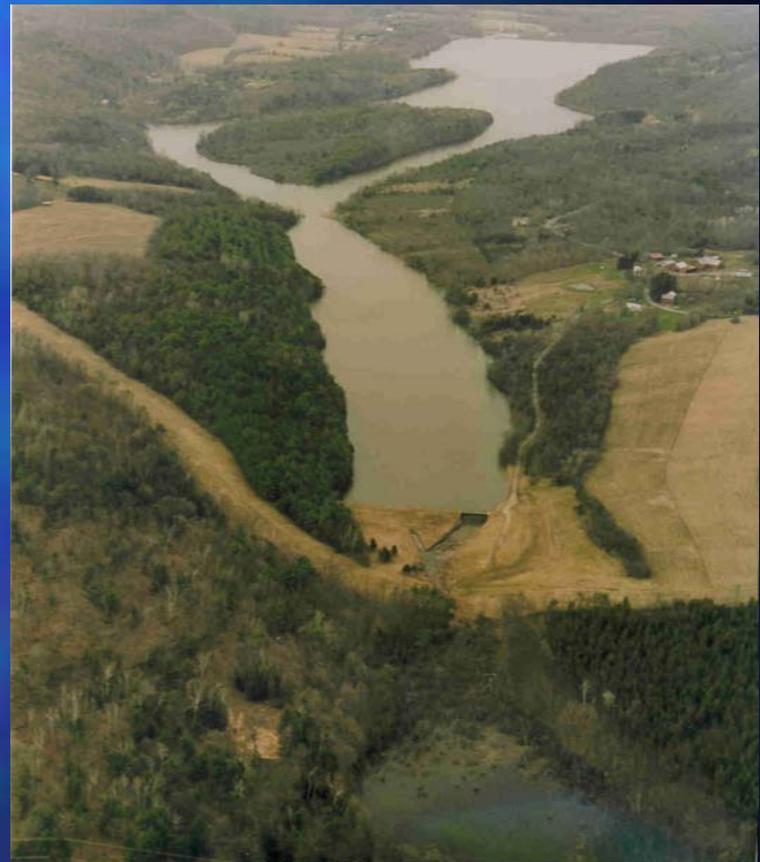
DPW Assets

- Water Plant-Clapper Road
- Wells with 6 MGD capacity
- Filtration Plant with 6 MGD capacity and 12 years old



DPW Assets

- Reservoirs and Dams
 - Vly Reservoir
 - Old Reservoir adjacent to New Salem Water Tank



DPW Assets

- Sewer Plant -
Dinmore Road
- 5.9 MGD permit
capacity
- 33 years old



DPW Assets

- Sewer Pumping Stations
- 39 stations
- Age is from over 70 years old to two years
- 70% are over 20 years old



Future Demand

- Comprehensive Plan has identified areas where we can expect additional water and sewer demand
- DPW has developed a projected water system demand and has developed a long term plan to achieve adequate supply

Capital Improvement Plan

- DPW has taken a ten year look ahead to determine the priority needs for water and sewer infrastructure
- The capital plan is reviewed annually to determine if the highest priorities are being accomplished
- A financial plan is necessary to support the capital plan

Funding

- Water and Sewer Infrastructure has historically been paid for by residential and commercial development
- Federal and State funding has contributed to construction of wastewater plants in the past
- There is very limited federal and state funding to support rebuilding infrastructure going forward

Financial Plan Analysis

- Operating Budgets are adequate to support routine maintenance
- Water and sewer breaks will continue to erode operating budgets since they are not planned work
- A Rate Analysis has been performed to determine how best to support the long term financial requirements that support the capital investment for water and sewer services

Next Steps

- Present long range capital plan
- Provide funding strategy to support capital requirements
- Present Rate Analysis scenarios