

# Asset Management Overview

Board of Public Utilities Meeting  
February 5, 2026

Presented by Liz Hanley, Supervising Engineer

# Outline

- Purpose
- Overview of Our Assets
- What is Asset Management and Why We Need It?
- How do we get from Asset Management to Project Development?

# Purpose

The main purpose of Utility Asset Management is to ensure that utilities can maximize the value of their assets, optimize their performance, and minimize risks and costs associated with asset ownership and operation.

- Execute data driven decisions
- Improve financial forecasting
- Describe and defend projects
- Prioritize projects to maximize public benefit

# What is an Asset?

“An asset is an item, thing, or entity that has potential or actual value to an organization.”

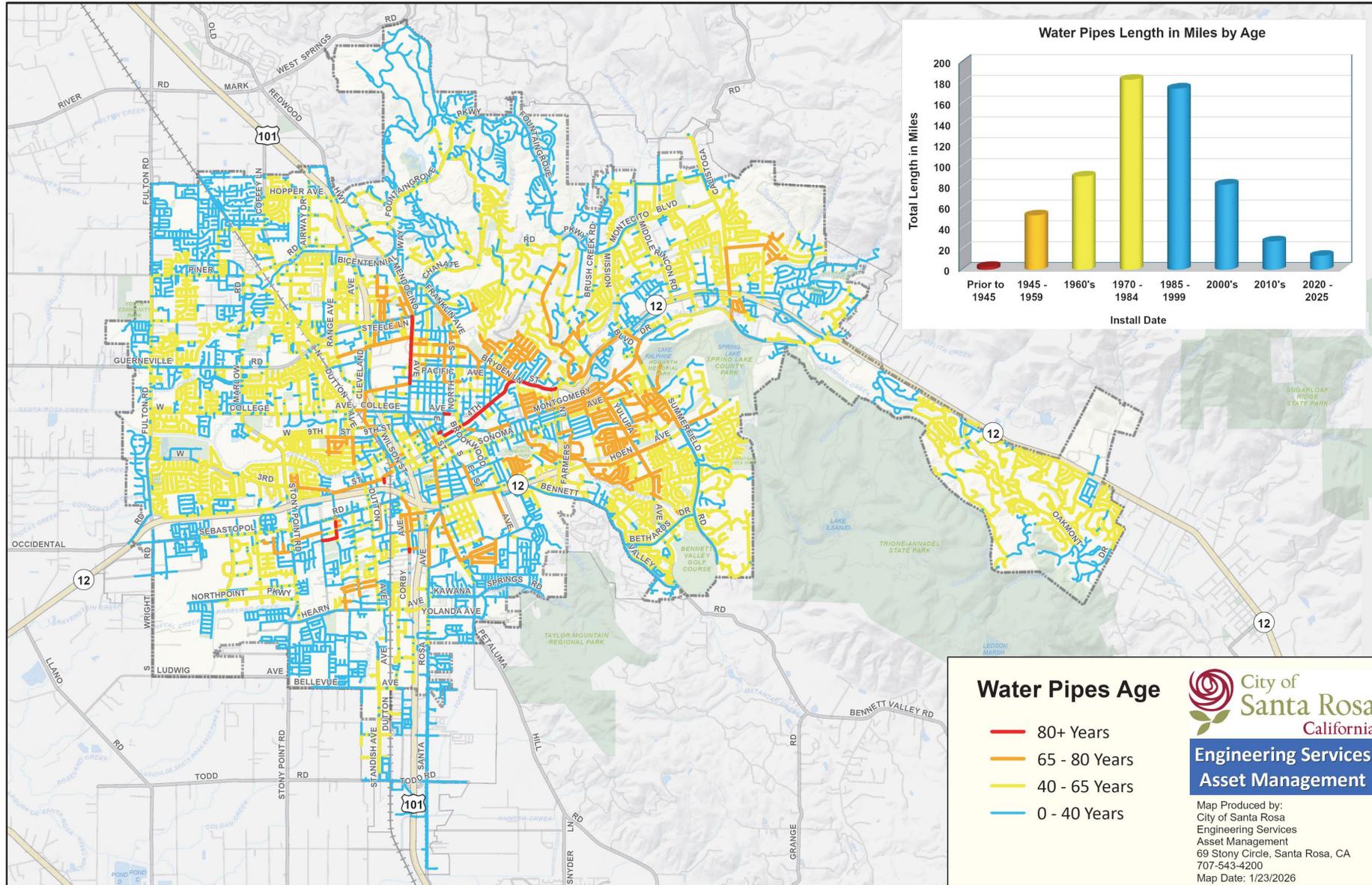
- *Institute of Asset Management (IAM)*

# Water System Assets

- 630 Miles of Transmission and Distribution Mains
- 24 Reservoirs
- 20 Pump Stations
- Current FY 26/27 CIP - \$16M
- \$250M CIP funding to be allocated over the next 10 years



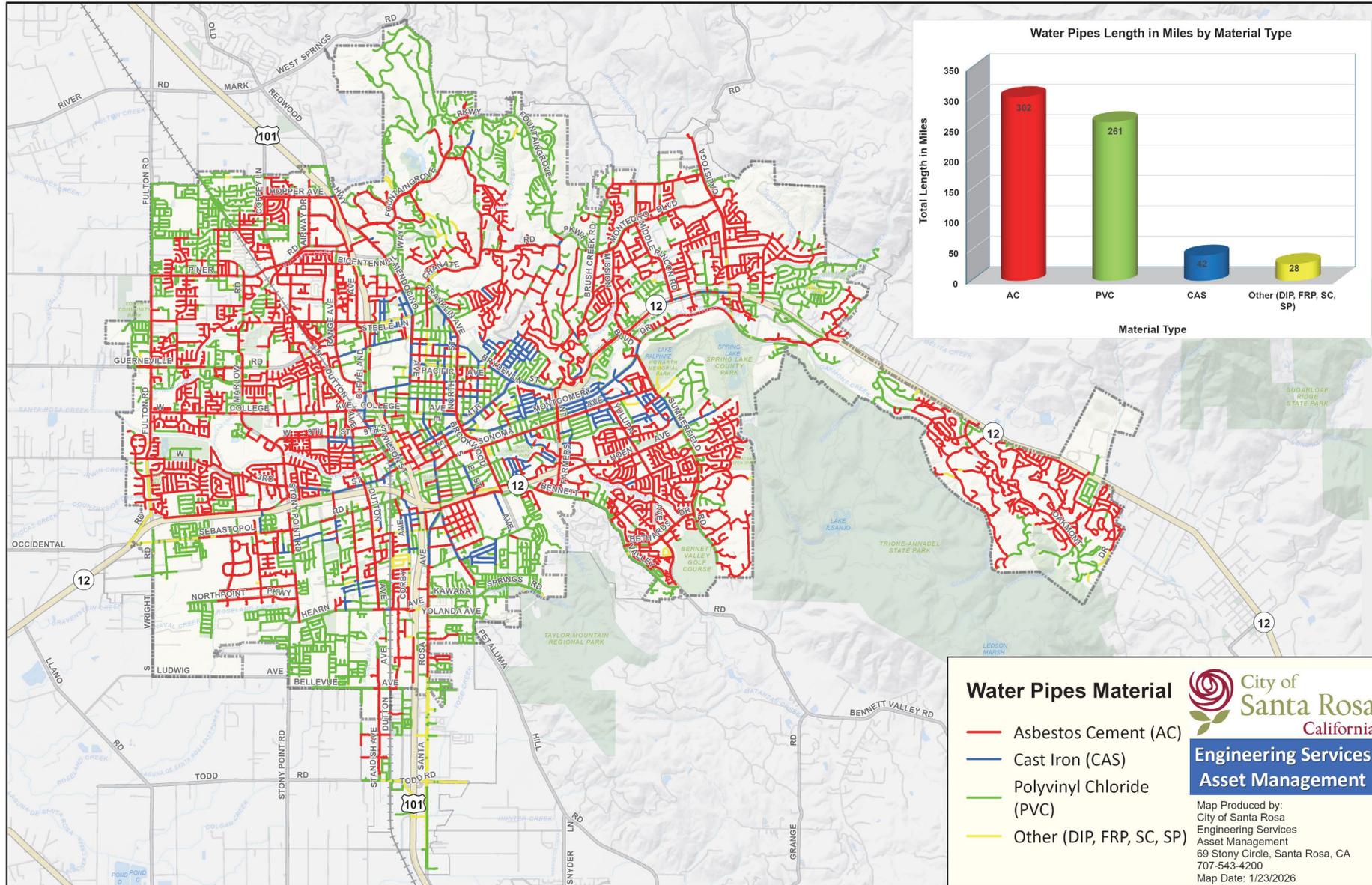
# Water System by Age



  
**City of Santa Rosa**  
 California  
**Engineering Services**  
**Asset Management**  
 Map Produced by:  
 City of Santa Rosa  
 Engineering Services  
 Asset Management  
 69 Stony Circle, Santa Rosa, CA  
 707-543-4200  
 Map Date: 1/23/2026

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# Water System by Material




  
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 California  
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- Water Pipes Material**
- Asbestos Cement (AC)
  - Cast Iron (CAS)
  - Polyvinyl Chloride (PVC)
  - Other (DIP, FRP, SC, SP)

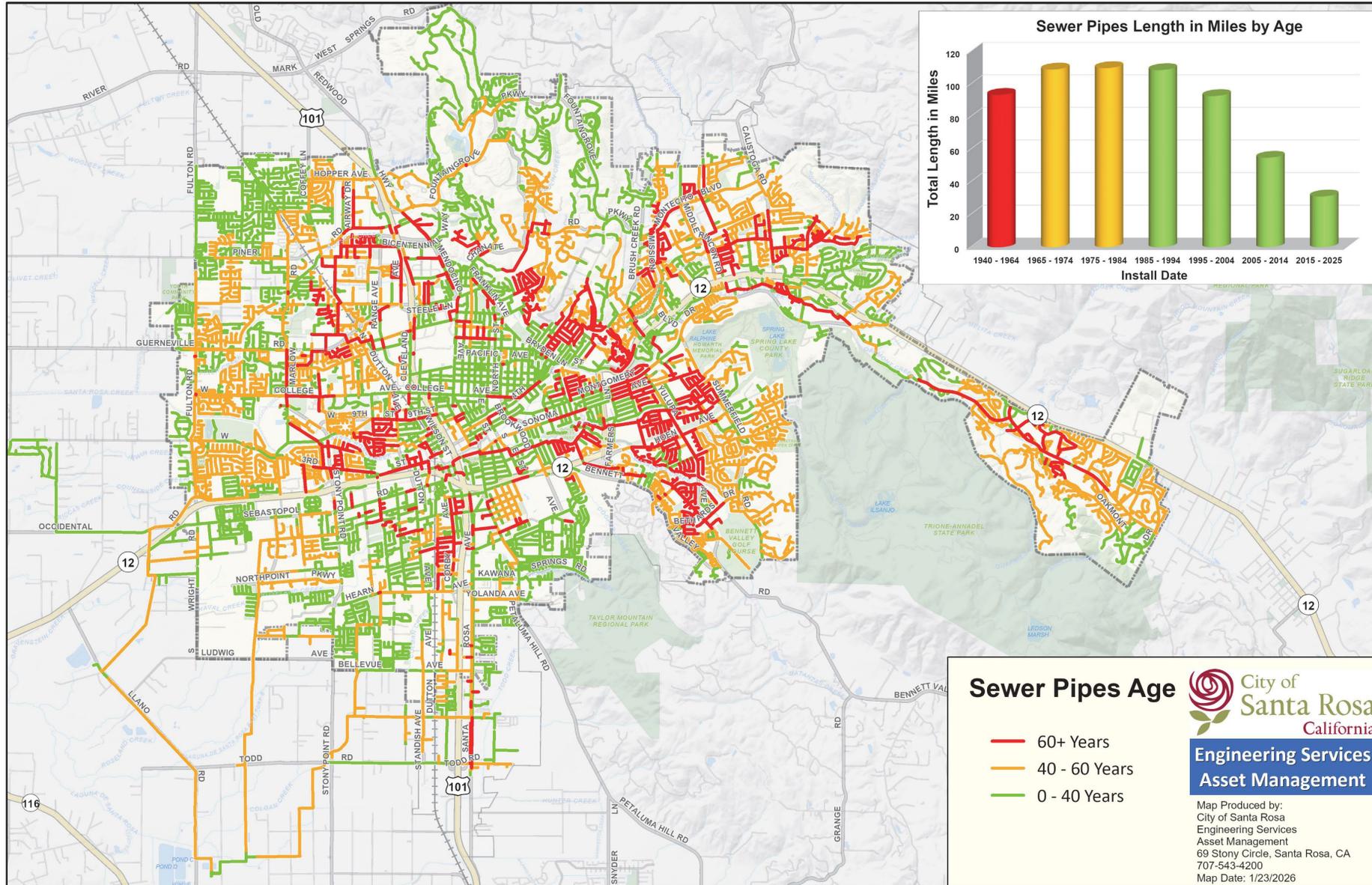
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# Sewer System Assets

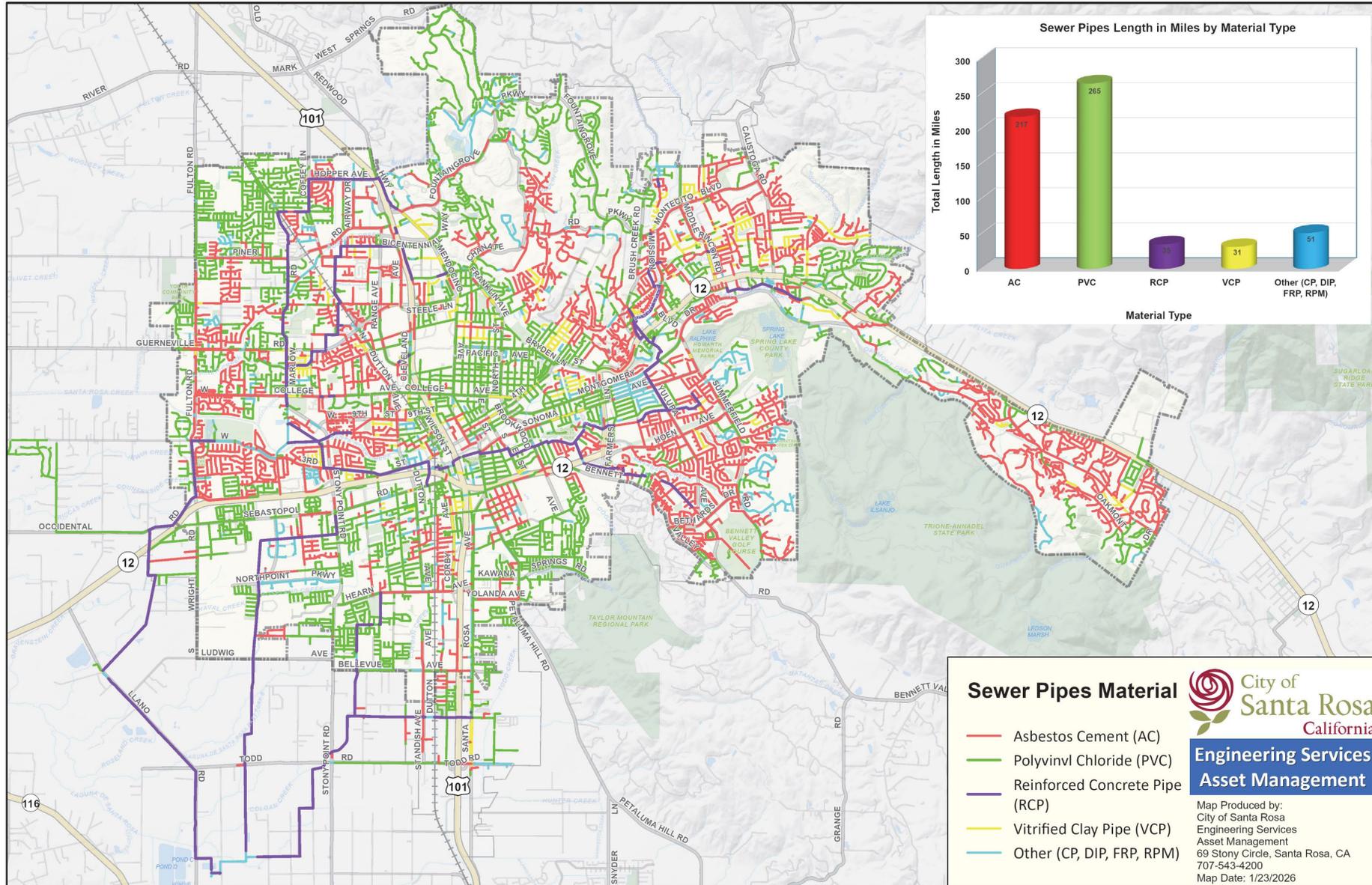
- 600 Miles of Trunks and Collection Mains
- 17 Sewage Lift Stations
- Current CIP - \$14.7M per year
- \$282M in CIP funding to be allocated over the next 10 years



# Sewer System by Age



# Sewer System by Material




  
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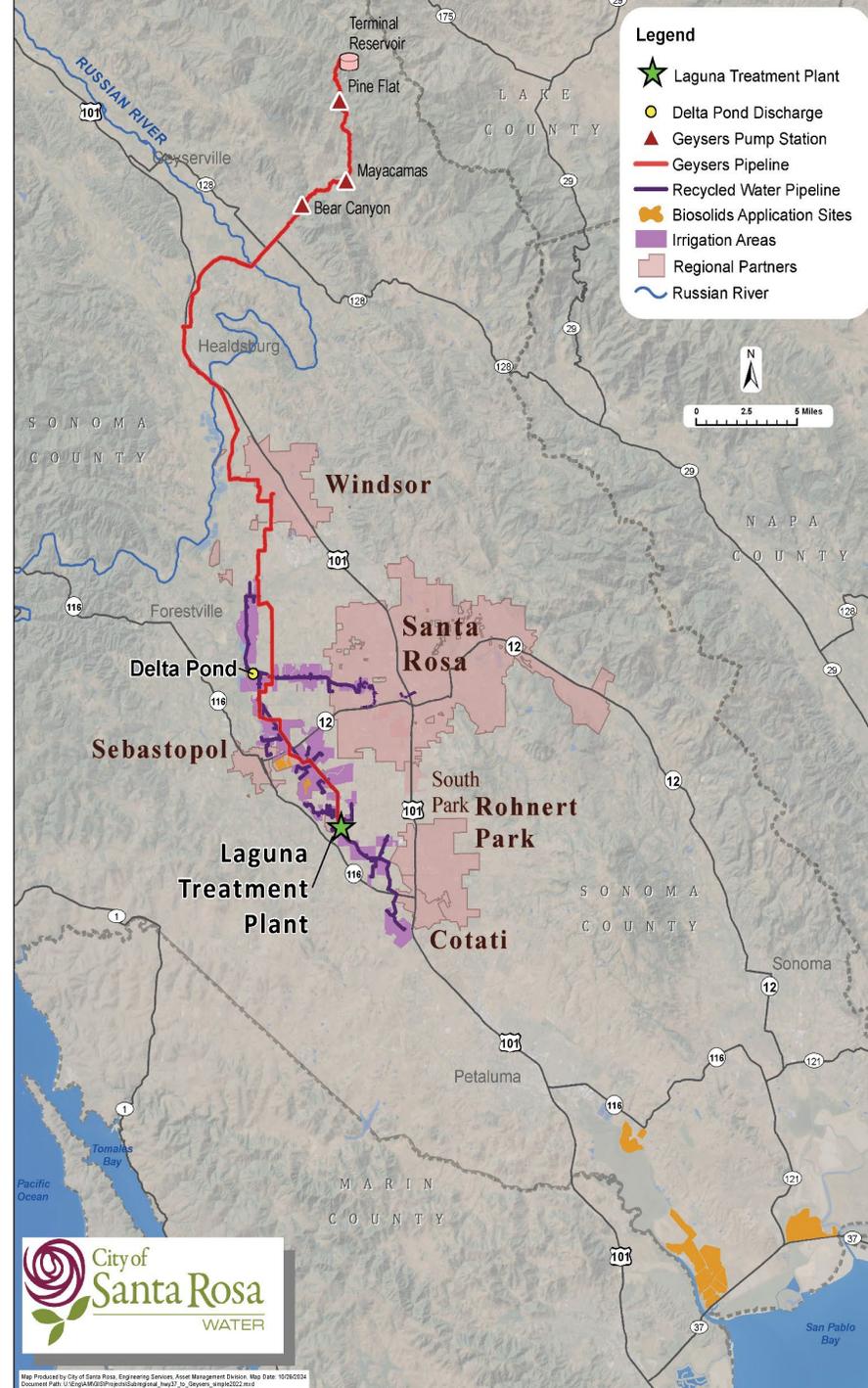
# Regional Water Reuse System

- Laguna Treatment Plant
  - Laboratory
  - Reclamation
  - Geysers
  - Biosolids
- 
- Current CIP - \$13M
  - \$175M in CIP funding to be allocated over the next 10 years



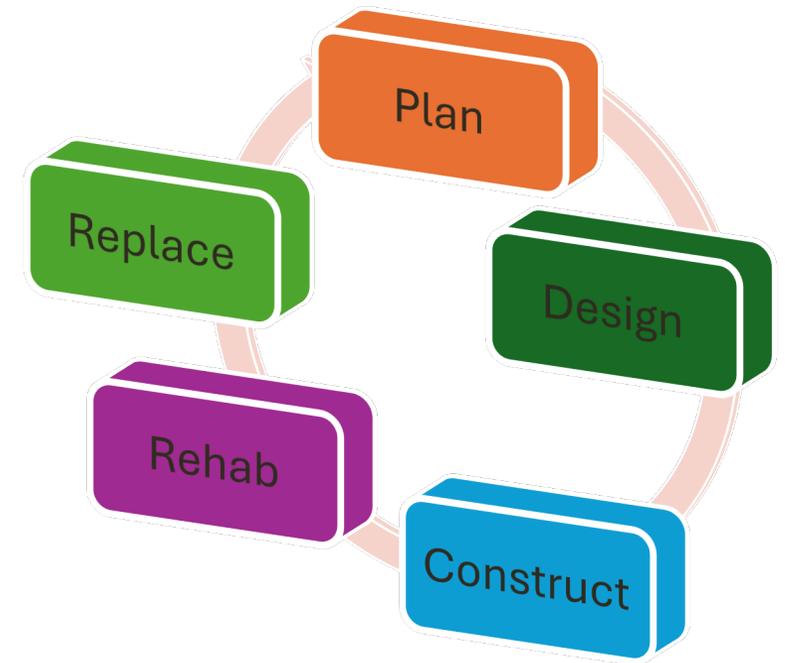
# Regional Water

# Reuse System



# What is Asset Management and Why We Need It?

- Infrastructure Management Commitment
- Programmatic Approach
- Minimize Surprises
- Right Decisions at the Right Time
- Spend funds wisely



# To Answer Questions

- Which assets need the most maintenance?
- When should we replace these “troubled assets”?
- Will our costs increase in the near term?



# To Answer Questions

- What Level of Service do we expect from our utilities?
- Which assets are critical to sustained performance?
- What does the financial forecast look like? Are we investing enough in CIP?



# Asset Management



# Asset Management Program

A comprehensive asset management program includes:

- Strategy and Planning
- Decision Making
- Life Cycle Delivery
- Asset Information
- Risk Assessment and Review
- Organization and People



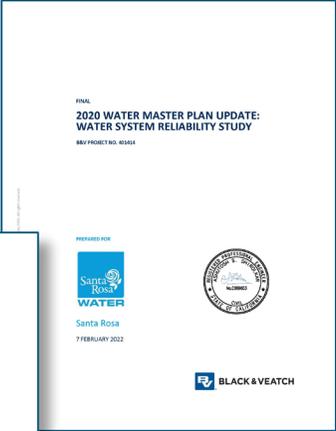
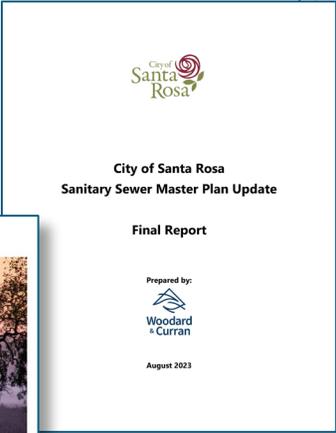
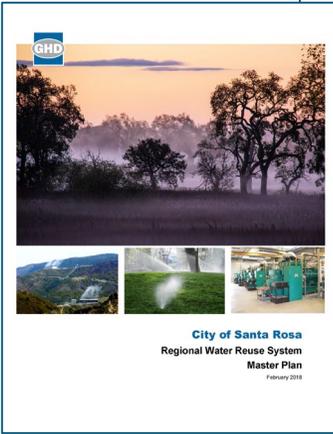
# Identifying Capital Projects

- City's General Plan, Master Plans, & Engineering Studies
- Asset Scoring
- Evaluate Level of Service
- Risk Assessment
- Regulatory Requirements
- Stakeholder and Public Input



# General Plan, Master Plans and Engineering Studies

- Evaluate System to Support General Plan Changes
- Water Master Plan
- Sewer Master Plan
- Regional Water Reuse Master Plan
- Condition Assessments



# Asset Scoring Process

## CONDITION

- Remaining Service Life
- CCTV-Pipe Condition
- Number of repair work orders
- Number of scheduled maintenance

## LEVEL OF SERVICE

- Hydraulic Capacity
- Flush Score
- Slope

## RISK

- Fire Flow Deficiencies
- Seismic Activity
- Waterways
- Hwy Right-of-Way
- Railroad Crossings

# Evaluate Level of Service

- Assets provide essential services to the community
- Level of Service scores are determined by evaluating individual assets numerically or qualitatively:
  - % downtime, incidents per year
  - Hydraulic capacity
  - Regulatory compliance
  - Cost to maintain



# Risk Assessment

- Likelihood of Failure
  - Maintenance history
  - Condition observations & assessment
  - Asset attributes (age, material)
- Consequence of Failure
  - Financial
  - Social
  - Environmental

	Consequence				
Likelihood	Insignificant	Minor	Moderate	Major	Severe
Almost Certain	Medium	High	High	Extreme	Extreme
Likely	Medium	Medium	High	Extreme	Extreme
Possible	Medium	Medium	High	High	Extreme
Unlikely	Low	Medium	Medium	High	High
Rare	Low	Low	Medium	High	High

# Regulatory Requirements

- Building Code and Fire Code Upgrades
- Division of Drinking Water
- NPDES Waste Discharge
- NPDES Stormwater
- Safety Compliance

# Stakeholder and Public Input

- Local Water Operations
- Local Sewer Operations
- Regional Water Reuse
- Water Administration
- Customer Calls
- Public Meeting Comments

# How are Projects Prioritized?

- CIP Program systematically prioritizes projects
  - Risk Reduction/Mitigation
  - Additional benefits beyond asset renewal
  - Time-sensitivity
  - Grant funding opportunities/timelines
- Maintain a 5 year CIP Program Plan  
Re-evaluated and re-prioritized yearly

# How are Projects Advanced?

- Develop comprehensive scoping documents
- Formulate a funding plan
- Queue projects for transfer to TPW Capital Projects Engineering Team for design and construction



# Water Department's Greatest Assets



# Questions?