



Engineering, Operations, & Technology Committee

Asset Management Program Update

Item 6b

November 18, 2024

Item 6b

Asset Management Program Update

Subject

Annual update of Asset Management Program

Purpose

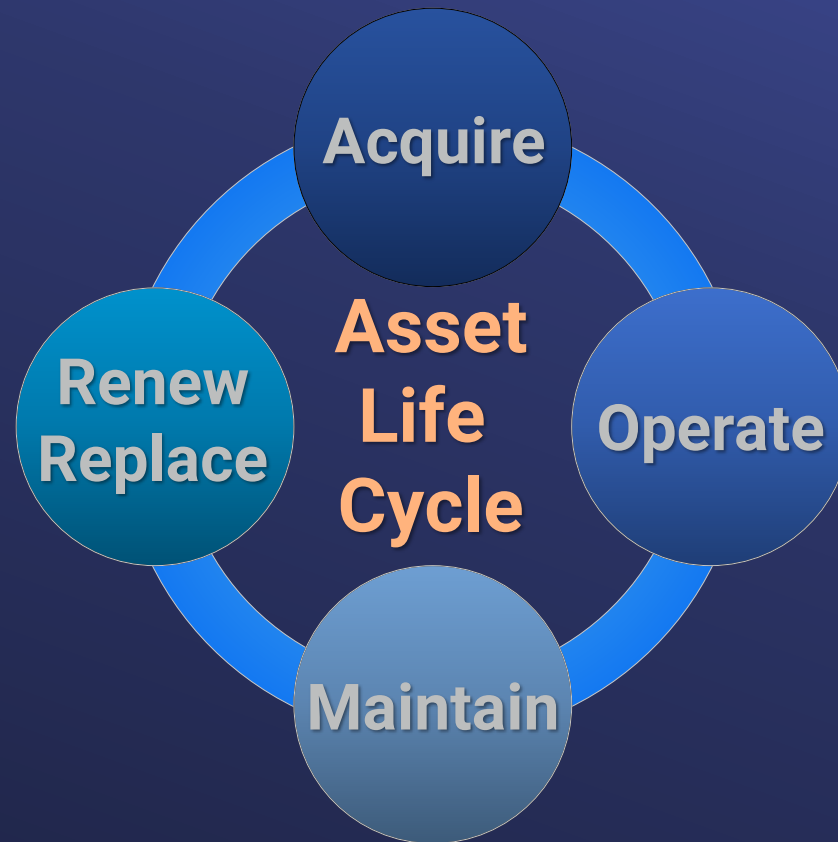
Provide annual update of progress on the Asset Management (AM) accomplishments, in support of Metropolitan's overall mission of water delivery and emergency response

Next Steps

Provide additional details of Maintenance Management in a subsequent update

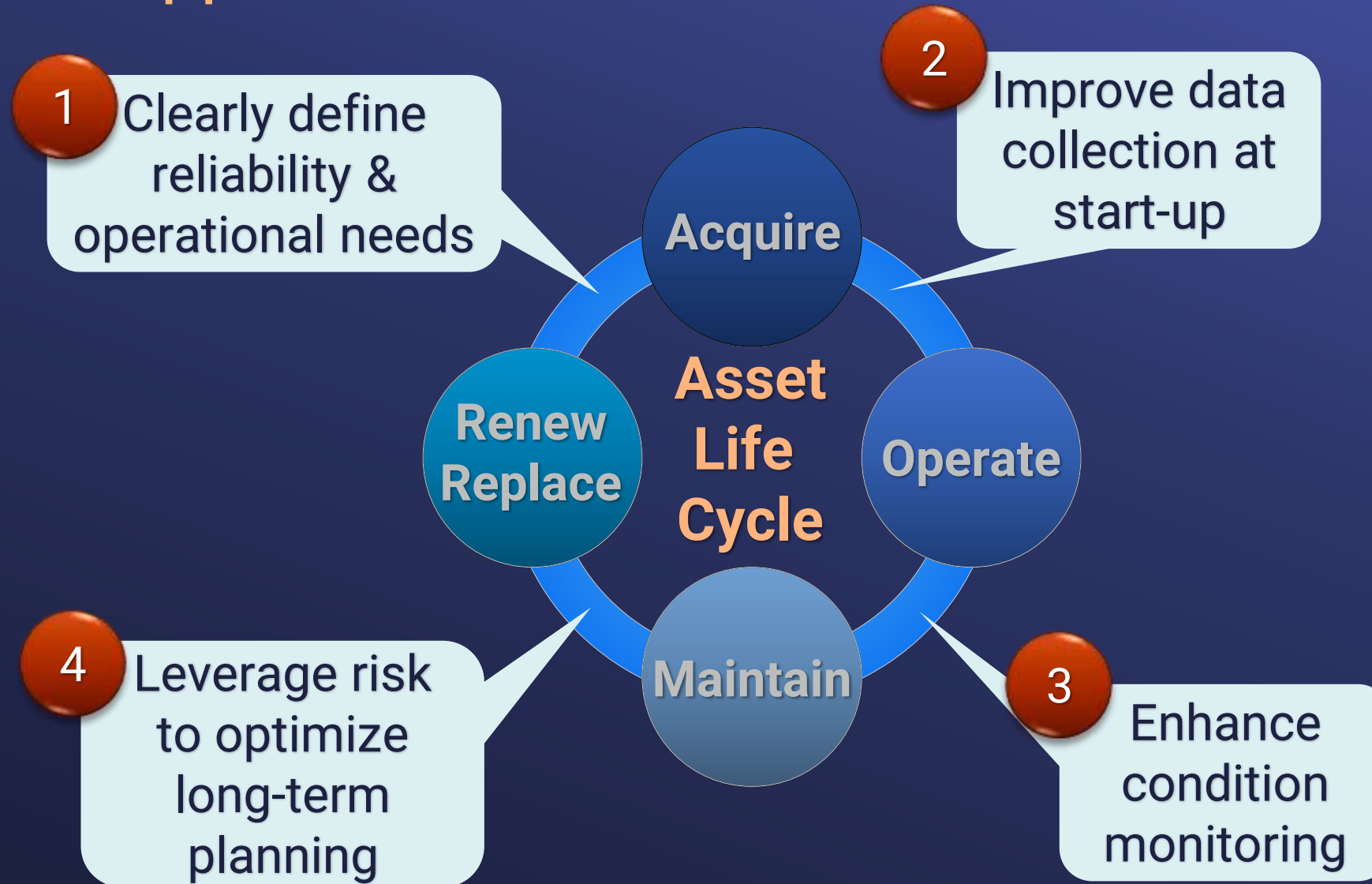
Asset Management (AM)

“The *coordinated activity* of an organization to *create value from its assets*” –ISO 55000



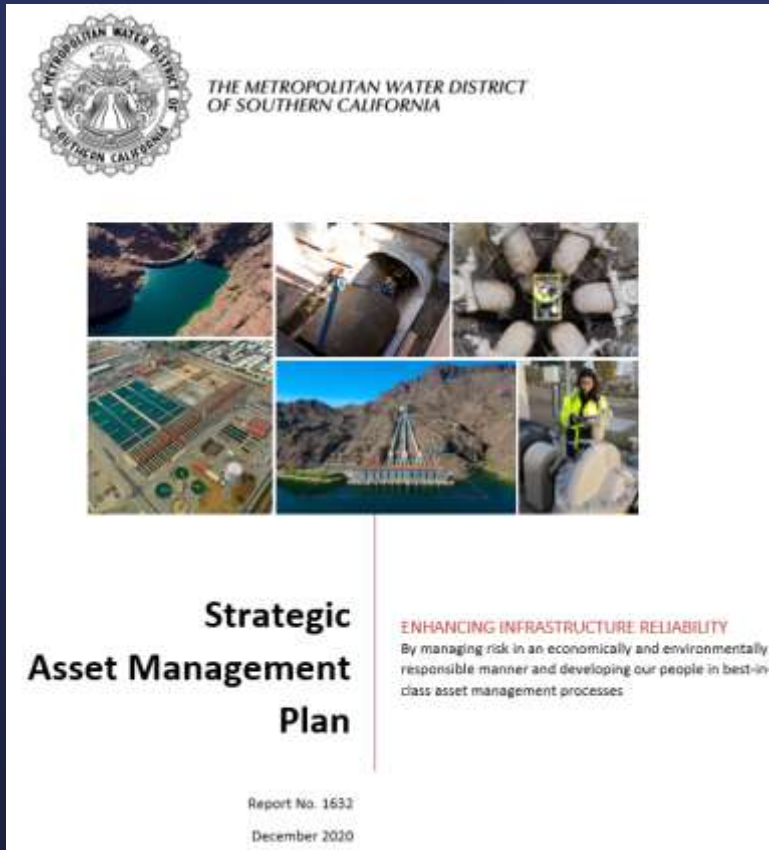
AM Program

Lifecycle Approach Enhancements



AM Program

Enhancing reliability by cost-effectively managing risk



- Achieve success through our people
- Make our processes more effective
- Maximize value from assets

AM Program

Mature Alignment

Organizational inputs:

- Safety & Emergency Response
- GM's Business Plan
- CAMP4W
- Climate Action Plan
- Capital Investment Plan

Feedback

Feedback

AM System

Adjust:

- Levels of service
- Risk tolerance
- Budget
- Staff resources
- Admin constraints

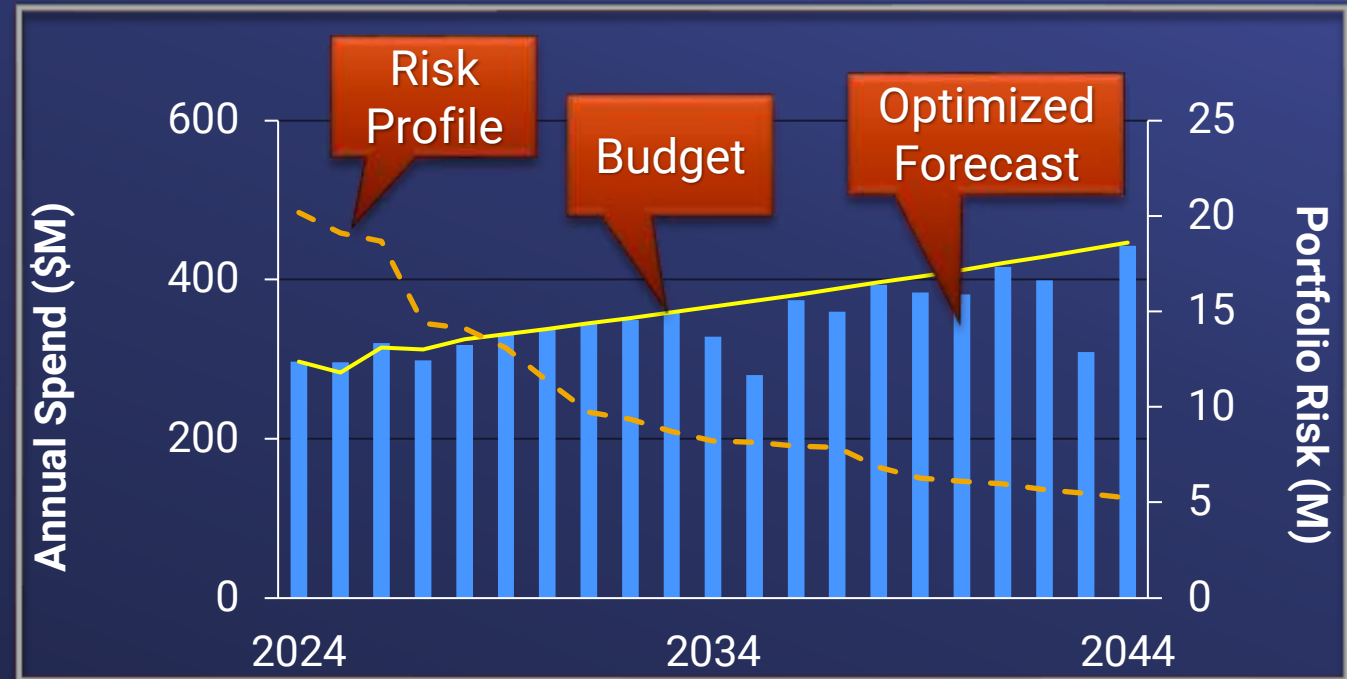


Is the proposed 10-year financial forecast sufficient?

AM Program

Capital Investment Plan (CIP) Risk

- Data collected from +500 capital project proposals
- Proof-of-concept model to optimize project delivery & sequencing



1 Risk Heatmap

2 Optimization Model

Tactical AM Plan

Zero Emission Vehicles

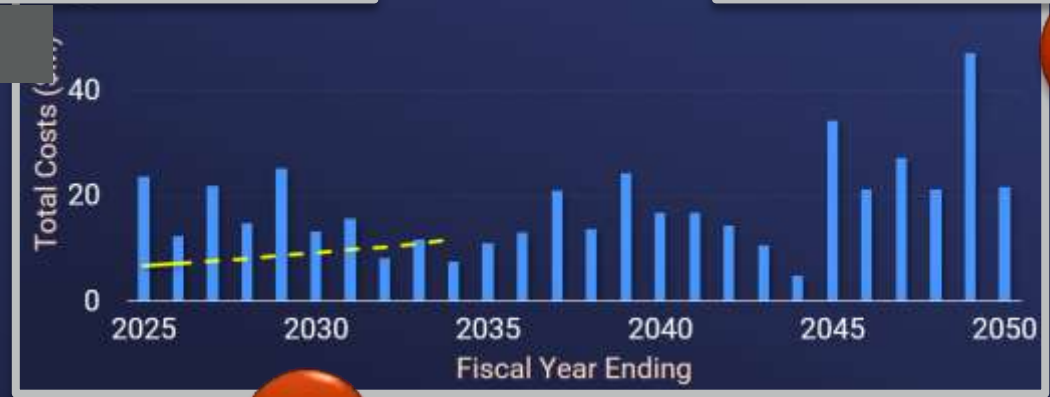
- Advanced AM practices to provide options for mitigating risk



	Low Criticality	Moderate Criticality	High Criticality
Very Poor	\$13M	\$11M	\$44M
Poor	\$11M	\$9M	\$30M
Good	\$13M	\$18M	\$32M

1 Condition Data

2 Risk



3 Long-Term Forecast

Maintenance Management

Facility Level Criticality Assessment



- Align CIP
- Optimize maintenance
- Assess system-level criticality

1 Segmentation

2 Insight

3 Next Steps

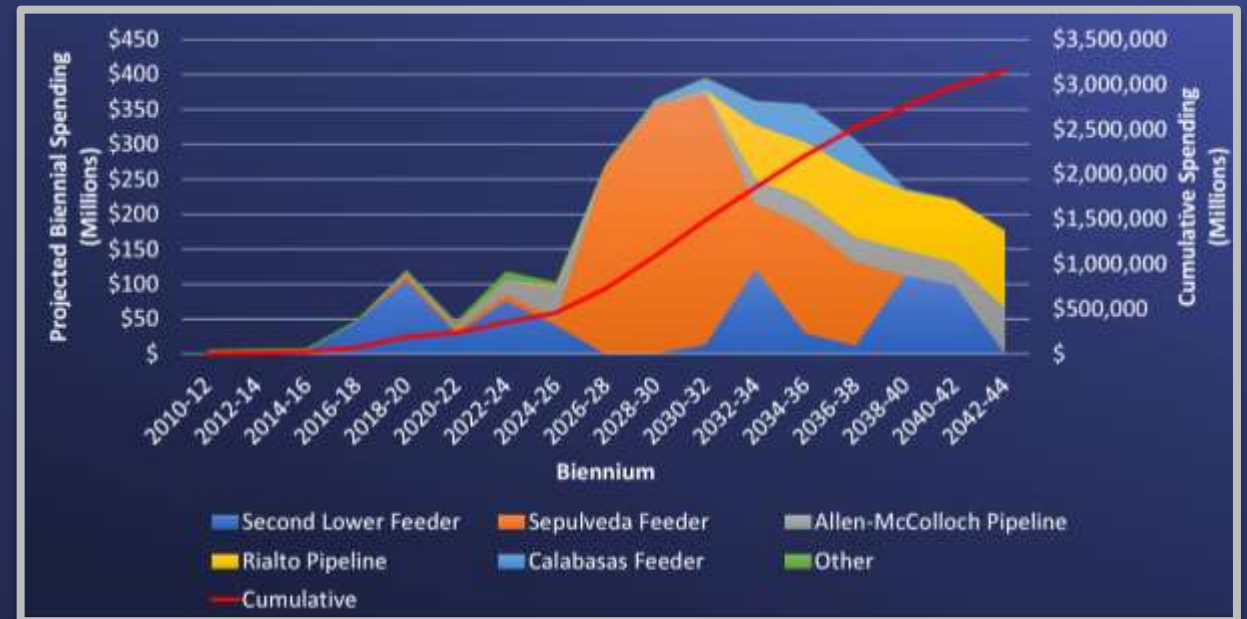
AM Program

Range of AM Maturity

- Extend AM approach used on ZEV to other assets (e.g., meters, pipelines, valves, pipelines, etc.)



A Service Connection Inspections



B Long-term Forecast for PCCP Renewals

Next Steps

- Update SAMP in 2025
 - AM maturity assessment consistent with ISO 55000
 - Benchmark AM practices with comparable agencies
 - Align with organizational goals
 - Improve the communication & implementation approach
- Continue progress on O&M side of AM
 - Asset Knowledge
 - Asset Hierarchy
 - System Criticality

