



Water Advisory Board

May 10, 2016



Infrastructure rehabilitation

Current estimated total funding needs

Water	-	\$100,000,000
Wastewater	-	\$100,000,000



Infrastructure rehabilitation

Street rehabilitation program

Water and sewer 10-year funding needs

Water	-	\$ 25,116,480
Wastewater	-	\$ 31,395,600



Infrastructure rehabilitation

Current capital fund balance

Water	-	\$3,361,379
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Wastewater	-	\$2,786,868
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Annual budgeted capital funding

Water	-	\$3,000,000
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Wastewater	-	\$1,200,000
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Infrastructure rehabilitation

Leverage capital funds for maximum impact

Debt availability (7-year period)

Water - \$45,000,000 (\$7.5M/yr)

Wastewater - \$41,000,000 (avg. \$5.8M/yr)



System operations

Master plan / condition assessment

3 phases:

- Master plan
- Risk-based condition assessment
- Leak detection



System operations master plan

Comprehensive assessment of water system

Objectives

- TCEQ regulatory compliance
 - Pressure plane evaluation
 - Storage & pumping capacities



System operations master plan

Comprehensive assessment of the water system

Objectives (cont.)

- Water system hydraulic model
- Projected future water demands / infrastructure
- Conduct a water age analysis



System operations risk-based condition assessment

Objectives:

Water system's remaining useful life?

Where is the system most at risk?

Understanding / reducing consequences of failure

- Will we fail to meet regulatory requirements
- Customer / service level impacts
- Water loss



System operations leak detection

Objectives

Reduce water loss

Maximize available water resources

Improve customer service

Reduce costs of producing and distributing water

Protect investments in infrastructure



System operations water system master plan

Cost

Master plan	-	\$154,440
Condition assessment	-	\$ 80,650
Leak detection	-	\$ 79,400
Total		\$314,460



CDM Smith, Inc.

- Experts in the field of strategic planning for Texas municipalities
- Dedicated teams of experts for the different phases of water master planning:
 - Modeling
 - Risk-based condition assessment
 - CIP development



Summary

Master plan

- Enhanced system operations
- Meet regulatory requirements

Condition assessment

- Utilize available funding to maximize impact on water loss and service levels
- Rehabilitation plan for bond funding





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