



City of Littleton Wastewater Utility

Utility Overview

August 8, 2017

The Difference

Collections v. Treatment

- **Wastewater collection** systems gather the used water from our homes, businesses and industries and convey it to a wastewater treatment plant. This type of system is also called a sanitary sewer.
- **Wastewater collection** infrastructure includes pump stations, force mains, and sewers.

Littleton Sewer Utility

- TABOR Enterprise
- 2016 Revenues - \$18,301,289
- 2016 Expenditures - \$12,369,334
 - Collections: \$1,150,988
 - Treatment: \$11,218,346



Systems Stats

- Approximately **128** miles of sanitary sewer pipe in the City's collection system ranging in size from 4" diameter to 66" diameter
- 8 sanitation districts connect to the City's interceptors

Operational Challenges

- Aging equipment
- Labor
 - not enough staff to reach the desired Level of Service
 - wages are not competitive in the marketplace
- CIRSA recommendations for maintenance frequency
- Currently we are very **reactive**, goal is to become more **proactive**



Long Term Strategic Planning

- Long term utility planning combines financial forecasting with asset management.
- Asset Management:
 - Evaluates existing system conditions
 - Asset portfolio
 - Maintenance demands
 - Infrastructure repair & replacement
 - Risk profile
 - Goal: Reduce risk & optimize cost
- Littleton does not have an asset management plan in the modern sense in place today.



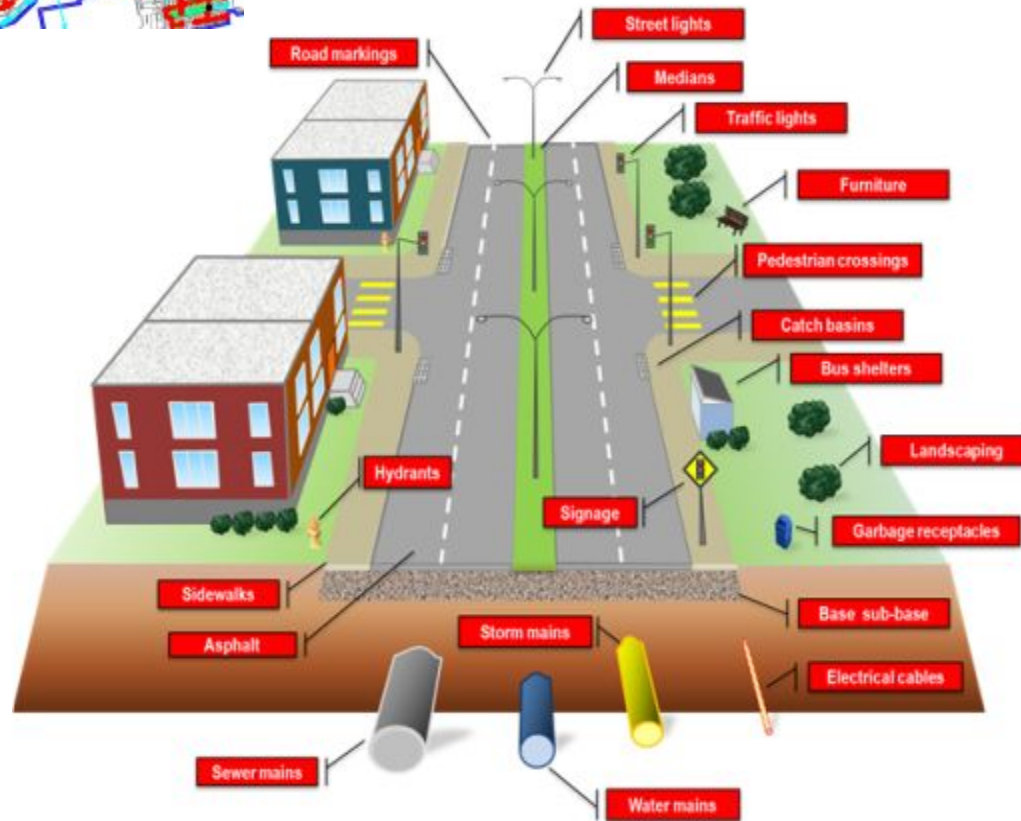
Benefits of Asset Management

- Prolonging asset life and improving decisions about asset rehabilitation, repair, and replacement
- Meeting consumer demands with a focus on system sustainability
- Setting rates based on sound operational and financial planning
- Budgeting focused on critical activities for sustained performance
- Meeting service expectations and regulatory requirements
- Improving responses to emergencies
- Improving the security and safety of assets
- Reducing overall costs for both operations and capital expenditures





Water and Sewer Asset Management



Current 5-Year Financial Model (Collections & Treatment)

City of Littleton
2016 - 2022 Sewer Analysis
FOR DISCUSSION PURPOSES ONLY
BIOGAS Project Cash Funded

8/2/2017 22:19

		BIOGAS Project Cash Funded Collection and Treatment					
	ACTUAL 2016	ESTIMATED 2017	PROJECTED 2018	PROJECTED 2019	PROJECTED 2020	PROJECTED 2021	PROJECTED 2022
Revenues	<i>Proposed rate increase =</i>						
		2.0%	0.0%	1.0%	1.5%	1.5%	1.5%
Total Revenues	\$18,048,015	\$16,063,598	\$15,889,171	\$16,008,391	\$15,843,016	\$16,105,833	\$16,339,182
Expenditures							
Operating:							
Total Operating Expenditures	\$8,182,700	\$10,185,182	\$11,974,804	\$10,163,810	\$10,474,510	\$10,745,533	\$10,576,747
Total Debt Service	\$3,555,218	\$3,550,810	\$3,552,390	\$3,555,160	\$3,555,680	\$3,553,710	\$3,558,140
Capital Projects - City - Collection	\$190,996	\$210,013	\$200,000	\$250,000	\$300,000	\$350,000	\$400,000
Capital Projects - Biogas - Treatment	0	0	4,000,000	0	0	0	0
Capital Projects - Bi-City - Treatment	440,420	2,040,000	1,550,000	960,000	4,110,000	8,400,000	8,400,000
Total Capital Projects	\$631,416	\$2,250,013	\$5,750,000	\$1,210,000	\$4,410,000	\$8,750,000	\$8,800,000
Total Expenditures	\$12,369,334	\$15,986,005	\$21,277,194	\$14,928,970	\$18,440,190	\$23,049,243	\$22,934,887
Beginning Cash Balance	\$21,194,090	\$26,872,771	\$26,950,364	\$21,562,340	\$22,641,760	\$20,044,585	\$13,101,174
Ending Cash Balance*	\$26,872,771	\$26,950,364	\$21,562,341	\$22,641,761	\$20,044,586	\$13,101,175	\$6,505,469
Less: operating reserve (17%)	(1,391,059)	(1,731,481)	(2,035,717)	(1,727,848)	(1,780,667)	(1,826,741)	(1,798,047)
Net Ending Cash Balance	\$25,481,712	\$25,218,883	\$19,526,624	\$20,913,913	\$18,263,919	\$11,274,434	\$4,707,422
Debt Coverage (must be 1.10 or higher per bond covenant)	2.77	1.65	1.10	1.64	1.51	1.51	1.62

Notes:

The Plant Master Plan was updated in 2017 and includes Capital Projects.
Per bond requirements, the City must maintain a \$3 million cash balance for rate stabilization purposes.
Cash has been reduced by \$1,180,000 as this is on deposit with City of Englewood per the treatment plant operating agreement.
Cash basis accounting is used for projection purposes.



Current 5-Year Financial Model (Treatment)

City of Littleton
2016 - 2022 Sewer Analysis
FOR DISCUSSION PURPOSES ONLY

8/2/2017 22:19

FOR DISCUSSION PURPOSES ONLY

		BIOGAS Project Cash Funded Treatment Only					
	ACTUAL 2016	ESTIMATED 2017	PROJECTED 2018	PROJECTED 2019	PROJECTED 2020	PROJECTED 2021	PROJECTED 2022
Revenues							
Total Revenues	\$17,167,437	\$15,134,081	\$14,931,619	\$15,037,591	\$14,853,096	\$15,098,262	\$15,315,767
Expenditures							
Operating:							
Total Operating Expenditures	\$7,222,708	\$8,832,962	\$9,225,227	\$8,552,905	\$8,805,360	\$9,019,958	\$8,787,567
Total Debt Service	\$3,555,218	\$3,550,810	\$3,552,390	\$3,555,160	\$3,555,680	\$3,553,710	\$3,558,140
Total Capital Projects	\$440,420	\$2,040,000	\$5,550,000	\$960,000	\$4,110,000	\$8,400,000	\$8,400,000
Total Expenditures	\$11,218,346	\$14,423,772	\$18,327,617	\$13,068,065	\$16,471,040	\$20,973,668	\$20,745,707
Total Net Surplus/(Deficit) Collection	\$5,949,091	\$710,309	(\$3,395,998)	\$1,969,526	(\$1,617,944)	(\$5,875,406)	(\$5,429,940)

Notes:

The Plant Master Plan was updated in 2017 and includes Capital Projects.

Per bond requirements, the City must maintain a \$3 million cash balance for rate stabilization purposes.

Cash has been reduced by \$1,180,000 as this is on deposit with City of Englewood per the treatment plant operating agreement.

Cash basis accounting is used for projection purposes.



Current 5-Year Financial Model (Collections)

City of Littleton
2016 - 2022 Sewer Analysis
FOR DISCUSSION PURPOSES ONLY

8/2/2017 22:19

FOR DISCUSSION PURPOSES ONLY

		BIOGAS Project Cash Funded Collection Only					
	ACTUAL 2016	ESTIMATED 2017	PROJECTED 2018	PROJECTED 2019	PROJECTED 2020	PROJECTED 2021	PROJECTED 2022
Revenues							
Total Revenues	\$880,578	\$929,517	\$957,551	\$970,799	\$989,919	\$1,007,570	\$1,023,414
Expenditures							
Operating:							
Total Operating Expenditures	\$959,992	\$1,352,220	\$2,749,577	\$1,610,905	\$1,669,150	\$1,725,575	\$1,789,180
Total Debt Service	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Capital Projects	\$190,996	\$210,013	\$200,000	\$250,000	\$300,000	\$350,000	\$400,000
Total Expenditures	\$1,150,988	\$1,562,233	\$2,949,577	\$1,860,905	\$1,969,150	\$2,075,575	\$2,189,180
Total Net Surplus/(Deficit) Collection	(\$270,410)	(\$632,716)	(\$1,992,026)	(\$890,106)	(\$979,231)	(\$1,068,005)	(\$1,165,766)

Notes:

The Plant Master Plan was updated in 2017 and includes Capital Projects.

Per bond requirements, the City must maintain a \$3 million cash balance for rate stabilization purposes.

Cash has been reduced by \$1,180,000 as this is on deposit with City of Englewood per the treatment plant operating agreement.

Cash basis accounting is used for projection purposes.



2017/2018 Plans

- RFP for Asset Management
 - Data collection on existing system
 - Camera all lines
 - Assess
 - system capacity
 - system condition
 - Evaluate risk profiles
- RFP for asset management platform (*Software*)
- Develop 20-year infrastructure needs model
- Develop asset maintenance support and replacement plan

2017/2018 Plan

- Develop cost model around needs, risk, aptitude for system investment
- Assess current rate structure against model
- Develop rate model that incorporates all known needs and growth (Unconstrained)
- Develop fiscally constrained rate model including
 - User fees
 - Tap fees
 - Plant investment fees
 - Debt model

Timeline

- September 2017 – RFP Asset Data Collection
 - Complete Q2 2018
- September 2017 – RFP Asset Management Platform
 - Complete Q2 2018
 - Implementation, Training, Data Merge
- System Financial Modeling
 - Complete Q3 2018
- Council Updates
 - System Profile & Infrastructure Needs Model - Q2 2018
 - Financial Model & Implications – Q3 2018

Timeline

- Rate Study
 - Commence in Q3 2019
 - Conclude in Q2 2020
 - Incorporate into 2021 Budget

Questions
