

Meeting Agenda

- Review of Objectives
- Prioritization of Projects
- Discussion of "Immediate Action" Projects

Objectives

- 1. Meet current and future demands for water and wastewater reliably
- 2. Provide safety and security of water resources systems
- 3. Maximize efficiency of water use and value of water resources
- 4. Improve water quality and ecological health of Harpeth River
- 5. Provide improved access and aesthetics of Harpeth River
- 6. Minimize carbon footprint of water resources operations
- 7. Achieve sustainable biosolids management
- 8. Achieve regional acceptance
- 9. Provide excellent level of water/wastewater utility services at reasonable cost

		Time/Implementation		
		15+ Years	5 – 15 Years	0 – 5 Years
	, Objectives)	Add Berry's Chapel & Cartwright Creek WWTPs Additional water conservation ordinances/programs	Add other potential reclaimed customers Annual leak detection program City owned facility stormwater reuse	SCADA System (Water/Wastewater) Low head dam removal Expand WTP to 4 mgd Rehabilitation for 1/1 reduction/control Calibrated wastewater collection model Automated Metering Infrastructure (AMI)
	Importance (Regulatory, Growth, Objectives)	Add septic users within UGB Water distribution quantity/supply improvements Irrigation controls ordinance Toilet/faucet replacement program	Streambank restoration projects Stormwater BMPs Produce Class A Biosolids (solar dryer)	Phase 1 of Wastewater Treatment Plant capacity to 16 mgd Produce Class B Biosolids (Thickening, Anaerobic Digestion, Dewatering)
\	Importar	New WWTP to increase capacity ultimately to 24 mgd (2 phases)	Upgrade reclaimed pump station to 12 mgd Add potential City owned reclaimed customers Calibrated water distribution model	Water distribution quality improvement (Multiple) projects WTP upgrades to meet LT2 regulations (UV addition)

Critical/Immediate Action Projects

Regulatory Driven Projects

- Distribution water quality improvements (D/DBP)
- Water treatment plant improvements (LT2ESWTR)

Growth/Capacity Projects

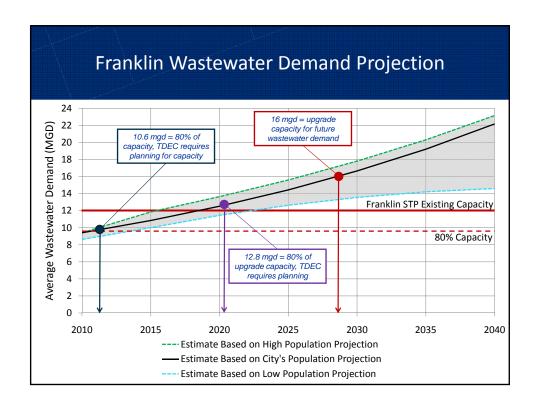
- Expansion of WWTP capacity to 16 MGD
- Biosolids facilities for 16 MGD
- SCADA (water/wastewater systems)
- Automated metering infrastructure (AMI)

Regulatory Driven Projects

- Distribution System Water Quality Improvements
 - Required to meet D/DBP rules for HAA and THM management
 - Aimed at reduction in water age in distribution system
 - \$2 million for multiple projects over next 2 fiscal years
- Water Treatment Plant Improvements
 - Upgrades to meet LT2ESWTR (Cryptosporidium)
 - Increased reliability and redundancy
 - Upgrades aging equipment
 - Expansion to 4 MGD results
 in operational cost savings







Growth/Capacity Projects

- Expansion of WWTP capacity to 16 MGD
 - Existing WWTP has hydraulic restrictions at peak flows
 - Existing WWTP has process equipment nearing end of useful life
- Adaptive management options
 - Existing plant site
 - Potential south plant
- Existing plant estimated to be at capacity in 2017-18

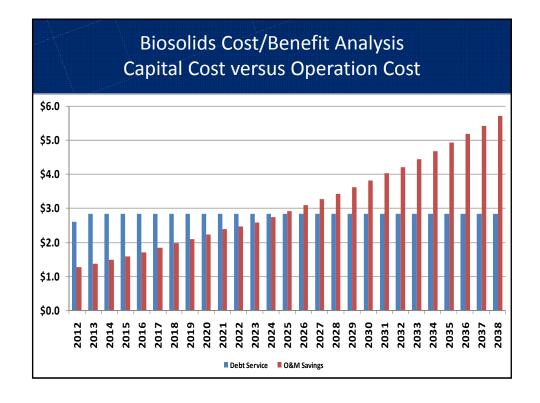


Growth/Capacity Projects

- Biosolids Facilities for 16 MGD
 - Existing biosolids process is risk to operations
 - Process must be expanded to accommodate City growth
 - Key driver is developing a sustainable, long-term solution with beneficially reusable product







Growth/Capacity Projects

- SCADA (water/wastewater systems)
 - Existing system is antiquated and data is not accessible
 - Can expand system with existing staff
 - Improved services such as improved emergency response
- Automated metering infrastructure (AMI)
 - Real time tracking of water demands
 - Consumption trends
 - Potential leaks
 - Reverse flow
 - Benefits to system customers
 - Allows Franklin to be proactive in addressing water loss
 - Improves customer service, billing accuracy, emergency response
 - Reduces operating expenses and risks associated with meter reading