

Implementing Conservation and DSM Programs in Water and Wastewater Utilities



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Austin Water Utility

- Department of City of Austin
- Provides Water and Wastewater Service
- Population Served 800,000 persons
- 450 Square miles service area
- 1,036 Employees



Water System Statistics

- Surface Water (Colorado River)
- 3 - Treatment Plants
- 193,276 water connections
- 260 MGD Water Treatment capacity
- +25 MGD soon to go on line
- 142 MGD average water production
- 2,800 miles water mains

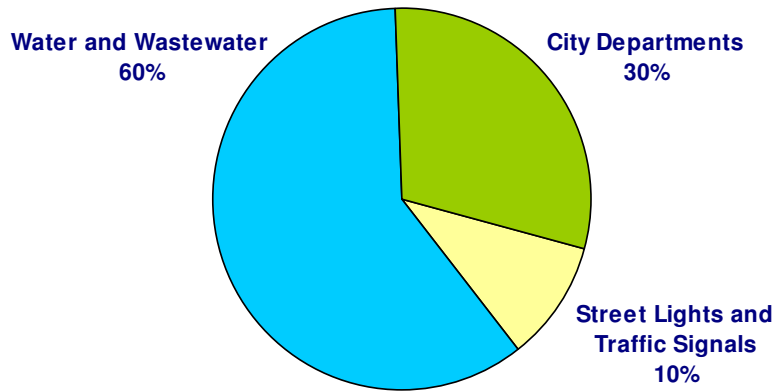


Wastewater System Statistics

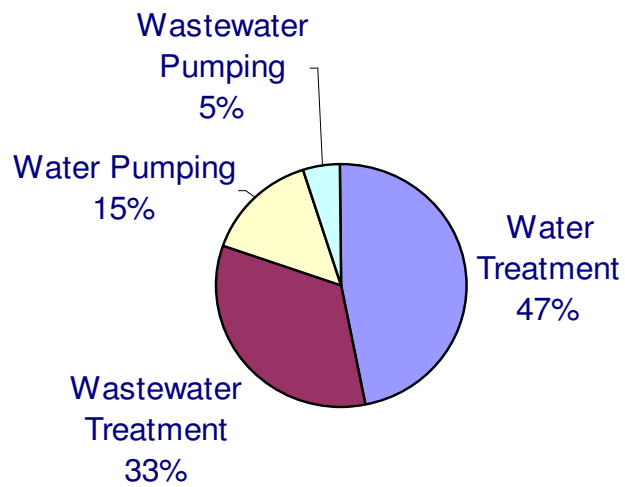
- 3 - Primary treatment plants
- 1 - sludge treatment facility
- 2,400 miles of wastewater main
- 150 MGD treatment capacity
- 115+ Lift stations



City of Austin Energy Use Breakdown



W&WW Energy use Breakdown



Current Energy Efficiency Drivers

- Texas Senate Bill 5 - 2001
- City of Austin's Commitment to conservation (water and energy)
- Reduce operating cost
- Upgrade equipment



Future Project Drivers

- Current drivers
- Meet future regulatory requirements
- Secure Future water Supplies
- Land and Easement acquisitions
- System Reliability
- Infrastructure Replacements



Project Development

- Re-active
 - Failed Equipment replacement
 - Preplan EE replacement
- Pro-Active means
 - Planned Upgrades
 - Various project drivers
 - Performance Contracting
 - Targeted at DSM and EE



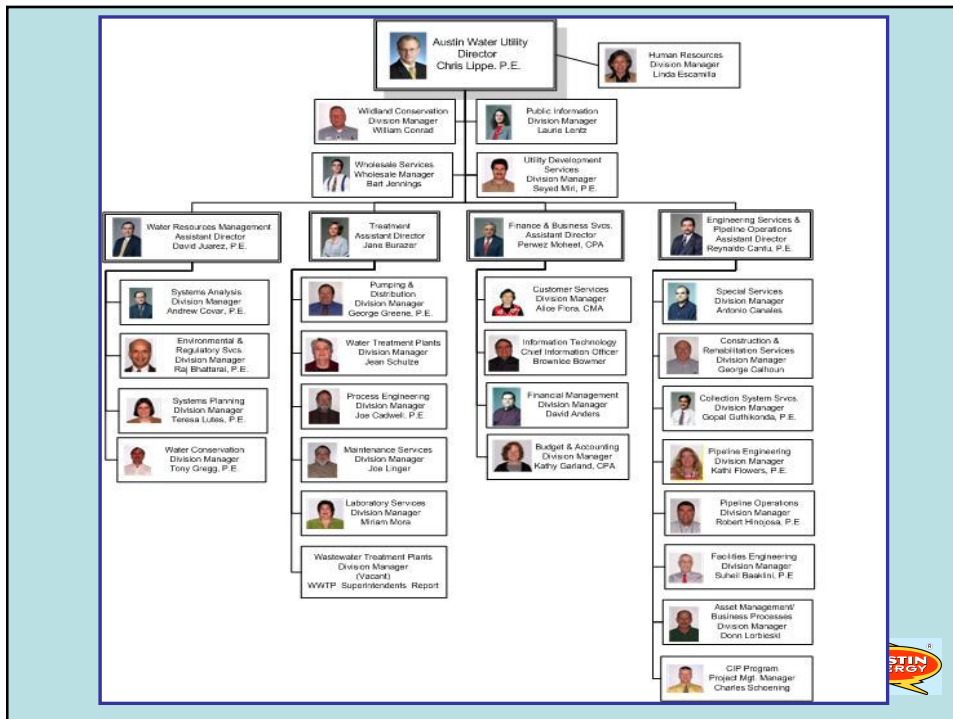
Project Development (Planned Upgrades)

- Develop RFQ for Master Plan Consultant
- Develop Master Plan and budgets
- Seek bond or other funding
- Develop RFQ for design services
- Prepare designs and specifications
- Bid design and construct
- Commission project

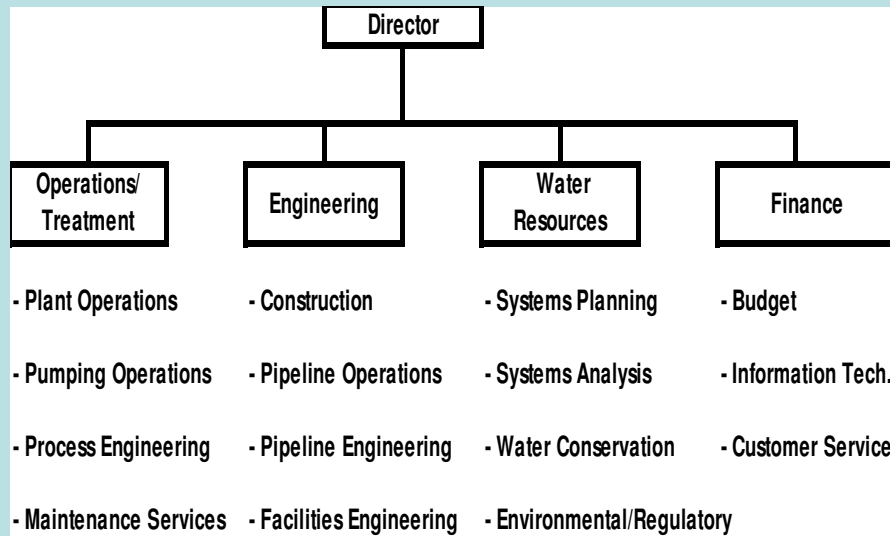


Project Development (Performance Contracting)

- Preliminary Energy Audits
- Detailed Energy Audits
- Project Proposals
- Design/Build
- Commission project



Water Utility Organizational Chart



Get projects implemented!

- Work at multiple levels in the organization
 - Management, Engineering, Plant Managers
- Find and maintain inside ally
- Facilitate information transfer
 - Invite staff/customers to training/events
- Consider timing
 - Introduce projects at the right time



Get projects implemented!

- Use multiple methods to gain influence
 - Internal
 - Gain city manager commitment
 - Set high level goals within the organization
 - Develop purchasing and funding tools
 - External
 - Rebates, grants, and cash incentives
 - Energy audit programs
 - Marketing Programs
 - Fund Technology Demonstrations



Questions & Answers



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