

# Perspective of Water & Wastewater Industry: City of Columbia

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CITY COUNCIL  
VISION STATEMENT

City of Columbia

# **WATER AND SEWER SYSTEM OVERVIEW**



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Approximately **2,400** miles of pipe carry fresh drinking water to City customers

**27** Booster Pump Stations &  
**24** Water Storage Tanks help serve the drinking water system

The City's **2** water treatment plants can produce up to **159 Million** gallons of drinking water each day



**55** City-owned Pump Stations move sewage through the wastewater system



In 2014, the City produced **20.9 Billion** gallons of drinking water and treated **13.3 Billion** gallons of sewage

With approximately **140,000** water customers & **60,000** sewer customers, City water and sewer serves about **400,000** people in the Midlands

Over **1,000** miles of pipe carry sewage to the City's wastewater treatment plant

The City's Metro Wastewater Treatment Plant can treat up to **60 Million** gallons of sewage each day



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# Water System

- Two water treatment plants



- Total capacity of 150 MGD – average approx. 60 MGD
- 141,000 customer accounts serving approx. 375,000 customers
- Customers include:
  - 5 major hospitals
  - Fort Jackson
  - McEntire Joint National Guard Base
  - University of South Carolina
  - State Capital and other state offices
  - Winsboro Water (Blythewood)



# Wastewater System

- Metro Wastewater Treatment Plant



- 60 MGD capacity, average approx. 40 MGD
- 62,000 customer accounts serving approx. 200,000 customers
- Customers include:
  - 5 major hospitals
  - Fort Jackson
  - University of South Carolina
  - State Capital and other state offices
  - West Columbia

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# CAPITAL IMPROVEMENT PROJECTS



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# Prioritization Of Water CIP Projects

- 1) Regulatory Compliance (WTP & Distribution)**
- 2) Fire Protection**
- 3) Water Quality Improvements**
- 4) Water Treatment Plant Upgrades (Non-regulatory)**
- 5) System Expansion & Contractual Obligations**



# Prioritization Of Wastewater CIP Projects

- 1) Regulatory Compliance & Consent Decree Requirements**
- 2) Rehabilitation Of Critical Collection System & WWTP Assets**
- 3) Capacity Enhancement (Correction of Capacity Limited Areas)**
- 4) System Expansion & Contractual Obligations**



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# CIP Project Types

## Drinking Water

- Water Plant improvements
  - High service pumps
  - Clearwell improvements
- Booster pump stations
- Waterline improvements
  - Neighborhood water quality
  - Capacity
- AMI installation

## Wastewater

- Metro WWTP improvements
  - Aeration system improvements
  - Anaerobic digesters
  - Biosolids handling
- Pump station improvements
- Sewer system assessment and projects
- Sewer system rehabilitation
- Sewer line improvements



# Working With the City

- Contractor Needs

- Water and Sewer Line (WL)
- Water and Sewer Plant (WP)
- Boring and Tunneling (BT)
- Building (BD)
- Concrete (CT, CP)
- Masonry (MS)
- Grading (GD)
- Asphalt Paving (AP)
- Electrical (EL)
- HVAC (HT)
- Roofing
- Hauling
- Landscaping
- ETC...



# Working With the City

- Programs
  - Mentor Protégé Program (MPP)
    - Provide MBE, WBE, and SBE assistance and operation strategies to grow business
    - Ultimately grow and compete water and sewer projects
  - Subcontractor Outreach Program (SOP)
    - Maximize subcontractor opportunities
    - Min 20% subcontracting on larger projects



# Working With the City

- Programs
  - Columbia Disadvantaged Business Enterprise (CDBE)
    - Subcontract % to qualified available CDBE subcontractors
    - Must register as CDBE
      - Certified business that has an office in Columbia-Orangeburg-Newberry Combined Statistical Area for one year
    - Does not apply to MPP
  - Local Business Preference Policy (LBE)
    - Maximize local business participation
    - Local contractor can match low bid of non local contractor if within 5%



# Working With the City

- City of Columbia Website
  - <http://www.columbiasc.net/business/bids-contracts-rfps>
  - Register on Bid Online

The screenshot shows the City of Columbia website interface. At the top, there is a navigation bar with 'HOME', 'LINKS', and 'FAQ' icons, and a search bar with 'City Search' and 'GO' buttons. Below this is a main menu with 'DEPARTMENTS', 'ABOUT', 'CITY COUNCIL', 'CITY SERVICES', 'BUSINESS', and 'CONTACT'. The main content area is divided into two columns. The left column is titled 'Business' and contains a list of links under various categories like Residential Development, Commercial Development, Growing Your Business, Starting a Business, and Small Business Assistance. The right column is titled 'Bids, Contracts, & RFP's' and features a large photograph of a city street with traffic. Below the photo are sections for 'Public Notices', 'Current Opportunities', 'Learn More About City Purchasing', 'Learn More About Engineering Bids', 'How to Do Business with the City', 'Rules & Regulations', 'Bid Results', and 'Business Outreach'.



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