

**WASTEWATER UTILITY TREATMENT FACILITIES IMPROVEMENTS**

The Wastewater Treatment System (System) collects, conveys and processes wastewater from an estimated 2.0 million people, generated in a service area which includes the City of Houston, several municipalities and unincorporated communities in the Houston metropolitan area. The system consists of approximately 6,200 miles of sanitary sewer lines, over 425,000 service connections, approximately 400 lift stations, 41 (5 major and 36 satellite) wastewater treatment plants, and three major sludge treatment facilities. The average daily wastewater flow through the system for the FY2005 is estimated at 267 million gallons per day (MGD). As reflected by state permits, the effective treatment capacity of the system is 564 MGD. The permitted capacity of plants is a part of the wastewater system treatment capacity that ranges from 0.20 MGD for the smallest plant to over 200 MGD for the 69th Street Wastewater Plant.

Prior to granting a building permit for construction, the City evaluates the wastewater system's ability to transport and treat the estimated volumes of additional wastewater. Impact fees are collected, at least in part, to recover the cost of facilities previously constructed. These fees can be applied to the construction of new facilities providing additional capacity.

The Wastewater Utility Treatment Facilities Improvements Program provides for the continued upgrading of the wastewater collection and treatment system. Additional funds are provided to comply with the regulations issued by the Texas Commission on Environmental Quality (TCEQ) and the U.S. Environmental Protection Agency (EPA).

The five-year program totals \$878.2 million and is financed through several funding sources with the largest single source being revenue bonds.

Highlights of the FY2006-2010 CIP include:

- Compliance with anticipated TCEQ Citywide Agreed Order.
- Rehabilitation or replacement of various wastewater treatment plants.
- Rehabilitation or replacement of various wastewater lift stations.
- Improvements to the Almeda Sims Wastewater Treatment Plant.
- Continued rehabilitation of neighborhood sewers to improve service, remove excessive infiltration, prevent sanitary sewer overflows, and eliminate sewage backups (\$28.8 million in FY2006).
- Improvements of sanitary sewer system in Houston Hope areas (R-0036).
- Increased participation in sewer line construction cost with Developers to promote inner city development.

SOURCE OF FUNDS SUMMARY (\$THOUSANDS)										
Source of Funds	Appropriations through Dec. 31, 2004	Estimated Appropriations Jan.1 - June 30 2005	Fiscal Year Planned Appropriations					Total	Total	
			2006	2007	2008	2009	2010	2006-2010		
Tx Water Development Board			80,795						80,795	80,795
Water & Sewer Ren. & Rep. Fund	38,435								0	38,435
Water & Sewer Cons. Const. Fund	862,168	98,716	91,451	167,839	179,851	176,641	181,607		797,389	1,758,273
Water & Sewer Operating Budget	360								0	360
<b>Total</b>	<b>900,963</b>	<b>98,716</b>	<b>172,246</b>	<b>167,839</b>	<b>179,851</b>	<b>176,641</b>	<b>181,607</b>		<b>878,184</b>	<b>1,877,863</b>

## WasteWater Facilities

FY2006 - 2010 CAPITAL IMPROVEMENT PLAN  
(\$THOUSANDS)

CIP NO.	COUNCIL DISTRICT	PROJECT NAME	FY2006	FY2007	FY2008	FY2009	FY2010	TOTAL FY2006 - 2010
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### WasteWater Facilities

R-0019	All	MISCELLANEOUS CONSTRUCTION ACQUISITION, ENGINEERING & LEGAL	7,500 AC	4,500 AC	5,200 AC	5,200 AC	5,200 AC	27,600AC
R-0036	B,D,H,I	HOUSTON HOPE PROJECT	1,460 C					1,460C
R-0265	All	WASTEWATER TREATMENT AND SLUDGE PLANT RENEWAL/REPLACEMENT	21,000 DC	21,750 DC	25,200 DC	23,200 DC	24,200 DC	115,350DC
R-0266	All	NEIGHBORHOOD SEWER REHABILITATION VAR. SERVICE AREAS	28,800 C	144,000C				
R-0267	All	PUMP AND LIFT STATION RENEWAL/REPLACEMENT	10,630 DC	11,000 DC	13,800 DC	13,800 DC	12,000 DC	61,230DC
R-0268	All	REHABILITATION/REPLACEMENT OF VARIOUS WASTEWATER FACILITIES	5,686 DC	3,139 C	1,751 DC	1,441 C	1,807 DC	13,824DC
R-0294	I	SIMS BAYOU TCEQ COMPLIANCE	12,000 DC	12,000 DC	12,000 C	13,200 DC	12,000 C	61,200DC
R-0295	ALL	TCEQ COMPLIANCE - CITYWIDE	12,500 C	12,500 C	12,500 C	14,000 C	14,000 C	65,500C
R-0298	D	ALMEDA SIMS WASTEWATER TREATMENT & SLUDGE PROCESS FACILITY	19,800 DC	9,300 DC	7,000 DC	7,000 DC	6,000 C	49,100DC
R-0302	All	WASTEWATER FACILITIES SAFETY IMPROVEMENTS	570 DC	550 DC	1,000 DC	1,000 DC	1,000 DC	4,120DC
R-0500	All	UTILITY IMPROVEMENT UNDER STREET & BRIDGE AND OTHER CIP PROJECTS	5,500 C	5,800 C	6,700 C	6,700 C	7,500 C	32,200C

LEGEND:      A = ACQUISITION      D = DESIGN      C = CONSTRUCTION      E = EQUIPMENT      O = OTHER      R = ART

## WasteWater Facilities

FY2006 - 2010 CAPITAL IMPROVEMENT PLAN  
(\$THOUSANDS)

CIP NO.	COUNCIL DISTRICT	PROJECT NAME	FY2006	FY2007	FY2008	FY2009	FY2010	TOTAL FY2006 - 2010
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### WasteWater Facilities

R-0509	I	69TH STREET WASTEWATER TREATMENT PLANT IMPROVEMENTS	5,000 C	4,500 DC	8,500 C	2,000 D	10,000 C	30,000DC
R-0512	All	SUPERVISORY CONT. & DATA ACQUISITION (SCADA) SYS. & PROCESS IMPROV.		4,000 C	500 D	2,000 C	500 D	7,000DC
R-0521	All	GOVERNMENT AGENCIES - SEWER LINE REPLACEMENT	2,300 C	2,000 DC	2,000 DC	2,000 DC	2,200 DC	10,500DC
R-0534	D	CULLEN MAINTENANCE FACILITY		5,200 C				5,200C
R-0535	All	NORTHWEST MAINTENANCE FACILITY FOR WASTEWATER OPERATIONS			500 D		3,500 C	4,000DC
R-0536	All	PLANT CONSOLIDATION	1,500 D	3,000 C	5,000 C	7,000 DC	5,000 C	21,500DC
R-0800	All	COLLECTION SYS. - SPONSOR PARTICIPATION CATEGORICAL (RESIDENT.)	7,000 C	35,000C				
R-0801	All	PROVIDING SEWER SERVICE TO AREAS INSIDE THE CITY NOT SERVED	3,900 DC	5,000 C	5,000 DC	5,000 C	1,000 D	19,900DC
R-0802	All	COLLECTION SYS. - SPONSOR PARTICIPATION CATEGORICAL (COMMERC.)	600 C	3,000C				
R-0803	ALL	EVALUATE & DEVELOP A PLAN TO REGIONALIZE THE WASTEWATER TREATMENT PLANTS & PROVIDE SANITARY SERVICE TO ETJ AREAS.	1,000 C	3,000 C	3,000 C	3,000 C	3,300 C	13,300C

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FY2006 - 2010 CAPITAL IMPROVEMENT PLAN  
(\$THOUSANDS)

CIP NO.	COUNCIL DISTRICT	PROJECT NAME	FY2006	FY2007	FY2008	FY2009	FY2010	TOTAL FY2006 - 2010
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### WasteWater Facilities

R-1000	All	EVALUATION OF WASTEWATER TREATMENT PLANT SERVICE AREA	2,000 DC	2,000 DC	2,500 DC	2,000 DC	2,500 DC	11,000DC
R-2003	B,H,I	NORTHSIDE SEWER RELIEF TUNNEL REHABILITATION	500 D	200 D	6,300 DC	6,700 C	7,000 C	20,700DC
R-2011	All	NEIGHBORHOOD SEWER SYSTEMS IMPROVEMENTS	13,000 DC	14,000 DC	15,000 DC	15,000 DC	16,500 DC	73,500DC
R-2013	All	LARGE DIAMETER SEWER ( LDS) REHABILITATION PROGRAM	10,000 C	8,000 C	10,000 C	10,000 C	10,000 C	48,000C

TOTAL PLAN:

172,246	167,839	179,851	176,641	181,607	878,184
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