

WATER SYSTEM FACILITIES IMPROVEMENTS

The Water System relies on both surface and ground water supplies. Surface water is taken from Lake Conroe and Lake Houston in the San Jacinto River System and Lake Livingston in the Trinity River System. In aggregate, these supplies are sufficient to meet the City's expected water requirements beyond the year 2035. However, additional water supplies must be developed to meet our long-term needs. In addition, the System continues to shift its supply source from groundwater to surface water in accordance with State mandates

The System delivers treated surface and ground water to customers through a series of storage tanks, pump stations and transmission and distribution mains. This potable water is sold to domestic, commercial, industrial, governmental and other customers in the Houston metropolitan area. Untreated surface water is delivered for sale to governmental, industrial and agricultural customers.

The Water System Capital Improvements Program continues to focus on neighborhood renewal by replacing old, unreliable water lines along with upgrading/improving the City's water transmission and treatment system to meet the demands of new growth and to replace an aging infrastructure.

Major capital projects to be undertaken in FY2005 include the following:

- Expansion and improvement of the East Water Purification Plant
- Providing water service to areas not previously served by the City.
- Construction of surface water transmission lines to provide a reliable surface water supply to north Houston.

- Initiate the purchase and installation of automated meter reading system.
- Installation of fire hydrants on undersized water lines to increase fire protection.
- Increase security of water treatment plants and water supply sources to meet the Federal Vulnerability Assessment Requirements.
- Rehabilitation of Large Diameter Water Transmission Lines.
- Continued replacement of neighborhood water mains to improve customer service, water quality, system reliability and assure compliance with TCEQ regulations (\$35.1 million proposed in FY2005).

SOURCE OF FUNDS SUMMARY (\$THOUSANDS)									
Source of Funds	Appropriations through Dec. 31, 2003	Estimated Appropriations Jan.1 - June 30 2004	Fiscal Year Planned Appropriations					Total	Total
			2005	2006	2007	2008	2009	2005 - 2009	
Annexed District Bond Fund	6,022							0	6,022
C.I.W.A. Bond Fund	36,000							0	36,000
Water & Sewer Cons. Const. Fund	1,478,342	127,352	157,162	149,273	153,518	140,350	141,275	741,578	2,347,272
Water & Sewer Ren. & Rep. Fund	24,621							0	24,621
Total	1,544,985	127,352	157,162	149,273	153,518	140,350	141,275	741,578	2,413,915

Water Facilities

FY2005 - 2009 CAPITAL IMPROVEMENT PLAN
(\$THOUSANDS)

CIP NO.	COUNCIL DISTRICT	PROJECT NAME	FY2005	FY2006	FY2007	FY2008	FY2009	TOTAL FY2005 - 2009
---------	------------------	--------------	--------	--------	--------	--------	--------	------------------------

Water Facilities

S-0012	C,D,E	SOUTHEAST WATER PURIFICATION PLANT EXPANSION/IMPROVEMENTS		25,710 DC	22,883 C		3,000 DC	51,593DC
S-0019	ALL	EMERGENCY NEEDS (ACQUISITION, ENGINEERING & LEGAL)	3,800 DC	3,800 DC	4,100 DC	4,100 DC	4,100 DC	19,900DC
S-0035	ALL	NEIGHBORHOOD RENEWAL: MASTER CATEGORICAL - WATER MAINS	35,100 DC	35,000 DC	46,000 DC	55,000 DC	55,000 DC	226,100DC
S-0037	ALL	CORROSION PREVENTION AND REHABILITATION PROGRAM	1,154 C	1,058 C	1,200 C	1,200 C	1,200 C	5,812C
S-0056	I	EAST WATER PURIFICATION PLANT UPGRADE AND OPTIMIZATION (File No. 10430)	10,183 DC	12,740 DC	8,600 DC	12,000 C	12,000 C	55,523DC
S-0100	ALL	REPLACEMENT WATER WELLS	2,000 AC			300 D		2,300ADC
S-0200	ALL	WATER WELL REWORK CATEGORICAL PROJECT	1,000 DC	5,000DC				
S-0500	ALL	Utility Improvements under Street & Bridge and Other	8,350 C	6,000 C	6,000 C	6,500 C	6,500 C	33,350C
S-0521	ALL	WATER MAIN REPLACEMENT-GOVERNMENTAL AGENCIES	4,000 C	4,000 C	4,200 C	4,300 C	4,300 C	20,800C
S-0522	I	CENTRAL CONTROL SYSTEM EXPANSION	10,700 C	2,000 C	2,000 C	2,000 C	2,000 C	18,700C
S-0530	ALL	WELL HEAD PROTECTION	1,000 AO	1,000 AO	1,000 AO	1,200 AO	2,000 AO	6,200AO

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

Water Facilities

FY2005 - 2009 CAPITAL IMPROVEMENT PLAN
(\$THOUSANDS)

CIP NO.	COUNCIL DISTRICT	PROJECT NAME	FY2005	FY2006	FY2007	FY2008	FY2009	TOTAL FY2005 - 2009
---------	------------------	--------------	--------	--------	--------	--------	--------	---------------------

Water Facilities

S-0533	ALL	SAFE DRINKING WATER ACT REQUIREMENTS	4,000 DC	4,500 DC	4,500 C	4,500 C	750 D	18,250DC
S-0600	ALL	STORAGE TANK REHABILITATION CATEGORICAL PROJECT	5,000 C	5,000 DC	6,000 C	6,000 DC	6,000 C	28,000DC
S-0610	ALL	NEW STORAGE TANKS	5,200 CO	7,200 DCO	3,000 DC	1,000 DC	1,000 DC	17,400DCO
S-0700	ALL	GRID EXTENSIONS CATEGORICAL PROJECT	3,000 DC	15,000DC				
S-0701	ALL	On-Call Rehab & Replacement Large Diameter Water Lines (16-inch and larger)	3,000 C	2,000 C	3,000 C	3,000 C	3,000 C	14,000C
S-0800	ALL	SPONSOR PARTICIPATION-WATER MAINS CATEGORICAL PROJECT (RESIDENTIAL)	2,000 C	10,000C				
S-0801	ALL	PROVIDING WATER SERVICE TO AREAS INSIDE THE CITY CURRENTLY NOT SERVED BY the CITY	2,500 C	2,000 C	500 D	2,000 C	2,000 C	9,000DC
S-0802	ALL	SPONSOR PARTICIPATION-WATER MAINS CATEGORICAL PROJECT (COMMERCIAL)	500 C	2,500C				
S-0900	ALL	SURFACE WATER TRANSMISSION	25,500 DC	15,000 DC	15,000 DC	15,000 DC	15,000 DC	85,500DC
S-0936	ALL	WELL COLLECTION AND LINE FLOW METER PROGRAM	3,500 DC	900 DC	900 DC	900 DC	750 C	6,950DC
S-0940	ALL	AMERICANS WITH DISABILITIES ACT		15 O	200 O	15 O	200 O	430O

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

Water Facilities

FY2005 - 2009 CAPITAL IMPROVEMENT PLAN
(\$THOUSANDS)

CIP NO.	COUNCIL DISTRICT	PROJECT NAME	FY2005	FY2006	FY2007	FY2008	FY2009	TOTAL FY2005 - 2009
---------	------------------	--------------	--------	--------	--------	--------	--------	------------------------

Water Facilities

S-0950	ALL	WATER CONSERVATION IMPLEMENTATION	1,250 C		500 D	500 D	500 D	2,750DC
S-1000	ALL	PUMP STATIONS UPGRADE	6,580 DCO	6,250 DCO	7,245 DCO	5,185 DC O	4,875 CO	30,135DCO
S-1004	A	JERSEY VILLAGE WATER PLANT	1,500 C					1,500C
S-1007	ALL	AMMONIA PROJECT	3,095 C	500 D	2,440 C	500 D	2,500 C	9,035DC
S-1008	ALL	CHLORINE SCRUBBER PROJECTS	1,500 C	350 D		900 C	350 D	3,100DC
SI-0536	ALL	PLANT CONSOLIDATION	750 C	750 C	750 C	750 C	750 C	3,750C
SI-0702	ALL	VALVE REPLACEMENT & INSTALLATION	3,000 C	2,000 C	2,000 C	2,000 C	2,000 C	11,000C
SI-0901	ALL	LARGE DIAMETER INSPECTION, REPLACEMENT/REHABILITATION	8,000 C	5,000 C	5,000 C	5,000 C	5,000 C	28,000C

TOTAL PLAN:

	157,162	149,273	153,518	140,350	141,275	741,578
--	---------	---------	---------	---------	---------	---------

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