

WATER SYSTEM FACILITIES IMPROVEMENTS



WATER UTILITY SYSTEM FACILITIES IMPROVEMENTS

The Water Utility System (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 Utility System Capital Improvements Program (CIP) 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 replace an aging infrastructure and to meet the demands of new growth. The five-year program totals \$742.8 million and is financed with revenue bonds.

Highlights of the FY2006-2010 CIP include:

- Expansion and improvement of the Southeast and East Water Purification Plants.
- Construction of surface water transmission lines to provide a reliable surface water supply for Houston.
- 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 (\$56.6 million in FY2006).
- Improvements of water distribution system in Houston Hope areas (S-0036).
- Increased participation in water main 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	
Annexed District Bond Fund	5,361							0	5,361
C.I.W.A. Bond Fund	36,000							0	36,000
Water & Sewer Cons. Const. Fund	1,583,367	127,143	152,076	162,028	157,906	144,188	126,579	742,777	2,453,287
Water & Sewer Ren. & Rep. Fund	24,621							0	24,621
Total	1,649,349	127,143	152,076	162,028	157,906	144,188	126,579	742,777	2,519,269

2006-2010 CAPITAL IMPROVEMENT PLAN

CITY OF HOUSTON

Program: Water Facilities			SUMMARY OF FUNDS (Thousands)						
C.I.P. Number	Project	Council District	Appropriations Through June 30, 2005	Fiscal Year Planned Appropriations					Project Total
				2006	2007	2008	2009	2010	
S-0012	SOUTHEAST WATER PURIFICATION PLANT EXPANSION/IMPROVEMENTS	C,D,E	0						0
	C.I.W.A. Bond Fund		36,000						36,000
	Water & Sewer Cons. Const. Fund		163,914	10,000	22,800	15,000	7,600		219,314
	Project Total		199,914	10,000	22,800	15,000	7,600	0	255,314
S-0019	EMERGENCY NEEDS (ACQUISITION, ENGINEERING & LEGAL)	ALL							
	Water & Sewer Cons. Const. Fund		27,533	7,500	9,000	9,000	9,000	9,000	71,033
	Project Total		27,533	7,500	9,000	9,000	9,000	9,000	71,033
S-0035	NEIGHBORHOOD RENEWAL: MASTER CATEGORICAL - WATER MAINS	ALL	0						0
	Water & Sewer Cons. Const. Fund		237,077	45,465	64,497	54,906	59,688	53,679	515,312
	Project Total		237,077	45,465	64,497	54,906	59,688	53,679	515,312
S-0036	HOUSTON HOPE PROJECT	B,H,I,D	0						0
	Water & Sewer Cons. Const. Fund		0	640	3,831				4,471
	Project Total		0	640	3,831	0	0	0	4,471
S-0037	CORROSION PREVENTION AND REHABILITATION PROGRAM	ALL							
	Water & Sewer Cons. Const. Fund		7,664	1,600	1,600	1,600	1,600	1,600	15,664
	Project Total		7,664	1,600	1,600	1,600	1,600	1,600	15,664

2006-2010 CAPITAL IMPROVEMENT PLAN

CITY OF HOUSTON

Program: Water Facilities			SUMMARY OF FUNDS (Thousands)						
C.I.P. Number	Project	Council District	Appropriations Through June 30, 2005	Fiscal Year Planned Appropriations					Project Total
				2006	2007	2008	2009	2010	
S-0056	EAST WATER PURIFICATION PLANT UPGRADE AND OPTIMIZATION Water & Sewer Cons. Const. Fund	I	319,665	5,000	2,000	10,000	10,000		346,665
	Project Total		319,665	5,000	2,000	10,000	10,000	0	346,665
S-0200	WATER WELL REWORK CATEGORICAL PROJECT Annexed District Bond Fund Water & Sewer Cons. Const. Fund Water & Sewer Ren. & Rep. Fund	ALL	0 5 44,976 6,922	1,500	1,500	1,500	1,500	1,500	0 5 52,476 6,922
	Project Total		51,903	1,500	1,500	1,500	1,500	1,500	59,403
S-0500	UTILITY IMPROVEMENTS UNDER STREET & BRIDGE AND OTHER CIP PROJECTS Water & Sewer Cons. Const. Fund	ALL	15,095	10,341	6,000	6,500	6,500	6,500	50,936
	Project Total		15,095	10,341	6,000	6,500	6,500	6,500	50,936
S-0521	WATER MAIN REPLACEMENT-GOVERNMENTAL AGENCIES Water & Sewer Cons. Const. Fund Water & Sewer Ren. & Rep. Fund	ALL	0 58,809 4,194	4,000	4,200	4,300	4,300	4,300	0 79,909 4,194
	Project Total		63,003	4,000	4,200	4,300	4,300	4,300	84,103
S-0522	CENTRAL CONTROL SYSTEM EXPANSION Water & Sewer Cons. Const. Fund	I	46,893	2,000	2,000	2,000	2,000	2,000	56,893
	Project Total		46,893	2,000	2,000	2,000	2,000	2,000	56,893

2006-2010 CAPITAL IMPROVEMENT PLAN

CITY OF HOUSTON

Program: Water Facilities			SUMMARY OF FUNDS (Thousands)						
C.I.P. Number	Project	Council District	Appropriations Through June 30, 2005	Fiscal Year Planned Appropriations					Project Total
				2006	2007	2008	2009	2010	
S-0530	WELL HEAD PROTECTION	ALL							
	Water & Sewer Cons. Const. Fund		866	1,000	1,000	1,000	1,000	1,000	5,866
	Project Total		866	1,000	1,000	1,000	1,000	1,000	5,866
S-0533	SAFE DRINKING WATER ACT REQUIREMENTS	ALL							
	Water & Sewer Cons. Const. Fund		4,221	4,500					8,721
	Project Total		4,221	4,500	0	0	0	0	8,721
S-0536	PLANT CONSOLIDATION	ALL							
	Water & Sewer Cons. Const. Fund		0	750	750	750	750	750	3,750
	Project Total		0	750	750	750	750	750	3,750
S-0600	STORAGE TANK REHABILITATION CATEGORICAL PROJECT	ALL	0						0
	Annexed District Bond Fund		2,109						2,109
	Water & Sewer Cons. Const. Fund		59,258	5,000	5,000	5,000	5,000	5,000	84,258
	Water & Sewer Ren. & Rep. Fund		12,975						12,975
	Project Total		74,342	5,000	5,000	5,000	5,000	5,000	99,342
S-0610	NEW STORAGE TANKS	ALL							
	Water & Sewer Cons. Const. Fund		27,032	6,400	250		2,000		35,682
	Project Total		27,032	6,400	250	0	2,000	0	35,682

2006-2010 CAPITAL IMPROVEMENT PLAN

CITY OF HOUSTON

Program: Water Facilities			SUMMARY OF FUNDS (Thousands)						
C.I.P. Number	Project	Council District	Appropriations Through June 30, 2005	Fiscal Year Planned Appropriations					Project Total
				2006	2007	2008	2009	2010	
S-0700	GRID EXTENSIONS CATEGORICAL PROJECT	ALL	0						0
	Annexed District Bond Fund		3,247						3,247
	Water & Sewer Cons. Const. Fund		99,575	2,780	2,650	4,950	2,650	2,650	115,255
	Water & Sewer Ren. & Rep. Fund		530						530
	Project Total		103,352	2,780	2,650	4,950	2,650	2,650	119,032
S-0701	ON-CALL REHAB & REPLACEMENT LARGE DIAMETER WATER LINES (16-INCH AND LARGER)	ALL	0						0
	Water & Sewer Cons. Const. Fund		10,880	1,500	1,500	4,500		1,500	19,880
	Project Total		10,880	1,500	1,500	4,500	0	1,500	19,880
S-0702	VALVE REPLACEMENT & INSTALLATION	ALL	0						0
	Water & Sewer Cons. Const. Fund		3,000	3,000		3,000		3,000	12,000
	Project Total		3,000	3,000	0	3,000	0	3,000	12,000
S-0800	SPONSOR PARTICIPATION-WATER MAINS CATEGORICAL PROJECT (RESIDENTIAL)	ALL	0						0
	Water & Sewer Cons. Const. Fund		20,099	5,000	5,000	5,000	5,000	5,000	45,099
	Project Total		20,099	5,000	5,000	5,000	5,000	5,000	45,099

2006-2010 CAPITAL IMPROVEMENT PLAN

CITY OF HOUSTON

Program: Water Facilities			SUMMARY OF FUNDS (Thousands)						
C.I.P. Number	Project	Council District	Appropriations Through June 30, 2005	Fiscal Year Planned Appropriations					Project Total
				2006	2007	2008	2009	2010	
S-0801	PROVIDING WATER SERVICE TO AREAS INSIDE THE CITY CURRENTLY NOT SERVED BY THE CITY	ALL							
			0						0
	Water & Sewer Cons. Const. Fund		4,545	2,500	2,000	2,000	2,000	2,000	15,045
	Project Total		4,545	2,500	2,000	2,000	2,000	2,000	15,045
S-0802	SPONSOR PARTICIPATION-WATER MAINS CATEGORICAL PROJECT (COMMERCIAL)	ALL							
			0						0
	Water & Sewer Cons. Const. Fund		835	500	500	500	500	500	3,335
	Project Total		835	500	500	500	500	500	3,335
S-0900	SURFACE WATER TRANSMISSION	ALL							
	Water & Sewer Cons. Const. Fund		488,756	25,600	20,450	20,900	17,600	21,100	594,406
	Project Total		488,756	25,600	20,450	20,900	17,600	21,100	594,406
S-0901	LARGE DIAMETER INSPECTION, REPLACEMENT/REHABILITATION	ALL							
			0						0
	Water & Sewer Cons. Const. Fund		0	3,000	3,000	3,000	3,000	3,000	15,000
	Project Total		0	3,000	3,000	3,000	3,000	3,000	15,000
S-0936	WELL COLLECTION LINE AND LINE FLOW METER PROGRAM	All							
			0						0
	Water & Sewer Cons. Const. Fund		10,809	1,000	1,000	1,000	1,000	1,000	15,809
	Project Total		10,809	1,000	1,000	1,000	1,000	1,000	15,809

2006-2010 CAPITAL IMPROVEMENT PLAN

CITY OF HOUSTON

Program:			SUMMARY OF FUNDS (Thousands)						
C.I.P. Number	Project	Council District	Appropriations Through June 30, 2005	Fiscal Year Planned Appropriations					Project Total
				2006	2007	2008	2009	2010	
S-1000	PUMP STATION UPGRADE	ALL	0						0
	Water & Sewer Cons. Const. Fund		59,008	1,500	1,500	1,500	1,500	1,500	66,508
	Project Total		59,008	1,500	1,500	1,500	1,500	1,500	66,508
	Total Appropriations		1,776,492	152,076	162,028	157,906	144,188	126,579	2,519,269

2006 - 2010 CAPITAL IMPROVEMENT PLAN

CITY OF HOUSTON

Project : SOUTHEAST WATER PURIFICATION PLANT EXPANSION/IMPROVEMENTS	Council District		C.I.P. Number: S-0012					
	Location: C,D,E	Served: ALL	Key Map: 577R		Neighborhood:			
	Geographic Reference: 5952-0507							
Description: This project will increase the capacity of the Southeast Water Purification Plant by providing for Interim Expansion, Filter Rate Study, Chemical Storage Improvements, secure Signal and Railroad Tracks, Railway Right of Way Acquisition. 80 MGD expansion. Justification: To obtain TCEQ approval of the capacity rating increase.	Operating and Maintenance Costs:(Thousands)							
		<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>		
	Personnel							
	Supplies							
	Svcs. and Chgs							
Capital Outlay								
Total								
FTEs								
Project Allocation	Appropriations Through Dec. 31, 2004 (Thousands)	Estimated Appropriations Jan 1 - June 30 2005 (Thousands)	Fiscal Year Planned Appropriations (Thousands)					Project Total
			2006	2007	2008	2009	2010	
Acquisition	4,491						4,491	
Design	42,936						42,936	
Construction	151,914		10,000	22,800	15,000	7,600	207,314	
Equipment								
Civic Art								
Other	573						573	
Total Allocations	199,914		10,000	22,800	15,000	7,600	255,314	
Source of Funds								
Water & Sewer Cons. Const. Fund	163,914		10,000	22,800	15,000	7,600	219,314	
C.I.W.A. Bond Fund	36,000						36,000	
Total Funds	199,914		10,000	22,800	15,000	7,600	255,314	

2006 - 2010 CAPITAL IMPROVEMENT PLAN

CITY OF HOUSTON

Project : EMERGENCY NEEDS (ACQUISITION, ENGINEERING & LEGAL)	Council District		C.I.P. Number: S-0019					
	Location: ALL	Served: ALL	Key Map: N/A		Neighborhood:			
	Geographic Reference: N/A							
Description: Previously S-0517, this project provides for unforeseen emergency needs for facility right-of-way, site and easement acquisition; engineering services and legal services required in conjunction with various projects and activities. Justification: This project is needed to provide for unforeseen costs.	Operating and Maintenance Costs:(Thousands)							
		<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>		
	Personnel							
	Supplies							
	Svcs. and Chgs							
Capital Outlay								
Total								
FTEs								
Project Allocation	Appropriations Through Dec. 31, 2004 (Thousands)	Estimated Appropriations Jan 1 - June 30 2005 (Thousands)	Fiscal Year Planned Appropriations (Thousands)					Project Total
			2006	2007	2008	2009	2010	
Acquisition	3,754		1,800	1,500	1,500	1,500	1,500	11,554
Design	4,939	500						5,439
Construction	10,764		5,700	7,500	7,500	7,500	7,500	46,464
Equipment								
Civic Art								
Other	7,576							7,576
Total Allocations	27,033	500	7,500	9,000	9,000	9,000	9,000	71,033
Source of Funds								
Water & Sewer Cons. Const. Fund	27,033	500	7,500	9,000	9,000	9,000	9,000	71,033
Total Funds	27,033	500	7,500	9,000	9,000	9,000	9,000	71,033

2006 - 2010 CAPITAL IMPROVEMENT PLAN

CITY OF HOUSTON

Project : NEIGHBORHOOD RENEWAL: MASTER CATEGORICAL - WATER MAINS	Council District		C.I.P. Number: S-0035					
	Location:ALL	Served: ALL	Key Map: N/A		Neighborhood:			
	Geographic Reference: N/A							
Description: This project provides for the design and construction of replacement distribution mains and upgrades small mains which have documented maintenance problems. Justification: This project will improve customer service, water quality, system reliability and assures compliance with TCEQ rules.	Operating and Maintenance Costs:(Thousands)							
		<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>		
	Personnel							
	Supplies							
	Svcs. and Chgs							
Capital Outlay								
Total								
FTEs								
Project Allocation	Appropriations Through Dec. 31, 2004 (Thousands)	Estimated Appropriations Jan 1 - June 30 2005 (Thousands)	Fiscal Year Planned Appropriations (Thousands)					Project Total
			2006	2007	2008	2009	2010	
Acquisition	26						26	
Design	49,397	10,356	8,000	9,700	9,700	9,700	9,000	105,853
Construction	155,640	18,037	37,465	54,797	45,206	49,988	44,679	405,812
Equipment	2,100							2,100
Civic Art								
Other	1,521							1,521
Total Allocations	208,684	28,393	45,465	64,497	54,906	59,688	53,679	515,312
Source of Funds								
Water & Sewer Cons. Const. Fund	208,684	28,393	45,465	64,497	54,906	59,688	53,679	515,312
Total Funds	208,684	28,393	45,465	64,497	54,906	59,688	53,679	515,312

2006 - 2010 CAPITAL IMPROVEMENT PLAN

CITY OF HOUSTON

Project : HOUSTON HOPE PROJECT	Council District		C.I.P. Number: S-0036		
	Location: B,H,I,D	Served: B,H,I,D	Key Map: VAR		Neighborhood: VAR
	Geographic Reference: VAR				
Description: This project provides for the design and construction of replacement distribution mains and upgrades small mains in the areas within the Houston Hope Project.			Operating and Maintenance Costs:(Thousands) 2006 2007 2008 2009 2010		
Justification: This project will improve water quality, system reliability and fire protection for the neighborhoods.			Personnel Supplies Svcs. and Chgs Capital Outlay Total FTEs		

Project Allocation	Appropriations Through Dec. 31, 2004 (Thousands)	Estimated Appropriations Jan 1 - June 30 2005 (Thousands)	Fiscal Year Planned Appropriations (Thousands)					Project Total
			2006	2007	2008	2009	2010	
Acquisition								
Design			640					640
Construction				3,831				3,831
Equipment								
Civic Art								
Total Allocations			640	3,831				4,471
Source of Funds								
Water & Sewer Cons. Const. Fund			640	3,831				4,471
Total Funds			640	3,831				4,471

2006 - 2010 CAPITAL IMPROVEMENT PLAN

CITY OF HOUSTON

Project : CORROSION PREVENTION AND REHABILITATION PROGRAM	Council District		C.I.P. Number: S-0037					
	Location: ALL	Served: ALL	Key Map: N/A		Neighborhood:			
	Geographic Reference: N/A							
Description: This project includes the design, investigation and subsequent corrosion protection on existing water lines. This includes the protective coatings on Aerial Crossings as well as the cathodic protection of main lines. Justification: This project has a positive impact on system reliability, public safety, customer satisfaction and management efficiencies. It also fulfills the need to renew and replace deteriorated materials.	Operating and Maintenance Costs:(Thousands)							
		<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>		
	Personnel							
	Supplies							
	Svcs. and Chgs							
	Capital Outlay							
Total								
	FTEs							
Project Allocation	Appropriations Through Dec. 31, 2004 (Thousands)	Estimated Appropriations Jan 1 - June 30 2005 (Thousands)	Fiscal Year Planned Appropriations (Thousands)					Project Total
			2006	2007	2008	2009	2010	
Acquisition								
Design								
Construction	7,664		1,600	1,600	1,600	1,600	1,600	15,664
Equipment								
Civic Art								
Total Allocations	7,664		1,600	1,600	1,600	1,600	1,600	15,664
Source of Funds								
Water & Sewer Cons. Const. Fund	7,664		1,600	1,600	1,600	1,600	1,600	15,664
Total Funds	7,664		1,600	1,600	1,600	1,600	1,600	15,664

2006 - 2010 CAPITAL IMPROVEMENT PLAN

CITY OF HOUSTON

Project : EAST WATER PURIFICATION PLANT UPGRADE AND OPTIMIZATION	Council District		C.I.P. Number: S-0056	
	Location:	Served: ALL	Key Map: 496Y Neighborhood:	
	Geographic Reference: 5756-1311			

Description:
 This project upgrades and optimizes the East Water Plants to comply with Federal and State regulations and to increase the capacity and reliability of the plants to meet immediate and future needs of the City and its customers.

Justification:
 This project is required to meet the requirements of the Safe Drinking Water Act and TCEQ.

Operating and Maintenance Costs:(Thousands)					
	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>
Personnel					
Supplies					
Svcs. and Chgs					
Capital Outlay					
Total					
FTEs					

Project Allocation	Appropriations Through Dec. 31, 2004 (Thousands)	Estimated Appropriations Jan 1 - June 30 2005 (Thousands)	Fiscal Year Planned Appropriations (Thousands)					Project Total
			2006	2007	2008	2009	2010	
Acquisition	9,545							9,545
Design	32,940			2,000				34,940
Construction	273,320	210	5,000		10,000	10,000		298,530
Equipment								
Civic Art								
Other	3,650							3,650
Total Allocations	319,455	210	5,000	2,000	10,000	10,000		346,665

Source of Funds								
Water & Sewer Cons. Const. Fund	319,455	210	5,000	2,000	10,000	10,000		346,665
Total Funds	319,455	210	5,000	2,000	10,000	10,000		346,665

2006 - 2010 CAPITAL IMPROVEMENT PLAN

CITY OF HOUSTON

Project : WATER WELL REWORK CATEGORICAL PROJECT	Council District		C.I.P. Number: S-0200	
	Location: ALL	Served: ALL		
	Geographic Reference: N/A		Key Map: N/A	Neighborhood:

Description:
Project provides for the rehabilitation of existing water wells to extend service life, improve water quality and reduce maintenance costs.

Justification:
This project is necessary in order to meet system demands and improve reliability.

Operating and Maintenance Costs:(Thousands)	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>
	Personnel				
	Supplies				
	Svcs. and Chgs				
	Capital Outlay				
	Total				
FTEs					

Project Allocation	Appropriations Through Dec. 31, 2004 (Thousands)	Estimated Appropriations Jan 1 - June 30 2005 (Thousands)	Fiscal Year Planned Appropriations (Thousands)					Project Total
			2006	2007	2008	2009	2010	
Acquisition	32							32
Design	1,211							1,211
Construction	48,130	2,530	1,500	1,500	1,500	1,500	1,500	58,160
Equipment								
Civic Art								
Total Allocations	49,373	2,530	1,500	1,500	1,500	1,500	1,500	59,403

Source of Funds								
Annexed District Bond Fund	5							5
Water & Sewer Cons. Const. Fund	42,446	2,530	1,500	1,500	1,500	1,500	1,500	52,476
Water & Sewer Ren. & Rep. Fund	6,922							6,922
Total Funds	49,373	2,530	1,500	1,500	1,500	1,500	1,500	59,403

2006 - 2010 CAPITAL IMPROVEMENT PLAN

CITY OF HOUSTON

Project : WATER MAIN REPLACEMENT-GOVERNMENTAL AGENCIES	Council District		C.I.P. Number: S-0521					
	Location: ALL	Served: ALL	Key Map: VAR		Neighborhood:			
	Geographic Reference: VAR							
Description: This project provides for the design and construction of distribution mains to replace water mains conflicting with proposed construction of other governmental agency projects inside City limits.		Operating and Maintenance Costs:(Thousands) Personnel <u>2006</u> <u>2007</u> <u>2008</u> <u>2009</u> <u>2010</u> Supplies Svcs. and Chgs Capital Outlay Total FTEs						
Justification: This project is to coordinate projects with other governmental agencies to minimize disturbance to the neighborhood, and reduce cost.								
Project Allocation	Appropriations Through Dec. 31, 2004 (Thousands)	Estimated Appropriations Jan 1 - June 30 2005 (Thousands)	Fiscal Year Planned Appropriations (Thousands)					Project Total
			2006	2007	2008	2009	2010	
Acquisition	511							511
Design	3,603							3,603
Construction	51,814	7,075	4,000	4,200	4,300	4,300	4,300	79,989
Equipment								
Civic Art								
Total Allocations	55,928	7,075	4,000	4,200	4,300	4,300	4,300	84,103
Source of Funds								
Water & Sewer Cons. Const. Fund	51,734	7,075	4,000	4,200	4,300	4,300	4,300	79,909
Water & Sewer Ren. & Rep. Fund	4,194							4,194
Total Funds	55,928	7,075	4,000	4,200	4,300	4,300	4,300	84,103

2006 - 2010 CAPITAL IMPROVEMENT PLAN

CITY OF HOUSTON

Project : CENTRAL CONTROL SYSTEM EXPANSION	Council District		C.I.P. Number: S-0522					
	Location:	Served: ALL	Key Map: 493K		Neighborhood:			
	Geographic Reference: 5357-1212							
Description: This project provides for the upgrade and expansion of the supervisory control and data acquisition system (SCADA). Vulnerability plant study to install security gate/fence and personal identification system.		Operating and Maintenance Costs:(Thousands)						
Justification: This project would provide necessary control and information to comply with both the subsidence district and the TCEQ requirements. This project also will increase the efficiency of the water supply system.		2006 2007 2008 2009 2010						
		Personnel						
		Supplies						
		Svcs. and Chgs						
		Capital Outlay						
		Total						
		FTEs						
Project Allocation	Appropriations Through Dec. 31, 2004 (Thousands)	Estimated Appropriations Jan 1 - June 30 2005 (Thousands)	Fiscal Year Planned Appropriations (Thousands)					Project Total
			2006	2007	2008	2009	2010	
Acquisition								
Design	7,366						7,366	
Construction		39,527	2,000	2,000	2,000	2,000	49,527	
Equipment								
Civic Art								
Total Allocations	7,366	39,527	2,000	2,000	2,000	2,000	56,893	
Source of Funds								
Water & Sewer Cons. Const. Fund	7,366	39,527	2,000	2,000	2,000	2,000	2,000	56,893
Total Funds	7,366	39,527	2,000	2,000	2,000	2,000	2,000	56,893

2006 - 2010 CAPITAL IMPROVEMENT PLAN

CITY OF HOUSTON

Project : WELL HEAD PROTECTION		Council District		C.I.P. Number:						
		Location: ALL		Served: ALL		S-0530				
		Geographic Reference: N/A		Key Map: N/A		Neighborhood:				
Description: This project provides for acquisition for sanitary easement required to protect the City's ground water wells from contamination by surface sources. Justification: To meet TCEQ requirements.			Operating and Maintenance Costs:(Thousands)							
				<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>		
			Personnel							
			Supplies							
			Svcs. and Chgs							
Capital Outlay										
Total										
FTEs										
Project Allocation	Appropriations Through Dec. 31, 2004 (Thousands)	Estimated Appropriations Jan 1 - June 30 2005 (Thousands)	Fiscal Year Planned Appropriations (Thousands)					Project Total		
			2006	2007	2008	2009	2010			
Acquisition										
Design	596							596		
Construction	120		1,000	1,000	1,000	1,000	1,000	5,120		
Equipment										
Civic Art										
Other	150							150		
Total Allocations	866		1,000	1,000	1,000	1,000	1,000	5,866		
Source of Funds										
Water & Sewer Cons. Const. Fund	866	0	1,000	1,000	1,000	1,000	1,000	5,866		
Total Funds	866		1,000	1,000	1,000	1,000	1,000	5,866		

2006 - 2010 CAPITAL IMPROVEMENT PLAN

CITY OF HOUSTON

Project : SAFE DRINKING WATER ACT REQUIREMENTS	Council District		C.I.P. Number: S-0533					
	Location:ALL	Served: ALL	Key Map: N/A		Neighborhood:			
	Geographic Reference: N/A							
Description: This project provides for the design and construction of the existing chlorine equipment with monitoring capability for the neighborhood safety. This would also include the latest requirements of Safe Drinking Water Act. Justification: This project is necessary for the water supply system to come into compliance with the Safe Water Act requirements.	Operating and Maintenance Costs:(Thousands) Personnel <u>2006</u> <u>2007</u> <u>2008</u> <u>2009</u> <u>2010</u> Supplies Svcs. and Chgs Capital Outlay Total							
	FTEs							
Project Allocation	Appropriations Through Dec. 31, 2004 (Thousands)	Estimated Appropriations Jan 1 - June 30 2005 (Thousands)	Fiscal Year Planned Appropriations (Thousands)					Project Total
			2006	2007	2008	2009	2010	
Acquisition								
Design	3,142							3,142
Construction	1,079		4,500					5,579
Equipment								
Civic Art								
Total Allocations	4,221		4,500					8,721
Source of Funds								
Water & Sewer Cons. Const. Fund	4,221	0	4,500					8,721
Total Funds	4,221		4,500					8,721

2006 - 2010 CAPITAL IMPROVEMENT PLAN

CITY OF HOUSTON

Project : PLANT CONSOLIDATION	Council District		C.I.P. Number: S-0536					
	Location: ALL	Served: ALL	Key Map: N/A		Neighborhood: N/A			
	Geographic Reference: N/A							
Description: This project provides decommission of ground water facilities as the result of the Surface Water Conversion and Regionalization.		Operating and Maintenance Costs:(Thousands)						
Justification: To improve efficiency of the Utility Operation.			<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	
		Personnel						
		Supplies						
		Svcs. and Chgs						
		Capital Outlay						
		Total						
		FTEs						
Project Allocation	Appropriations Through Dec. 31, 2004 (Thousands)	Estimated Appropriations Jan 1 - June 30 2005 (Thousands)	Fiscal Year Planned Appropriations (Thousands)					Project Total
			2006	2007	2008	2009	2010	
Acquisition								
Design								
Construction			750	750	750	750	750	3,750
Equipment								
Civic Art								
Total Allocations			750	750	750	750	750	3,750
Source of Funds								
Water & Sewer Cons. Const. Fund			750	750	750	750	750	3,750
Total Funds			750	750	750	750	750	3,750

2006 - 2010 CAPITAL IMPROVEMENT PLAN

CITY OF HOUSTON

Project : STORAGE TANK REHABILITATION CATEGORICAL PROJECT	Council District		C.I.P. Number: S-0600					
	Location: ALL	Served: ALL	Key Map: N/A		Neighborhood:			
	Geographic Reference: N/A							
Description: This project provides for the inspection, rehabilitation and preventive maintenance of sixteen existing water ground storage tanks.			Operating and Maintenance Costs:(Thousands)					
Justification: This project is necessary to meet the water storage capacity requirement of the TCEQ and to meet the Annual State Inspection.				<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>
			Personnel					
			Supplies					
			Svcs. and Chgs					
			Capital Outlay					
			Total					
			FTEs					
Project Allocation	Appropriations Through Dec. 31, 2004 (Thousands)	Estimated Appropriations Jan 1 - June 30 2005 (Thousands)	Fiscal Year Planned Appropriations (Thousands)					Project Total
			2006	2007	2008	2009	2010	
Acquisition								
Design	14,060		750	750	750	750	750	17,810
Construction	58,782	1,500	4,250	4,250	4,250	4,250	4,250	81,532
Equipment								
Civic Art								
Total Allocations	72,842	1,500	5,000	5,000	5,000	5,000	5,000	99,342
Source of Funds								
Water & Sewer Cons. Const. Fund	57,758	1,500	5,000	5,000	5,000	5,000	5,000	84,258
Annexed District Bond Fund	2,109							2,109
Water & Sewer Ren. & Rep. Fund	12,975							12,975
Total Funds	72,842	1,500	5,000	5,000	5,000	5,000	5,000	99,342

2006 - 2010 CAPITAL IMPROVEMENT PLAN

CITY OF HOUSTON

Project : NEW STORAGE TANKS	Council District		C.I.P. Number: S-0610					
	Location: ALL	Served: ALL	Key Map: N/A		Neighborhood:			
	Geographic Reference: N/A							
Description: This project provides for the design and const. of new water storage tanks in order for the water supply system to meet operating requirements under all conditions. Storage tank inspection and sludge disposal. Designed for Katy Addicks repump station Justification: This project is necessary to meet the requirements of the TCEQ and to meet the Annual State Inspection.	Operating and Maintenance Costs:(Thousands)							
		<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>		
	Personnel							
	Supplies							
	Svcs. and Chgs							
	Capital Outlay							
Total								
FTEs								
Project Allocation	Appropriations Through Dec. 31, 2004 (Thousands)	Estimated Appropriations Jan 1 - June 30 2005 (Thousands)	Fiscal Year Planned Appropriations (Thousands)					Project Total
			2006	2007	2008	2009	2010	
Acquisition								
Design	3,912			250				4,162
Construction	22,120	1,000	6,400			2,000		31,520
Equipment								
Civic Art								
Total Allocations	26,032	1,000	6,400	250		2,000		35,682
Source of Funds								
Water & Sewer Cons. Const. Fund	26,032	1,000	6,400	250		2,000		35,682
Total Funds	26,032	1,000	6,400	250		2,000		35,682

2006 – 2010 CAPITAL IMPROVEMENT PLAN

CITY OF HOUSTON

Project : GRID EXTENSIONS CATEGORICAL PROJECT	Council District		C.I.P. Number: S-0700							
	Location: ALL	Served: ALL	Key Map: N/A		Neighborhood:					
	Geographic Reference: N/A									
Description: This project provides for the design and construction of water main extension projects to improve circulation and fire protection in redeveloping areas. Justification: Project required for City to provide quality service and improve system reliability.	Operating and Maintenance Costs:(Thousands)									
		<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>				
	Personnel									
	Supplies									
	Svcs. and Chgs									
	Capital Outlay									
Total										
FTEs										
Project Allocation	Appropriations Through Dec. 31, 2004 (Thousands)	Estimated Appropriations Jan 1 - June 30 2005 (Thousands)	Fiscal Year Planned Appropriations (Thousands)					Project Total		
			2006	2007	2008	2009	2010			
Acquisition										
Design	13,530	415	350	350	350	350	350	350	15,695	
Construction	89,407		2,430	2,300	4,600	2,300	2,300	2,300	103,337	
Equipment										
Civic Art										
Total Allocations	102,937	415	2,780	2,650	4,950	2,650	2,650	2,650	119,032	
Source of Funds										
Water & Sewer Cons. Const. Fund	99,160	415	2,780	2,650	4,950	2,650	2,650	2,650	115,255	
Annexed District Bond Fund	3,247								3,247	
Water & Sewer Ren. & Rep. Fund	530								530	
Total Funds	102,937	415	2,780	2,650	4,950	2,650	2,650	2,650	119,032	

2006 – 2010 CAPITAL IMPROVEMENT PLAN

CITY OF HOUSTON

Project : ON-CALL REHAB & REPLACEMENT LARGE DIAMETER WATER LINES (16-INCH AND LARGER)	Council District		C.I.P. Number: S-0701					
	Location: ALL	Served: ALL	Key Map: N/A		Neighborhood:			
	Geographic Reference: N/A							
Description: To repair and replace valves equal to or larger than 16-inch in diameter in the distribution system with an On-Call contract. Justification: To ensure that large diameter water lines be repaired or replaced to minimize the impacts of major water main shut downs. This would increase the quality of service and customer satisfaction.	Operating and Maintenance Costs:(Thousands)							
		<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>		
	Personnel							
	Supplies							
	Svcs. and Chgs							
	Capital Outlay							
	Total							
	FTEs							
Project Allocation	Appropriations Through Dec. 31, 2004 (Thousands)	Estimated Appropriations Jan 1 - June 30 2005 (Thousands)	Fiscal Year Planned Appropriations (Thousands)					Project Total
			2006	2007	2008	2009	2010	
Acquisition								
Design								
Construction	7,880	3,000	1,500	1,500	4,500		1,500	19,880
Equipment								
Civic Art								
Total Allocations	7,880	3,000	1,500	1,500	4,500		1,500	19,880
Source of Funds								
Water & Sewer Cons. Const. Fund	7,880	3,000	1,500	1,500	4,500		1,500	19,880
Total Funds	7,880	3,000	1,500	1,500	4,500		1,500	19,880

2006 - 2010 CAPITAL IMPROVEMENT PLAN

CITY OF HOUSTON

Project : VALVE REPLACEMENT & INSTALLATION		Council District		C.I.P. Number:						
		Location: ALL		Served:		S-0702				
		Geographic Reference: N/A		Key Map: VAR		Neighborhood: N/A				
Description: Inspect and replace missing or broken valves on the large diameter lines Justification: The Water Distribution system will not function properly without the valves			Operating and Maintenance Costs:(Thousands)							
					<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	
			Personnel							
			Supplies							
			Svcs. and Chgs							
			Capital Outlay							
			Total							
			FTEs							
Project Allocation	Appropriations Through Dec. 31, 2004 (Thousands)	Estimated Appropriations Jan 1 - June 30 2005 (Thousands)	Fiscal Year Planned Appropriations (Thousands)					Project Total		
			2006	2007	2008	2009	2010			
Acquisition										
Design										
Construction		3,000	3,000		3,000		3,000	12,000		
Equipment										
Civic Art										
Total Allocations		3,000	3,000		3,000		3,000	12,000		
Source of Funds										
Water & Sewer Cons. Const. Fund		3,000	3,000		3,000		3,000	12,000		
Total Funds		3,000	3,000		3,000		3,000	12,000		

2006 - 2010 CAPITAL IMPROVEMENT PLAN

CITY OF HOUSTON

Project : SPONSOR PARTICIPATION-WATER MAINS CATEGORICAL PROJECT (RESIDENTIAL)	Council District		C.I.P. Number: S-0800					
	Location: ALL	Served: ALL	Key Map: N/A			Neighborhood:		
	Geographic Reference: N/A							
Description: This project provides for the funding of the City's share in construction of public water mains within subdivisions constructed within the City limits and for the cost difference to oversize projects to meet future demands. Justification: This project is necessary for the City to promote In-City development and to meet future demands.	Operating and Maintenance Costs:(Thousands)							
		<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>		
	Personnel							
	Supplies							
	Svcs. and Chgs							
Capital Outlay								
Total								
FTEs								
Project Allocation	Appropriations Through Dec. 31, 2004 (Thousands)	Estimated Appropriations Jan 1 - June 30 2005 (Thousands)	Fiscal Year Planned Appropriations (Thousands)					Project Total
			2006	2007	2008	2009	2010	
Acquisition								
Design	9							9
Construction	7,930	1,387	5,000	5,000	5,000	5,000	5,000	34,317
Equipment	9,489							9,489
Civic Art								
Materials	1,284							1,284
Total Allocations	18,712	1,387	5,000	5,000	5,000	5,000	5,000	45,099
Source of Funds								
Water & Sewer Cons. Const. Fund	18,712	1,387	5,000	5,000	5,000	5,000	5,000	45,099
Total Funds	18,712	1,387	5,000	5,000	5,000	5,000	5,000	45,099

2006 - 2010 CAPITAL IMPROVEMENT PLAN

CITY OF HOUSTON

Project : PROVIDING WATER SERVICE TO AREAS INSIDE THE CITY CURRENTLY NOT SERVED BY THE CITY	Council District		C.I.P. Number: S-0801					
	Location: ALL	Served: ALL	Key Map: N/A		Neighborhood:			
	Geographic Reference: N/A							
Description: To design and construct water main extensions throughout the City. To acquire investor owned public utilities inside the City limits as needed, and to provide better service to residents in the areas currently served by these utilities. Justification: A part of the Neighborhood Redevelopment Program to meet the water capacity needs to promote redevelopment of small tracts in various City neighborhoods. Also, to provide water service to areas inside the city limits currently not served by the City.	Operating and Maintenance Costs:(Thousands)							
		<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>		
	Personnel							
	Supplies							
	Svcs. and Chgs							
	Capital Outlay							
Total								
	FTEs							
Project Allocation	Appropriations Through Dec. 31, 2004 (Thousands)	Estimated Appropriations Jan 1 - June 30 2005 (Thousands)	Fiscal Year Planned Appropriations (Thousands)					Project Total
			2006	2007	2008	2009	2010	
Acquisition	600						600	
Design	2,210						2,210	
Construction	1,735		2,500	2,000	2,000	2,000	2,000	12,235
Equipment								
Civic Art								
Total Allocations	4,545		2,500	2,000	2,000	2,000	2,000	15,045
Source of Funds								
Water & Sewer Cons. Const. Fund	4,545	0	2,500	2,000	2,000	2,000	2,000	15,045
Total Funds	4,545		2,500	2,000	2,000	2,000	2,000	15,045

2006 - 2010 CAPITAL IMPROVEMENT PLAN

CITY OF HOUSTON

Project : SPONSOR PARTICIPATION-WATER MAINS CATEGORICAL PROJECT (COMMERCIAL)	Council District		C.I.P. Number: S-0802						
	Location: ALL	Served: ALL	Key Map: N/A		Neighborhood:				
	Geographic Reference: N/A								
Description: This project provides for the funding of the City's share in construction of public water mains within subdivisions constructed within the City limits and for the cost difference to oversize projects to meet future demands. Justification: This project is necessary for the City to promote In City development and to meet future demands.	Operating and Maintenance Costs:(Thousands)								
		<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>			
	Personnel								
	Supplies								
	Svcs. and Chgs								
	Capital Outlay								
Total									
	FTEs								
Project Allocation	Appropriations Through Dec. 31, 2004 (Thousands)	Estimated Appropriations Jan 1 - June 30 2005 (Thousands)	Fiscal Year Planned Appropriations (Thousands)					Project Total	
			2006	2007	2008	2009	2010		
Acquisition									
Design									
Construction	835		500	500	500	500	500	3,335	
Equipment									
Civic Art									
Total Allocations	835		500	500	500	500	500	3,335	
Source of Funds									
Water & Sewer Cons. Const. Fund	835		500	500	500	500	500	500	3,335
Total Funds	835		500	500	500	500	500	500	3,335

2006 - 2010 CAPITAL IMPROVEMENT PLAN

CITY OF HOUSTON

Project : SURFACE WATER TRANSMISSION		Council District		C.I.P. Number:								
		Location: ALL		Served: ALL		S-0900						
		Geographic Reference: N/A		Key Map: N/A		Neighborhood:						
Description: Project provides for the design and construction of major water distribution lines to convey treated water from surface water facilities. This project is part of the City's long range water supply plan.			Operating and Maintenance Costs:(Thousands)									
			Justification: Project is required to comply with the subsidence requirement and to implement City's regionalization plan.			2006		2007		2008		2009
Personnel Supplies Svcs. and Chgs Capital Outlay Total FTEs												
Project Allocation		Appropriations Through Dec. 31, 2004 (Thousands)	Estimated Appropriations Jan 1 - June 30 2005 (Thousands)	Fiscal Year Planned Appropriations (Thousands)					Project Total			
				2006	2007	2008	2009	2010				
Acquisition		18									18	
Design		90,399		2,500	2,200	2,300	2,500	3,800			103,699	
Construction		369,276	29,063	23,100	18,250	18,600	15,100	17,300			490,689	
Equipment												
Civic Art												
Total Allocations		459,693	29,063	25,600	20,450	20,900	17,600	21,100			594,406	
Source of Funds												
Water & Sewer Cons. Const. Fund		459,693	29,063	25,600	20,450	20,900	17,600	21,100			594,406	
Total Funds		459,693	29,063	25,600	20,450	20,900	17,600	21,100			594,406	

2006 - 2010 CAPITAL IMPROVEMENT PLAN

CITY OF HOUSTON

Project : LARGE DIAMETER INSPECTION, REPLACEMENT/REHABILITATION		Council District		C.I.P. Number: S-0901				
		Location: ALL	Served: ALL	Key Map: VAR			Neighborhood: N/A	
		Geographic Reference: N/A						
Description: Inspect, rehab and replace Large Diameter Water Lines. Justification: Repair and provide preventive maintenance for Large Diameter Mains built many years ago.		Operating and Maintenance Costs:(Thousands)						
			<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	
		Personnel						
		Supplies						
		Svcs. and Chgs						
Capital Outlay								
Total								
FTEs								
Project Allocation	Appropriations Through Dec. 31, 2004 (Thousands)	Estimated Appropriations Jan 1 - June 30 2005 (Thousands)	Fiscal Year Planned Appropriations (Thousands)					Project Total
			2006	2007	2008	2009	2010	
Acquisition								
Design								
Construction			3,000	3,000	3,000	3,000	3,000	15,000
Equipment								
Civic Art								
Total Allocations			3,000	3,000	3,000	3,000	3,000	15,000
Source of Funds								
Water & Sewer Cons. Const. Fund			3,000	3,000	3,000	3,000	3,000	15,000
Total Funds			3,000	3,000	3,000	3,000	3,000	15,000

2006 - 2010 CAPITAL IMPROVEMENT PLAN

CITY OF HOUSTON

Project : WELL COLLECTION LINE AND LINE FLOW METER PROGRAM	Council District		C.I.P. Number: S-0936					
	Location: All	Served: All	Key Map: N/A		Neighborhood: N/A			
	Geographic Reference: N/A							
Description: This project provides for the repair and improvement of the damaged/leaking well collection lines of the ground water wells. This would also provide for design and installation of new plant discharge flow meters, and well collection flow meters. Justification: This project also includes a freeze protection package. Improve accuracy of flow measurement to provide support documents to the HGCSD. This would also meet TCEQ requirement.			Operating and Maintenance Costs:(Thousands)					
				<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>
			Personnel					
			Supplies					
			Svcs. and Chgs					
			Capital Outlay					
			Total					
			FTEs					
Project Allocation	Appropriations Through Dec. 31, 2004 (Thousands)	Estimated Appropriations Jan 1 - June 30 2005 (Thousands)	Fiscal Year Planned Appropriations (Thousands)					Project Total
			2006	2007	2008	2009	2010	
Acquisition	137							137
Design	1,633							1,633
Construction	9,039		1,000	1,000	1,000	1,000	1,000	14,039
Equipment								
Civic Art								
Total Allocations	10,809		1,000	1,000	1,000	1,000	1,000	15,809
Source of Funds								
Water & Sewer Cons. Const. Fund	10,809	0	1,000	1,000	1,000	1,000	1,000	15,809
Total Funds	10,809		1,000	1,000	1,000	1,000	1,000	15,809

2006 - 2010 CAPITAL IMPROVEMENT PLAN

CITY OF HOUSTON

Project : PUMP STATION UPGRADE	Council District		C.I.P. Number: S-1000					
	Location: ALL	Served: ALL	Key Map: VAR		Neighborhood: N/A			
	Geographic Reference: N/A							
Description: This project provides for the rehabilitation of pump stations. Improvements include renovations, individual pump installation, replacement of electrical switchgear and generators, valves, meters, motors, pumps, lead abatement, site demolition, roadway. Justification: To meet the water system capacity requirements by the TCEQ, and Annual State inspection.			Operating and Maintenance Costs:(Thousands)					
				<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>
			Personnel					
			Supplies					
			Svcs. and Chgs					
			Capital Outlay					
			Total					
			FTEs					
Project Allocation	Appropriations Through Dec. 31, 2004 (Thousands)	Estimated Appropriations Jan 1 - June 30 2005 (Thousands)	Fiscal Year Planned Appropriations (Thousands)					Project Total
			2006	2007	2008	2009	2010	
Acquisition								
Design	5,899	200	150	150	150	150	150	6,849
Construction	42,427		1,350	1,350	1,350	1,350	1,350	49,177
Equipment	3,318							3,318
Civic Art								
Other	7,164							7,164
Total Allocations	58,808	200	1,500	1,500	1,500	1,500	1,500	66,508
Source of Funds								
Water & Sewer Cons. Const. Fund	58,808	200	1,500	1,500	1,500	1,500	1,500	66,508
Total Funds	58,808	200	1,500	1,500	1,500	1,500	1,500	66,508