WATER UTILITY SYSTEM FACILITIES

Water Utility System

The Water Utility System (System) delivers treated surface and ground water to customers through a series of storage tanks, pump stations, transmission and distribution mains. This potable water is sold to domestic, commercial, industrial, governmental, and other customers in the Houston metropolitan area. In addition, untreated surface water is delivered for sale to governmental, industrial and agricultural customers. The System provides water to the residents of Houston as well as municipalities, municipal utility districts, and water authorities outside the City limits. The service population is approximately 4 million.

The System relies on 86% Surface Water and 14% Groundwater sources. Surface Water is sourced 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 demands beyond the year 2060. However, additional water supply strategies have been developed to meet the long-term needs. In addition, the System continues to shift its supply source from groundwater to surface water in accordance with state mandates.

The Capital Improvement Plan (CIP) provides an estimate of delivery by fiscal year for the next five years. The FY2027-2031 CIP includes approximately $5 billion of Water Utility System improvements financed by a combination of pay-as-you-go, revenue bonds and proposed contributed capital.

Highlights of the Fiscal Year 2027-2031 CIP:

- Continue work to replace East Water Purification Plants 1 and 2.
- Improve raw water supply infrastructure including facilities operated by the Coastal Water Authority and Trinity River Authority.
- Continue funding for replacement of water mains to reduce water loss, improve fire protection, water quality, system reliability and assure compliance with Texas Commission on Environmental Quality (TCEQ) regulations.
- Continue to construct surface water transmission lines to access and deliver expanded treated surface water supplies for Houston and surrounding water authorities.
- Install chloramination chemical systems at 30 groundwater pump stations.
- Rehabilitate wells, ground storage tanks and pump stations as part of long-range asset management.

2027-2031 CAPITAL IMPROVEMENT PLAN ($ Thousands) CITY OF HOUSTON - WATER UTILITY SYSTEM FACILITIES

Project Allocation	Fiscal Year Planned Appropriations					2027-2031
	2027	2028	2029	2030	2031	
Planning						
Acquisition-Land	**1,782**					1,782
Design	**32,081**	91,600	73,600	88,600	78,100	363,981
Construction	**666,394**	715,152	565,766	1,089,365	1,147,537	4,184,214
Equipment Acquisition	**5,500**	5,500	5,500	5,500	5,500	27,500
Salary Recovery						
Other	**79,889**	119,450	52,950	122,950	108,950	484,189
Total Allocation	**785,646**	**931,702**	**697,816**	**1,306,415**	**1,340,087**	**5,061,666**
Source of Funds						
4042 - DDSRF CAPITAL FUND-DRAINAGE CHARGE						
5410 - State - PWE State Grant Funded - DDSR						
5430 - Federal State Local - HPW Pass thru DDSR						
8500 - HPW-W&S Syst Consolidated Constr Fd	**716,963**	636,340	347,816	1,306,415	1,340,087	4,347,621
8509 - HPW-SETL Capital Contribution	**60,304**	20,069				80,373
8510 - HPW-SETL Construction Fund	**8,379**	10,293				18,672
8512 - East Water Purification Enhancement Proj		265,000	350,000			615,000
Total Funds	**785,646**	**931,702**	**697,816**	**1,306,415**	**1,340,087**	**5,061,666**

WATER UTILITY SYSTEM FACILITIES - Summary of Funds
2027-2031 CAPITAL IMPROVEMENT PLAN ($ Thousands)

CIP No.	Project		Fiscal Year Planned Appropriations					2027-2031	
			2027	2028	2029	2030	2031		
S-000012	**Southeast Water Purification Plant**								
	8500 - HPW-W&S Syst Consolidated Constr Fd		39,061	50,000				89,061	
		Project Total	39,061	50,000				89,061	
S-000019	**Emergency Needs for Water Utility**								
	8500 - HPW-W&S Syst Consolidated Constr Fd		550	550	550	550	550	2,750	
		Project Total	550	550	550	550	550	2,750	
S-000020	**Miscellaneous Water Needs**								
	8500 - HPW-W&S Syst Consolidated Constr Fd		14,337	337	45,337	337	337	60,687	
		Project Total	14,337	337	45,337	337	337	60,687	
S-000035	**Neighborhood Water Main Replacement**								
	8500 - HPW-W&S Syst Consolidated Constr Fd		86,849	141,345	61,655	54,500		344,349	
		Project Total	86,849	141,345	61,655	54,500		344,349	
S-000056	**East Water Purification Plant**								
	8500 - HPW-W&S Syst Consolidated Constr Fd		71,531	233,559		1,000,000	1,275,000	2,580,090	
	8512 - East Water Purification Enhancement Proj			265,000	350,000			615,000	
		Project Total	71,531	498,559	350,000	1,000,000	1,275,000	3,195,090	
S-000065	**NE Water Purification Plant Expansion**								
	8500 - HPW-W&S Syst Consolidated Constr Fd		55,000					55,000	
		Project Total	55,000					55,000	
S-000100	**New / Replacement Ground Water Wells**								
	8500 - HPW-W&S Syst Consolidated Constr Fd		10,000	10,000	10,000	10,000	10,000	50,000	
		Project Total	10,000	10,000	10,000	10,000	10,000	50,000	
S-000200	**Water Well Renewal Program**								
	8500 - HPW-W&S Syst Consolidated Constr Fd		5,000	5,000	5,000	5,000	5,000	25,000	
		Project Total	5,000	5,000	5,000	5,000	5,000	25,000	

WATER UTILITY SYSTEM FACILITIES - Summary of Funds
2027-2031 CAPITAL IMPROVEMENT PLAN ($ Thousands)

CIP No.	Project	2027	2028	2029	2030	2031	2027-2031
S-000500	**Water Improvements Under M/N**						
	8500 - HPW-W&S Syst Consolidated Constr Fd	26,392	12,014	26,362	9,828		74,596
	Project Total	26,392	12,014	26,362	9,828		74,596
S-000521	**Water Main Replacement by Other Govt**						
	8500 - HPW-W&S Syst Consolidated Constr Fd	1,400	1,400	1,400	1,400	1,400	7,000
	Project Total	1,400	1,400	1,400	1,400	1,400	7,000
S-000600	**Water Storage Tank Rehabilitation**						
	8500 - HPW-W&S Syst Consolidated Constr Fd	9,550	5,300	8,000	8,000	8,000	38,850
	Project Total	9,550	5,300	8,000	8,000	8,000	38,850
S-000700	**Water Main Grid Extensions Program**						
	8500 - HPW-W&S Syst Consolidated Constr Fd	18,500	10,500	18,500	10,500	18,500	76,500
	Project Total	18,500	10,500	18,500	10,500	18,500	76,500
S-000701	**Lg Diameter Water Line Rehab**						
	8500 - HPW-W&S Syst Consolidated Constr Fd	56,601	57,650	7,000	7,000	7,000	135,251
	Project Total	56,601	57,650	7,000	7,000	7,000	135,251
S-000800	**Sponsor Participation-Water Mains Prog.**						
	8500 - HPW-W&S Syst Consolidated Constr Fd	2,000	2,000	2,000	2,000	2,000	10,000
	Project Total	2,000	2,000	2,000	2,000	2,000	10,000
S-000890	**Lake Houston Dam Projects**						
	4042 - DDSRF CAPITAL FUND-DRAINAGE CHAR		10,699				10,699
	5410 - State - PWE State Grant Funded - DDSR		85,000				85,000
	5430 - Federal State Local - HPW Pass thru DDSR		32,097				32,097
	Project Total		127,796				127,796

WATER UTILITY SYSTEM FACILITIES - Summary of Funds
2027-2031 CAPITAL IMPROVEMENT PLAN ($ Thousands)

CIP No.	Project	2027	2028	2029	2030	2031	2027-2031
S-000900	**Surface Water Transmission Program**						
	8500 - HPW-W&S Syst Consolidated Constr Fd	183,817	10,784	109,711	90,000		394,312
	8509 - HPW-SETL Capital Contribution	60,304	20,069				80,373
	8510 - HPW-SETL Construction Fund	8,379	10,293				18,672
	Project Total	252,500	41,146	109,711	90,000		493,357
S-000901	**Condition Assessment and Rehabilitation**						
	8500 - HPW-W&S Syst Consolidated Constr Fd	12,175	5,500	15,500	5,500	5,500	44,175
	Project Total	12,175	5,500	15,500	5,500	5,500	44,175
S-000902	**Raw Water Transmission Lines**						
	8500 - HPW-W&S Syst Consolidated Constr Fd	75,000	75,000	30,000	95,000		275,000
	Project Total	75,000	75,000	30,000	95,000		275,000
S-000958	**Meter Replacement & Upgrade Program**						
	8500 - HPW-W&S Syst Consolidated Constr Fd	5,500	5,500	5,500	5,500	5,500	27,500
	Project Total	5,500	5,500	5,500	5,500	5,500	27,500
S-001000	**Pump Station Program**						
	8500 - HPW-W&S Syst Consolidated Constr Fd	42,400	8,600				51,000
	Project Total	42,400	8,600				51,000
S-002015	**Water Substitute Service Program**						
	8500 - HPW-W&S Syst Consolidated Constr Fd	300	300	300	300	300	1,500
	Project Total	300	300	300	300	300	1,500
S-900001	**Upgrades to CUS-Owned Support Facilities**						
	8500 - HPW-W&S Syst Consolidated Constr Fd	1,000	1,000	1,000	1,000	1,000	5,000
	Project Total	1,000	1,000	1,000	1,000	1,000	5,000

WATER UTILITY SYSTEM FACILITIES - Summary of Funds
2027-2031 CAPITAL IMPROVEMENT PLAN ($ Thousands)

CIP No.	Project		2027	2028	2029	2030	2031	2027-2031	
S-NA0000	**Funding Offset**								
	4042 - DDSRF CAPITAL FUND-DRAINAGE CHAR			-10,699				-10,699	
	5410 - State - PWE State Grant Funded - DDSR			-85,000				-85,000	
	5430 - Federal State Local - HPW Pass thru DDSR			-32,097				-32,097	
	Project Total			-127,796				-127,796	
	Total Appropriations:		785,646	931,702	697,816	1,306,415	1,340,087	5,061,666	