

The seal of the City of Houston, Texas, is a circular emblem. It features a central illustration of a steam locomotive with a star above it. Below the locomotive is a plow. The words "CITY OF HOUSTON" are arched across the top, and "TEXAS" is arched across the bottom. The entire seal is rendered in a light gray, semi-transparent style.

WATER UTILITY SYSTEM FACILITIES

Water Utility System

The Water Utility 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 FY2023-2027 CIP includes approximately \$1.5 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 2023-2027 CIP:

- Begin work to replace East Water Purification Plants 1 and 2.
- Continue to construct surface water transmission lines to access and deliver expanded treated surface water supplies for Houston and surrounding water authorities
- Continue funding for replacement of neighborhood water mains to improve fire protection, water quality, system reliability and assure compliance with Texas Commission on Environmental Quality (TCEQ) regulations

- Install chloramination chemical systems at 30 groundwater pump stations
- Rehabilitate wells, ground storage tanks and pump stations as part of long range asset management

Project Allocation	Fiscal Year Planned Appropriations					2023-2027
	2023	2024	2025	2026	2027	
Planning						
Acquisition-Land	28,066	4,407	550	550	550	34,123
Design	74,235	12,950	10,200	10,100	19,100	126,585
Construction	211,211	471,566	242,856	192,310	158,199	1,276,141
Equipment Acquisition	5,498	5,500	5,500	21,555	5,500	43,553
Salary Recovery						
Other	5,200	3,950	4,750	3,950	3,950	21,800
Total Allocation	324,210	498,373	263,856	228,464	187,299	1,502,202
Source of Funds						
4042 - DDSRF CAPITAL FUND-DRAINAGE CHARGE						
5430 - Federal State Local - HPW Pass thru DDSR						
8500 - HPW-W&S Syst Consolidated Constr Fd	302,361	425,224	239,946	228,464	187,299	1,383,294
8509 - HPW-SETL Capital Contribution	16,450	60,359	20,992			97,801
8510 - HPW-SETL Construction Fund	5,399	12,790	2,917			21,106
Total Funds	324,210	498,373	263,856	228,464	187,299	1,502,202

Some projects in this section are related to the impact of Hurricane Harvey DR4332 and it is the City's intent to seek reimbursement from the Federal Emergency Management Agency (FEMA) and any other eligible sources for such expenditures, with the FEMA share being 75% or 90% of eligible costs.

WATER UTILITY SYSTEM FACILITIES - Summary of Funds
2023-2027 CAPITAL IMPROVEMENT PLAN (\$ Thousands)

CIP No.	Project		Fiscal Year Planned Appropriations					2023-2027	
			2023	2024	2025	2026	2027		
S-000019	Emergency Needs for Water Utility								
	8500 - HPW-W&S Syst Consolidated Constr Fd		552	550	550	550	550	2,752	
	Project Total		552	550	550	550	550	2,752	
S-000020	Miscellaneous Water Needs								
	8500 - HPW-W&S Syst Consolidated Constr Fd		264	194	293	194	249	1,195	
	Project Total		264	194	293	194	249	1,195	
S-000035	Neighborhood Water Main Replacement								
	8500 - HPW-W&S Syst Consolidated Constr Fd		45,964	34,500	38,500	29,500	38,500	186,964	
	Project Total		45,964	34,500	38,500	29,500	38,500	186,964	
S-000056	East Water Purification Plant								
	8500 - HPW-W&S Syst Consolidated Constr Fd		40,000	108,500	100,000	100,000	100,000	448,500	
	Project Total		40,000	108,500	100,000	100,000	100,000	448,500	
S-000100	New / Replacement Ground Water Wells								
	8500 - HPW-W&S Syst Consolidated Constr Fd		5,075	9,000	7,750	1,250	1,250	24,325	
	Project Total		5,075	9,000	7,750	1,250	1,250	24,325	
S-00019A	Real Estate Annual Appropriation								
	8500 - HPW-W&S Syst Consolidated Constr Fd		552	550	550	550	550	2,752	
	Project Total		552	550	550	550	550	2,752	
S-000200	Water Well Renewal Program								
	8500 - HPW-W&S Syst Consolidated Constr Fd		2,864	5,000	8,915	5,000	5,000	26,779	
	Project Total		2,864	5,000	8,915	5,000	5,000	26,779	
S-000500	Water Improvements under M/N								
	8500 - HPW-W&S Syst Consolidated Constr Fd		20,926	20,414	24,017	2,666		68,022	
	Project Total		20,926	20,414	24,017	2,666		68,022	

WATER UTILITY SYSTEM FACILITIES - Summary of Funds
2023-2027 CAPITAL IMPROVEMENT PLAN (\$ Thousands)

CIP No.	Project							2023-2027	
			2023	2024	2025	2026	2027		
S-000521	Water Main Replacement by Other Govt								
	8500 - HPW-W&S Syst Consolidated Constr Fd		2,440	1,400	1,400	1,400	1,400	8,040	
	Project Total		2,440	1,400	1,400	1,400	1,400	8,040	
S-000600	Water Storage Tank Rehabilitation								
	8500 - HPW-W&S Syst Consolidated Constr Fd		5,410	13,520	8,000	8,000	8,000	42,930	
	Project Total		5,410	13,520	8,000	8,000	8,000	42,930	
S-000700	Water Main Grid Extensions Program								
	8500 - HPW-W&S Syst Consolidated Constr Fd		17,483		7,500	30,000	6,000	60,983	
	Project Total		17,483		7,500	30,000	6,000	60,983	
S-000701	Lg Diameter Water Line Rehab								
	8500 - HPW-W&S Syst Consolidated Constr Fd		21,411	16,540	7,000	19,000	7,000	70,951	
	Project Total		21,411	16,540	7,000	19,000	7,000	70,951	
S-000702	Valve Replacement & Installation Program								
	8500 - HPW-W&S Syst Consolidated Constr Fd		4,416		4,500		4,500	13,416	
	Project Total		4,416		4,500		4,500	13,416	
S-000800	Sponsor Participation-Water Mains Prog.								
	8500 - HPW-W&S Syst Consolidated Constr Fd		2,208	2,000	2,000	2,000	2,000	10,208	
	Project Total		2,208	2,000	2,000	2,000	2,000	10,208	
S-000890	Lake Houston Dam Projects								
	4042 - DDSRF CAPITAL FUND-DRAINAGE CHAR			10,699				10,699	
	5430 - Federal State Local - HPW Pass thru DDSR			32,097				32,097	
	Project Total			42,796				42,796	
S-000894	San Jacinto River Authority								
	8500 - HPW-W&S Syst Consolidated Constr Fd		841	800	800			2,441	
	Project Total		841	800	800			2,441	

WATER UTILITY SYSTEM FACILITIES - Summary of Funds
2023-2027 CAPITAL IMPROVEMENT PLAN (\$ Thousands)

CIP No.	Project							2023-2027	
			2023	2024	2025	2026	2027		
S-000895	Trinity River Authority								
	8500 - HPW-W&S Syst Consolidated Constr Fd		10,000					10,000	
	Project Total		10,000					10,000	
S-000900	Surface Water Transmission Program								
	8500 - HPW-W&S Syst Consolidated Constr Fd		70,225	168,791	8,281			247,297	
	8509 - HPW-SETL Capital Contribution		16,450	60,359	20,992			97,801	
	8510 - HPW-SETL Construction Fund		5,399	12,790	2,917			21,106	
	Project Total		92,074	241,940	32,190			366,204	
S-000901	Condition Assessment and Rehabilitation								
	8500 - HPW-W&S Syst Consolidated Constr Fd		3,547	11,050	5,500	5,500	5,500	31,097	
	Project Total		3,547	11,050	5,500	5,500	5,500	31,097	
S-000956	Automatic Meter Reading Program								
	8500 - HPW-W&S Syst Consolidated Constr Fd					16,055		16,055	
	Project Total					16,055		16,055	
S-000958	Meter Replacement & Upgrade Program								
	8500 - HPW-W&S Syst Consolidated Constr Fd		5,498	5,500	5,500	5,500	5,500	27,498	
	Project Total		5,498	5,500	5,500	5,500	5,500	27,498	
S-001000	Pump Station Program								
	8500 - HPW-W&S Syst Consolidated Constr Fd		35,916	25,615	7,590			69,121	
	Project Total		35,916	25,615	7,590			69,121	
S-002015	Water Substitute Service Program								
	8500 - HPW-W&S Syst Consolidated Constr Fd		276	300	300	300	300	1,476	
	Project Total		276	300	300	300	300	1,476	

WATER UTILITY SYSTEM FACILITIES - Summary of Funds
2023-2027 CAPITAL IMPROVEMENT PLAN (\$ Thousands)

CIP No.	Project							2023-2027	
			2023	2024	2025	2026	2027		
S-900001	Upgrades to CUS-Owned Support Facilities								
	8500 - HPW-W&S Syst Consolidated Constr Fd		6,493	1,000	1,000	1,000	1,000	10,493	
	Project Total		6,493	1,000	1,000	1,000	1,000	10,493	
S-NA0000	Funding Offset								
	4042 - DDSRF CAPITAL FUND-DRAINAGE CHAR			-10,699				-10,699	
	5430 - Federal State Local - HPW Pass thru DDSR			-32,097				-32,097	
	Project Total			-42,796				-42,796	
Total Appropriations:			324,210	498,373	263,856	228,464	187,299	1,502,202	



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