

The seal of the City of Houston, Texas, is a circular emblem. It features a central illustration of a steam locomotive with smoke rising from its chimneys, positioned on a set of tracks. Above the locomotive is a five-pointed star. Below the locomotive is a large anchor. The entire central scene is enclosed within a circular border. The words "CITY OF HOUSTON" are written in a serif font along the top arc of the border, and "TEXAS" is written along the bottom arc. The border is decorated with a rope-like pattern.

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 FY2021-2025 CIP includes approximately \$1.8 billion of Water Utility System improvements financed by a combination of pay-as-you-go, revenue bonds and adopted contributed capital.

Highlights of the FY2021-2025 CIP:

- Continue funding the Design-Build contract for the 320 MGD expansion of the Northeast Water Purification Plant with regional water authority funding partners
- 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					2021-2025
	2021	2022	2023	2024	2025	
Planning						
Acquisition-Land	781	13,260	11,670	550	550	26,810
Design	18,716	6,610	10,546	9,950	9,950	55,771
Construction	410,110	623,797	192,318	220,505	186,896	1,633,625
Equipment Acquisition	5,284	5,388	5,498	5,500	5,500	27,170
Salary Recovery						
Other	4,053	4,105	4,160	3,950	4,750	21,018
Total Allocation	438,942	653,160	224,191	240,455	207,646	1,764,393
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	222,498	333,390	140,353	240,455	207,646	1,144,340
8505 - Water Authorities Capital Contrib-NEWPP	148,282	319,770				468,051
8507 - Water Authorities Cap Contr Fund NETL	39,078					39,078
8508 - HPW-NETL Construction Fund	29,085					29,085
8509 - HPW-SETL Capital Contribution			71,749			71,749
8510 - HPW-SETL Construction Fund			12,089			12,089
Total Funds	438,942	653,160	224,191	240,455	207,646	1,764,393

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 up to 90% of eligible costs.

WATER UTILITY SYSTEM FACILITIES - Summary of Funds
2021-2025 CAPITAL IMPROVEMENT PLAN (\$ Thousands)

CIP No.	Project		Fiscal Year Planned Appropriations					2021-2025	
			2021	2022	2023	2024	2025		
S-000019	Emergency Needs for Water Utility								
	8500 - HPW-W&S Syst Consolidated Constr Fd		531	541	552	550	550	2,724	
	Project Total		531	541	552	550	550	2,724	
S-000020	Miscellaneous Water Needs								
	8500 - HPW-W&S Syst Consolidated Constr Fd		2,850	184	353	300	300	3,987	
	Project Total		2,850	184	353	300	300	3,987	
S-000035	Neighborhood Water Main Replacement								
	8500 - HPW-W&S Syst Consolidated Constr Fd		13,488	29,500	43,332	29,500	38,500	154,320	
	Project Total		13,488	29,500	43,332	29,500	38,500	154,320	
S-000056	East Water Purification Plant								
	8500 - HPW-W&S Syst Consolidated Constr Fd		28,750	5,520		100,000	100,000	234,270	
	Project Total		28,750	5,520		100,000	100,000	234,270	
S-000065	NE Water Purification Plant Expansion								
	8500 - HPW-W&S Syst Consolidated Constr Fd		2,594	81,366				83,960	
	8505 - Water Authorities Capital Contrib-NEWPP		148,282	319,770				468,051	
	Project Total		150,876	401,136				552,011	
S-000100	New / Replacement Ground Water Wells								
	8500 - HPW-W&S Syst Consolidated Constr Fd		453	6,384	12,034	9,000	9,000	36,871	
	Project Total		453	6,384	12,034	9,000	9,000	36,871	
S-00019A	Real Estate Annual Appropriation								
	8500 - HPW-W&S Syst Consolidated Constr Fd		531	541	552	550	550	2,724	
	Project Total		531	541	552	550	550	2,724	
S-000200	Water Well Renewal Program								
	8500 - HPW-W&S Syst Consolidated Constr Fd		3,915	5,031	3,864	5,000	5,000	22,810	
	Project Total		3,915	5,031	3,864	5,000	5,000	22,810	

WATER UTILITY SYSTEM FACILITIES - Summary of Funds
2021-2025 CAPITAL IMPROVEMENT PLAN (\$ Thousands)

CIP No.	Project							2021-2025	
			2021	2022	2023	2024	2025		
S-000500	Water Improvements under M/N								
	8500 - HPW-W&S Syst Consolidated Constr Fd		3,145	21,993	14,590	12,395	14,246	66,368	
	Project Total		3,145	21,993	14,590	12,395	14,246	66,368	
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		7,427	5,410	5,520	8,000	8,000	34,357	
	Project Total		7,427	5,410	5,520	8,000	8,000	34,357	
S-000700	Water Main Grid Extensions Program								
	8500 - HPW-W&S Syst Consolidated Constr Fd		3,183		3,312			6,495	
	Project Total		3,183		3,312			6,495	
S-000701	Lg Diameter Water Line Rehab								
	8500 - HPW-W&S Syst Consolidated Constr Fd		11,127	6,864		7,000	7,000	31,991	
	Project Total		11,127	6,864		7,000	7,000	31,991	
S-000702	Valve Replacement & Installation Program								
	8500 - HPW-W&S Syst Consolidated Constr Fd		4,244		4,416			8,660	
	Project Total		4,244		4,416			8,660	
S-000800	Sponsor Participation-Water Mains Prog.								
	8500 - HPW-W&S Syst Consolidated Constr Fd		2,122	2,164	2,208	2,000	2,000	10,494	
	Project Total		2,122	2,164	2,208	2,000	2,000	10,494	
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	

WATER UTILITY SYSTEM FACILITIES - Summary of Funds
2021-2025 CAPITAL IMPROVEMENT PLAN (\$ Thousands)

CIP No.	Project							2021-2025	
			2021	2022	2023	2024	2025		
S-000894	San Jacinto River Authority								
	8500 - HPW-W&S Syst Consolidated Constr Fd		419	824	841	800	800	3,685	
	Project Total		419	824	841	800	800	3,685	
S-000900	Surface Water Transmission Program								
	8500 - HPW-W&S Syst Consolidated Constr Fd		109,798	122,913	32,605	43,660		308,975	
	8507 - Water Authorities Cap Contr Fund NETL		39,078					39,078	
	8508 - HPW-NETL Construction Fund		29,085					29,085	
	8509 - HPW-SETL Capital Contribution				71,749			71,749	
	8510 - HPW-SETL Construction Fund				12,089			12,089	
	Project Total		177,961	122,913	116,443	43,660		460,976	
S-000901	Condition Assessment and Rehabilitation								
	8500 - HPW-W&S Syst Consolidated Constr Fd			3,547		5,500	5,500	14,547	
	Project Total			3,547		5,500	5,500	14,547	
S-000958	Meter Replacement & Upgrade Program								
	8500 - HPW-W&S Syst Consolidated Constr Fd		5,284	5,388	5,498	5,500	5,500	27,170	
	Project Total		5,284	5,388	5,498	5,500	5,500	27,170	
S-001000	Pump Station Program								
	8500 - HPW-W&S Syst Consolidated Constr Fd		17,973	32,049	8,000	8,000	8,000	74,022	
	Project Total		17,973	32,049	8,000	8,000	8,000	74,022	
S-002015	Water Substitute Service Program								
	8500 - HPW-W&S Syst Consolidated Constr Fd		265	271	276	300	300	1,412	
	Project Total		265	271	276	300	300	1,412	
S-900001	Upgrades to CUS-Owned Support Facilities								
	8500 - HPW-W&S Syst Consolidated Constr Fd		3,000	1,500	1,000	1,000	1,000	7,500	
	Project Total		3,000	1,500	1,000	1,000	1,000	7,500	

WATER UTILITY SYSTEM FACILITIES - Summary of Funds
2021-2025 CAPITAL IMPROVEMENT PLAN (\$ Thousands)

CIP No.	Project							2021-2025	
			2021	2022	2023	2024	2025		
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:			438,942	653,160	224,191	240,455	207,646	1,764,393	