

The seal of the City of Houston, Texas, is a circular emblem. It features a central five-pointed star above a steam locomotive. Below the locomotive is a plow. The words "CITY OF HOUSTON" are inscribed in an arc at the top, and "TEXAS" is inscribed at 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 (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 demands beyond the year 2060. 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 provides water to the citizens of Houston as well as customers outside the City limits. The service population is approximately 4 million.

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 replacing aging water infrastructure and meeting the demands of new growth. This is accomplished through localized projects, such as, replacement of inadequate water lines in neighborhoods and upgrading/improving the City's water transmission and treatment system.

The five-year program includes approximately \$2.7 billion of improvements financed by a combination of pay-as-you-go, revenue bonds and proposed contributed capital.

Highlights of the FY2015-2019 CIP include:

- 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.
- Upgrade and optimize East, Southeast, and Northeast Water Purification Plants.

Water Utility System

Highlights of the FY2015-2019 CIP include - continued:

- Implement Luce Bayou Inter-basin Transfer from Trinity River to Lake Houston to meet demand caused by regulation requiring the conversion to surface water.
- Rehabilitate wells and ground storage tanks.
- Continue to construct surface water transmission lines to provide a reliable surface water supply for Houston and surrounding water authorities and communities.
- Rehabilitate and upgrade pump stations.

Project Allocation	Fiscal Year Planned Appropriations					2015-2019
	2015	2016	2017	2018	2019	
Planning						
Acquisition-Land	4,100	2,497				6,597
Design	108,623	158,847	277,086	20,091	12,404	577,051
Construction	219,287	217,894	626,979	576,895	405,229	2,046,284
Equipment Acquisition	3,535	3,492	3,385	3,300	3,150	16,862
Salary Recovery						
Other	4,098	2,967	16,816	11,323	14,533	49,737
Total Allocation	339,643	385,697	924,266	611,609	435,316	2,696,531
Source of Funds						
8500 - PWE-W&S Syst Consolidated Constr Fd	166,525	155,428	196,054	181,565	101,773	801,345
Proposed TWDB	30,044	90,784	279,647	60,346	55,728	516,549
Proposed TWDB (8500)	31,588	28,785	6,164			66,537
Proposed W&S Ctr Cap	35,092	32,802	107,920	109,909	55,562	341,285
TWDB by Water Auth.	76,394	77,898	334,481	259,789	222,253	970,815
Total Funds	339,643	385,697	924,266	611,609	435,316	2,696,531

**WATER UTILITY SYSTEM FACILITIES - Summary of Funds
2015-2019 CAPITAL IMPROVEMENT PLAN (\$ Thousands)**

CIP No.	Project	Fiscal Year Planned Appropriations					2015-2019
		2015	2016	2017	2018	2019	
S-000012	Southeast Water Purification Plant						
	8500 - PWE-W&S Syst Consolidated Constr Fd	1,035	4,756	594	10,428	860	17,673
	Project Total	1,035	4,756	594	10,428	860	17,673
S-000019	Emergency Needs for Water Utility						
	8500 - PWE-W&S Syst Consolidated Constr Fd	500	500	1,000	1,000	1,000	4,000
	Project Total	500	500	1,000	1,000	1,000	4,000
S-000020	Miscellaneous Water Needs						
	8500 - PWE-W&S Syst Consolidated Constr Fd	1,190	240	740	740	740	3,650
	Project Total	1,190	240	740	740	740	3,650
S-000035	Neighborhood Water Main Replacement						
	8500 - PWE-W&S Syst Consolidated Constr Fd	5,940	10,420	28,537	30,402	36,086	111,385
	Proposed TWDB (8500)	28,053	25,293	2,779			56,125
	Project Total	33,993	35,713	31,316	30,402	36,086	167,510
S-000056	East Water Purification Plant						
	8500 - PWE-W&S Syst Consolidated Constr Fd	16,500	29,727	22,353			68,580
	Project Total	16,500	29,727	22,353			68,580
S-000066	Northeast Water Purification Plant						
	8500 - PWE-W&S Syst Consolidated Constr Fd	21,512	11,012	14,545	32,608	9,750	89,427
	Proposed TWDB	9,660	8,993	58,178	47,237	39,001	163,069
	Proposed W&S Ctr Cap	23,049	17,736	74,686	75,332	50,067	240,870
	TWDB by Water Auth.	49,605	46,176	298,746	242,560	200,270	837,357
	Project Total	103,826	83,917	446,155	397,737	299,088	1,330,723

**WATER UTILITY SYSTEM FACILITIES - Summary of Funds
2015-2019 CAPITAL IMPROVEMENT PLAN (\$ Thousands)**

CIP No.	Project						2015-2019
		2015	2016	2017	2018	2019	
S-000067	Luce Bayou Inter-Basin Transfer						
	8500 - PWE-W&S Syst Consolidated Constr Fd			17,483			17,483
	Proposed TWDB		57,654	194,280			251,934
	Project Total		57,654	211,763			269,417
S-000068	Coastal Water Authority (CWA) Projects						
	8500 - PWE-W&S Syst Consolidated Constr Fd	2,198					2,198
	Project Total	2,198					2,198
S-0000NA	Water Contingencies						
	8500 - PWE-W&S Syst Consolidated Constr Fd	500	-400	106	414	-163	457
	Project Total	500	-400	106	414	-163	457
S-000100	New / Replacement Ground Water Wells						
	8500 - PWE-W&S Syst Consolidated Constr Fd	4,785	2,338	5,546	4,298	4,993	21,960
	Project Total	4,785	2,338	5,546	4,298	4,993	21,960
S-000200	Water Well Renewal Program						
	8500 - PWE-W&S Syst Consolidated Constr Fd	3,510	4,152	3,625	4,288	3,745	19,320
	Project Total	3,510	4,152	3,625	4,288	3,745	19,320
S-000500	Water Improvements under M/N						
	8500 - PWE-W&S Syst Consolidated Constr Fd		2,367	14,210	8,409	12,196	37,182
	Project Total		2,367	14,210	8,409	12,196	37,182
S-000521	Water Main Replacement by Other Govt						
	8500 - PWE-W&S Syst Consolidated Constr Fd		500	1,000	1,000	1,000	3,500
	Project Total		500	1,000	1,000	1,000	3,500
S-000600	Water Storage Tank Rehabilitation						
	8500 - PWE-W&S Syst Consolidated Constr Fd	8,408	2,378	2,377	6,905	6,241	26,309
	Project Total	8,408	2,378	2,377	6,905	6,241	26,309

**WATER UTILITY SYSTEM FACILITIES - Summary of Funds
2015-2019 CAPITAL IMPROVEMENT PLAN (\$ Thousands)**

CIP No.	Project						2015-2019	
		2015	2016	2017	2018	2019		
S-000700-A	Water Main Grid Extensions Program							
	8500 - PWE-W&S Syst Consolidated Constr Fd	3,661		2,750		2,750	9,161	
	Project Total	3,661		2,750		2,750	9,161	
S-000701	Lg Diameter Water Line Rehab							
	8500 - PWE-W&S Syst Consolidated Constr Fd	6,406	10,338	10,904	8,065	7,228	42,941	
	Project Total	6,406	10,338	10,904	8,065	7,228	42,941	
S-000702	Valve Replacement & Installation Program							
	8500 - PWE-W&S Syst Consolidated Constr Fd	3,710	2,688	2,736	2,785	2,835	14,754	
	Project Total	3,710	2,688	2,736	2,785	2,835	14,754	
S-000800	Sponsor Participation-Water Mains Prog.							
	8500 - PWE-W&S Syst Consolidated Constr Fd	500	500	1,000	1,000	1,000	4,000	
	Project Total	500	500	1,000	1,000	1,000	4,000	
S-000890	Lake Houston Water Supply Projects							
	8500 - PWE-W&S Syst Consolidated Constr Fd	2,000		10,000	15,000		27,000	
	Project Total	2,000		10,000	15,000		27,000	
S-000900	Surface Water Transmission Program							
	8500 - PWE-W&S Syst Consolidated Constr Fd	55,210	37,485	37,395	32,380	6,864	169,334	
	Proposed TWDB	20,384	24,137	27,189	13,109	16,727	101,546	
	Proposed W&S Ctr Cap	11,928	14,858	31,846	34,577	5,495	98,704	
	TWDB by Water Auth.	26,789	31,722	35,735	17,229	21,983	133,458	
	Project Total	114,311	108,202	132,165	97,295	51,069	503,042	
S-000901	Condition Assessment and Rehabilitation							
	8500 - PWE-W&S Syst Consolidated Constr Fd	316	570	3,807	6,123		10,816	
	Proposed W&S Ctr Cap	115	208	1,388			1,711	
	Project Total	431	778	5,195	6,123		12,527	

**WATER UTILITY SYSTEM FACILITIES - Summary of Funds
2015-2019 CAPITAL IMPROVEMENT PLAN (\$ Thousands)**

CIP No.	Project						2015-2019	
		2015	2016	2017	2018	2019		
S-000902	Raw Water Transmission Lines							
	8500 - PWE-W&S Syst Consolidated Constr Fd	16,542	6,296					22,838
	Project Total	16,542	6,296					22,838
S-000956	Automatic Meter Reading Program							
	8500 - PWE-W&S Syst Consolidated Constr Fd				650	650		1,300
	Proposed TWDB (8500)	1,356	642	635				2,633
	Project Total	1,356	642	635	650	650		3,933
S-000958	Meter Replacement & Upgrade Program							
	8500 - PWE-W&S Syst Consolidated Constr Fd				2,650	2,500		5,150
	Proposed TWDB (8500)	2,179	2,850	2,750				7,779
	Project Total	2,179	2,850	2,750	2,650	2,500		12,929
S-001000	Pump Station Program							
	8500 - PWE-W&S Syst Consolidated Constr Fd	10,707	28,730	15,104	11,666	1,248		67,455
	Project Total	10,707	28,730	15,104	11,666	1,248		67,455
S-002015	Water Substitute Service Program							
	8500 - PWE-W&S Syst Consolidated Constr Fd	1,395	831	242	754	250		3,472
	Project Total	1,395	831	242	754	250		3,472
	Total Appropriations:	339,643	385,697	924,266	611,609	435,316		2,696,531