

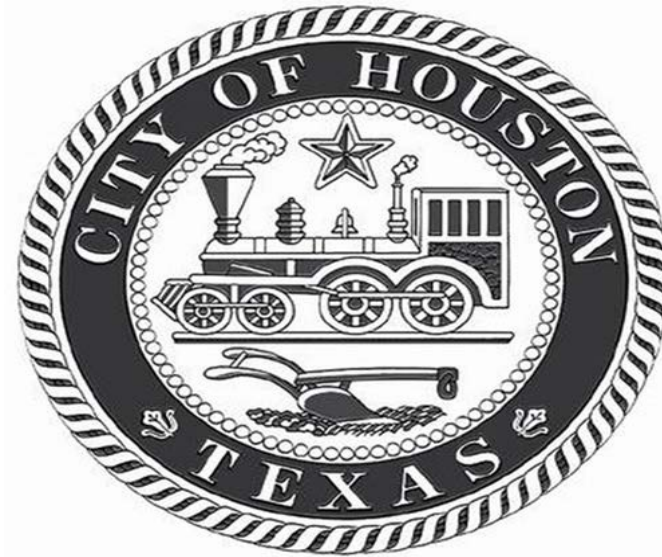
WATER UTILITY SYSTEM FACILITIES 2016-2020 CAPITAL IMPROVEMENT PLAN

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2016-2020 CAPITAL IMPROVEMENT PLAN (\$ Thousands)

CITY OF HOUSTON - WATER UTILITY SYSTEM FACILITIES

Project: Southeast Water Purification Plant		Project No.		S-000012	
Project Description					
This project provides for the design and construction for plant maintenance, upgrades, security and sustainability.		City Council District			
		Location	E	Address Descr 2:	
		Served:	W	Zip Codes:	
		Key Map:	577M,R	Category:	
		Location Code:	UA-00	Sub-Category:	
Project Justification					
This project is necessary to meet water demand, Safe Drinking Water Act, TCEQ and Harris-Galveston Subsidence District requirements.		Units:	0		
		Start Year:	2015		
		RCC Total	\$	RCA Total	\$

Project Allocation	Previous Appropriations						2016-2020	Project Total
		2016	2017	2018	2019	2020		
Planning								
Acquisition-Land	129							129
Design	9,696	1,500			242		1,742	11,438
Construction	195,806		8,000		14,283	6,250	28,533	224,339
Equipment Acquisition								
Salary Recovery								
Other								
Total Allocation	205,631	1,500	8,000		14,525	6,250	30,275	235,906
Source of Funds								
8500 - PWE-W&S Syst Consolidated Constr Fd	109,080	1,500	8,000		14,525	6,250	30,275	139,355
Total Funds	205,631	1,500	8,000		14,525	6,250	30,275	235,906

2016-2020 CAPITAL IMPROVEMENT PLAN (\$ Thousands)

CITY OF HOUSTON - WATER UTILITY SYSTEM FACILITIES

Project: Emergency Needs for Water Utility		Project No.		S-000019	
Project Description					
This program provides for unforeseen emergency needs for engineering services, construction, and equipments for facility and water line failure of Public Utility.		City Council District			
		Location	V	Address Descr 2:	
		Served:	V	Zip Codes:	
		Key Map:	V	Category:	
		Location Code:	UA-00	Sub-Category:	
Project Justification					
This program is needed to provide public health and safety, and to ensure regulatory compliance.		Units:	0		
		Start Year:	2015		
		RCC Total	\$	RCA Total	\$

Project Allocation	Previous Appropriations						2016-2020	Project Total
		2016	2017	2018	2019	2020		
Planning								
Acquisition-Land	137	500	500	390	500	500	2,390	2,527
Design	2,267							2,267
Construction	7,384							7,384
Equipment Acquisition	2,357							2,357
Salary Recovery	2							2
Other		500	500	300	500	500	2,300	2,300
Total Allocation	12,148	1,000	1,000	690	1,000	1,000	4,690	16,838
Source of Funds								
8500 - PWE-W&S Syst Consolidated Constr Fd	12,148	1,000	1,000	690	1,000	1,000	4,690	16,838
Total Funds	12,148	1,000	1,000	690	1,000	1,000	4,690	16,838

2016-2020 CAPITAL IMPROVEMENT PLAN (\$ Thousands)

CITY OF HOUSTON - WATER UTILITY SYSTEM FACILITIES

Project: Miscellaneous Water Needs		Project No.		S-000020	
Project Description					
This program provides for unforeseen miscellaneous needs for acquisition, engineering services, construction, and legal services required in conjunction with various projects and activities of Public Utility.		City Council District			
		Location	V	Address Descr 2:	
		Served:	V	Zip Codes:	
		Key Map:	N/A	Category:	
		Location Code:	UA-00	Sub-Category:	
Project Justification					
This program is needed to provide for unforeseen costs.		Units:	0		
		Start Year:	2015		
		RCC Total	\$	RCA Total	\$

Project Allocation	Previous Appropriations						2016-2020	Project Total
		2016	2017	2018	2019	2020		
Planning								
Acquisition-Land								
Design	850		595		615		1,210	2,060
Construction	3,024	120	120	120	120	120	600	3,624
Equipment Acquisition	2,169							2,169
Salary Recovery								
Other								0
Total Allocation	6,042	120	715	120	735	120	1,810	7,852
Source of Funds								
8500 - PWE-W&S Syst Consolidated Constr Fd	6,042	120	715	120	735	120	1,810	7,852
Total Funds	6,042	120	715	120	735	120	1,810	7,852

2016-2020 CAPITAL IMPROVEMENT PLAN (\$ Thousands)

CITY OF HOUSTON - WATER UTILITY SYSTEM FACILITIES

Project: Neighborhood Water Main Replacement		Project No.		S-000035		
Project Description						
This program provides for the design and construction of replacement distribution mains and upgrades small mains which do not meet standards.		City Council District				
		Location	V	Address Descr 2:		
		Served:	V	Zip Codes:		
		Key Map:	V	Category:		
		Location Code:	UA-00	Sub-Category:		
Project Justification						
This program is required to improve customer service, water quality and capacity, fire protection, system reliability, and assures compliance with TCEQ rules and other governmental regulations.		Units:	0			
		Start Year:	2015			
		RCC Total	\$	RCA Total	\$	

Project Allocation	Previous Appropriations						2016-2020	Project Total
		2016	2017	2018	2019	2020		
Planning								
Acquisition-Land	214							214
Design	69,278		808		1,145		1,953	71,231
Construction	374,684	11,390	13,799	9,977	13,178	4,256	52,600	427,284
Equipment Acquisition								
Salary Recovery								
Other								
Total Allocation	444,177	11,390	14,607	9,977	14,323	4,256	54,553	498,730
Source of Funds								
8500 - PWE-W&S Syst Consolidated Constr Fd	444,177	3,960	4,842	4,108	8,234	4,256	25,400	469,577
Proposed TWDB (8500)		7,430	9,765	5,869	6,089		29,153	29,153
Total Funds	444,177	11,390	14,607	9,977	14,323	4,256	54,553	498,730

2016-2020 CAPITAL IMPROVEMENT PLAN (\$ Thousands)

CITY OF HOUSTON - WATER UTILITY SYSTEM FACILITIES

Project: East Water Purification Plant		Project No.		S-000056	
Project Description					
This project upgrades and optimizes the East Water Plant, and increases the capacity and reliability to meet immediate and future needs of the City and its customers.		City Council District			
		Location	E	Address Descr 2:	
		Served:	W	Zip Codes:	
		Key Map:	496U,Y	Category:	
		Location Code:	UA-00	Sub-Category:	
Project Justification					
This project is necessary to meet water demand, Safe Drinking Water Act, TCEQ and Harris-Galveston Subsidence District requirements.		Units:	0		
		Start Year:	2015		
		RCC Total	\$	RCA Total	\$

Project Allocation	Previous Appropriations						2016-2020	Project Total
		2016	2017	2018	2019	2020		
Planning								
Acquisition-Land	1,650							1,650
Design	19,513	1,500					1,500	21,013
Construction	106,383	19,317	16,261	20,361	30,151		86,090	192,473
Equipment Acquisition								
Salary Recovery								
Other								
Total Allocation	127,546	20,817	16,261	20,361	30,151		87,590	215,136
Source of Funds								
8500 - PWE-W&S Syst Consolidated Constr Fd	127,546	20,817	16,261	20,361	30,151		87,590	215,136
Total Funds	127,546	20,817	16,261	20,361	30,151		87,590	215,136

2016-2020 CAPITAL IMPROVEMENT PLAN (\$ Thousands)

CITY OF HOUSTON - WATER UTILITY SYSTEM FACILITIES

Project: NE Water Purification Plant Expansion		Project No.		S-000065	
Project Description					
Expansion of Northeast Water Purification Plant to 400 MGD total capacity.		City Council District			
		Location	E	Address Descr 2:	
		Served:	W	Zip Codes:	
		Key Map:	377W	Category:	
		Location Code:	UA-00	Sub-Category:	
Project Justification					
Expansion of Northeast Water Purification Plant to meet surface water requirements and provide water to regional Water Authorities.		Units:	0		
		Start Year:			
		RCC Total	\$	RCA Total	\$

Project Allocation	Previous Appropriations						2016-2020	Project Total
		2016	2017	2018	2019	2020		
Planning								
Acquisition-Land								
Design		10,302	103,122	31,824	10,320	10,321	165,889	165,889
Construction				322,933	728,783		1,051,716	1,051,716
Equipment Acquisition								
Salary Recovery								
Other								
Total Allocation		10,302	103,122	354,757	739,103	10,321	1,217,605	1,217,605
Source of Funds								
8500 - PWE-W&S Syst Consolidated Constr Fd		330	3,300	2,834	30,276	330	37,070	37,070
Proposed TWDB		1,319	13,199	11,337	121,105	1,321	148,281	148,281
Proposed W&S Ctr Cap		8,653	86,623	340,586	587,722	8,670	1,032,254	1,032,254
Total Funds		10,302	103,122	354,757	739,103	10,321	1,217,605	1,217,605

2016-2020 CAPITAL IMPROVEMENT PLAN (\$ Thousands)

CITY OF HOUSTON - WATER UTILITY SYSTEM FACILITIES

Project: Northeast Water Purification Plant		Project No.		S-000066	
Project Description					
This project consists of evaluation, site preparation, design, and construction of the Northeast Plant for improvement and expansion.		City Council District			
		Location	E	Address Descr 2:	
		Served:	W	Zip Codes:	
		Key Map:	377W, X	Category:	
		Location Code:	UA-00	Sub-Category:	
Project Justification					
This project is necessary to meet water demand, Safe Drinking Water Act, TCEQ and Harris-Galveston Subsidence District requirements.		Units:	0		
		Start Year:	2015		
		RCC Total	\$	RCA Total	\$

Project Allocation	Previous Appropriations						2016-2020	Project Total
		2016	2017	2018	2019	2020		
Planning								
Acquisition-Land								
Design	18,209	2,763					2,763	20,972
Construction	12,827	49,725		12,100	15,375	15,625	92,825	105,652
Equipment Acquisition								
Salary Recovery								
Other	600							600
Total Allocation	31,636	52,488		12,100	15,375	15,625	95,588	127,224
Source of Funds								
8500 - PWE-W&S Syst Consolidated Constr Fd	31,636	31,181		7,091	9,010	9,156	56,438	88,074
Proposed W&S Ctr Cap		21,307		5,009	6,365	6,469	39,150	39,150
Total Funds	31,636	52,488		12,100	15,375	15,625	95,588	127,224

2016-2020 CAPITAL IMPROVEMENT PLAN (\$ Thousands)

CITY OF HOUSTON - WATER UTILITY SYSTEM FACILITIES

Project: Luce Bayou Inter-Basin Transfer		Project No.		S-000067	
Project Description					
The project consists of the construction of an inter-basin transfer bayou from Trinity River to Lake Houston. The project is implemented by The Coastal Water Authority for several surrounding entities. The project is owned approximately 70% by the City and 30% by other water authorities.		City Council District			
		Location	V	Address Descr 2:	
		Served:	V	Zip Codes:	
		Key Map:	V	Category:	
		Location Code:	UA-00	Sub-Category:	
Project Justification					
The project is required to supplement Lake Houston, a source of drinking water for the City. It is required to meet demand caused by regulation requiring the conversion to surface water. This project will help supply the City with water for the next 50 years.		Units:	0		
		Start Year:			
		RCC Total	\$	RCA Total	\$

Project Allocation	Previous Appropriations						2016-2020	Project Total
		2016	2017	2018	2019	2020		
Planning								
Acquisition-Land								
Design							0	
Construction							0	
Equipment Acquisition								
Salary Recovery								
Other		57,654	211,763				269,417	
Total Allocation		57,654	211,763				269,417	
Source of Funds								
8500 - PWE-W&S Syst Consolidated Constr Fd			17,483				17,483	
Proposed TWDB		57,654	194,280				251,934	
Total Funds		57,654	211,763				269,417	

2016-2020 CAPITAL IMPROVEMENT PLAN (\$ Thousands)

CITY OF HOUSTON - WATER UTILITY SYSTEM FACILITIES

Project: New / Replacement Ground Water Wells		Project No.		S-000100	
Project Description					
This program provides assessment, evaluation, and installation of ground water wells to increase or maintain water production capacity.		City Council District			
		Location	V	Address Descr 2:	
		Served:	V	Zip Codes:	
		Key Map:	V	Category:	
		Location Code:	UA-00	Sub-Category:	
Project Justification					
This program is necessary to assess the stability of the water system.		Units:	0		
		Start Year:	2015		
		RCC Total	\$	RCA Total	\$

Project Allocation	Previous Appropriations						2016-2020	Project Total
		2016	2017	2018	2019	2020		
Planning								
Acquisition-Land	230							230
Design	1,618		700		726		1,426	3,044
Construction	8,749	4,676	4,800	40	4,960	40	14,516	23,265
Equipment Acquisition								
Salary Recovery								
Other								
Total Allocation	10,598	4,676	5,500	40	5,686	40	15,942	26,540
Source of Funds								
8500 - PWE-W&S Syst Consolidated Constr Fd	10,598	4,676	5,500	40	5,686	40	15,942	26,540
Total Funds	10,598	4,676	5,500	40	5,686	40	15,942	26,540

2016-2020 CAPITAL IMPROVEMENT PLAN (\$ Thousands)

CITY OF HOUSTON - WATER UTILITY SYSTEM FACILITIES

Project: Pre-Engineering for Water Projects		Project No.		S-000101	
Project Description					
Program to develop candidate projects for future Capital Improvement Plans.		City Council District			
		Location	V	Address Descr 2:	
		Served:	V	Zip Codes:	
		Key Map:		Category:	
		Location Code:	UA-00	Sub-Category:	
Project Justification					
The program supports an integrated, long-term plan for maintenance and expansion of the water infrastructure.		Units:	0		
		Start Year:			
		RCC Total	\$	RCA Total	\$

Project Allocation	Previous Appropriations						2016-2020	Project Total
		2016	2017	2018	2019	2020		
Planning								
Acquisition-Land								
Design		460			484	944	944	
Construction								
Equipment Acquisition								
Salary Recovery								
Other								
Total Allocation		460			484	944	944	
Source of Funds								
8500 - PWE-W&S Syst Consolidated Constr Fd		460			484	944	944	
Total Funds		460			484	944	944	

2016-2020 CAPITAL IMPROVEMENT PLAN (\$ Thousands)

CITY OF HOUSTON - WATER UTILITY SYSTEM FACILITIES

Project: Water Well Renewal Program		Project No.		S-000200	
Project Description					
This program provides assesment, evaluation, and rehabilitation of existing water wells to extend service life, improve water quality, and reduce maintenance costs.		City Council District			
		Location	V	Address Descr 2:	
		Served:	V	Zip Codes:	
		Key Map:	V	Category:	
		Location Code:	UA-00	Sub-Category:	
Project Justification					
This program is necessary in order to improve the performance of wells, reliability, and demand of the system.		Units:	0		
		Start Year:	2015		
		RCC Total	\$	RCA Total	\$

Project Allocation	Previous Appropriations						2016-2020	Project Total
		2016	2017	2018	2019	2020		
Planning								
Acquisition-Land	4							4
Design	1,365	575		595		615	1,785	3,150
Construction	22,682		3,570		3,690		7,260	29,942
Equipment Acquisition								
Salary Recovery								
Other								
Total Allocation	24,050	575	3,570	595	3,690	615	9,045	33,095
Source of Funds								
8500 - PWE-W&S Syst Consolidated Constr Fd	24,050	575	3,570	595	3,690	615	9,045	33,095
Total Funds	24,050	575	3,570	595	3,690	615	9,045	33,095

2016-2020 CAPITAL IMPROVEMENT PLAN (\$ Thousands)

CITY OF HOUSTON - WATER UTILITY SYSTEM FACILITIES

Project: Water Improvements under M/N	Project No.	S-000500	
Project Description			
Water Improvements completed under Street and Bridge or Stormwater Projects.	City Council District		
	Location		Address Descr 2:
	Served:		Zip Codes:
	Key Map:		Category:
	Location Code: UA-00		Sub-Category:
Project Justification			
Water projects completed in conjunction with Street and Bridge or Stormwater Projects are less expensive and less disruption to the community.	Units:	0	
	Start Year:	2015	
	RCC Total	\$	RCA Total \$

Project Allocation	Previous Appropriations						2016-2020	Project Total
		2016	2017	2018	2019	2020		
Planning								
Acquisition-Land								
Design								
Construction	98,031							98,031
Equipment Acquisition								
Salary Recovery								
Other	1,101	17,257	21,966	24,178	24,600	33,300	121,301	122,402
Total Allocation	99,132	17,257	21,966	24,178	24,600	33,300	121,301	220,433
Source of Funds								
8500 - PWE-W&S Syst Consolidated Constr Fd	99,132	17,257	21,966	24,178	24,600	33,300	121,301	220,433
Total Funds	99,132	17,257	21,966	24,178	24,600	33,300	121,301	220,433

2016-2020 CAPITAL IMPROVEMENT PLAN (\$ Thousands)

CITY OF HOUSTON - WATER UTILITY SYSTEM FACILITIES

Project: Water Main Replacement by Other Govt		Project No.		S-000521		
Project Description						
This program provides funding for the design and construction of water distribution mains replacement in coordination with projects by other governmental agencies.		City Council District				
		Location	V	Address Descr 2:		
		Served:	V	Zip Codes:		
		Key Map:	V	Category:		
		Location Code:	UA-00	Sub-Category:		
Project Justification						
This program is to coordinate projects with other governmental agencies to avoid conflict, minimize disturbance to the neighborhood, and reduce cost.		Units:	0			
		Start Year:	2015			
		RCC Total	\$	RCA Total	\$	

Project Allocation	Previous Appropriations						2016-2020	Project Total
		2016	2017	2018	2019	2020		
Planning								
Acquisition-Land	16							16
Design	1,195							1,195
Construction	15,345							15,345
Equipment Acquisition								
Salary Recovery								
Other	2,989	950	1,000	1,000	1,000	1,000	4,950	7,939
Total Allocation	19,546	950	1,000	1,000	1,000	1,000	4,950	24,496
Source of Funds								
8500 - PWE-W&S Syst Consolidated Constr Fd	19,546	950	1,000	1,000	1,000	1,000	4,950	24,496
Total Funds	19,546	950	1,000	1,000	1,000	1,000	4,950	24,496

2016-2020 CAPITAL IMPROVEMENT PLAN (\$ Thousands)

CITY OF HOUSTON - WATER UTILITY SYSTEM FACILITIES

Project: Water Storage Tank Rehabilitation		Project No.		S-000600		
Project Description						
This program provides for the cleaning, inspection, rehabilitation and preventive maintenance of existing water storage tanks.		City Council District				
		Location	V	Address Descr 2:		
		Served:	V	Zip Codes:		
		Key Map:	V	Category:		
		Location Code:	UA-00	Sub-Category:		
Project Justification						
This program is necessary to meet the supply demand capacity, water storage capacity requirements of the TCEQ and the Annual State Inspection.		Units:	0			
		Start Year:	2015			
		RCC Total	\$	RCA Total	\$	

Project Allocation	Previous Appropriations						2016-2020	Project Total
		2016	2017	2018	2019	2020		
Planning								
Acquisition-Land								
Design	5,797		2,340	500			2,840	8,637
Construction	29,405	1,700	8,119		6,150	5,000	20,969	50,374
Equipment Acquisition								
Salary Recovery								
Other								
Total Allocation	35,203	1,700	10,459	500	6,150	5,000	23,809	59,012
Source of Funds								
8500 - PWE-W&S Syst Consolidated Constr Fd	35,203	1,700	10,459	500	6,150	5,000	23,809	59,012
Total Funds	35,203	1,700	10,459	500	6,150	5,000	23,809	59,012

2016-2020 CAPITAL IMPROVEMENT PLAN (\$ Thousands)

CITY OF HOUSTON - WATER UTILITY SYSTEM FACILITIES

Project: Water Main Grid Extensions Program		Project No.		S-000700-A		
Project Description						
This program provides for the design and construction of water main extension projects to improve circulation and fire protection.		City Council District				
		Location	V	Address Descr 2:		
		Served:	V	Zip Codes:		
		Key Map:	V	Category:		
		Location Code:	UA-00	Sub-Category:		
Project Justification						
This program is required for City to provide quality water service, fire protection, and improve system reliability.		Units:	0			
		Start Year:				
		RCC Total	\$	RCA Total	\$	

Project Allocation	Previous Appropriations						2016-2020	Project Total
		2016	2017	2018	2019	2020		
Planning								
Acquisition-Land								
Design		92	738		739		1,569	1,569
Construction		1,989	1,970		1,971		5,930	5,930
Equipment Acquisition								
Salary Recovery								
Other								
Total Allocation		2,081	2,708		2,710		7,499	7,499
Source of Funds								
8500 - PWE-W&S Syst Consolidated Constr Fd		2,081	2,708		2,710		7,499	7,499
Total Funds		2,081	2,708		2,710		7,499	7,499

2016-2020 CAPITAL IMPROVEMENT PLAN (\$ Thousands)

CITY OF HOUSTON - WATER UTILITY SYSTEM FACILITIES

Project: Lg Diameter Water Line Rehab		Project No.		S-000701		
Project Description						
This program provides for the repairs and replacements of large diameter waterlines and valves in the distribution and transmission system.		City Council District				
		Location	V	Address Descr 2:		
		Served:	V	Zip Codes:		
		Key Map:	V	Category:		
		Location Code:	UA-00	Sub-Category:		
Project Justification						
This program is 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.		Units:	0			
		Start Year:	2015			
		RCC Total	\$	RCA Total	\$	

Project Allocation	Previous Appropriations						2016-2020	Project Total
		2016	2017	2018	2019	2020		
Planning								
Acquisition-Land								
Design		1,786		2,857		1,414	6,057	6,057
Construction	20,515	8,870		10,043		10,375	29,288	49,803
Equipment Acquisition								
Salary Recovery								
Other								
Total Allocation	20,515	10,656		12,900		11,789	35,345	55,860
Source of Funds								
8500 - PWE-W&S Syst Consolidated Constr Fd	20,515	10,656		12,900		11,789	35,345	55,860
Total Funds	20,515	10,656		12,900		11,789	35,345	55,860

2016-2020 CAPITAL IMPROVEMENT PLAN (\$ Thousands)

CITY OF HOUSTON - WATER UTILITY SYSTEM FACILITIES

Project: Valve Replacement & Installation Program		Project No.		S-000702		
Project Description						
This program provides for the inspection and replacement of missing or broken valves on water lines.		City Council District				
		Location	V	Address Descr 2:		
		Served:	V	Zip Codes:		
		Key Map:	V	Category:		
		Location Code:	UA-00	Sub-Category:		
Project Justification						
The water distribution and transmission system will not function properly without the valves.		Units:	0			
		Start Year:	2015			
		RCC Total	\$	RCA Total	\$	

Project Allocation	Previous Appropriations						2016-2020	Project Total
		2016	2017	2018	2019	2020		
Planning								
Acquisition-Land								
Design								0
Construction	9,340	2,140	2,180	2,220		2,300	8,840	18,180
Equipment Acquisition								
Salary Recovery								
Other								
Total Allocation	9,340	2,140	2,180	2,220		2,300	8,840	18,180
Source of Funds								
8500 - PWE-W&S Syst Consolidated Constr Fd	9,340	2,140	2,180	2,220		2,300	8,840	18,180
Total Funds	9,340	2,140	2,180	2,220		2,300	8,840	18,180

2016-2020 CAPITAL IMPROVEMENT PLAN (\$ Thousands)

CITY OF HOUSTON - WATER UTILITY SYSTEM FACILITIES

Project: Sponsor Participation-Water Mains Prog.		Project No.		S-000800		
Project Description						
This program provides for the funding of the City's share in construction of developer built public water mains within the City limits and for the cost difference to oversize projects for future demands.		City Council District				
		Location	V	Address Descr 2:		
		Served:	V	Zip Codes:		
		Key Map:	V	Category:		
		Location Code:	UA-00	Sub-Category:		
Project Justification						
This program is necessary for the City to promote In-City development and to meet future demands.		Units:	0			
		Start Year:	2015			
		RCC Total	\$	RCA Total	\$	

Project Allocation	Previous Appropriations						2016-2020	Project Total
		2016	2017	2018	2019	2020		
Planning								
Acquisition-Land								
Design								
Construction	15,645							15,645
Equipment Acquisition								
Salary Recovery								
Other		1,000	709	1,000	1,000	1,000	4,709	4,709
Total Allocation	15,645	1,000	709	1,000	1,000	1,000	4,709	20,354
Source of Funds								
8500 - PWE-W&S Syst Consolidated Constr Fd	15,645	1,000	709	1,000	1,000	1,000	4,709	20,354
Total Funds	15,645	1,000	709	1,000	1,000	1,000	4,709	20,354

2016-2020 CAPITAL IMPROVEMENT PLAN (\$ Thousands)

CITY OF HOUSTON - WATER UTILITY SYSTEM FACILITIES

Project: Lake Houston Water Supply Projects		Project No.		S-000890	
Project Description					
Repairs to Lake Houston Dam or other infrastructure associated with Lake Houston Water Supply. Coastal Water Authority is the facility operator.		City Council District			
		Location		Address Descr 2:	
		Served:	W	Zip Codes:	
		Key Map:		Category: SUPPLY	
		Location Code: UA-00		Sub-Category:	
Project Justification					
Lake Houston and associated infrastructure are part of the City's long term plan for water supply.		Units:		0	
		Start Year:		2011	
		RCC Total	\$	RCA Total	\$

Project Allocation	Previous Appropriations						2016-2020	Project Total
		2016	2017	2018	2019	2020		
Planning								
Acquisition-Land								
Design	33	2,500					2,500	2,533
Construction	223				10,000	15,000	25,000	25,223
Equipment Acquisition								
Salary Recovery								
Other								
Total Allocation	256	2,500			10,000	15,000	27,500	27,756
Source of Funds								
8500 - PWE-W&S Syst Consolidated Constr Fd	256	2,500			10,000	15,000	27,500	27,756
Total Funds	256	2,500			10,000	15,000	27,500	27,756

2016-2020 CAPITAL IMPROVEMENT PLAN (\$ Thousands)

CITY OF HOUSTON - WATER UTILITY SYSTEM FACILITIES

Project: Surface Water Transmission Program		Project No.		S-000900	
Project Description					
Project program provides for the design and construction of transmission and distribution lines to convey treated water from surface water facilities.		City Council District			
		Location	V	Address Descr 2:	
		Served:	V	Zip Codes:	
		Key Map:	V	Category:	
		Location Code:	UA-00	Sub-Category:	
Project Justification					
This program is required to comply with the Harris-Galveston Subsidence District requirement and to implement City's regionalization plan. This program is part of the City's long range water supply plan.		Units:	0		
		Start Year:	2015		
		RCC Total	\$	RCA Total	\$

Project Allocation	Previous Appropriations						2016-2020	Project Total
		2016	2017	2018	2019	2020		
Planning								
Acquisition-Land	2,070	7,400	3,774				11,174	13,244
Design	75,265	30,094	23,815	16,462	4,091	8,689	83,151	158,416
Construction	139,612	93,035	57,636	107,183	54,899	122,642	435,395	575,007
Equipment Acquisition								
Salary Recovery								
Other								
Total Allocation	216,947	130,529	85,225	123,645	58,990	131,331	529,720	746,667
Source of Funds								
8319 - PWE-W & S Contributed CAP	3,020							3,020
8500 - PWE-W&S Syst Consolidated Constr Fd	213,927	60,708	41,098	68,319	7,949	44,890	222,964	436,891
Proposed TWDB		23,179	12,920	20,648	19,049	13,413	89,209	89,209
Proposed W&S Ctr Cap		46,642	31,207	34,678	31,992	73,028	217,547	217,547
Total Funds	216,947	130,529	85,225	123,645	58,990	131,331	529,720	746,667

2016-2020 CAPITAL IMPROVEMENT PLAN (\$ Thousands)

CITY OF HOUSTON - WATER UTILITY SYSTEM FACILITIES

Project: Condition Assessment and Rehabilitation		Project No.		S-000901	
Project Description					
This program provides for inspection, rehabilitation, and replacement of large diameter water lines.		City Council District			
		Location	V	Address Descr 2:	
		Served:	V	Zip Codes:	
		Key Map:	V	Category:	
		Location Code:	UA-00	Sub-Category:	
Project Justification					
This program is necessary to provide preventive maintenance for large diameter water lines to ensure the demand capacity of water distribution and transmission system.		Units:	0		
		Start Year:	2015		
		RCC Total	\$	RCA Total	\$

Project Allocation	Previous Appropriations						2016-2020	Project Total
		2016	2017	2018	2019	2020		
Planning								
Acquisition-Land								
Design		95	198	975		3,574	4,842	4,842
Construction	26,895		684	6,033		5,500	12,217	39,112
Equipment Acquisition								
Salary Recovery								
Other								
Total Allocation	26,895	95	882	7,008		9,074	17,059	43,954
Source of Funds								
8500 - PWE-W&S Syst Consolidated Constr Fd	26,895	67	696	6,784		7,576	15,123	42,018
Proposed W&S Ctr Cap		28	186	224		1,498	1,936	1,936
Total Funds	26,895	95	882	7,008		9,074	17,059	43,954

2016-2020 CAPITAL IMPROVEMENT PLAN (\$ Thousands)

CITY OF HOUSTON - WATER UTILITY SYSTEM FACILITIES

Project: Raw Water Transmission Lines		Project No.		S-000902		
Project Description						
This program provides for the design and construction of raw water transmission lines to convey raw water to water purification facilities.		City Council District				
		Location	V	Address Descr 2:		
		Served:	V	Zip Codes:		
		Key Map:	V	Category:		
		Location Code:	UA-00	Sub-Category:		
Project Justification						
This program is required to ensure that water purification plants are supplied with raw water in order to meet demand for purified water.		Units:	0			
		Start Year:	2015			
		RCC Total	\$	RCA Total	\$	

Project Allocation	Previous Appropriations						2016-2020	Project Total
		2016	2017	2018	2019	2020		
Planning								
Acquisition-Land								
Design			351			351	351	
Construction	12,841		5,950			5,950	18,791	
Equipment Acquisition								
Salary Recovery								
Other								
Total Allocation	12,841		6,301			6,301	19,142	
Source of Funds								
8500 - PWE-W&S Syst Consolidated Constr Fd	12,841		6,301			6,301	19,142	
Total Funds	12,841		6,301			6,301	19,142	

2016-2020 CAPITAL IMPROVEMENT PLAN (\$ Thousands)

CITY OF HOUSTON - WATER UTILITY SYSTEM FACILITIES

Project: Well Collection Line and Flow Meters		Project No.		S-000936		
Project Description						
This program provides for the design and construction or rehabilitation of well collection lines, plant discharge flow meters, well collection flow meters, and freeze protection.		City Council District				
		Location	V	Address Descr 2:		
		Served:	V	Zip Codes:		
		Key Map:	V	Category:		
		Location Code:	UA-00	Sub-Category:		
Project Justification						
This program improves quality and dependability of ground water and meets TCEQ requirements. It also improves accuracy of flow measurement for reporting to Harris Galveston Coastal Subsidence District.		Units:	0			
		Start Year:	2015			
		RCC Total	\$	RCA Total	\$	

Project Allocation	Previous Appropriations						2016-2020	Project Total
		2016	2017	2018	2019	2020		
Planning								
Acquisition-Land	1						1	
Design	1,202	575				575	1,777	
Construction	5,572	3,218				3,218	8,790	
Equipment Acquisition								
Salary Recovery								
Other								
Total Allocation	6,775	3,793				3,793	10,568	
Source of Funds								
8500 - PWE-W&S Syst Consolidated Constr Fd	6,775	3,793				3,793	10,568	
Total Funds	6,775	3,793				3,793	10,568	

2016-2020 CAPITAL IMPROVEMENT PLAN (\$ Thousands)

CITY OF HOUSTON - WATER UTILITY SYSTEM FACILITIES

Project: Automatic Meter Reading Program		Project No.		S-000956	
Project Description					
This program provides for the purchase and installation of radio frequency automated meter reading devices and Mobile Data Command System to read meters.		City Council District			
		Location	V	Address Descr 2:	
		Served:	V	Zip Codes:	
		Key Map:	V	Category:	
		Location Code:	UA-00	Sub-Category:	
Project Justification					
The program reduces manpower and allows monitoring water consumption on demand to reduce unaccounted water.		Units:	0		
		Start Year:	2015		
		RCC Total	\$	RCA Total	\$

Project Allocation	Previous Appropriations						2016-2020	Project Total
		2016	2017	2018	2019	2020		
Planning								
Acquisition-Land								
Design								
Construction	4,250							4,250
Equipment Acquisition	7,637	600	635	669	750	750	3,404	11,041
Salary Recovery	5,521							5,521
Other								
Total Allocation	17,408	600	635	669	750	750	3,404	20,812
Source of Funds								
8500 - PWE-W&S Syst Consolidated Constr Fd	17,408			669	750	750	2,169	19,577
Proposed TWDB (8500)		600	635				1,235	1,235
Total Funds	17,408	600	635	669	750	750	3,404	20,812

2016-2020 CAPITAL IMPROVEMENT PLAN (\$ Thousands)

CITY OF HOUSTON - WATER UTILITY SYSTEM FACILITIES

Project: Meter Replacement & Upgrade Program		Project No.		S-000958	
Project Description					
This program provides removal, replacement, and upgrade of water meters to get accurate readings.		City Council District			
		Location	V	Address Descr 2:	
		Served:	V	Zip Codes:	
		Key Map:	V	Category:	
		Location Code:	UA-00	Sub-Category:	
Project Justification					
Replacement of the meters has been determined to be more cost effective than retrofitting the old meters and would increase annual revenues.		Units:	0		
		Start Year:	2015		
		RCC Total	\$	RCA Total	\$

Project Allocation	Previous Appropriations						2016-2020	Project Total
		2016	2017	2018	2019	2020		
Planning								
Acquisition-Land								
Design								
Construction								
Equipment Acquisition	1,848	2,431	2,200	2,200	3,000	2,500	12,331	14,179
Salary Recovery								
Other								
Total Allocation	1,848	2,431	2,200	2,200	3,000	2,500	12,331	14,179
Source of Funds								
8500 - PWE-W&S Syst Consolidated Constr Fd	1,848			2,200	3,000	2,500	7,700	9,548
Proposed TWDB (8500)		2,431	2,200				4,631	4,631
Total Funds	1,848	2,431	2,200	2,200	3,000	2,500	12,331	14,179

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CITY OF HOUSTON - WATER UTILITY SYSTEM FACILITIES

Project: Pump Station Program		Project No.		S-001000	
Project Description					
This program provides for the renewal of pump stations. Improvements include renovations, individual pump installation, replacement of electrical switchgear, generators, valves, meters, motors, pumps, lead abatement, site demolition, and roadway.		City Council District			
		Location	V	Address Descr 2:	
		Served:	V	Zip Codes:	
		Key Map:	V	Category:	
		Location Code:	UA-00	Sub-Category:	
Project Justification					
This program is necessary to meet the water system capacity requirements by the TCEQ and Annual State inspection.		Units:	0		
		Start Year:	2015		
		RCC Total	\$	RCA Total	\$

Project Allocation	Previous Appropriations						2016-2020	Project Total
		2016	2017	2018	2019	2020		
Planning								
Acquisition-Land								
Design	17,860	173					173	18,033
Construction	39,760	23,392	12,182	6,050	13,776	26,311	81,711	121,471
Equipment Acquisition	6,840							6,840
Salary Recovery								
Other								
Total Allocation	64,459	23,565	12,182	6,050	13,776	26,311	81,884	146,343
Source of Funds								
8500 - PWE-W&S Syst Consolidated Constr Fd	64,459	23,565	12,182	6,050	13,776	26,311	81,884	146,343
Total Funds	64,459	23,565	12,182	6,050	13,776	26,311	81,884	146,343

2016-2020 CAPITAL IMPROVEMENT PLAN (\$ Thousands)

CITY OF HOUSTON - WATER UTILITY SYSTEM FACILITIES

Project: Water Substitute Service Program		Project No.		S-002015	
Project Description					
The program consists of design and construction associated with removing water main lines from the rear of lots, and installing a new main line and service line in the front of the right of way at the City's expense.		City Council District			
		Location	V	Address Descr 2:	
		Served:	V	Zip Codes:	
		Key Map:	V	Category:	
		Location Code:	UA-00	Sub-Category:	
Project Justification					
The program is required to provide better service to customers with minimal disruption and lower maintenance costs.		Units:	0		
		Start Year:	2015		
		RCC Total	\$	RCA Total	\$

Project Allocation	Previous Appropriations						2016-2020	Project Total
		2016	2017	2018	2019	2020		
Planning								
Acquisition-Land								
Design								
Construction	2,570	2,105	238	742	246	250	3,581	6,151
Equipment Acquisition								
Salary Recovery								
Other								
Total Allocation	2,570	2,105	238	742	246	250	3,581	6,151
Source of Funds								
8500 - PWE-W&S Syst Consolidated Constr Fd	2,570	2,105	238	742	246	250	3,581	6,151
Total Funds	2,570	2,105	238	742	246	250	3,581	6,151

2016-2020 CAPITAL IMPROVEMENT PLAN (\$ Thousands)

CITY OF HOUSTON - WATER UTILITY SYSTEM FACILITIES

Project: Water Contingencies		Project No.		S-NA0000	
Project Description					
Contingency amount used to balance Adopted CIP.		City Council District			
		Location	V	Address Descr 2:	
		Served:	V	Zip Codes:	
		Key Map:		Category:	
		Location Code:	UA-00	Sub-Category:	
Project Justification					
Project is needed to balance CIP.		Units:	0		
		Start Year:			
		RCC Total	\$	RCA Total	\$

Project Allocation	Previous Appropriations						2016-2020	Project Total
		2016	2017	2018	2019	2020		
Planning								
Acquisition-Land								
Design								
Construction								
Equipment Acquisition								
Salary Recovery								
Other		800			300	5	1,105	1,105
Total Allocation		800			300	5	1,105	1,105
Source of Funds								
8500 - PWE-W&S Syst Consolidated Constr Fd		800			300	5	1,105	1,105
Total Funds		800			300	5	1,105	1,105