

CAPITAL IMPROVEMENT PROGRAM - Project Cost Listing

WATER

Project Name and Description	Fund Source	Fund	Project No.	Estimated Completion Date	Prior Expenses Up to 10 Yrs.	Encumbrances	Estimated Continuing Appropriations	Prior Funding Subtotal	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	Future Years	Total Project Cost
WATER CAPACITY FUND															
Cota Groundwater Injection System and Treatment Facility Development of groundwater injection infrastructure for Title 22 indirect Potable Reuse.	WTR CAP	507	6015	June 2019							\$ 213,000			\$ 2,832,500	\$ 3,045,500
Home Gardens Water District Well Collection Project Construct approximately 12,000 feet of ductile iron pipe from the well to Quarry Street. Agreement with the Western Riverside County Regional Wastewater Authority (WRCRWA) to give Corona voting rights and permission to increase capacity.	WTR CAP	507	6842	Ongoing	391,750	101,295	5,006,955	5,500,000							5,500,000
Coldwater and Mayhew Canyon Recharge Basins Construct recharge basins to capture storm water runoff to allow the flow to return to the aquifer.	WTR CAP	507	6907	Ongoing	113,508	581,492		695,000							695,000
Skyline Water Storage Tank Construct two potable water tanks near the proposed extension of Trudy way.	WTR CAP	507	6977	Ongoing					300,000	5,212,500					5,512,500
Home Gardens Well 32 and Well 33 Project Drilling and equipping Well 32 and Well 33 which are located on Grant Street.	WTR CAP	507	7033	Ongoing					3,800,000						3,800,000
Lester Zone 4 Booster Pump Increase capacity of existing booster. Master Plan Project B-1.	WTR CAP	507		Ongoing										396,500	396,500
Water Capacity Fund Subtotal					\$ 505,258	\$ 682,787	\$ 5,006,955	\$ 6,195,000	\$ 4,100,000	\$ 5,212,500	\$ 213,000	\$ -	\$ -	\$ 3,229,000	\$ 18,949,500

RECLAIMED WATER SYSTEM FUND

Stagecoach Park Reclaimed Waterline Install 20-inch diameter pipeline from Bluff Street and River Road to Stagecoach Park to receive Norco's reclaimed water.	REC WTR	567	6559	Ongoing	\$ 1,572,244	\$ 1,261,754	\$ 286,656	\$ 3,120,654							\$ 3,120,654
Butterfield Park Reclaimed Waterline Connect 5600 feet of 12" pipe to an existing pipeline at the intersection of Stagecoach Road and Corydon Street, continue southwest along Corydon to connect to an existing 12" reclaimed waterline in Butterfield Drive to feed Butterfield Park.	REC WTR	567	6561	June 2016	2,727,705		1,145,065	3,872,770							3,872,770

CAPITAL IMPROVEMENT PROGRAM - Project Cost Listing

WATER

Project Name and Description	Fund Source	Fund	Project No.	Estimated Completion Date	Prior Expenses Up to 10 Yrs.	Encumbrances	Estimated Continuing Appropriations	Prior Funding Subtotal	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	Future Years	Total Project Cost
<u>RECLAIMED WATER SYSTEM FUND, Continued</u>															
Chase Park Reclaimed Waterline Construct 1,500 feet of 8" ductile pipe from Foothill Parkway to Chase Park.	REC WTR	567	6843	Ongoing	2,180			2,180	50,000		479,000				531,180
Reclaimed Water Zone 2 to Zone 3 Project Construct 10,000 feet of 12" ductile pipe from City Park to Centennial High.	REC WTR	567	6844	Ongoing	2,245			2,245	100,000			3,260,500			3,362,745
Promenade Reclaimed Waterline Project Construct 6,000 feet of 12" ductile pipe from McKinley to East Sixth Street.	REC WTR	567	6845	Ongoing	2,182			2,182	100,000			1,902,000			2,004,182
Western Riverside County Regional Wastewater Authority Reclaimed Waterline Construct waterline from Plant to Bluff/ River Road.	REC WTR	567	6971	Ongoing			200,000	200,000		3,127,500					3,327,500
Corona Hills Reclaimed Water Storage Tank Update reservoir and related reclaimed water pipeline near Hidden Valley Golf Course.	REC WTR	567	7034	Ongoing					250,000					5,664,500	5,914,500
Main Street Reclaimed Waterline Project Design and construct 8" pipeline for 2000 feet from Citrus to Montoya.	REC WTR	567	7035	Ongoing					50,000	208,500					258,500
Main Street Reclaimed Water Storage Tank Construct a 2.5 MG reclaimed water storage tank at the terminus of South Main.	REC WTR	567	7036	Ongoing					200,000					7,091,500	7,291,500
Old Temescal Road Recycled Water Line Install 8" line for 4400 feet, from Fullerton and Old Temescal easterly to Compton.	REC WTR	567	7037	Ongoing					75,000			935,000			1,010,000
Reclaimed Water System Fund Subtotal					\$ 4,306,556	\$ 1,261,754	\$ 1,631,721	\$ 7,200,031	\$ 825,000	\$ 3,336,000	\$ 479,000	\$ 6,097,500	\$ -	\$ 12,756,000	\$ 30,693,531

WATER UTILITY FUND

Desalter Interstage Boosters/ Brine Recovery Design and install interstage booster systems on Trains 1 through 4 or utilize Brine Recovery technology.	WTR UTIL	570	6018	Ongoing							\$ 495,000				\$ 495,000
Smith Waterline Replacement Replace 2,100 feet of 10" ACP with 12" PVC, ten water services, 15 fire services and 3 "T" connectors.	WTR UTIL	570	6282	Ongoing	939,775	186,699	189,244	1,315,718							1,315,718

CAPITAL IMPROVEMENT PROGRAM - Project Cost Listing

WATER

Project Name and Description	Fund Source	Fund	Project No.	Estimated Completion Date	Prior Expenses Up to 10 Yrs.	Encumbrances	Estimated Continuing Appropriations	Prior Funding Subtotal	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	Future Years	Total Project Cost
<u>WATER UTILITY FUND, Continued</u>															
<u>SR-91 DWP Utility Betterments</u> Cooperative Agreement with RCTC to pay up to \$1,554,000 for DWP's requested betterments. This agreement will be initiated upon the completion of the Temescal Wells.	WTR UTIL	570	6284	Ongoing	130,610		269,390	400,000						1,284,433	1,684,433
<u>Temescal Valley Water District Service Boundary Adjustment</u> In conjunction with the Temescal Valley Water District, installation of tie overs which will remove service from the Corona service line for the service boundary areas along Temescal Canyon Road near Weirick Avenue and connect to the Temescal Valley Water Service. In addition, construct an interconnection between the two services to provide redundancy in case of an emergency.	WTR UTIL	570	6563	Ongoing	83,955		48,045	132,000		43,000					175,000
<u>Small Waterline Replacement</u> Small Waterline repairs throughout system as pipe reaches service life. Master Plan Project P-15.	WTR UTIL	570	6573	Ongoing	13,647	252,350	90,382	356,379			850,000			2,266,000	3,472,379
<u>Southwest Grand Blvd Quadrant Waterline Replacement</u> Replace existing water services and aging small diameter waterlines from rear alleys to fronting streets. Water Master Plan Project P-26.	WTR UTIL	570	6608	Ongoing	308,735	36,013	560,252	905,000	1,000,000						1,905,000
<u>Southeast Grand Blvd Quadrant Waterline Replacement</u> Replace existing water services and aging small diameter waterlines from rear alleys to fronting streets. Water Master Plan Project P-24.	WTR UTIL	570	6611	Ongoing	230,020	7,267	62,713	300,000				2,673,500			2,973,500
<u>Ontario Zone 4 - Buena Vista to Taylor</u> Upsize existing waterline to 12".	WTR UTIL	570	6704	Ongoing	4,310		17,450	21,760			2,182,000				2,203,760
<u>Lester Inlet Valve Relocation</u> Relocate valve onto property into an open vault with staircase powered by plant generation.	WTR UTIL	570	6817	Ongoing	9,381			9,381			351,619				361,000
<u>Lester Post Disinfection Station</u> Relocate post disinfection injection point onto 30" filter effluent line between filters and Contact Chlorine Basin. Also install two injectors.	WTR UTIL	570	6818	Ongoing	11,771			11,771				468,229			480,000
<u>Mills Flow Station at Lester</u> Raise station above ground.	WTR UTIL	570	6823	Ongoing	1,156			1,156		264,344					265,500

CAPITAL IMPROVEMENT PROGRAM - Project Cost Listing

WATER

Project Name and Description	Fund Source	Fund	Project No.	Estimated Completion Date	Prior Expenses Up to 10 Yrs.	Encumbrances	Estimated Continuing Appropriations	Prior Funding Subtotal	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	Future Years	Total Project Cost
<u>WATER UTILITY FUND, Continued</u>															
<u>Ontario Ave 1220 Zone: Kellogg - Fullerton</u> Install a new 12" waterline.	WTR UTIL	570	6824	Ongoing	16,484		943,516	960,000							960,000
<u>Well 14 Re-drill/ Repipe</u> Complete well re-drilling, building expansion and Motor Control Center (MCC) upgrade.	WTR UTIL	570	6826	Ongoing	36,639			36,639			2,055,861				2,092,500
<u>Well 15 Repipe</u> Repipe Well 15's discharge piping and raise pump base.	WTR UTIL	570	6827	Ongoing	11,332		163,668	175,000					1,110,000		1,285,000
<u>Well 22 Repipe</u> Repipe Well 22's discharge piping and relocate common well valve inside the building.	WTR UTIL	570	6828	Ongoing	13,347		61,653	75,000							75,000
<u>Cathodic Protection on Desalter Wells/ Pipeline</u> Install cathodic protection on Desalter wells/ pipeline.	WTR UTIL	570	6836	Ongoing	14			14			200,000				200,014
<u>Corona Airport Waterline</u> Construct 700 feet of 8 inch ductile iron waterline from Jenks Circle to Butterfield Drive.	WTR UTIL	570	6839	Ongoing	77,254		22,746	100,000				261,000			361,000
<u>Home Gardens Water District Well Interconnection Project</u> Construction of a metering facility to allow the City to begin serving the Home Garden's Water District (HGWD) potable water.	WTR UTIL	570	6841	Ongoing	275,924		24,076	300,000							300,000
<u>Masters Water Storage Tank</u> Construction of a 2.5 MG water storage tank in Zone 1220. This project is associated with the Arantine Hills Development.	WTR UTIL	570	6852	Ongoing	37,955		312,045	350,000		4,170,000					4,520,000
<u>Hidden Springs Road Waterline</u> Design and construct 16" ductile iron potable in Hidden Springs, from Prairie Circle to Tejon Circle.	WTR UTIL	570	6857	Ongoing	80,667	26,623	20,000	127,290					1,559,710		1,687,000
<u>Kellogg Waterline Replacement</u> Replace service tie-ins between Magnolia Avenue and Ontario Avenue. Tie onto existing 12" line on east side of street. Abandon existing 6" tie-ins on west side of street.	WTR UTIL	570	6861	Ongoing						782,000					782,000
<u>Advanced Metering Infrastructure (AMI)</u> Convert 1,100 meters to "smart" meters and two collectors.	WTR UTIL	570	6865	Ongoing	622,694	4,999	22,307	650,000							650,000

CAPITAL IMPROVEMENT PROGRAM - Project Cost Listing

WATER

Project Name and Description	Fund Source	Fund	Project No.	Estimated Completion Date	Prior Expenses Up to 10 Yrs.	Encumbrances	Estimated Continuing Appropriations	Prior Funding Subtotal	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	Future Years	Total Project Cost
<u>WATER UTILITY FUND, Continued</u>															
<u>Well Rehabilitation</u> Reline deteriorating well casing, install new pump and motor, repipe and paint Well 19 to meet operating standards.	WTR UTIL	570	6868	Ongoing	168,804	25,563		194,367		505,000					699,367
<u>Temescal Desalter Facility Improvements</u> Provides for necessary improvements which include building code, Americans with Disabilities Act (ADA) upgrades, landscaping and parking improvements.	WTR UTIL	570	6913	Ongoing	610,381	1,168	48,451	660,000							660,000
<u>Arcadia Waterline Replacement</u> Construct 8" looped waterline in the Arcadia-Jolora-Minnesota areas to replace existing waterlines. In addition, replace existing 4" waterline in Orange Street and Boyd Avenue.	WTR UTIL	570	6972	Ongoing	65,117	19,554	39,829	124,500			275,500				400,000
<u>Library Conservation Garden</u> Design and install a demonstration garden at the Corona Public Library.	WTR UTIL	570	6973	Ongoing	9,962		315,038	325,000							325,000
<u>Sierra Del Oro (SDO) Treatment Plant - CO2 Injection System</u> Injection system will provide better control of the PH levels to enhance coagulation properties of chemicals.	WTR UTIL	570	6975	Ongoing			400,000	400,000							400,000
<u>Sierra Del Oro (SDO) - Valve and Actuator Replacement</u> Replace valve and actuator.	WTR UTIL	570	6976	Ongoing			70,000	70,000							70,000
<u>Water Treatment Facilities Filter Media Exchange</u> Remove and replace all of the media in 9 filters located at Lester and Sierra Del Oro (SDO) facilities. The current media has met its life and replacement will allow for filter optimization.	WTR UTIL	570	6979	Ongoing			300,000	300,000							300,000
<u>West End Well 34</u> Drill and equip new water supply well number 34 at Garfield Avenue, north of Railroad Street.	WTR UTIL	570	6980	Ongoing			100,000	100,000		2,000,000					2,100,000
<u>West End Well Field Waterline</u> Design and construct 24" ductile iron pipeline from Garfield Street to Railroad Street and then easterly to a point west of Vicentia Avenue.	WTR UTIL	570	6981	Ongoing	28,975	54,590	100,000	183,565		1,981,000					2,164,565

CAPITAL IMPROVEMENT PROGRAM - Project Cost Listing

WATER

Project Name and Description	Fund Source	Fund	Project No.	Estimated Completion Date	Prior Expenses Up to 10 Yrs.	Encumbrances	Estimated Continuing Appropriations	Prior Funding Subtotal	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	Future Years	Total Project Cost
<u>WATER UTILITY FUND, Continued</u>															
<u>Supplemental Residential Turf Removal Rebate Project</u> Provide additional funding for the Turf Removal Rebate Project to incentivize residents to remove ornamental turf.	WTR UTIL	570	6998	Ongoing			1,000,000	1,000,000							1,000,000
<u>Desalter Chemical Feed System</u> Install a polyphosphate and Y2K chemical system. Water Master Plan Project S-4. Design and install 2,500 gallon antiscalent chemical tank in containment. Design and install 2,500 gallon polyphosphate chemical storage tank in containment. Also install chemical feed system in containment.	WTR UTIL	570	8431	Ongoing	95,660			95,660		492,144					587,804
<u>Gunnison Waterline Replacement</u> Waterline replacement and upsizing. Upsize 750 feet of 8" waterline to 12" to maintain pressure on Gunnison. Water Master Plan Project P-7.	WTR UTIL	570	8434	Ongoing										204,000	204,000
<u>Waterline Replacement - Merrill</u> Replace 2" water line with 810 feet of 12" water line, between West Grand and Railroad after the State Route 91 is completed. Plan Project P-19 and P-32.	WTR UTIL	570	8439	Ongoing								815,500			815,500
<u>Avenida del Vista Waterline Replacement</u> Replace pipe at Avenida del Vista due to service life: Upsize 1800 LF of 12" and 200 LF of 8". Master Plan Project P-29.	WTR UTIL	570		Ongoing					375,500						375,500
<u>Desalter Stage 3 Recovery System</u> Install a third stage recovery system to increase the permeation of the combined water flow of trains one through four. This process will yield a longer lifespan of the membrane element.	WTR UTIL	570		Ongoing								2,661,000			2,661,000
<u>Kendall Waterline Replacement</u> Install 1700 feet of 8' waterline, 12 fire hydrants, and tie in 30 services from alley on West Kendall from Taylor to Main Street.	WTR UTIL	570		Ongoing										396,500	396,500
<u>Lincoln Waterline Third to Tenth</u> Construct waterline along Lincoln between Third Street and Tenth Street. This waterline will facilitate Well 14 to provide water to the Desalter.	WTR UTIL	570		Ongoing								1,000,000			1,000,000

CAPITAL IMPROVEMENT PROGRAM - Project Cost Listing

WATER

Project Name and Description	Fund Source	Fund	Project No.	Estimated Completion Date	Prior Expenses Up to 10 Yrs.	Encumbrances	Estimated Continuing Appropriations	Prior Funding Subtotal	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	Future Years	Total Project Cost
<u>WATER UTILITY FUND, Continued</u>															
<u>Northeast Grand Blvd Quadrant Waterline Replacement</u> Replace existing water services and aging small diameter water lines from rear alleys to fronting streets. Water Master Plan Project P-20.	WTR UTIL	570		Ongoing										2,379,000	2,379,000
<u>Oakland Hills, Cypress Point and Braeburn Waterline Replacement</u> Replace 1,680 feet of 8" waterline, 28 water services, and seven fire hydrants. Water Master Plan Project P-28.	WTR UTIL	570		Ongoing						469,500					469,500
<u>Sixth Street Waterline Replacement - Grand to Rimpau</u> Replace 2,200 LF of pipe from Grand to Rimpau due to service life. Master Plan Project P-31.	WTR UTIL	570		Ongoing										340,000	340,000
<u>Water Systems Improvement Project</u> Replace Cutler Hammer Variable Frequency Drives (VFD's) which have exhausted their useful life. Replace with the current department standard Allen Bradley VFD's. Project will include six VFD's at the Temescal Desalter Facility and seven VFD's at various well sites throughout the system.	WTR UTIL	570		Ongoing									520,000		520,000
Water Utility Fund Subtotal					\$ 3,884,569	\$ 614,826	\$ 5,180,805	\$ 9,680,200	\$ 1,000,000	\$ 11,082,488	\$ 6,409,980	\$ 7,879,229	\$ 3,189,710	\$ 6,869,933	\$ 46,111,540

MULTI-FUND PROJECTS

<u>Reclaimed Water Backbone System</u> To design/ construct the citywide recycled water backbone system. Prior funding included a State Revolving Loan and a Water Recycling Grant. Water Master Plan Project S-14.	WR CAP	440	6540	June 2016	\$ 1,004,504			\$ 1,004,504							\$ 1,004,504
	REC WTR	567	6540		11,078,615	84,261	239,079	11,401,955							11,401,955
	WR UTIL	572	6540		1,457,000			1,457,000							1,457,000
<u>Mangular Blending Facility</u> Install new blending facility.	WTR RV	453	6589	Ongoing	696,336	64,832	132,573	893,741	200,000	5,800,000					6,893,741
	WTR UTIL	570	6589		206,259			206,259							206,259
<u>R3 Water Storage Tank</u> The design and construction of new Master Plan Reservoirs R-3.	WTR RV	453	6645	Ongoing	4,584,428		19,949	4,604,377							4,604,377
	WTR CAP	507	6645		643,535		119,156	762,691							762,691
	WTR UTIL	570	6645		28,930			28,930							28,930

CAPITAL IMPROVEMENT PROGRAM - Project Cost Listing

WATER

Project Name and Description	Fund Source	Fund	Project No.	Estimated Completion Date	Prior Expenses Up to 10 Yrs.	Encumbrances	Estimated Continuing Appropriations	Prior Funding Subtotal	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	Future Years	Total Project Cost
<u>MULTI-FUND PROJECTS, Continued</u>															
<u>Home Gardens Ion Exchange - Resin Treatment Plant Project</u>	WTR CAP	507	6851	Ongoing	385,627		7,689,125	8,074,752	130,000						8,204,752
Design and construct treatment facilities using the Strong Base Anion-ion Exchange method to handle both nitrate and perchlorate water issues at Wells 11A, 12A and Home Gardens well water.	WTR UTIL	570	6851		255,915		94,085	350,000							350,000
<u>Enterprise Asset Management (EAM) Program</u>	WTR UTIL	570	6866	Ongoing	168,454	863,546	68,000	1,100,000		1,000,000					2,100,000
Asset Management Program for all DWP facilities.	WR UTIL	572	6866		84,227	431,773	534,000	1,050,000							1,050,000
	ELEC	578	6866		28,076	143,924	178,000	350,000							350,000
<u>Supervisory Control and Data Acquisition (SCADA) Panel Replacement</u>	REC WTR	567	6982	Ongoing					30,000	31,500	32,000	33,000	33,500		160,000
Replacement and installation of 80 panels that have reached their end of service life. Project to continue over the next five years at 16 panels per year.	WTR UTIL	570	6982		57,680		342,320	400,000		313,000	319,500	435,000	444,000		1,911,500
	WR UTIL	572	6982		225,552		34,448	260,000	150,000	156,500	160,000				726,500
<u>Rincon Bridge</u>	WTR UTIL	570	7038	Ongoing					33,000		300,000				333,000
Construct a bailey bridge over the Oak Channel at Rincon Street to provide an emergency access road to the Temescal Desalter, Emergency Operations Center (EOC) and Corporation Yard.	WR UTIL	572	7038						33,000		300,000				333,000
	ELEC	578	7038						33,000		300,000				333,000
<u>Supervisory Control and Data Acquisition (SCADA) Backbone Licensed Radio Installation</u>	REC WTR	567	7039	Ongoing					15,000	15,000					30,000
Installing licensed backbone radios for SCADA Network. Project includes Federal Communications Commission (FCC) coordination and configuration, microwave equipment and labor to install 11 licensed microwave links, and site specific hardware and battery system.	WTR UTIL	570	7039						142,500	142,500					285,000
	WR UTIL	572	7039						142,500	142,500					285,000
Multi-Fund Projects Subtotal					\$ 20,905,138	\$ 1,588,336	\$ 9,450,735	\$ 31,944,209	\$ 909,000	\$ 7,601,000	\$ 1,411,500	\$ 468,000	\$ 477,500	\$ -	\$ 42,811,209
TOTAL WATER FACILITIES					\$ 29,601,521	\$ 4,147,703	\$ 21,270,216	\$ 55,019,440	\$ 6,834,000	\$ 27,231,988	\$ 8,513,480	\$ 14,444,729	\$ 3,667,210	\$ 22,854,933	\$ 138,565,780