



## **2019 – 2023 Capital Improvement Program**

### Utilities Project Summary by Fund

## 2019 – 2023 Capital Improvement Program

### Utilities Project Summary

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## Capital Improvement Program Project Funding Summary Fiscal Years 2019 - 2023

### Electric

#### Electric Distribution Overhead (CP0458)

##### CITYWIDE

Install system enhancements to ensure electric system reliability. Improvements may include replacement of electrical overhead conductors, transformers, distribution poles and devices to increase reliability and reduce operating costs.

	Fund	Estimated Exp Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	Future Years (3)	Totals
Capital	2014 Electric Bond	\$1,253,080	\$577,475	\$416,026	-	-	-	-	\$2,246,581
	2020 Electric Bond	-	-	-	\$630,326	\$646,800	\$663,812	\$681,305	\$2,622,243
	<b>Sum:</b>	<b>\$1,253,080</b>	<b>\$577,475</b>	<b>\$416,026</b>	<b>\$630,326</b>	<b>\$646,800</b>	<b>\$663,812</b>	<b>\$681,305</b>	<b>\$4,868,824</b>

#### Electric Distribution Underground (CP0459)

##### CITYWIDE

Provide various system improvements to include underground conductor installation, cable replacement, vault lid replacement and replacement of miscellaneous devices. These improvements are planned over several fiscal years.

	Fund	Estimated Exp Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	Future Years (3)	Totals
Capital	2014 Electric Bond	\$600,908	\$536,614	\$549,806	-	-	-	-	\$1,687,328
	2020 Electric Bond	-	-	-	\$2,596,466	\$2,664,327	\$2,701,965	\$2,773,166	\$10,735,924
	<b>Sum:</b>	<b>\$600,908</b>	<b>\$536,614</b>	<b>\$549,806</b>	<b>\$2,596,466</b>	<b>\$2,664,327</b>	<b>\$2,701,965</b>	<b>\$2,773,166</b>	<b>\$12,423,252</b>

#### Electric Generation (CP0082)

##### CITYWIDE

Identify power supply resources, including solar power, that can be owned in whole or in part by the City of Mesa. Alternatives are being explored to improve the reliability and/or efficiency of the electric utility service.

	Fund	Estimated Exp Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	Future Years (3)	Totals
Capital	2014 Electric Bond	-	\$292,793	\$299,615	-	-	-	-	\$592,408
	2020 Electric Bond	-	-	-	\$308,077	\$316,129	\$324,444	\$332,993	\$1,281,643
	<b>Sum:</b>	<b>-</b>	<b>\$292,793</b>	<b>\$299,615</b>	<b>\$308,077</b>	<b>\$316,129</b>	<b>\$324,444</b>	<b>\$332,993</b>	<b>\$1,874,051</b>

#### Electric Metering (CP0435)

##### CITYWIDE

Replace electric service meters based on 20-year lifecycle criteria. In addition, replace meters based on known issues, such as potential coils that improperly register energy consumption.

	Fund	Estimated Exp Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	Future Years (3)	Totals
Capital	Utility Replacement Extension and Renewal - ELC	\$369,750	\$456,353	\$466,016	\$505,362	\$504,588	\$507,445	\$1,602,568	\$4,412,082
	<b>Sum:</b>	<b>\$369,750</b>	<b>\$456,353</b>	<b>\$466,016</b>	<b>\$505,362</b>	<b>\$504,588</b>	<b>\$507,445</b>	<b>\$1,602,568</b>	<b>\$4,412,082</b>

#### Electric Smart Grid (CP0081)

##### CITYWIDE

Replace obsolete technology to improve system reliability and improve the ability to identify problems quickly and respond efficiently.

	Fund	Estimated Exp Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	Future Years (3)	Totals
Capital	2014 Electric Bond	-	\$275,225	\$119,845	-	-	-	-	\$395,070
	2020 Electric Bond	-	-	-	\$123,230	-	-	-	\$123,230
	<b>Sum:</b>	<b>-</b>	<b>\$275,225</b>	<b>\$119,845</b>	<b>\$123,230</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>\$518,300</b>



**Capital Improvement Program Project Funding Summary  
Fiscal Years 2019 - 2023**

**Electric****Electric Substation Improvements (CP0461)****CITYWIDE**

Construct improvements at electric substations to ensure long-term system reliability. These improvements will meet safety standards and improve security at the facilities.

		<b>Estimated Exp</b>							
<b>Fund</b>		<b>Through FY 17/18</b>	<b>FY 18/19</b>	<b>FY 19/20</b>	<b>FY 20/21</b>	<b>FY 21/22</b>	<b>FY 22/23</b>	<b>Future Years (3)</b>	<b>Totals</b>
Capital	2014 Electric Bond	\$1,042,880	\$2,568,962	-	-	-	-	-	\$3,611,842
	<b>Sum:</b>	<b>\$1,042,880</b>	<b>\$2,568,962</b>	-	-	-	-	-	<b>\$3,611,842</b>

**Electric Systems Retirements (CP0591)****CITYWIDE**

Replace electric system infrastructure to ensure reliability.

		<b>Estimated Exp</b>							
<b>Fund</b>		<b>Through FY 17/18</b>	<b>FY 18/19</b>	<b>FY 19/20</b>	<b>FY 20/21</b>	<b>FY 21/22</b>	<b>FY 22/23</b>	<b>Future Years (3)</b>	<b>Totals</b>
Capital	Electric	\$1,864	\$117,117	\$119,845	\$123,230	\$126,451	\$129,778	\$409,852	\$1,028,137
	<b>Sum:</b>	<b>\$1,864</b>	<b>\$117,117</b>	<b>\$119,845</b>	<b>\$123,230</b>	<b>\$126,451</b>	<b>\$129,778</b>	<b>\$409,852</b>	<b>\$1,028,137</b>

**New Electric Services (CP0534)****CITYWIDE**

Install new electrical service wires for new customers and provide for system expansion. It will also replace existing electrical service wires to increase reliability. These improvements are planned over several fiscal years.

		<b>Estimated Exp</b>							
<b>Fund</b>		<b>Through FY 17/18</b>	<b>FY 18/19</b>	<b>FY 19/20</b>	<b>FY 20/21</b>	<b>FY 21/22</b>	<b>FY 22/23</b>	<b>Future Years (3)</b>	<b>Totals</b>
Capital	2014 Electric Bond	\$806,202	\$392,761	\$394,330	-	-	-	-	\$1,593,293
	2020 Electric Bond	-	-	-	\$1,232,305	\$1,264,513	\$1,297,773	\$1,331,971	\$5,126,562
	<b>Sum:</b>	<b>\$806,202</b>	<b>\$392,761</b>	<b>\$394,330</b>	<b>\$1,232,305</b>	<b>\$1,264,513</b>	<b>\$1,297,773</b>	<b>\$1,331,971</b>	<b>\$6,719,855</b>

## Capital Improvement Program Project Funding Summary Fiscal Years 2019 - 2023

### Natural Gas Aging Infrastructure

#### Gas Aging Infrastructure Replacement (CP0483)

##### CITYWIDE

Replace necessary gas system infrastructure identified during the annual survey

		Estimated Exp							Totals
Fund		Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	Future Years (3)	
Capital	2014 Gas Bond	\$2,673,847	\$2,183,598	\$2,053,141	-	-	-	-	\$6,910,586
	2020 Gas Bond	-	-	-	\$3,721,836	\$3,764,189	\$3,992,152	\$4,167,824	\$15,646,001
<b>Sum:</b>		<b>\$2,673,847</b>	<b>\$2,183,598</b>	<b>\$2,053,141</b>	<b>\$3,721,836</b>	<b>\$3,764,189</b>	<b>\$3,992,152</b>	<b>\$4,167,824</b>	<b>\$22,556,587</b>

#### Gas Line Retirements (CP0563)

##### CITYWIDE

Remove gas mains and services that are no longer needed to support the natural gas system. Inclusion of this project will ensure operational integrity of the natural gas pipeline system and the reliability of a safe energy resource to our customers.

		Estimated Exp							Totals
Fund		Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	Future Years (3)	
Capital	Natural Gas	\$276,508	\$119,119	\$121,894	\$125,337	\$128,613	\$131,996	\$416,858	\$1,320,325
<b>Sum:</b>		<b>\$276,508</b>	<b>\$119,119</b>	<b>\$121,894</b>	<b>\$125,337</b>	<b>\$128,613</b>	<b>\$131,996</b>	<b>\$416,858</b>	<b>\$1,320,325</b>

#### Gas Main Replacements - Magma Service Area (CP0482)

##### CITYWIDE

Upgrade the existing Magma system to reduce maintenance problems and ensure operational integrity of the natural gas pipeline system.

		Estimated Exp							Totals
Fund		Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	Future Years (3)	
Capital	2014 Gas Bond	\$115	\$587,853	\$640,655	-	-	-	-	\$1,228,623
	2020 Gas Bond	-	-	-	\$702,815	\$770,898	\$844,100	\$924,296	\$3,242,109
<b>Sum:</b>		<b>\$115</b>	<b>\$587,853</b>	<b>\$640,655</b>	<b>\$702,815</b>	<b>\$770,898</b>	<b>\$844,100</b>	<b>\$924,296</b>	<b>\$4,470,732</b>

#### Gas Meters New and Replacement (CP0711)

##### CITYWIDE

Install gas meters citywide

		Estimated Exp							Totals
Fund		Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	Future Years (3)	
Capital	2014 Gas Bond	\$1,008,263	\$446,023	\$454,502	-	-	-	-	\$1,908,788
	2020 Gas Bond	-	-	-	\$493,932	\$492,621	\$505,578	\$518,901	\$2,011,032
<b>Sum:</b>		<b>\$1,008,263</b>	<b>\$446,023</b>	<b>\$454,502</b>	<b>\$493,932</b>	<b>\$492,621</b>	<b>\$505,578</b>	<b>\$518,901</b>	<b>\$3,919,820</b>

#### Gas Meters: New and Replacement (CP0496)

##### CITYWIDE

Install gas meters citywide

		Estimated Exp							Totals
Fund		Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	Future Years (3)	
Capital	Utility Replacement Extension and Renewal - GAS	\$1,216,724	\$446,023	\$454,502	\$493,932	\$492,621	\$505,578	\$1,596,672	\$5,206,052
<b>Sum:</b>		<b>\$1,216,724</b>	<b>\$446,023</b>	<b>\$454,502</b>	<b>\$493,932</b>	<b>\$492,621</b>	<b>\$505,578</b>	<b>\$1,596,672</b>	<b>\$5,206,052</b>

#### High Pressure Gas Main Installations (CP0442)

##### CITYWIDE

Install high pressure gas main to meet anticipated growth of the City.

		Estimated Exp							Totals
Fund		Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	Future Years (3)	
Capital	2014 Gas Bond	\$152,163	\$839,108	\$901,593	-	-	-	-	\$1,892,864
	2020 Gas Bond	-	-	-	\$973,409	\$1,048,792	\$1,130,198	\$1,217,979	\$4,370,378
<b>Sum:</b>		<b>\$152,163</b>	<b>\$839,108</b>	<b>\$901,593</b>	<b>\$973,409</b>	<b>\$1,048,792</b>	<b>\$1,130,198</b>	<b>\$1,217,979</b>	<b>\$6,263,242</b>

## Capital Improvement Program Project Funding Summary Fiscal Years 2019 - 2023

### Natural Gas Aging Infrastructure

#### Mckellips Road Gas Line; Lindsay to Val Vista (C10374)

##### COUNCIL DISTRICT 1

Install high and intermediate pressure gas main to ensure operational integrity of the natural gas system.

		Estimated Exp							
Fund		Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	Future Years (3)	Totals
Capital	2020 Gas Bond	-	-	-	-	\$126,857	\$1,549,102	-	\$1,675,959
<b>Sum:</b>		-	-	-	-	<b>\$126,857</b>	<b>\$1,549,102</b>	-	<b>\$1,675,959</b>

#### Mckellips Road Natural Gas Line; Country Club to Loop 202 (CP0221)

##### COUNCIL DISTRICT 1

Purchase and install intermediate pressure gas main for service along Mckellips Road.

		Estimated Exp							
Fund		Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	Future Years (3)	Totals
Capital	2020 Gas Bond	-	-	-	\$29,297	\$354,746	-	-	\$384,043
<b>Sum:</b>		-	-	-	<b>\$29,297</b>	<b>\$354,746</b>	-	-	<b>\$384,043</b>

### Replace Aging Utility Infrastructure (CP0649)

##### CITYWIDE

Replace less efficient utility lines or lines that are beyond their support lifecycle. Timely replacement will help avoid service disruptions.

		Estimated Exp							
Fund		Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	Future Years (3)	Totals
Capital	2020 Gas Bond	-	-	-	\$1,996,134	-	-	-	\$1,996,134
	2020 Wastewater Bond	-	-	-	\$581,673	\$6,565,860	-	-	\$7,147,533
	2020 Water Bond	-	-	-	\$558,445	\$5,902,321	-	-	\$6,460,766
<b>Sum:</b>		-	-	-	<b>\$3,136,252</b>	<b>\$12,468,181</b>	-	-	<b>\$15,604,433</b>

#### Rio Salado Parkway Utility Line Replacement (C10385)

##### COUNCIL DISTRICT 1

Replace intermediate pressure gas main to ensure operational integrity of the natural gas system in Mesa.

		Estimated Exp							
Fund		Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	Future Years (3)	Totals
Capital	2020 Gas Bond	-	-	-	\$81,545	-	-	-	\$81,545
	2020 Water Bond	-	-	-	\$461,859	-	-	-	\$461,859
<b>Sum:</b>		-	-	-	<b>\$543,404</b>	-	-	-	<b>\$543,404</b>

#### SCADA System for the Natural Gas Distribution System (C01886)

##### CITYWIDE

Install a Supervisory Control & Data Acquisition (SCADA) system to control and monitor all natural gas remote facilities.

Natural gas remote facilities are currently monitored manually, which leads to inefficiencies and safety hazards.

		Estimated Exp							
Fund		Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	Future Years (3)	Totals
Capital	2010 Gas Bond	\$100	-	-	-	-	-	-	\$100
	2014 Gas Bond	\$100,247	\$142,943	-	-	-	-	-	\$243,190
<b>Sum:</b>		<b>\$100,347</b>	<b>\$142,943</b>	-	-	-	-	-	<b>\$243,290</b>

#### Stapley Road Utility Line; University to Mckellips (CP0219)

##### CITYWIDE

Replace gas line along Stapley Drive to ensure operational reliability of the natural gas system.

		Estimated Exp							
Fund		Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	Future Years (3)	Totals
Capital	2020 Gas Bond	-	-	-	\$97,897	\$2,324,800	-	-	\$2,422,697
<b>Sum:</b>		-	-	-	<b>\$97,897</b>	<b>\$2,324,800</b>	-	-	<b>\$2,422,697</b>

**Capital Improvement Program Project Funding Summary  
Fiscal Years 2019 - 2023**

**Natural Gas Aging Infrastructure****University Drive Utility Line; Alma School to Country Club (CP0220)****CITYWIDE**

Construct system improvements along University Drive to ensure operational reliability of the natural gas system.

	Fund	Estimated Exp							Totals
		Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	Future Years (3)	
Capital	2010 Gas Bond	-	-	\$35,718	-	-	-	-	\$35,718
	2020 Gas Bond	-	-	-	\$902,876	-	-	-	\$902,876
	<b>Sum:</b>	-	-	<b>\$35,718</b>	<b>\$902,876</b>	-	-	-	<b>\$938,594</b>

**Utility Line Replacement in Quarter Sections 12B & 12D (C10584)****COUNCIL DISTRICT 3**

Replace aging main and service lines in plat quarter section 12B and 12D.

	Fund	Estimated Exp							Totals
		Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	Future Years (3)	
Capital	2010 Gas Bond	-	-	\$290,079	-	-	-	-	\$290,079
	2020 Gas Bond	-	-	-	\$5,248,717	-	-	-	\$5,248,717
	2020 Wastewater Bond	-	-	-	-	-	\$614,666	\$7,008,878	\$7,623,544
	<b>Sum:</b>	-	-	<b>\$290,079</b>	<b>\$5,248,717</b>	-	<b>\$614,666</b>	<b>\$7,008,878</b>	<b>\$13,162,340</b>

**Utility Line Replacement in Quarter Sections 14A & 14C (C10585)****CITYWIDE**

Replace aging main and service lines in plat quarter section 14A and 14C.

	Fund	Estimated Exp							Totals
		Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	Future Years (3)	
Capital	2010 Gas Bond	-	-	\$396,685	-	-	-	-	\$396,685
	2020 Gas Bond	-	-	-	\$6,318,681	-	-	-	\$6,318,681
	<b>Sum:</b>	-	-	<b>\$396,685</b>	<b>\$6,318,681</b>	-	-	-	<b>\$6,715,366</b>

**Utility Line Replacement in Quarter Sections 20A & 20B (C10381)****COUNCIL DISTRICT 1**

Replace aging main and service lines in plat quarter section 20A and 20B.

	Fund	Estimated Exp							Totals
		Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	Future Years (3)	
Capital	2020 Gas Bond	-	-	-	\$79,910	\$1,344,079	-	-	\$1,423,989
	2020 Water Bond	-	-	-	\$710,796	\$7,512,544	-	-	\$8,223,340
	<b>Sum:</b>	-	-	-	<b>\$790,706</b>	<b>\$8,856,623</b>	-	-	<b>\$9,647,329</b>

**Utility Line Replacement Quarter Section 21D, Clark, Pepper (C10382)****COUNCIL DISTRICT 4**

Replace aging main and service lines in plat quarter section 21D.

	Fund	Estimated Exp							Totals
		Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	Future Years (3)	
Capital	2020 Gas Bond	-	-	-	\$996,892	-	-	-	\$996,892
	2020 Water Bond	-	-	-	\$477,590	\$5,047,747	-	-	\$5,525,337
	<b>Sum:</b>	-	-	-	<b>\$1,474,482</b>	<b>\$5,047,747</b>	-	-	<b>\$6,522,229</b>

**Utility Line Replacement Quarter Sections 13C, 21A, & 20D (C10380)****CITYWIDE**

Replace aging main and service lines in plat quarter section 13C, 21A and 20D.

	Fund	Estimated Exp							Totals
		Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	Future Years (3)	
Capital	2010 Gas Bond	-	\$1,546,434	-	-	-	-	-	\$1,546,434
	2014 Water Bond	-	\$3,113,442	-	-	-	-	-	\$3,113,442
	<b>Sum:</b>	-	<b>\$4,659,876</b>	-	-	-	-	-	<b>\$4,659,876</b>

## Capital Improvement Program Project Funding Summary Fiscal Years 2019 - 2023

### Natural Gas Aging Infrastructure

#### Warner Road Utility Infrastructure; Power to Sossaman (C10562)

##### COUNCIL DISTRICT 6

Replace aging infrastructure to avoid service disruption in the area.

		Estimated Exp							Totals
Fund		Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	Future Years (3)	
Capital	2020 Gas Bond	-	-	-	\$187,027	\$2,169,652	-	-	\$2,356,679
	2020 Water Bond	-	-	-	\$95,684	\$991,664	-	-	\$1,087,348
<b>Sum:</b>		-	-	-	<b>\$282,711</b>	<b>\$3,161,316</b>	-	-	<b>\$3,444,027</b>

### Natural Gas Growth

#### Arizona Farms Road High Pressure Main & Gate Station (CP0517)

##### MAGMA

Replace aging high pressure steel main along Arizona Farms Road to increase the effective capacity of the Clausen gate station in the Magma service area. This will allow Clausen gate station to be a more effective supply point.

		Estimated Exp							Totals
Fund		Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	Future Years (3)	
Capital	2020 Gas Bond	-	-	-	-	-	\$857,973	\$8,805,812	\$9,663,785
<b>Sum:</b>		-	-	-	-	-	<b>\$857,973</b>	<b>\$8,805,812</b>	<b>\$9,663,785</b>

### EVIT CNG Fueling Station (CP0677)

##### COUNCIL DISTRICT 4

Construct a Compressed Natural Gas (CNG) fueling facility to serve the community. The construction of this facility is in cooperation with the East Valley Institute of Technology campus on Main Street, west of Alma School Road.

		Estimated Exp							Totals
Fund		Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	Future Years (3)	
Capital	2020 Gas Bond	-	-	-	\$2,506,740	-	-	-	\$2,506,740
<b>Sum:</b>		-	-	-	<b>\$2,506,740</b>	-	-	-	<b>\$2,506,740</b>

### Gas New Mains (CP0481)

##### CITYWIDE

Extend gas mains and services to new subdivisions.

		Estimated Exp							Totals
Fund		Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	Future Years (3)	
Capital	2014 Gas Bond	\$1,934,073	\$2,982,045	\$3,356,472	-	-	-	-	\$8,272,590
	2020 Gas Bond	-	-	-	\$4,702,979	\$5,067,191	\$5,460,499	\$5,884,610	\$21,115,279
<b>Sum:</b>		<b>\$1,934,073</b>	<b>\$2,982,045</b>	<b>\$3,356,472</b>	<b>\$4,702,979</b>	<b>\$5,067,191</b>	<b>\$5,460,499</b>	<b>\$5,884,610</b>	<b>\$29,387,869</b>

### Gas New Services (CP0480)

##### CITYWIDE

Install gas lines in new subdivision developments throughout the City and Magma Service Area.

		Estimated Exp							Totals
Fund		Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	Future Years (3)	
Capital	2014 Gas Bond	\$2,354,175	\$2,751,006	\$2,955,861	-	-	-	-	\$8,061,042
	2020 Gas Bond	-	-	-	\$3,191,306	\$3,438,448	\$3,705,335	\$3,993,128	\$14,328,217
<b>Sum:</b>		<b>\$2,354,175</b>	<b>\$2,751,006</b>	<b>\$2,955,861</b>	<b>\$3,191,306</b>	<b>\$3,438,448</b>	<b>\$3,705,335</b>	<b>\$3,993,128</b>	<b>\$22,389,259</b>

### Higley Regulator Station; McDowell to Thomas (CP0181)

##### COUNCIL DISTRICT 5

Construct a regulator station and other system improvements to ensure operational reliability and expansion of the natural gas pipeline to customers in northeast Mesa.

		Estimated Exp							Totals
Fund		Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	Future Years (3)	
Capital	2014 Gas Bond	\$1,122	-	\$1,777,921	-	-	-	-	\$1,779,043
<b>Sum:</b>		<b>\$1,122</b>	-	<b>\$1,777,921</b>	-	-	-	-	<b>\$1,779,043</b>

Streets bond funding is not included pending City Council direction.

**Capital Improvement Program Project Funding Summary**  
**Fiscal Years 2019 - 2023**

**Natural Gas Growth****Magma Utility Service Center (CP0071)****MAGMA**

Construct a satellite service center for employees, vehicles, materials, tools and equipment from the Natural Gas Division, the Utility Services Section and Gas Marketing to provide service and support to the gas system and customers in the area.

		Estimated Exp							
Fund		Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	Future Years (3)	Totals
Capital	2020 Gas Bond	-	-	-	\$564,017	-	-	-	\$564,017
<b>Sum:</b>		-	-	-	\$564,017	-	-	-	\$564,017

**Natural Gas System Reinforcement****Regulator Station Security (C10388)****CITYWIDE**

Install on-site security systems to monitor and deter theft and sabotage of regulator station equipment.

		Estimated Exp							
Fund		Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	Future Years (3)	Totals
Capital	2010 Gas Bond	\$5,835	-	-	-	-	-	-	\$5,835
	2014 Gas Bond	-	\$65,392	\$68,065	-	-	-	-	\$133,457
	2020 Gas Bond	-	-	-	\$71,193	\$74,311	\$77,575	\$80,989	\$304,068
<b>Sum:</b>		\$5,835	\$65,392	\$68,065	\$71,193	\$74,311	\$77,575	\$80,989	\$443,360

**Capital Improvement Program Project Funding Summary  
Fiscal Years 2019 - 2023**

**Streets****1st Avenue Improvements (CP0279)****COUNCIL DISTRICT 4**

Install landscaping and street improvements in areas along downtown at both 1st Avenue and Hibbert.

Fund	Estimated Exp Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	Future Years (3)	Totals
Capital	2014 Electric Bond	\$905	-	-	-	-	-	\$905
	2014 Gas Bond	\$1,208	-	-	-	-	-	\$1,208
	2014 Wastewater Bond	\$4	-	-	-	-	-	\$4
	2014 Water Bond	\$186	-	-	-	-	-	\$186
	2020 Electric Bond	-	-	-	\$2,287,204	-	-	\$2,287,204
	2020 Gas Bond	-	-	-	\$2,166,177	-	-	\$2,166,177
	2020 Wastewater Bond	-	-	-	\$521,700	-	-	\$521,700
	2020 Water Bond	-	-	-	\$1,990,692	-	-	\$1,990,692
<b>Sum:</b>	<b>\$2,303</b>	<b>-</b>	<b>-</b>	<b>\$6,965,773</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>\$6,968,076</b>

**Arterial Reconstruction (CP0861)****CITYWIDE**

Reconstruct arterial street segments that are at the end of their life cycle and can no longer be maintained by conventional means.

Concurrent work will include upgrades to any concrete ramps, driveways and sidewalks to current ADA standards.

Fund	Estimated Exp Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	Future Years (3)	Totals
Capital	2010 Gas Bond	-	\$540,485	-	-	-	-	\$540,485
	2020 Water Bond	-	-	-	\$923,718	-	-	\$923,718
<b>Sum:</b>	<b>-</b>	<b>\$540,485</b>	<b>-</b>	<b>\$923,718</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>\$1,464,203</b>

**Broadway Road; Country Club to Mesa Drive (CP0029)****COUNCIL DISTRICT 4**

Construct lane extensions around the intersections and various roadway improvements from Country Club to Mesa Drive.

Fund	Estimated Exp Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	Future Years (3)	Totals
Capital	2014 Electric Bond	-	\$480,030	-	-	-	-	\$480,030
	2014 Gas Bond	-	\$110,849	-	-	-	-	\$110,849
	2014 Water Bond	-	\$191,375	-	-	-	-	\$191,375
	2020 Electric Bond	-	-	-	\$9,191,436	-	-	\$9,191,436
	2020 Gas Bond	-	-	-	\$1,628,292	-	-	\$1,628,292
	2020 Water Bond	-	-	-	\$1,750,336	-	-	\$1,750,336
<b>Sum:</b>	<b>-</b>	<b>\$782,254</b>	<b>-</b>	<b>-</b>	<b>\$12,570,064</b>	<b>-</b>	<b>-</b>	<b>\$13,352,318</b>

**Broadway Road; Mesa Drive to Stapley (CP0666)****COUNCIL DISTRICT 4**

Address safety and capacity needs along the Broadway Road corridor from Mesa Drive to east of Stapley Road.

Fund	Estimated Exp Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	Future Years (3)	Totals
Capital	2014 Electric Bond	-	\$156,644	-	-	-	-	\$156,644
	2014 Gas Bond	-	\$135,482	-	-	-	-	\$135,482
	2014 Water Bond	-	\$527,774	-	-	-	-	\$527,774
	2020 Electric Bond	-	-	-	\$2,922,965	-	-	\$2,922,965
	2020 Gas Bond	-	-	-	\$1,939,446	-	-	\$1,939,446
	2020 Water Bond	-	-	-	\$4,704,160	-	-	\$4,704,160
<b>Sum:</b>	<b>-</b>	<b>\$819,900</b>	<b>-</b>	<b>\$9,566,571</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>\$10,386,471</b>

**Capital Improvement Program Project Funding Summary  
Fiscal Years 2019 - 2023**

**Streets****Country Club and Main Improvements (CP0856)****COUNCIL DISTRICT 4**

Construct raised median and replace utility lines in Country Club Road north of Main Street.

	Fund	Estimated Exp						Future Years (3)	Totals
		Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23		
Capital	2014 Wastewater Bond	-	\$200,000	-	-	-	-	-	\$200,000
	<b>Sum:</b>	-	<b>\$200,000</b>	-	-	-	-	-	<b>\$200,000</b>

**Economic Development (CP0342)****CITYWIDE**

Provide discretionary funding for required street improvements associated with significant economic development projects.

	Fund	Estimated Exp						Future Years (3)	Totals
		Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23		
Capital	2010 Wastewater Bond	-	\$388,800	\$397,859	\$409,095	-	-	-	\$1,195,754
	2014 Water Bond	-	\$713,733	\$730,362	\$750,993	-	-	-	\$2,195,088
	<b>Sum:</b>	-	<b>\$1,102,533</b>	<b>\$1,128,221</b>	<b>\$1,160,088</b>	-	-	-	<b>\$3,390,842</b>

**Ellsworth Road & University Drive Intersection (C10164)****COUNCIL DISTRICT 5**

Replace water valves that have reached the end of their support lifecycle. This work will prevent service disruptions.

	Fund	Estimated Exp						Future Years (3)	Totals
		Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23		
Capital	2014 Water Bond	-	-	-	-	-	-	-	-
	2020 Water Bond	-	-	-	-	-	-	\$1,552,598	\$1,552,598
	<b>Sum:</b>	-	-	-	-	-	-	<b>\$1,552,598</b>	<b>\$1,552,598</b>

**Mesa Drive Phase II (C01400)****COUNCIL DISTRICT 4**

Construct an additional through lane in all directions as well as fully-protected dual left turn lanes. Construct bus pullouts at all corners connected by detached sidewalks and new street lighting to help mitigate traffic congestion and enhance safety.

	Fund	Estimated Exp						Future Years (3)	Totals
		Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23		
Capital	2010 Electric Bond	\$183,132	-	-	-	-	-	-	\$183,132
	2010 Gas Bond	\$6,258	-	-	-	-	-	-	\$6,258
	2010 Water Bond	\$58,152	-	-	-	-	-	-	\$58,152
	2014 Electric Bond	-	\$1,972,250	-	-	-	-	-	\$1,972,250
	2014 Wastewater Bond	\$582	\$159,067	-	-	-	-	-	\$159,649
	2014 Water Bond	-	\$1,842,810	-	-	-	-	-	\$1,842,810
	<b>Sum:</b>	<b>\$248,124</b>	<b>\$3,974,127</b>	-	-	-	-	-	<b>\$4,222,251</b>

**Southern Avenue and Stapley Drive Intersection (CP0800)****COUNCIL DISTRICT 4**

Construct dual left turn lanes, and additional through lanes and existing gas and storm sewer infrastructure.

	Fund	Estimated Exp						Future Years (3)	Totals
		Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23		
Capital	2010 Gas Bond	\$439	\$228,956	\$2,903,409	-	-	-	-	\$3,132,804
	2014 Water Bond	\$276	\$276,866	-	-	-	-	-	\$277,142
	<b>Sum:</b>	<b>\$715</b>	<b>\$505,822</b>	<b>\$2,903,409</b>	-	-	-	-	<b>\$3,409,946</b>



**Capital Improvement Program Project Funding Summary**  
**Fiscal Years 2019 - 2023**

**Streets****Southern Avenue & Country Club Drive Roadways (CP0844)****COUNCIL DISTRICT 4**

Reconstruct two major arterials where pavement is failing. The two segments are Southern; Alma School to Center and Country Club; US 60 to 1st Ave

	<b>Fund</b>	<b>Estimated Exp Through FY 17/18</b>	<b>FY 18/19</b>	<b>FY 19/20</b>	<b>FY 20/21</b>	<b>FY 21/22</b>	<b>FY 22/23</b>	<b>Future Years (3)</b>	<b>Totals</b>
Capital	2010 Gas Bond	-	-	\$79,657	\$1,956,022	-	-	-	\$2,035,679
	2014 Electric Bond	-	-	\$28,392	\$361,303	-	-	-	\$389,695
	2020 Wastewater Bond	-	-	-	-	-	\$653,475	-	\$653,475
	2020 Water Bond	-	-	-	\$4,108,883	-	-	-	\$4,108,883
	<b>Sum:</b>	-	-	<b>\$108,049</b>	<b>\$6,426,208</b>	-	<b>\$653,475</b>	-	<b>\$7,187,732</b>

**Southern Avenue; Gilbert Road to Val Vista Dr (CP0061)****COUNCIL DISTRICT 4**

Improve Southern Avenue including intersection at Lindsay Road, right-of-way acquisition, pedestrian ramps, street light relocation, and pavement reconstruction.

	<b>Fund</b>	<b>Estimated Exp Through FY 17/18</b>	<b>FY 18/19</b>	<b>FY 19/20</b>	<b>FY 20/21</b>	<b>FY 21/22</b>	<b>FY 22/23</b>	<b>Future Years (3)</b>	<b>Totals</b>
Capital	2014 Water Bond	-	-	\$151,858	-	-	-	-	\$151,858
	2020 Wastewater Bond	-	-	-	\$25,091	\$259,916	-	-	\$285,007
	2020 Water Bond	-	-	-	\$1,577,080	-	-	-	\$1,577,080
	<b>Sum:</b>	-	-	<b>\$151,858</b>	<b>\$1,602,171</b>	<b>\$259,916</b>	-	-	<b>\$2,013,945</b>

**Stapley Drive and University Drive Intersection (C05041)****COUNCIL DISTRICT 4**

Construct an additional left turn lane and right turn lane in all directions to reduce traffic congestion at this intersection. This project has been identified as a Regional Transportation Plan project.

	<b>Fund</b>	<b>Estimated Exp Through FY 17/18</b>	<b>FY 18/19</b>	<b>FY 19/20</b>	<b>FY 20/21</b>	<b>FY 21/22</b>	<b>FY 22/23</b>	<b>Future Years (3)</b>	<b>Totals</b>
Capital	2010 Gas Bond	-	-	\$19,684	-	-	-	-	\$19,684
	2014 Water Bond	-	-	\$93,056	-	-	-	-	\$93,056
	2020 Gas Bond	-	-	-	\$489,347	-	-	-	\$489,347
	2020 Water Bond	-	-	-	\$957,226	-	-	-	\$957,226
	<b>Sum:</b>	-	-	<b>\$112,740</b>	<b>\$1,446,573</b>	-	-	-	<b>\$1,559,313</b>

**Val Vista Drive; Pueblo to US 60 (CP0062)****COUNCIL DISTRICT 2**

Improve Val Vista Drive between Pueblo and US 60. Construction work will mitigate traffic delays and congestion and enhance safety.

	<b>Fund</b>	<b>Estimated Exp Through FY 17/18</b>	<b>FY 18/19</b>	<b>FY 19/20</b>	<b>FY 20/21</b>	<b>FY 21/22</b>	<b>FY 22/23</b>	<b>Future Years (3)</b>	<b>Totals</b>
Capital	2020 Gas Bond	-	-	-	\$130,476	\$2,234,569	-	-	\$2,365,045
	2020 Water Bond	-	-	-	\$183,394	\$1,900,690	-	-	\$2,084,084
	<b>Sum:</b>	-	-	-	<b>\$313,870</b>	<b>\$4,135,259</b>	-	-	<b>\$4,449,129</b>

**Capital Improvement Program Project Funding Summary  
Fiscal Years 2019 - 2023**

**Wastewater Contractual Obligations****91st Avenue Wastewater Treatment Plant (CN0027)****CITYWIDE**

Fund the City of Mesa's portion of operational and facility upgrades to the 91st Avenue Plant. Mesa is a member of the Sub-Regional Operating Group (SROG). Per an Intergovernmental Agreement with SROG, Mesa shares in the cost of improvements.

	<b>Fund</b>	<b>Estimated Exp Through FY 17/18</b>	<b>FY 18/19</b>	<b>FY 19/20</b>	<b>FY 20/21</b>	<b>FY 21/22</b>	<b>FY 22/23</b>	<b>Future Years (3)</b>	<b>Totals</b>
Capital	2010 Wastewater Bond	-	\$2,100,000	-	-	-	-	-	<b>\$2,100,000</b>
	2014 Wastewater Bond	\$4,157,233	\$5,213,723	\$5,035,438	\$2,478,729	-	-	-	<b>\$16,885,123</b>
	2020 Wastewater Bond	-	-	-	\$1,812,970	\$3,817,775	\$5,928,335	\$12,324,260	<b>\$23,883,340</b>
	<b>Sum:</b>	<b>\$4,157,233</b>	<b>\$7,313,723</b>	<b>\$5,035,438</b>	<b>\$4,291,699</b>	<b>\$3,817,775</b>	<b>\$5,928,335</b>	<b>\$12,324,260</b>	<b>\$42,868,463</b>

**Wastewater Main Oversize & Extensions City Share (CN0063)****CITYWIDE**

Fund reimbursements to developers for construction of new wastewater extensions and oversized mains to meet the City's need and provide service to new development.

	<b>Fund</b>	<b>Estimated Exp Through FY 17/18</b>	<b>FY 18/19</b>	<b>FY 19/20</b>	<b>FY 20/21</b>	<b>FY 21/22</b>	<b>FY 22/23</b>	<b>Future Years (3)</b>	<b>Totals</b>
Capital	2010 Wastewater Bond	-	\$162,000	\$165,775	-	-	-	-	<b>\$327,775</b>
	2020 Wastewater Bond	-	-	-	\$170,456	\$174,911	\$179,512	\$184,243	<b>\$709,122</b>
	<b>Sum:</b>	<b>-</b>	<b>\$162,000</b>	<b>\$165,775</b>	<b>\$170,456</b>	<b>\$174,911</b>	<b>\$179,512</b>	<b>\$184,243</b>	<b>\$1,036,897</b>

## Capital Improvement Program Project Funding Summary Fiscal Years 2019 - 2023

### **Wastewater Customer Demand - Citywide New Lift Stations (CP0617)**

#### **COUNCIL DISTRICT 2**

Construct new wastewater lift stations to serve projected growth in currently undeveloped areas that can not be totally served by a gravity sewer system.

	<b>Fund</b>	<b>Estimated Exp Through FY 17/18</b>	<b>FY 18/19</b>	<b>FY 19/20</b>	<b>FY 20/21</b>	<b>FY 21/22</b>	<b>FY 22/23</b>	<b>Future Years (3)</b>	<b>Totals</b>
Capital	2020 Wastewater Bond	-	-	-	\$1,254,628	\$6,634,381	\$10,752,248	-	\$18,641,257
	<b>Sum:</b>	-	-	-	\$1,254,628	\$6,634,381	\$10,752,248	-	\$18,641,257

### **New Sewer Lines - Other Areas (CP0619)**

#### **COUNCIL DISTRICT 6**

Construct new sewer lines in undeveloped areas other than southeast Mesa to serve projected growth and areas currently served by on-site septic systems.

	<b>Fund</b>	<b>Estimated Exp Through FY 17/18</b>	<b>FY 18/19</b>	<b>FY 19/20</b>	<b>FY 20/21</b>	<b>FY 21/22</b>	<b>FY 22/23</b>	<b>Future Years (3)</b>	<b>Totals</b>
Capital	2020 Wastewater Bond	-	-	-	\$1,953,440	\$2,945,815	\$2,903,668	-	\$7,802,923
	<b>Sum:</b>	-	-	-	\$1,953,440	\$2,945,815	\$2,903,668	-	\$7,802,923

### **Odor Control Master Plan (CP0349)**

#### **CITYWIDE**

Identify and correct major odor-causing compounds at the Northwest Water Reclamation Plant and in the vicinity of Baseline/Loop 101. Odor control is a sensitive issue and closely tied to public relations.

	<b>Fund</b>	<b>Estimated Exp Through FY 17/18</b>	<b>FY 18/19</b>	<b>FY 19/20</b>	<b>FY 20/21</b>	<b>FY 21/22</b>	<b>FY 22/23</b>	<b>Future Years (3)</b>	<b>Totals</b>
Capital	2010 Wastewater Bond	\$59,005	\$372,374	-	-	-	-	-	\$431,379
	2020 Wastewater Bond	-	-	-	\$681,826	\$1,749,114	-	-	\$2,430,940
	<b>Sum:</b>	\$59,005	\$372,374	-	\$681,826	\$1,749,114	-	-	\$2,862,319

### **Sewer Line Extensions to Unsewered Areas (CP0624)**

#### **CITYWIDE**

Install trunk and lateral sewers to serve residential areas currently served by failing on-site septic systems.

	<b>Fund</b>	<b>Estimated Exp Through FY 17/18</b>	<b>FY 18/19</b>	<b>FY 19/20</b>	<b>FY 20/21</b>	<b>FY 21/22</b>	<b>FY 22/23</b>	<b>Future Years (3)</b>	<b>Totals</b>
Capital	2014 Wastewater Bond	\$1,454,121	-	-	-	-	-	-	\$1,454,121
	2020 Wastewater Bond	-	-	-	\$568,396	\$2,003,166	\$2,285,168	\$2,126,908	\$6,983,638
	<b>Sum:</b>	\$1,454,121	-	-	\$568,396	\$2,003,166	\$2,285,168	\$2,126,908	\$8,437,759

## Capital Improvement Program Project Funding Summary Fiscal Years 2019 - 2023

### **Wastewater Customer Demand - Southeast Mesa Greenfield Water Reclamation Plant Expansion (CP0067)**

#### **CITYWIDE**

Construct additional treatment capacity to meet the increasing wastewater flows to the Greenfield Water Reclamation Plant. The towns of Gilbert and Queen Creek are sharing in the cost of the plant expansion.

		Estimated Exp							
Fund		Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	Future Years (3)	Totals
Capital	Greenfield WRP Joint Venture	\$14,725,759	\$131,335,490	\$50,056,300	\$242,672	-	-	-	\$196,360,221
O&M	Greenfield WRP Joint Venture	-	-	\$1,880,173	\$2,012,393	\$2,065,376	\$2,116,612	-	\$8,074,554
<b>Sum:</b>		<b>\$14,725,759</b>	<b>\$131,335,490</b>	<b>\$51,936,473</b>	<b>\$2,255,065</b>	<b>\$2,065,376</b>	<b>\$2,116,612</b>	-	<b>\$204,434,775</b>

### **Greenfield Water Reclamation Plant Expansion - Mesa Share (CN0015)**

#### **CITYWIDE**

Construct additional treatment capacity to meet the increasing wastewater flows to the Greenfield Water Reclamation Plant. The towns of Gilbert and Queen Creek will share in the cost of the plant expansion.

		Estimated Exp							
Fund		Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	Future Years (3)	Totals
Capital	2010 Wastewater Bond	\$538,059	-	-	-	-	-	-	\$538,059
	2014 Wastewater Bond	\$7,782,265	\$79,195,300	\$30,183,949	\$146,332	-	-	-	\$117,307,846
<b>Sum:</b>		<b>\$8,320,324</b>	<b>\$79,195,300</b>	<b>\$30,183,949</b>	<b>\$146,332</b>	-	-	-	<b>\$117,845,905</b>

### **New Sewer Lines - Phx Mesa Gateway Development Plan (CP0620)**

#### **COUNCIL DISTRICT 6**

Construct new sewer lines to serve development in the Phoenix Mesa Gateway Airport Northeast Development Area.

		Estimated Exp							
Fund		Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	Future Years (3)	Totals
Capital	2014 Wastewater Bond	-	\$260,049	\$1,413,126	\$243,912	\$1,348,726	-	-	\$3,265,813
	2014 Water Bond	-	-	-	\$733,533	\$6,002,912	-	-	\$6,736,445
<b>Sum:</b>		-	<b>\$260,049</b>	<b>\$1,413,126</b>	<b>\$977,445</b>	<b>\$7,351,638</b>	-	-	<b>\$10,002,258</b>

### **New Sewer Lines - Southeast Mesa (CP0618)**

#### **COUNCIL DISTRICT 6**

Construct new sewer lines in the area bounded by Elliot, Power, Germann, and Meridian Roads to serve development in southeast Mesa.

		Estimated Exp							
Fund		Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	Future Years (3)	Totals
Capital	2020 Wastewater Bond	-	-	-	\$364,025	\$3,644,647	\$6,548,541	\$5,557,242	\$16,114,455
<b>Sum:</b>		-	-	-	<b>\$364,025</b>	<b>\$3,644,647</b>	<b>\$6,548,541</b>	<b>\$5,557,242</b>	<b>\$16,114,455</b>

### **Water and Wastewater Improvements at ASU Polytechnic (CP0805)**

#### **COUNCIL DISTRICT 6**

Provide necessary water and wastewater infrastructure improvements to handle project flows from the ASU Polytechnic Campus and to maintain service reliability in the area.

		Estimated Exp							
Fund		Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	Future Years (3)	Totals
Capital	2010 Wastewater Bond	-	\$212,644	\$2,159,864	-	-	-	-	\$2,372,508
<b>Sum:</b>		-	<b>\$212,644</b>	<b>\$2,159,864</b>	-	-	-	-	<b>\$2,372,508</b>

### **Williams Field Road Sewer; Ellsworth to Mountain (C10425)**

#### **COUNCIL DISTRICT 6**

Install sewer line along State Route 24 and Williams Field Road from Mountain to Ellsworth to serve future development.

		Estimated Exp							
Fund		Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	Future Years (3)	Totals
Capital	2010 Wastewater Bond	-	\$113,847	\$1,226,465	-	-	-	-	\$1,340,312
<b>Sum:</b>		-	<b>\$113,847</b>	<b>\$1,226,465</b>	-	-	-	-	<b>\$1,340,312</b>

## Capital Improvement Program Project Funding Summary Fiscal Years 2019 - 2023

### Wastewater Lifecycle

#### Diversion Structure Rehabilitation (CP0598)

##### CITYWIDE

Rehabilitate wastewater diversion structures that have deteriorated due to age and corrosion to extend the life and operability of the structures. Work will include repair and recoating of deteriorated concrete and control gates.

		Estimated Exp							Totals
Fund		Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	Future Years (3)	
Capital	2014 Wastewater Bond	-	-	\$122,673	-	-	-	-	\$122,673
	2020 Wastewater Bond	-	-	-	\$134,093	\$137,597	\$141,216	\$144,937	\$557,843
<b>Sum:</b>		-	-	<b>\$122,673</b>	<b>\$134,093</b>	<b>\$137,597</b>	<b>\$141,216</b>	<b>\$144,937</b>	<b>\$680,516</b>

#### Greenfield Water Reclamation Plant Headworks/Solids Upgrade (CP0263)

##### CITYWIDE

Replace the bus duct systems at both the solids and headworks buildings with conduit and wire systems to eliminate the possibility of future failures due to water intrusion.

		Estimated Exp							Totals
Fund		Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	Future Years (3)	
Capital	2006 Wastewater Bond	\$7,916	-	-	-	-	-	-	\$7,916
<b>Sum:</b>		<b>\$7,916</b>	-	-	-	-	-	-	<b>\$7,916</b>

#### Greenfield Water Reclamation Plant Headworks/Solids Upgrade - CP0263 Mesa Share (CN0014)

##### CITYWIDE

Replace the bus duct systems at both the solids and headworks buildings with conduit and wire systems to eliminate the possibility of future failures due to water intrusion.

		Estimated Exp							Totals
Fund		Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	Future Years (3)	
Capital	2006 Wastewater Bond	\$9	-	-	-	-	-	-	\$9
	2014 Wastewater Bond	\$20,798	\$319,154	-	-	-	-	-	\$339,952
<b>Sum:</b>		<b>\$20,807</b>	<b>\$319,154</b>	-	-	-	-	-	<b>\$339,961</b>

#### Greenfield Water Reclamation Plant Major Plant Improvements (CP0625)

##### CITYWIDE

Replace and/or modify major equipment or systems to improve plant performance and ensure compliance with regulatory requirements.

		Estimated Exp							Totals
Fund		Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	Future Years (3)	
Capital	Greenfield WRP Joint Venture	-	-	-	-	\$1,865,722	\$12,565,854	\$1,033,258	\$15,464,834
<b>Sum:</b>		-	-	-	-	<b>\$1,865,722</b>	<b>\$12,565,854</b>	<b>\$1,033,258</b>	<b>\$15,464,834</b>

#### Greenfield Water Reclamation Plant Major Plant Improvements - CP0625 Mesa Share (CN0035)

##### CITYWIDE

Replace and/or modify major equipment or systems to improve plant performance and ensure compliance with regulatory requirements.

		Estimated Exp							Totals
Fund		Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	Future Years (3)	
Capital	2020 Wastewater Bond	-	-	-	-	\$1,125,030	\$7,577,210	-	\$8,702,240
<b>Sum:</b>		-	-	-	-	<b>\$1,125,030</b>	<b>\$7,577,210</b>	-	<b>\$8,702,240</b>

#### Greenfield Water Reclamation Plant Miscellaneous Plant Improvements (CP0626)

##### CITYWIDE

Modify and/or rehabilitate existing systems, install new systems, and replace equipment that has reached it's useful life at the Greenfield Water Reclamation Plant. This work will improve plant operations and reliability.

		Estimated Exp							Totals
Fund		Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	Future Years (3)	
Capital	Greenfield WRP Joint Venture	\$2,663,631	\$249,998	\$255,822	\$860,805	\$1,999,821	\$2,115,252	\$7,388,786	\$15,534,115
<b>Sum:</b>		<b>\$2,663,631</b>	<b>\$249,998</b>	<b>\$255,822</b>	<b>\$860,805</b>	<b>\$1,999,821</b>	<b>\$2,115,252</b>	<b>\$7,388,786</b>	<b>\$15,534,115</b>

Streets bond funding is not included pending City Council direction.

## Capital Improvement Program Project Funding Summary Fiscal Years 2019 - 2023

### Wastewater Lifecycle

#### Greenfield Water Reclamation Plant Miscellaneous Plant Improvements - CP0626 Mesa Share (CN0036)

##### CITYWIDE

Modify and/or rehabilitate existing systems, install new systems, and replace equipment that has reached its useful life at the Greenfield Water Reclamation Plant. Improve plant operations and reliability.

		Estimated Exp							Totals
Fund		Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	Future Years (3)	
Capital	2014 Wastewater Bond	\$763,696	-	-	-	-	-	-	\$763,696
	2020 Wastewater Bond	-	-	-	\$519,065	\$1,205,892	\$1,275,497	\$1,309,108	\$4,309,562
<b>Sum:</b>		<b>\$763,696</b>	<b>-</b>	<b>-</b>	<b>\$519,065</b>	<b>\$1,205,892</b>	<b>\$1,275,497</b>	<b>\$1,309,108</b>	<b>\$5,073,258</b>

#### Greenfield Water Reclamation Plant Plant Equipment - CP0798 Mesa Share (CN0058)

##### CITYWIDE

Fund Mesa's cost share to replace the primary Bulgear and Level transmitters at the plant.

		Estimated Exp							Totals
Fund		Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	Future Years (3)	
Capital	2014 Wastewater Bond	\$31,260	-	-	-	-	-	-	\$31,260
	2020 Wastewater Bond	-	-	-	-	\$386,167	\$306,083	-	\$692,250
<b>Sum:</b>		<b>\$31,260</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>\$386,167</b>	<b>\$306,083</b>	<b>-</b>	<b>\$723,510</b>

#### Greenfield Water Reclamation Plant Plant Equipment Replacement (CP0798)

##### CITYWIDE

Replace the primary Bulgear and Level transmitters at the plant.

		Estimated Exp							Totals
Fund		Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	Future Years (3)	
Capital	Greenfield WRP Joint Venture	-	-	-	-	\$640,409	\$507,601	-	\$1,148,010
<b>Sum:</b>		<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>\$640,409</b>	<b>\$507,601</b>	<b>-</b>	<b>\$1,148,010</b>

#### Greenfield Water Reclamation Plant Plant Rehabilitation and Equipment - CP0797 Mesa Share (CN0057)

##### CITYWIDE

Fund Mesa's cost share to rebuild/replace equipment to minimize system downtime and ensure efficient operation at the plant.

		Estimated Exp							Totals
Fund		Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	Future Years (3)	
Capital	2010 Wastewater Bond	\$3,135	\$125,484	-	-	-	-	-	\$128,619
	2020 Wastewater Bond	-	-	-	\$102,785	\$725,279	\$133,637	-	\$961,701
<b>Sum:</b>		<b>\$3,135</b>	<b>\$125,484</b>	<b>-</b>	<b>\$102,785</b>	<b>\$725,279</b>	<b>\$133,637</b>	<b>-</b>	<b>\$1,090,320</b>

#### Greenfield Water Reclamation Plant Plant Rehabilitation and Equipment Replacement (CP0797)

##### CITYWIDE

Rebuild/Replace equipment to minimize system downtime and ensure efficient operation at the plant.

		Estimated Exp							Totals
Fund		Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	Future Years (3)	
Capital	Greenfield WRP Joint Venture	\$12,367	\$300,202	-	\$170,456	\$1,202,785	\$221,621	-	\$1,907,431
<b>Sum:</b>		<b>\$12,367</b>	<b>\$300,202</b>	<b>-</b>	<b>\$170,456</b>	<b>\$1,202,785</b>	<b>\$221,621</b>	<b>-</b>	<b>\$1,907,431</b>

#### Greenfield Water Reclamation Plant Sludge Line Replacement (CP0590)

##### CITYWIDE

Replace piping in the solids handling building that has deteriorated due to corrosion and is subject to failure.

		Estimated Exp							Totals
Fund		Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	Future Years (3)	
Capital	Greenfield WRP Joint Venture	\$45,875	\$582,304	-	-	\$2,159,572	\$2,216,377	\$6,999,561	\$12,003,689
<b>Sum:</b>		<b>\$45,875</b>	<b>\$582,304</b>	<b>-</b>	<b>-</b>	<b>\$2,159,572</b>	<b>\$2,216,377</b>	<b>\$6,999,561</b>	<b>\$12,003,689</b>

## Capital Improvement Program Project Funding Summary Fiscal Years 2019 - 2023

### Wastewater Lifecycle

#### Greenfield Water Reclamation Plant Sludge Line Replacement - CP0590 Mesa Share (CN0026)

##### CITYWIDE

Replace piping in the solids handling building that has deteriorated due to corrosion and is subject to failure.

		Estimated Exp							Totals
Fund		Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	Future Years (3)	
Capital	2010 Wastewater Bond	\$19,348	\$243,403	-	-	-	-	-	\$262,751
	2020 Wastewater Bond	-	-	-	-	\$1,302,222	\$1,336,475	\$1,371,693	\$4,010,390
<b>Sum:</b>		<b>\$19,348</b>	<b>\$243,403</b>	<b>-</b>	<b>-</b>	<b>\$1,302,222</b>	<b>\$1,336,475</b>	<b>\$1,371,693</b>	<b>\$4,273,141</b>

#### Lift Station Rehabilitation (CP0599)

##### CITYWIDE

Replace existing equipment that is no longer functional or has reached it's useful life to maintain adequate levels of service and bring the facilities into conformance with current design standards and specifications.

		Estimated Exp							Totals
Fund		Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	Future Years (3)	
Capital	2014 Wastewater Bond	\$497	\$16,330	\$29,840	-	-	-	-	\$46,667
	2020 Wastewater Bond	-	-	-	\$359,095	\$3,120,420	\$105,913	\$299,089	\$3,884,517
<b>Sum:</b>		<b>\$497</b>	<b>\$16,330</b>	<b>\$29,840</b>	<b>\$359,095</b>	<b>\$3,120,420</b>	<b>\$105,913</b>	<b>\$299,089</b>	<b>\$3,931,184</b>

#### Manhole Rehabilitation (CP0600)

##### CITYWIDE

Rehabilitate manholes that have deteriorated due to the corrosive environment of the wastewater system. Rehabbing the manholes will extend their useful life and prevent structural failures.

		Estimated Exp							Totals
Fund		Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	Future Years (3)	
Capital	2010 Wastewater Bond	-	\$1,486,102	-	-	-	-	-	\$1,486,102
<b>Sum:</b>		<b>-</b>	<b>\$1,486,102</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>\$1,486,102</b>

#### Metering Station Rehabilitation (CP0616)

##### CITYWIDE

Rehabilitate deteriorated structures and replace equipment that is no longer functional to maintain adequate levels of service and bring the facilities into conformance with current design standards and specifications.

		Estimated Exp							Totals
Fund		Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	Future Years (3)	
Capital	2014 Wastewater Bond	-	\$22,086	\$22,601	-	-	-	-	\$44,687
	2020 Wastewater Bond	-	-	-	\$30,682	\$31,484	\$32,312	\$33,165	\$127,643
<b>Sum:</b>		<b>-</b>	<b>\$22,086</b>	<b>\$22,601</b>	<b>\$30,682</b>	<b>\$31,484</b>	<b>\$32,312</b>	<b>\$33,165</b>	<b>\$172,330</b>

#### Northwest Water Reclamation Plant Equipment Replacement (CP0811)

##### COUNCIL DISTRICT 1

Replace process equipment at the Northwest Water Reclamation Plant that has reached the end of its useful life.

		Estimated Exp							Totals
Fund		Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	Future Years (3)	
Capital	2020 Wastewater Bond	-	-	-	\$857,964	\$880,388	\$903,545	\$927,355	\$3,569,252
<b>Sum:</b>		<b>-</b>	<b>-</b>	<b>-</b>	<b>\$857,964</b>	<b>\$880,388</b>	<b>\$903,545</b>	<b>\$927,355</b>	<b>\$3,569,252</b>

#### Northwest Water Reclamation Plant Major Plant Improvements (CP0627)

##### COUNCIL DISTRICT 1

Replace and/or modify major equipment or systems to improve plant performance and ensure compliance with regulatory requirements.

		Estimated Exp							Totals
Fund		Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	Future Years (3)	
Capital	2014 Wastewater Bond	\$35,213	-	-	-	-	-	-	\$35,213
	2020 Wastewater Bond	-	-	-	\$909,101	\$7,696,102	\$8,377,236	-	\$16,982,439
<b>Sum:</b>		<b>\$35,213</b>	<b>-</b>	<b>-</b>	<b>\$909,101</b>	<b>\$7,696,102</b>	<b>\$8,377,236</b>	<b>-</b>	<b>\$17,017,652</b>

## Capital Improvement Program Project Funding Summary Fiscal Years 2019 - 2023

### Wastewater Lifecycle

#### Northwest Water Reclamation Plant Miscellaneous Plant Improvements (CP0628)

##### COUNCIL DISTRICT 1

Modify and/or rehabilitate existing systems, install new systems, and replace equipment at the Northwest Water Reclamation Plant. This work will improve plant operations and reliability.

		Estimated Exp							Totals
Fund		Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	Future Years (3)	
Capital	2010 Wastewater Bond	-	\$1,116,200	-	-	-	-	-	\$1,116,200
	2014 Wastewater Bond	\$8,163	-	-	-	-	-	-	\$8,163
	2020 Wastewater Bond	-	-	-	\$863,646	\$932,861	\$4,786,992	\$3,684,852	\$10,268,351
<b>Sum:</b>		<b>\$8,163</b>	<b>\$1,116,200</b>	<b>-</b>	<b>\$863,646</b>	<b>\$932,861</b>	<b>\$4,786,992</b>	<b>\$3,684,852</b>	<b>\$11,392,714</b>

#### Odor Control Station Rehabilitation (CP0621)

##### CITYWIDE

Replace existing equipment that is no longer reliable to maintain adequate levels of service and bring the facilities into conformance with current design standards and specifications.

		Estimated Exp							Totals
Fund		Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	Future Years (3)	
Capital	2014 Wastewater Bond	\$8,567	\$317,723	\$48,834	-	-	-	-	\$375,124
	2020 Wastewater Bond	-	-	-	\$210,798	\$1,876,217	\$2,417,432	\$62,030	\$4,566,477
<b>Sum:</b>		<b>\$8,567</b>	<b>\$317,723</b>	<b>\$48,834</b>	<b>\$210,798</b>	<b>\$1,876,217</b>	<b>\$2,417,432</b>	<b>\$62,030</b>	<b>\$4,941,601</b>

#### Sewer Line Condition Assessment (CP0622)

##### CITYWIDE

CCTV inspection and evaluation to determine condition of lines and what rehabilitation is needed.

		Estimated Exp							Totals
Fund		Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	Future Years (3)	
Capital	2014 Wastewater Bond	\$600,918	\$433,620	\$439,303	-	-	-	-	\$1,473,841
	2020 Wastewater Bond	-	-	-	\$456,255	\$468,180	\$480,494	\$493,156	\$1,898,085
<b>Sum:</b>		<b>\$600,918</b>	<b>\$433,620</b>	<b>\$439,303</b>	<b>\$456,255</b>	<b>\$468,180</b>	<b>\$480,494</b>	<b>\$493,156</b>	<b>\$3,371,926</b>

#### Sewer Line Rehabilitation (CP0623)

##### CITYWIDE

Rehabilitate and/or replace defective pipe in the wastewater collection system to prevent catastrophic failures and maintain a high level of service. These defective lines were identified through the wastewater asset management program.

		Estimated Exp							Totals
Fund		Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	Future Years (3)	
Capital	2014 Wastewater Bond	\$238,649	\$197,261	\$201,857	-	-	-	-	\$637,767
	2020 Wastewater Bond	-	-	-	\$3,035,497	\$17,905,747	\$9,000,874	\$2,525,799	\$32,467,917
<b>Sum:</b>		<b>\$238,649</b>	<b>\$197,261</b>	<b>\$201,857</b>	<b>\$3,035,497</b>	<b>\$17,905,747</b>	<b>\$9,000,874</b>	<b>\$2,525,799</b>	<b>\$33,105,684</b>

#### Southeast Water Reclamation Plant Equipment Replacement (CP0631)

##### COUNCIL DISTRICT 6

Replace existing equipment at Southeast Water Reclamation Plant on an as needed basis.

		Estimated Exp							Totals
Fund		Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	Future Years (3)	
Capital	2020 Wastewater Bond	-	-	-	\$430,403	\$700,520	\$453,268	\$465,213	\$2,049,404
<b>Sum:</b>		<b>-</b>	<b>-</b>	<b>-</b>	<b>\$430,403</b>	<b>\$700,520</b>	<b>\$453,268</b>	<b>\$465,213</b>	<b>\$2,049,404</b>



**Capital Improvement Program Project Funding Summary**  
**Fiscal Years 2019 - 2023**

**Wastewater Lifecycle****Southeast Water Reclamation Plant Major Plant Improvements (CP0629)****COUNCIL DISTRICT 6**

Replace and/or modify major equipment or systems to improve plant performance and ensure compliance with regulatory requirements.

	<b>Fund</b>	<b>Estimated Exp Through FY 17/18</b>	<b>FY 18/19</b>	<b>FY 19/20</b>	<b>FY 20/21</b>	<b>FY 21/22</b>	<b>FY 22/23</b>	<b>Future Years (3)</b>	<b>Totals</b>
Capital	2020 Wastewater Bond	-	-	-	-	\$1,166,076	\$6,043,577	-	\$7,209,653
	<b>Sum:</b>	-	-	-	-	\$1,166,076	\$6,043,577	-	\$7,209,653

**Southeast Water Reclamation Plant Miscellaneous Plant Improvements (CP0630)****COUNCIL DISTRICT 6**

Modify and/or rehabilitate existing systems, install new systems, and replace equipment at the Southeast Water Reclamation Plant. This work will improve plant operations and reliability.

	<b>Fund</b>	<b>Estimated Exp Through FY 17/18</b>	<b>FY 18/19</b>	<b>FY 19/20</b>	<b>FY 20/21</b>	<b>FY 21/22</b>	<b>FY 22/23</b>	<b>Future Years (3)</b>	<b>Totals</b>
Capital	2010 Wastewater Bond	\$408	-	-	-	-	-	-	\$408
	2014 Wastewater Bond	\$207,160	\$55,000	-	-	-	-	-	\$262,160
	2020 Wastewater Bond	-	-	-	\$2,614,564	\$2,397,182	\$1,195,551	\$1,227,056	\$7,434,353
	<b>Sum:</b>	\$207,568	\$55,000	-	\$2,614,564	\$2,397,182	\$1,195,551	\$1,227,056	\$7,696,921

**Capital Improvement Program Project Funding Summary**  
**Fiscal Years 2019 - 2023**

**Water Contractual Obligations****Val Vista Water Treatment Plant - Mesa Share (CN0010)****CITYWIDE**

Fund the City's portion of the operations and maintenance cost of the Val Vista Water Treatment Plant per the Intergovernmental Agreement with the City of Phoenix.

		Estimated Exp							
Fund		Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	Future Years (3)	Totals
Capital	2014 Water Bond	\$8,854,710	\$3,385,302	\$10,446,264	\$5,614,927	-	-	-	\$28,301,203
	2020 Water Bond	-	-	-	\$760,829	\$1,382,539	\$3,878,350	\$8,062,600	\$14,084,318
	<b>Sum:</b>	<b>\$8,854,710</b>	<b>\$3,385,302</b>	<b>\$10,446,264</b>	<b>\$6,375,756</b>	<b>\$1,382,539</b>	<b>\$3,878,350</b>	<b>\$8,062,600</b>	<b>\$42,385,521</b>

**White Mountain Apache Water Settlement Water Rights (CN0028)****CITYWIDE**

Lease Central Arizona Project (CAP) canal water rights from the White Mountain Apache Tribe for 100 years. Long-term leasing of the water rights will help ensure the City's water supply.

		Estimated Exp							
Fund		Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	Future Years (3)	Totals
Capital	2014 Water Bond	-	\$3,700,000	\$3,786,210	-	-	-	-	\$7,486,210
	<b>Sum:</b>	<b>-</b>	<b>\$3,700,000</b>	<b>\$3,786,210</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>\$7,486,210</b>

## Capital Improvement Program Project Funding Summary Fiscal Years 2019 - 2023

### Water Customer Demand Citywide

#### Desert Wells Groundwater Well; Crismon and Pecos (CP0833)

##### COUNCIL DISTRICT 6

Drill and equip a new groundwater well in Southeast Mesa near Crismon and Pecos to provide water during CAP dryups.

	Fund	Estimated Exp Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	Future Years (3)	Totals
Capital	2020 Water Bond	-	-	-	\$278,833	-	-	-	\$278,833
	<b>Sum:</b>	-	-	-	\$278,833	-	-	-	\$278,833

#### Desert Wells Groundwater Well; Crismon and State Route 24 (CP0834)

##### COUNCIL DISTRICT 6

Drill and equip a new groundwater well in Southeast Mesa near Crismon and State Route 24 to provide water during CAP dryups.

	Fund	Estimated Exp Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	Future Years (3)	Totals
Capital	2020 Water Bond	-	-	-	-	-	\$293,647	-	\$293,647
	<b>Sum:</b>	-	-	-	-	-	\$293,647	-	\$293,647

#### Desert Wells Groundwater Well; Ellsworth and Pecos (CP0832)

##### COUNCIL DISTRICT 6

Drill and equip a new groundwater well in Southeast Mesa near Ellsworth and Pecos to provide water during CAP dryups.

	Fund	Estimated Exp Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	Future Years (3)	Totals
Capital	2020 Water Bond	-	-	-	\$451,709	\$2,009,710	\$1,623,278	-	\$4,084,697
	<b>Sum:</b>	-	-	-	\$451,709	\$2,009,710	\$1,623,278	-	\$4,084,697

#### Desert Wells Groundwater Well; Germann and Crismon (CP0831)

##### COUNCIL DISTRICT 6

Drill and equip a new groundwater well in southeast Mesa near Germann and Crismon to provide water during CAP canal dryups.

	Fund	Estimated Exp Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	Future Years (3)	Totals
Capital	2020 Water Bond	-	-	-	\$278,833	-	-	-	\$278,833
	<b>Sum:</b>	-	-	-	\$278,833	-	-	-	\$278,833

#### Desert Wells Groundwater Well; Signal Butte and Pecos (CP0836)

##### COUNCIL DISTRICT 6

Drill and equip a new groundwater well in Southeast Mesa near Signal Butte and Pecos to provide water during CAP dryups.

	Fund	Estimated Exp Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	Future Years (3)	Totals
Capital	2020 Water Bond	-	-	-	\$451,709	\$2,009,710	\$1,623,278	-	\$4,084,697
	<b>Sum:</b>	-	-	-	\$451,709	\$2,009,710	\$1,623,278	-	\$4,084,697

#### Transmission Main - Other Areas (CP0646)

##### CITYWIDE

Construct various large diameter water mains throughout the City as identified in the water master plan. These improvements are needed to keep pace with demand.

	Fund	Estimated Exp Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	Future Years (3)	Totals
Capital	2020 Water Bond	-	-	-	\$1,420,376	\$1,457,498	\$15,556,864	\$15,966,809	\$34,401,547
	<b>Sum:</b>	-	-	-	\$1,420,376	\$1,457,498	\$15,556,864	\$15,966,809	\$34,401,547

**Capital Improvement Program Project Funding Summary  
Fiscal Years 2019 - 2023**

**Water Customer Demand Citywide****Water Extensions and Oversized Mains - City Share (CN0064)****CITYWIDE**

City Share for developer constructed waterlines that are larger than 16-inch diameter.

	<b>Fund</b>	<b>Estimated Exp Through FY 17/18</b>	<b>FY 18/19</b>	<b>FY 19/20</b>	<b>FY 20/21</b>	<b>FY 21/22</b>	<b>FY 22/23</b>	<b>Future Years (3)</b>	<b>Totals</b>
Capital	2014 Water Bond	-	\$200,000	\$204,660	-	-	-	-	\$404,660
	2020 Water Bond	-	-	-	\$210,440	\$215,940	\$221,620	\$227,460	\$875,460
	<b>Sum:</b>	-	<b>\$200,000</b>	<b>\$204,660</b>	<b>\$210,440</b>	<b>\$215,940</b>	<b>\$221,620</b>	<b>\$227,460</b>	<b>\$1,280,120</b>

**Waterline Replacement (CP0814)****CITYWIDE**

Replace waterline with highest breakage risk. Waterlines will be inspected and prioritized for replacement based on risk of breakage.

	<b>Fund</b>	<b>Estimated Exp Through FY 17/18</b>	<b>FY 18/19</b>	<b>FY 19/20</b>	<b>FY 20/21</b>	<b>FY 21/22</b>	<b>FY 22/23</b>	<b>Future Years (3)</b>	<b>Totals</b>
Capital	2014 Water Bond	\$12,833	\$756,948	\$921,364	-	-	-	-	\$1,691,145
	2020 Water Bond	-	-	-	\$1,603,763	\$1,739,607	\$1,362,681	\$1,675,663	\$6,381,714
	<b>Sum:</b>	<b>\$12,833</b>	<b>\$756,948</b>	<b>\$921,364</b>	<b>\$1,603,763</b>	<b>\$1,739,607</b>	<b>\$1,362,681</b>	<b>\$1,675,663</b>	<b>\$8,072,859</b>

**Williams Gateway Well #5; Power and Williams Field (CP0830)****COUNCIL DISTRICT 6**

Re-drill and equip Williams Gateway Well #5 to provide water during CAP dryups.

	<b>Fund</b>	<b>Estimated Exp Through FY 17/18</b>	<b>FY 18/19</b>	<b>FY 19/20</b>	<b>FY 20/21</b>	<b>FY 21/22</b>	<b>FY 22/23</b>	<b>Future Years (3)</b>	<b>Totals</b>
Capital	2020 Water Bond	-	-	-	\$172,876	\$2,009,710	\$1,623,278	-	\$3,805,864
	<b>Sum:</b>	-	-	-	<b>\$172,876</b>	<b>\$2,009,710</b>	<b>\$1,623,278</b>	-	<b>\$3,805,864</b>

**Capital Improvement Program Project Funding Summary**  
**Fiscal Years 2019 - 2023**

**Water Customer Demand - Southeast Mesa****Desert Wells Groundwater Well - Crismon & Williams Field (CP0835)****COUNCIL DISTRICT 6**

Replace water valves that have reached the end of their support lifecycle. This work will prevent service disruptions.

		Estimated Exp								
Fund		Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	Future Years (3)	Totals	
Capital	2014 Water Bond	-	-	-	-	-	-	-	-	
	2020 Water Bond	-	-	-	-	-	-	\$301,385	\$301,385	
<b>Sum:</b>		-	-	-	-	-	-	\$301,385	\$301,385	

**Desert Wells Groundwater Well - Warner & Elliot (CP0829)****COUNCIL DISTRICT 6**

Replace water valves that have reached the end of their support lifecycle. This work will prevent service disruptions.

		Estimated Exp								
Fund		Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	Future Years (3)	Totals	
Capital	2014 Water Bond	-	-	-	-	-	-	-	-	
	2020 Water Bond	-	-	-	-	-	-	\$4,109,661	\$4,109,661	
<b>Sum:</b>		-	-	-	-	-	-	\$4,109,661	\$4,109,661	

**Desert Wells Groundwater Well - Warner & Ellsworth (CP0828)****COUNCIL DISTRICT 6**

Replace water services that have reached the end of their support lifecycle. Timely replacement will prevent service disruptions.

		Estimated Exp								
Fund		Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	Future Years (3)	Totals	
Capital	2014 Water Bond	-	-	-	-	-	-	-	-	
	2020 Water Bond	-	-	-	-	-	-	\$4,109,661	\$4,109,661	
<b>Sum:</b>		-	-	-	-	-	-	\$4,109,661	\$4,109,661	

**Drill and Equip Non-Potable Well for Southeast Mesa (CP0826)****COUNCIL DISTRICT 6**

Drill and equip a new non-potable groundwater well in the DMB Development to provide water during CAP dryups.

		Estimated Exp								
Fund		Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	Future Years (3)	Totals	
Capital	2020 Water Bond	-	-	-	\$1,351,576	\$1,262,685	-	-	\$2,614,261	
<b>Sum:</b>		-	-	-	\$1,351,576	\$1,262,685	-	-	\$2,614,261	

## Capital Improvement Program Project Funding Summary Fiscal Years 2019 - 2023

### Water Customer Demand - Southeast Mesa

#### Future Well 1 on Crismon (between Elliott and Warner) (CP0824)

##### COUNCIL DISTRICT 6

Drill and equip a new groundwater well in southeast Mesa to provide water during CAP canal dryups.

		Estimated Exp								
Fund		Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	Future Years (3)	Totals	
Capital	2020 Water Bond	-	-	-	\$172,876	\$2,009,710	\$1,623,278	-	\$3,805,864	
<b>Sum:</b>		-	-	-	\$172,876	\$2,009,710	\$1,623,278	-	\$3,805,864	

#### Future Well 2 on Crismon (at Warner) (CP0825)

##### COUNCIL DISTRICT 6

Drill and equip a new groundwater well in the DMB Development to provide water during CAP dryups.

		Estimated Exp								
Fund		Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	Future Years (3)	Totals	
Capital	2020 Water Bond	-	-	-	\$172,876	\$2,009,710	\$1,623,278	-	\$3,805,864	
<b>Sum:</b>		-	-	-	\$172,876	\$2,009,710	\$1,623,278	-	\$3,805,864	

#### New Groundwater Wells (CP0365)

##### COUNCIL DISTRICT 6

Drill new groundwater wells to meet growing service demands. The need for new wells was identified in the Water Master Plan.

		Estimated Exp								
Fund		Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	Future Years (3)	Totals	
Capital	2014 Water Bond	\$47,805	-	-	-	-	-	-	\$47,805	
<b>Sum:</b>		\$47,805	-	-	-	-	-	-	\$47,805	

#### New Pump Station (CP0639)

##### COUNCIL DISTRICT 6

Construct new pump stations to meet the growing water demand. The Water Master Plan identified the need for additional pumping capacity.

		Estimated Exp								
Fund		Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	Future Years (3)	Totals	
Capital	2020 Water Bond	-	-	-	\$376,870	\$3,970,094	\$855,099	\$10,074,462	\$15,276,525	
<b>Sum:</b>		-	-	-	\$376,870	\$3,970,094	\$855,099	\$10,074,462	\$15,276,525	

#### Signal Butte Water Treatment Plant (C01600)

##### COUNCIL DISTRICT 6

Construct the first phase of a plant with a water treatment capacity of 24 million gallons per day to serve Southeast Mesa. Treated water will flow into an existing finished water reservoir and pump station.

		Estimated Exp								
Fund		Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	Future Years (3)	Totals	
Capital	2010 Water Bond	\$33,483	-	-	-	-	-	-	\$33,483	
	2014 Water Bond	\$121,450,000	-	-	-	-	-	-	\$121,450,000	
O&M	Water	-	\$691,740	\$1,467,996	\$1,509,216	\$1,548,447	\$1,588,956	\$5,016,778	\$11,823,133	
<b>Sum:</b>		\$121,483,483	\$691,740	\$1,467,996	\$1,509,216	\$1,548,447	\$1,588,956	\$5,016,778	\$133,306,616	

#### Signal Butte Water Treatment Plant Expansion (CP0372)

##### COUNCIL DISTRICT 6

Construct additional treatment capacity at the plant to meet growth demands in southeast Mesa.

		Estimated Exp								
Fund		Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	Future Years (3)	Totals	
Capital	2020 Water Bond	-	-	-	\$557,666	\$5,722,410	\$42,696,201	\$43,821,306	\$92,797,583	
<b>Sum:</b>		-	-	-	\$557,666	\$5,722,410	\$42,696,201	\$43,821,306	\$92,797,583	

**Capital Improvement Program Project Funding Summary**  
**Fiscal Years 2019 - 2023**

**Water Customer Demand - Southeast Mesa**  
**Transmission Mains - Southeast Mesa (CP0645)**

**COUNCIL DISTRICT 6**

Construct various large diameter water mains in southeast Mesa. The Water Master Plan identified the need for water transmission mains to meet water demand.

		Estimated Exp							
Fund		Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	Future Years (3)	Totals
Capital	2014 Water Bond	-	\$265,000	-	-	-	-	-	\$265,000
	2020 Water Bond	-	-	-	\$2,129,999	\$23,073,707	\$164,442	\$4,784,669	\$30,152,817
	<b>Sum:</b>	-	\$265,000	-	\$2,129,999	\$23,073,707	\$164,442	\$4,784,669	\$30,417,817

**Well Collection Lines (CP0648)**

**COUNCIL DISTRICT 6**

Construct the waterlines that convey groundwater from new wells to the City's reservoirs, where the water is pumped into the distribution system. The Water Master Plan has identified new groundwater wells that need to be installed to meet water demands.

		Estimated Exp							
Fund		Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	Future Years (3)	Totals
Capital	2020 Water Bond	-	-	-	-	\$315,877	\$3,356,967	\$23,124,485	\$26,797,329
	<b>Sum:</b>	-	-	-	-	\$315,877	\$3,356,967	\$23,124,485	\$26,797,329

**Well Site Acquisition (C04048)**

**COUNCIL DISTRICT 6**

Acquire land for additional well sites needed in the Desert Wells service zone.

		Estimated Exp							
Fund		Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	Future Years (3)	Totals
Capital	2014 Water Bond	\$5,222	\$265,000	\$271,175	-	-	-	-	\$541,397
	<b>Sum:</b>	\$5,222	\$265,000	\$271,175	-	-	-	-	\$541,397

## Capital Improvement Program Project Funding Summary Fiscal Years 2019 - 2023

### Water Lifecycle

#### Aging Water Main Repairs (CP0821)

##### CITYWIDE

Make needed emergency repairs to pipe breaks on aging waterlines.

		Estimated Exp							
Fund		Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	Future Years (3)	Totals
Capital	2014 Water Bond	-	\$583,000	\$596,584	\$613,433	\$629,465	\$646,022	\$663,046	\$3,731,550
<b>Sum:</b>		-	<b>\$583,000</b>	<b>\$596,584</b>	<b>\$613,433</b>	<b>\$629,465</b>	<b>\$646,022</b>	<b>\$663,046</b>	<b>\$3,731,550</b>

#### Aging Water Main Replacement and Rehabilitation (CP0822)

##### CITYWIDE

Identify and replace or rehabilitate aging waterlines based on risk analysis priority.

		Estimated Exp							
Fund		Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	Future Years (3)	Totals
Capital	2014 Water Bond	\$56,869	-	-	-	-	-	-	\$56,869
	2020 Water Bond	-	-	-	\$1,330,972	\$10,433,899	\$10,419,166	\$10,271,787	\$32,455,824
<b>Sum:</b>		<b>\$56,869</b>	-	-	<b>\$1,330,972</b>	<b>\$10,433,899</b>	<b>\$10,419,166</b>	<b>\$10,271,787</b>	<b>\$32,512,693</b>

#### Brown Road Water Treatment Plant - Major Plant Improvements (CP0634)

##### COUNCIL DISTRICT 5

Rehabilitate/replace major equipment & materials at the Brown Road Water Treatment Plant. Work includes possible replacement of the following: leaking valves actuators & controls, filter underdrains, reservoir liner, and the electric SES Service.

		Estimated Exp							
Fund		Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	Future Years (3)	Totals
Capital	2020 Water Bond	-	-	-	\$297,421	\$3,387,665	\$3,476,775	\$3,246,915	\$10,408,776
<b>Sum:</b>		-	-	-	<b>\$297,421</b>	<b>\$3,387,665</b>	<b>\$3,476,775</b>	<b>\$3,246,915</b>	<b>\$10,408,776</b>

#### Brown Road Water Treatment Plant - Miscellaneous Plant Improvements (CP0635)

##### COUNCIL DISTRICT 5

Rehabilitate/replace equipment & materials at the plant. Work includes some of the following: bulk chemical tanks, pump & piping, sledge pumps & valves, chlorine & chemical feed systems, etc.

		Estimated Exp							
Fund		Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	Future Years (3)	Totals
Capital	2014 Water Bond	-	\$453,680	-	-	-	-	-	\$453,680
	2020 Water Bond	-	-	-	\$2,539,614	\$8,534,015	\$8,084,089	\$5,849,874	\$25,007,592
<b>Sum:</b>		-	<b>\$453,680</b>	-	<b>\$2,539,614</b>	<b>\$8,534,015</b>	<b>\$8,084,089</b>	<b>\$5,849,874</b>	<b>\$25,461,272</b>

#### Compliance Equipment at Water Facilities (CP0638)

##### CITYWIDE

Replace lab compliance equipment prior to failure so that the City can remain in compliance with federal regulation. The lab is responsible for regulatory compliance analysis samples at the water plant and other water facilities.

		Estimated Exp							
Fund		Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	Future Years (3)	Totals
Capital	2014 Water Bond	\$128,131	-	-	-	-	-	-	\$128,131
	2020 Wastewater Bond	-	-	-	-	\$362,796	-	-	\$362,796
	2020 Water Bond	-	-	-	\$557,666	\$1,518,013	-	-	\$2,075,679
<b>Sum:</b>		<b>\$128,131</b>	-	-	<b>\$557,666</b>	<b>\$1,880,809</b>	-	-	<b>\$2,566,606</b>



**Capital Improvement Program Project Funding Summary  
Fiscal Years 2019 - 2023**

**Water Lifecycle****Desert Well 6 and 7 Connection to Falcon Field Zone (CP0021)****COUNCIL DISTRICT 6**

Connect groundwater wells Desert Wells 6 and 7 directly to the Falcon Field Zone. This will increase groundwater well production, by reducing total dynamic head requirements and will add more flexibility to the system.

	<b>Fund</b>	<b>Estimated Exp Through FY 17/18</b>	<b>FY 18/19</b>	<b>FY 19/20</b>	<b>FY 20/21</b>	<b>FY 21/22</b>	<b>FY 22/23</b>	<b>Future Years (3)</b>	<b>Totals</b>
Capital	2010 Water Bond	\$11,810	-	-	-	-	-	-	\$11,810
	2020 Water Bond	-	-	-	\$446,133	-	-	-	\$446,133
	<b>Sum:</b>	<b>\$11,810</b>	<b>-</b>	<b>-</b>	<b>\$446,133</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>\$457,943</b>

**Desert Well Zone Well Site Acquisition (CP0823)****COUNCIL DISTRICT 6**

Purchase land for two future wells sites in the DMB development.

	<b>Fund</b>	<b>Estimated Exp Through FY 17/18</b>	<b>FY 18/19</b>	<b>FY 19/20</b>	<b>FY 20/21</b>	<b>FY 21/22</b>	<b>FY 22/23</b>	<b>Future Years (3)</b>	<b>Totals</b>
Capital	2020 Water Bond	-	-	-	\$278,833	\$286,121	-	-	\$564,954
	<b>Sum:</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>\$278,833</b>	<b>\$286,121</b>	<b>-</b>	<b>-</b>	<b>\$564,954</b>

**Fire Hydrant Meters (CP0320)****CITYWIDE**

Purchase fire hydrant meters to ensure accurate measurement of construction water usage is captured to maintain water revenues. These improvements are planned over several fiscal years. This funds the purchase of meters only.

	<b>Fund</b>	<b>Estimated Exp Through FY 17/18</b>	<b>FY 18/19</b>	<b>FY 19/20</b>	<b>FY 20/21</b>	<b>FY 21/22</b>	<b>FY 22/23</b>	<b>Future Years (3)</b>	<b>Totals</b>
Capital	2014 Water Bond	\$26,540	\$15,900	\$16,271	-	-	-	-	\$58,711
	2020 Water Bond	-	-	-	\$22,307	\$22,890	\$23,492	\$24,111	\$92,800
	<b>Sum:</b>	<b>\$26,540</b>	<b>\$15,900</b>	<b>\$16,271</b>	<b>\$22,307</b>	<b>\$22,890</b>	<b>\$23,492</b>	<b>\$24,111</b>	<b>\$151,511</b>

**Fire Hydrant Replacement (CP0636)****CITYWIDE**

Replace fire hydrants that are beyond their useful life to ensure hydrants are operational when needed. These improvements are planned over several fiscal years.

	<b>Fund</b>	<b>Estimated Exp Through FY 17/18</b>	<b>FY 18/19</b>	<b>FY 19/20</b>	<b>FY 20/21</b>	<b>FY 21/22</b>	<b>FY 22/23</b>	<b>Future Years (3)</b>	<b>Totals</b>
Capital	2014 Water Bond	\$414,502	\$374,710	\$383,441	-	-	-	-	\$1,172,653
	2020 Water Bond	-	-	-	\$481,823	\$494,416	\$507,421	\$520,793	\$2,004,453
	<b>Sum:</b>	<b>\$414,502</b>	<b>\$374,710</b>	<b>\$383,441</b>	<b>\$481,823</b>	<b>\$494,416</b>	<b>\$507,421</b>	<b>\$520,793</b>	<b>\$3,177,106</b>

**Groundwater Treatment-Arsenic (CP0827)****COUNCIL DISTRICT 6**

Provide water treatment facility for future groundwater wells based on water quality results at the time of drilling.

	<b>Fund</b>	<b>Estimated Exp Through FY 17/18</b>	<b>FY 18/19</b>	<b>FY 19/20</b>	<b>FY 20/21</b>	<b>FY 21/22</b>	<b>FY 22/23</b>	<b>Future Years (3)</b>	<b>Totals</b>
Capital	2020 Water Bond	-	-	-	\$538,706	\$5,583,127	-	\$3,531,021	\$9,652,854
	<b>Sum:</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>\$538,706</b>	<b>\$5,583,127</b>	<b>-</b>	<b>\$3,531,021</b>	<b>\$9,652,854</b>

## Capital Improvement Program Project Funding Summary Fiscal Years 2019 - 2023

### Water Lifecycle

#### Horne Waterline Replacement; Marilyn Ave to Southern Ave (CP0366)

##### COUNCIL DISTRICT 4

Install new water mains, and abandon aging water line. New water mains will extend along Horne Road between Marilyn Avenue to Southern Avenue. Work includes related equipment such as valves, hydrants and service lines.

Fund	Estimated Exp							Future Years (3)	Totals
	Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23			
Capital 2014 Electric Bond	\$28,366	\$1,676,812	-	-	-	-	-	-	\$1,705,178
2014 Gas Bond	\$79,648	-	-	-	-	-	-	-	\$79,648
2014 Wastewater Bond	\$22,141	-	-	-	-	-	-	-	\$22,141
2014 Water Bond	\$157,702	-	-	-	-	-	-	-	\$157,702
<b>Sum:</b>	<b>\$287,858</b>	<b>\$1,676,812</b>	-	-	-	-	-	-	<b>\$1,964,670</b>

#### Pump Station Rehabilitation (CP0640)

##### CITYWIDE

Rehabilitate/replace equipment and material at existing pump stations. Work includes replacing some of the followings: vertical turbine pumps, motors, chlorine equipment, electric switch gear, instrumentation & controls.

Fund	Estimated Exp							Future Years (3)	Totals
	Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23			
Capital 2014 Water Bond	\$1,427,630	\$169,494	-	-	-	-	-	-	\$1,597,124
2020 Water Bond	-	-	-	\$1,713,150	\$2,490,507	\$646,022	\$663,046	-	\$5,512,725
<b>Sum:</b>	<b>\$1,427,630</b>	<b>\$169,494</b>	-	<b>\$1,713,150</b>	<b>\$2,490,507</b>	<b>\$646,022</b>	<b>\$663,046</b>	-	<b>\$7,109,849</b>

#### Radio Communication Upgrade at Remote Water Facilities (CP0360)

##### CITYWIDE

Replace aging radio communication facilities at Remote Water Facilities. Pumps, motors, and VFD's found to be failing or performing at substandard levels of efficiency must be repaired or replaced.

Fund	Estimated Exp							Future Years (3)	Totals
	Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23			
Capital 2010 Gas Bond	\$2,677	-	-	-	-	-	-	-	\$2,677
2014 Wastewater Bond	\$816	-	-	-	-	-	-	-	\$816
2014 Water Bond	\$121,162	-	-	\$920,149	-	-	-	-	\$1,041,311
<b>Sum:</b>	<b>\$124,655</b>	-	-	<b>\$920,149</b>	-	-	-	-	<b>\$1,044,804</b>

#### Re-drill Groundwater Wells (CP0642)

##### CITYWIDE

Re-drill wells and replace old equipment at wells identified in the Water Master Plan to meet water demand. Work will include re-drilling the well and installing new equipment - new electric service, electrical & instrument components, pump & motor.

Fund	Estimated Exp							Future Years (3)	Totals
	Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23			
Capital 2014 Water Bond	-	-	-	\$687,044	-	-	-	-	\$687,044
2020 Water Bond	-	-	-	\$745,222	\$7,473,800	\$5,645,065	\$14,289,531	-	\$28,153,618
<b>Sum:</b>	-	-	-	<b>\$1,432,266</b>	<b>\$7,473,800</b>	<b>\$5,645,065</b>	<b>\$14,289,531</b>	-	<b>\$28,840,662</b>

#### Reservoir Rehabilitation (CP0641)

##### CITYWIDE

Replace failing equipment at City reservoirs in the water system. Equipment planned for replacement include cathodic protection equipment, liners, interior & exterior coatings & mixer equipment.

Fund	Estimated Exp							Future Years (3)	Totals
	Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23			
Capital 2014 Water Bond	\$200,459	\$1,429,092	\$106,518	-	-	-	-	-	\$1,736,069
2020 Water Bond	-	-	-	\$872,101	\$7,761,187	\$140,950	\$144,665	-	\$8,918,903
<b>Sum:</b>	<b>\$200,459</b>	<b>\$1,429,092</b>	<b>\$106,518</b>	<b>\$872,101</b>	<b>\$7,761,187</b>	<b>\$140,950</b>	<b>\$144,665</b>	-	<b>\$10,654,972</b>

## Capital Improvement Program Project Funding Summary Fiscal Years 2019 - 2023

### Water Lifecycle

#### Signal Butte Water Treatment Plant Equipment Replacement

##### COUNCIL DISTRICT 6

Design and construct plant improvements and equipment replacement that will provide increased reliability and cost effective operation of the SBWTP. This includes rehab or replacement of bulk chemical tanks, pump and piping, sludge pumps and valves, etc.

	Fund	Estimated Exp Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	Future Years (3)	Totals
Capital	2020 Water Bond	-	-	-	\$5,576,660	-	-	-	\$5,576,660
	<b>Sum:</b>	-	-	-	\$5,576,660	-	-	-	\$5,576,660

#### Val Vista Major Plant Improvements (CP0647)

##### COUNCIL DISTRICT 1

Replace the liner at Reservoir 1 at the Val Vista Water Treatment Plant. The City assumed full ownership of Reservoir 1 as part of the 2012 Inter-Governmental Agreement with the City of Phoenix.

	Fund	Estimated Exp Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	Future Years (3)	Totals
Capital	2020 Water Bond	-	-	-	\$223,066	\$2,311,854	-	-	\$2,534,920
	<b>Sum:</b>	-	-	-	\$223,066	\$2,311,854	-	-	\$2,534,920

#### Water Meter Vault Rehabilitation (CP0860)

##### CITYWIDE

Perform upgrades necessary for OSHA compliance & to reduce safety hazards. Improvements are planned over several fiscal years.

	Fund	Estimated Exp Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	Future Years (3)	Totals
Capital	2014 Water Bond	-	\$958,770	\$981,109	-	-	-	-	\$1,939,879
	2020 Water Bond	-	-	-	\$1,065,142	\$1,092,981	\$1,121,730	\$1,151,289	\$4,431,142
	<b>Sum:</b>	-	\$958,770	\$981,109	\$1,065,142	\$1,092,981	\$1,121,730	\$1,151,289	\$6,371,021

#### Water Services Extension & Replacement (CP0650)

##### CITYWIDE

Replace water services that have reached the end of their support lifecycle. Timely replacement will prevent service disruptions.

	Fund	Estimated Exp Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	Future Years (3)	Totals
Capital	2014 Water Bond	\$3,982	\$214,120	\$219,109	-	-	-	-	\$437,211
	2020 Water Bond	-	-	-	\$296,678	\$304,432	\$312,440	\$320,673	\$1,234,223
	<b>Sum:</b>	\$3,982	\$214,120	\$219,109	\$296,678	\$304,432	\$312,440	\$320,673	\$1,671,434

#### Water Valve Replacement (CP0651)

##### CITYWIDE

Replace water valves that have reached the end of their support lifecycle. This work will prevent service disruptions.

	Fund	Estimated Exp Through FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	Future Years (3)	Totals
Capital	2014 Water Bond	\$422,257	\$381,600	\$390,491	-	-	-	-	\$1,194,348
	2020 Water Bond	-	-	-	\$474,016	\$486,405	\$499,200	\$512,354	\$1,971,975
	<b>Sum:</b>	\$422,257	\$381,600	\$390,491	\$474,016	\$486,405	\$499,200	\$512,354	\$3,166,323