

## WATER & SEWER ENTERPRISE FUNDS

Water and sewer capital projects account for the largest portion of the current capital improvement plan. These projects will be funded from water/sewer fund revenues. The FY 2013-2022 budget reflects recommendations from the Red Oak rate study completed in 2012.

The combined Water/Sewer Fund (2360) reflects continued and new funding in FY 2013 for upgrades at the Arrowhead Water Reclamation Facility to ensure regulatory requirements are met.

FY 2013 for the Water Fund (2400) reflects carryover funding for the Zone 4 Groundwater Treatment Plant that will provide capacity of 10 million gallons per day (MGD) for the drinking water system. FY 2013 also includes funding for citywide water line replacement where needed and part ownership of a New River/Agua Fria underground storage facility which provides additional recharge capacity for the city.

In FY 2013, the Sewer Fund (2420) projects include carryover and new funding for sewer line replacement and/or rehabilitation, as well as new funding for the continued expansion of the 91<sup>st</sup> Avenue Wastewater Treatment Plan co-owned by the City of Phoenix and other valley cities. This project will expand the facility's treatment capacity from 153 MGD to 250 MGD.



**Project Name:** Oasis Water Campus  
**Funding Source:** Revenue Bond  
**Fund #:** 2400  
**Project #:** 61003

**FY 2013-2022 CAPITAL IMPROVEMENT PLAN**  
**Fund Summary and Project Detail**



**FUND SUMMARY: 2360-Water & Sewer** **Category: Revenue**

	<u>FY 2013:</u>		<u>FY 2014:</u>	<u>FY 2015:</u>	<u>FY 2016:</u>	<u>FY 2017:</u>	<u>FYs 18-22:</u>
<b>Capital Project Expenses</b>	<u>Carrlover</u>	<u>New Funding</u>					
<b>Existing Assets</b>							
<i>Improvement of Existing Assets</i>							
60007 Arrwhd Wtr Reclam Fac Imps	6,991,104	2,968,453	7,372,726	3,835,090	1,741,227	1,808,151	18,439,099
<i>Replacement of Existing Assets</i>							
60001 Water Quality Instruments	0	100,000	0	0	350,000	0	335,000
60009 West Area WRF Service Wtr Sys.	149,594	0	0	0	0	0	0
60010 Lab Data Management System	0	300,000	0	0	0	0	0
T2270 WAWRF Fine Screen Replacement	0	0	752,950	0	0	0	0
T2280 WAWRF Odor Control Replacement	0	0	0	0	1,081,700	0	0
T2283 Computerized Maint. Mgmt Sys.	0	0	0	0	0	579,637	3,260,718
T2284 Radio Phase IV Equipment	0	0	848,720	0	0	0	983,000
<b>Sub-Total - Existing Assets</b>	<b>7,140,698</b>	<b>3,368,453</b>	<b>8,974,396</b>	<b>3,835,090</b>	<b>3,172,927</b>	<b>2,387,788</b>	<b>23,017,817</b>
<b>New Assets</b>							
60008 WAWRF Phase IV	284,264	0	318,271	0	0	0	6,818,020
<b>Sub-Total - New Assets</b>	<b>284,264</b>	<b>0</b>	<b>318,271</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>6,818,020</b>
<b>Total Project Expenses:</b>	<b>\$7,424,962</b>	<b>\$3,368,453</b>	<b>\$9,292,667</b>	<b>\$3,835,090</b>	<b>\$3,172,927</b>	<b>\$2,387,788</b>	<b>\$29,835,837</b>
<b>Total FY 2013 Funding:</b>		<b>\$10,793,415</b>					

**PROJECT DETAIL: 2360-Water & Sewer** **Category: Revenue**

**Project:** 60007 - Arrwhd Wtr Reclam Fac Imps (I) **Funding Source:** Water & Sewer Revenues

**Project Description:** To ensure reliable and safe treatment of wastewater in the Arrowhead area and meet upcoming regulatory requirements, the treatment plant processes will be upgraded. This project will replace the aging sand filters and headworks at the Arrowhead Ranch Water Reclamation Facility. This project will also include civil, mechanical, and electrical improvements. These improvements will enable the plant to consistently meet the A+ effluent water quality requirements and help assure personnel safety by meeting Occupational Safety and Health Administration (OSHA) standards.

<b>Capital Costs:</b>	<b>Carryover</b>	<b>FY 2013</b>	<b>FY 2014</b>	<b>FY 2015</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FYs 18-22</b>
Design	\$707,448	\$2,300,000	\$1,055,000	\$300,000	\$320,000	\$320,000	\$3,200,000
Construction	\$5,580,546	\$350,000	\$5,580,000	\$3,100,000	\$1,250,000	\$1,300,000	\$14,600,000
Finance Charges	\$85,453	\$39,750	\$99,525	\$51,000	\$23,550	\$24,300	\$243,000
Engineering Charges	\$57,021	\$10,203	\$25,545	\$13,090	\$6,045	\$6,237	\$68,530
Arts	\$0	\$3,500	\$55,800	\$31,000	\$12,500	\$13,000	\$146,000
Contingency	\$560,575	\$265,000	\$556,856	\$340,000	\$129,132	\$144,614	\$181,569
Miscellaneous/Other	\$61	\$0	\$0	\$0	\$0	\$0	\$0
<b>TOTAL</b>	<b>\$6,991,104</b>	<b>\$2,968,453</b>	<b>\$7,372,726</b>	<b>\$3,835,090</b>	<b>\$1,741,227</b>	<b>\$1,808,151</b>	<b>\$18,439,099</b>

**Operating Description:** No additional O and M is needed for this project.

\* New Project  
 N=New Asset, R=Replacement of Existing Asset, I=Improvement of Existing Asset



**PROJECT DETAIL: 2360-Water & Sewer** **Category: Revenue**

**Project:** 60001 - Water Quality Instruments (R) **Funding Source:** Water & Sewer Revenues

**Project Description:** This project reflects a replacement program for the major analytical instrumentation at the city's water quality laboratory. Highly sensitive and precise analytical instrumentation is required for the regulatory analysis of the city's water. FY 2013 funding is for replacement of an inductively coupled plasma instrument for metals analysis.

Capital Costs:	Carryover	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FYs 18-22
Equipment	\$0	\$100,000	\$0	\$0	\$350,000	\$0	\$335,000
<b>TOTAL</b>	<b>\$0</b>	<b>\$100,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$350,000</b>	<b>\$0</b>	<b>\$335,000</b>

**Operating Description:** No additional O & M is required for this project.

**Project:** 60009 - West Area WRF Service Wtr Sys. (R) **Funding Source:** Water & Sewer Revenues

**Project Description:** This project will include replacement of the existing 2 inch galvanized water lines at the West Area Water Reclamation Facility. Numerous areas of the pipeline system have leaks indicating pipeline corrosion. Leaks currently have temporary repairs done by Utilities staff.

Capital Costs:	Carryover	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FYs 18-22
Construction	\$131,594	\$0	\$0	\$0	\$0	\$0	\$0
Engineering Charges	\$9,840	\$0	\$0	\$0	\$0	\$0	\$0
Arts	\$820	\$0	\$0	\$0	\$0	\$0	\$0
Contingency	\$7,340	\$0	\$0	\$0	\$0	\$0	\$0
<b>TOTAL</b>	<b>\$149,594</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>

**Operating Description:** No additional O and M is needed for this project.

**Project:** 60010 - Lab Data Management System (R) **Funding Source:** Water & Sewer Revenues

**Project Description:** Purchase of a new information management system to replace an outdated data system. The new information system will interface directly with laboratory instrumentation, integrate quality control processes, eliminate duplicate and manual data entry, and automate regulatory reporting.

Capital Costs:	Carryover	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FYs 18-22
IT/Phone/Security	\$0	\$300,000	\$0	\$0	\$0	\$0	\$0
<b>TOTAL</b>	<b>\$0</b>	<b>\$300,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>

**Operating Description:** Additional O and M expenses are related to software license renewals/updates and system configuration hardware requirements. The additional O and M will be absorbed by the department.

Operating Costs:	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FYs 18-22
Supplies/Contr	\$0	\$17,510	\$18,035	\$18,576	\$19,134	\$104,631
<b>TOTAL</b>	<b>\$0</b>	<b>\$17,510</b>	<b>\$18,035</b>	<b>\$18,576</b>	<b>\$19,134</b>	<b>\$104,631</b>

\* New Project

N=New Asset, R=Replacement of Existing Asset, I=Improvement of Existing Asset



**PROJECT DETAIL: 2360-Water & Sewer** **Category: Revenue**

**Project:** T2270 - WAWRF Fine Screen Replacement (R) **Funding Source:** Water & Sewer Revenues

**Project Description:** The West Area Water Reclamation Facility (WAWRF) fine screens are mechanical devices that remove solid materials from the influent flows. These devices are subject to wear and tear and need to be replaced periodically.

Capital Costs:	Carryover	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FYs 18-22
Design	\$0	\$0	\$50,000	\$0	\$0	\$0	\$0
Construction	\$0	\$0	\$580,000	\$0	\$0	\$0	\$0
Engineering Charges	\$0	\$0	\$29,400	\$0	\$0	\$0	\$0
Arts	\$0	\$0	\$5,800	\$0	\$0	\$0	\$0
Contingency	\$0	\$0	\$87,750	\$0	\$0	\$0	\$0
<b>TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$752,950</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>

**Operating Description:** No additional O and M is needed for this project.

**Project:** T2280 - WAWRF Odor Control Replacement (R) **Funding Source:** Water & Sewer Revenues

**Project Description:** The West Area Water Reclamation Facility odor control system is required to meet air quality regulatory standards and minimize or prevent odor complaints. Elements of the odor control system will require rehabilitation or replacement due to normal wear and tear.

Capital Costs:	Carryover	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FYs 18-22
Design	\$0	\$0	\$0	\$0	\$100,000	\$0	\$0
Construction	\$0	\$0	\$0	\$0	\$839,000	\$0	\$0
Engineering Charges	\$0	\$0	\$0	\$0	\$40,377	\$0	\$0
Arts	\$0	\$0	\$0	\$0	\$8,390	\$0	\$0
Contingency	\$0	\$0	\$0	\$0	\$93,933	\$0	\$0
<b>TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,081,700</b>	<b>\$0</b>	<b>\$0</b>

**Operating Description:** No additional O and M is needed for this project.

\* New Project  
 N=New Asset, R=Replacement of Existing Asset, I=Improvement of Existing Asset



**PROJECT DETAIL: 2360-Water & Sewer** **Category: Revenue**

**Project:** T2283 - Computerized Maint. Mgmt Sys. (R) **Funding Source:** Water & Sewer Revenues

**Project Description:** A computerized maintenance management system (CMMS) will be used to track data regarding the operation and maintenance of the city's water and wastewater treatment, distribution and collection systems. This database system eliminates manual record keeping.

Capital Costs:	Carryover	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FYs 18-22
Design	\$0	\$0	\$0	\$0	\$0	\$15,000	\$22,000
Construction	\$0	\$0	\$0	\$0	\$0	\$495,000	\$2,800,000
Finance Charges	\$0	\$0	\$0	\$0	\$0	\$0	\$45,300
Engineering Charges	\$0	\$0	\$0	\$0	\$0	\$9,435	\$52,207
Arts	\$0	\$0	\$0	\$0	\$0	\$4,950	\$28,000
Contingency	\$0	\$0	\$0	\$0	\$0	\$55,252	\$313,211
<b>TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$579,637</b>	<b>\$3,260,718</b>

**Operating Description:** New O and M costs are needed to support the new programs. A supplemental budget request will be submitted once the project is complete. The \$40,000 is for two years of software maintenance.

Operating Costs:	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FYs 18-22
Supplies/Contr	\$0	\$0	\$0	\$0	\$0	\$40,000
<b>TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$40,000</b>

**Project:** T2284 - Radio Phase IV Equipment (R) **Funding Source:** Water & Sewer Revenues

**Project Description:** This project includes the replacement of the existing microwave radio equipment that is a critical component for the wide area networking of the Supervisory Control and Data Acquisition (SCADA) System. The microwave radio equipment installed under the Radio Phase III project has a supportable and operational life span of approximately five years.

Capital Costs:	Carryover	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FYs 18-22
Construction	\$0	\$0	\$749,000	\$0	\$0	\$0	\$868,000
Engineering Charges	\$0	\$0	\$26,964	\$0	\$0	\$0	\$31,248
Arts	\$0	\$0	\$7,490	\$0	\$0	\$0	\$8,680
Contingency	\$0	\$0	\$65,266	\$0	\$0	\$0	\$75,072
<b>TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$848,720</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$983,000</b>

**Operating Description:** No additional O and M is needed for this project.

\* New Project  
N=New Asset, R=Replacement of Existing Asset, I=Improvement of Existing Asset

**FY 2013-2022 CAPITAL IMPROVEMENT PLAN**  
**Fund Summary and Project Detail**



**PROJECT DETAIL: 2360-Water & Sewer** **Category: Revenue**

**Project:** 60008 - WAWRF Phase IV (N) **Funding Source:** Water & Sewer Revenues

**Project Description:** The funding request for FY 2015 and beyond includes an engineering assessment, design and construction of treatment system improvements and capacity expansion to address the expected increase in wastewater flows from the developing areas along the Loop 101 and west area. The plant improvements and expansion were identified in the West Area Water Reclamation Facility Phase V Master Plan conducted by Damon S. Williams Associates (DSWA).

<b>Capital Costs:</b>	<b>Carryover</b>	<b>FY 2013</b>	<b>FY 2014</b>	<b>FY 2015</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FYs 18-22</b>
Design	\$0	\$0	\$60,000	\$0	\$0	\$0	\$5,000,000
Construction	\$256,728	\$0	\$220,000	\$0	\$0	\$0	\$1,500,000
Finance Charges	\$0	\$0	\$0	\$0	\$0	\$0	\$100,000
Engineering Charges	\$0	\$0	\$3,820	\$0	\$0	\$0	\$88,680
Arts	\$2,567	\$0	\$2,200	\$0	\$0	\$0	\$15,000
Contingency	\$24,969	\$0	\$32,251	\$0	\$0	\$0	\$0
Miscellaneous/Other	\$0	\$0	\$0	\$0	\$0	\$0	\$114,340
<b>TOTAL</b>	<b>\$284,264</b>	<b>\$0</b>	<b>\$318,271</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$6,818,020</b>

**Operating Description:** An expanded facility is estimated to require two new plant operators and one senior plant maintenance mechanic once construction nears completion. Other additional operating expenses are projected as a result of increases in supplies (chemicals) \$200,000, (2) utilities of \$300,000, and (3) equipment maintenance \$66,000. No new telephones, PCs or vehicles will be required. A supplemental will be submitted once the project is near completion.

<b>Operating Costs:</b>	<b>FY 2013</b>	<b>FY 2014</b>	<b>FY 2015</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FYs 18-22</b>
Staffing	\$0	\$0	\$0	\$0	\$0	\$865,692
Supplies/Contr	\$0	\$0	\$0	\$0	\$0	\$260,955
Utilities	\$0	\$0	\$0	\$0	\$0	\$391,432
Equip. Maint.	\$0	\$0	\$0	\$0	\$0	\$86,115
<b>TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,604,194</b>

\* New Project  
 N=New Asset, R=Replacement of Existing Asset, I=Improvement of Existing Asset



**FUND SUMMARY: 2400-Water** **Category: Revenue**

Capital Project Expenses	FY 2013:		FY 2014:	FY 2015:	FY 2016:	FY 2017:	FYs 18-22:
	Carrlover	New Funding					
<b>Existing Assets</b>							
<i>Improvement of Existing Assets</i>							
61023 Water System Security	112,169	0	0	0	0	0	3,009,012
61024 Cholla Water Plant Process Imp	400,000	0	500,000	0	0	0	0
61036 Zn4 Groundwater Trtment Plant	1,748,165	0	0	0	0	0	22,168,476
61045 Thunderbird Reservoir Misc. Im	180,000	0	0	0	0	0	0
61046 SRP Well Imp	280,000	0	0	0	0	0	0
61047 Citywide Meter Vault Imp	125,000	250,000	0	0	0	0	0
61048 *City Wide Well Rehab	0	600,000	800,000	0	0	0	0
T3540 WTPs Chlorine Gas Elimination	0	0	0	0	0	0	9,344,653
T3555 Fiber Optic Cable at Reservoir	0	0	0	0	0	0	225,000
T3561 Northern Ave PRV Station Reloc	0	0	0	0	0	0	200,000
T3563 *Pyramid Peak Trains Improv	0	0	0	0	0	0	9,109,792
<i>Replacement of Existing Assets</i>							
61001 Fire Hydrant Replacement	596,074	0	0	301,200	301,200	300,200	0
61012 Citywide Irrigation System	0	0	0	200,000	200,000	200,000	200,000
61013 Water Line Replacement	689,992	2,000,000	0	2,000,000	3,500,000	3,500,000	14,000,000
61015 Outer Loop Effluent Line	0	0	0	0	0	1,600,000	2,600,000
61043 Pyramid Pk WTP Train #1 Equip	100,000	0	0	0	0	0	0
T3550 Hillcrest Ranch Booster Rehab	0	0	0	0	0	0	2,388,015
<b>Sub-Total - Existing Assets</b>	<b>4,231,400</b>	<b>2,850,000</b>	<b>1,300,000</b>	<b>2,501,200</b>	<b>4,001,200</b>	<b>5,600,200</b>	<b>63,244,948</b>
<b>New Assets</b>							
61009 Drinking Water Well Head Trmt	0	0	0	0	0	0	1,775,000
61019 Storage and Recovery Well	0	0	0	0	0	745,453	4,005,475
61021 N River/Agua Fria Storage Proj	1,257,030	1,257,030	0	0	0	0	0
61027 Water Line Extension	0	0	0	1,000,000	2,000,000	3,000,000	1,500,000
61038 Loop 101 Water Treatment Plant	0	756,000	0	0	0	0	0
61044 New River Waterline Crossing	1,275,454	0	0	0	0	0	0
T3552 Additional Water Supply	0	0	6,394,660	0	0	0	0
<b>Sub-Total - New Assets</b>	<b>2,532,484</b>	<b>2,013,030</b>	<b>6,394,660</b>	<b>1,000,000</b>	<b>2,000,000</b>	<b>3,745,453</b>	<b>7,280,475</b>
<b>Total Project Expenses:</b>	<b>\$6,763,884</b>	<b>\$4,863,030</b>	<b>\$7,694,660</b>	<b>\$3,501,200</b>	<b>\$6,001,200</b>	<b>\$9,345,653</b>	<b>\$70,525,423</b>
<b>Total FY 2013 Funding:</b>		<b>\$11,626,914</b>					

\* New Project  
 N=New Asset, R=Replacement of Existing Asset, I=Improvement of Existing Asset

**FY 2013-2022 CAPITAL IMPROVEMENT PLAN**  
**Fund Summary and Project Detail**



**PROJECT DETAIL: 2400-Water** **Category: Revenue**

**Project:** 61023 - Water System Security (I) **Funding Source:** Water & Sewer Revenues

**Project Description:** This project includes the installation of equipment to further enhance security of the city's water supply, treatment plants and distribution system.

<b>Capital Costs:</b>	<b>Carryover</b>	<b>FY 2013</b>	<b>FY 2014</b>	<b>FY 2015</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FYs 18-22</b>
Design	\$0	\$0	\$0	\$0	\$0	\$0	\$450,000
Construction	\$103,434	\$0	\$0	\$0	\$0	\$0	\$2,190,000
Finance Charges	\$0	\$0	\$0	\$0	\$0	\$0	\$39,600
Engineering Charges	\$8,735	\$0	\$0	\$0	\$0	\$0	\$55,000
Arts	\$0	\$0	\$0	\$0	\$0	\$0	\$21,900
Contingency	\$0	\$0	\$0	\$0	\$0	\$0	\$252,512
<b>TOTAL</b>	<b>\$112,169</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$3,009,012</b>

**Operating Description:** No additional O and M is needed for this project.

**Project:** 61024 - Cholla Water Plant Process Imp (I) **Funding Source:** Water & Sewer Revenues

**Project Description:** This project will include improvements at Cholla Water Treatment Plant to continue to meet regulatory requirements. The improvements include the installation of new variable frequency drive systems, odor control, solids handling facility repair and improvements, and reservoir lining rehabilitation or replacement.

<b>Capital Costs:</b>	<b>Carryover</b>	<b>FY 2013</b>	<b>FY 2014</b>	<b>FY 2015</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FYs 18-22</b>
Design	\$70,000	\$0	\$60,000	\$0	\$0	\$0	\$0
Construction	\$275,000	\$0	\$364,700	\$0	\$0	\$0	\$0
Engineering Charges	\$14,835	\$0	\$20,810	\$0	\$0	\$0	\$0
Arts	\$2,750	\$0	\$3,647	\$0	\$0	\$0	\$0
Contingency	\$37,415	\$0	\$50,843	\$0	\$0	\$0	\$0
<b>TOTAL</b>	<b>\$400,000</b>	<b>\$0</b>	<b>\$500,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>

**Operating Description:** No additional O and M is needed for this project.

\* New Project  
 N=New Asset, R=Replacement of Existing Asset, I=Improvement of Existing Asset



**PROJECT DETAIL: 2400-Water** **Category: Revenue**

**Project:** 61036 - Zn4 Groundwater Trtment Plant (I) **Funding Source:** Water & Sewer Revenues

**Project Description:** This 10 million gallons per day (MGD) Groundwater Treatment Plant was identified in the "Comprehensive Water Facilities Planning and Design" report by Black & Veatch as a key water supply component to provide additional water during plant outages such as canal dry-ups and to help meet peak water demands. This project will include additional conveyance pipeline, a supply well, and brine disposal ponds.

<b>Capital Costs:</b>	<b>Carryover</b>	<b>FY 2013</b>	<b>FY 2014</b>	<b>FY 2015</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FYs 18-22</b>
Design	\$543,895	\$0	\$0	\$0	\$0	\$0	\$1,900,000
Construction	\$1,160,509	\$0	\$0	\$0	\$0	\$0	\$17,900,000
Finance Charges	\$0	\$0	\$0	\$0	\$0	\$0	\$297,000
Engineering Charges	\$43,761	\$0	\$0	\$0	\$0	\$0	\$120,780
Arts	\$0	\$0	\$0	\$0	\$0	\$0	\$179,000
Contingency	\$0	\$0	\$0	\$0	\$0	\$0	\$1,771,696
<b>TOTAL</b>	<b>\$1,748,165</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$22,168,476</b>

**Operating Description:** The new O and M costs reflect the need for additional staff, chemicals and utilities beginning 7/1/2020 . Staffing includes three plant operator 1's. This equals to \$149,145 per years for all three with benefits. Chemical, utilities, and maintenance costs are based on actual costs during a pilot study to treat groundwater. A supplemental will be submitted in the future for the additional O and M costs.

<b>Operating Costs:</b>	<b>FY 2013</b>	<b>FY 2014</b>	<b>FY 2015</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FYs 18-22</b>
Staffing	\$0	\$0	\$0	\$0	\$0	\$298,290
Supplies/Contr	\$0	\$0	\$0	\$0	\$0	\$887,760
Utilities	\$0	\$0	\$0	\$0	\$0	\$134,500
Equip. Maint.	\$0	\$0	\$0	\$0	\$0	\$11,950
Insurance	\$0	\$0	\$0	\$0	\$0	\$15,780
<b>TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,348,280</b>

**Project:** 61045 - Thunderbird Reservoir Misc. Im (I) **Funding Source:** Water & Sewer Revenues

**Project Description:** The requested funding addresses an engineering study to evaluate alternatives for enhancing water quality during the hot summer months for water stored at the Thunderbird Reservoir. Once the study is completed, design and construction of the recommended improvements are projected to proceed in FY 2016.

<b>Capital Costs:</b>	<b>Carryover</b>	<b>FY 2013</b>	<b>FY 2014</b>	<b>FY 2015</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FYs 18-22</b>
Design	\$73,000	\$0	\$0	\$0	\$0	\$0	\$0
Construction	\$80,000	\$0	\$0	\$0	\$0	\$0	\$0
Engineering Charges	\$7,497	\$0	\$0	\$0	\$0	\$0	\$0
Arts	\$800	\$0	\$0	\$0	\$0	\$0	\$0
Contingency	\$18,703	\$0	\$0	\$0	\$0	\$0	\$0
<b>TOTAL</b>	<b>\$180,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>

**Operating Description:** No additional O and M is needed for this project.

\* New Project  
N=New Asset, R=Replacement of Existing Asset, I=Improvement of Existing Asset

**FY 2013-2022 CAPITAL IMPROVEMENT PLAN**  
**Fund Summary and Project Detail**



**PROJECT DETAIL: 2400-Water** **Category: Revenue**

**Project:** 61046 - SRP Well Imp (I) **Funding Source:** Water & Sewer Revenues

**Project Description:** The project will include the rehabilitation of various Salt River Project wells in water zones 1 and 2 to meet the drinking water standards.

Capital Costs:	Carryover	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FYs 18-22
Design	\$45,000	\$0	\$0	\$0	\$0	\$0	\$0
Construction	\$198,000	\$0	\$0	\$0	\$0	\$0	\$0
Engineering Charges	\$11,907	\$0	\$0	\$0	\$0	\$0	\$0
Arts	\$1,980	\$0	\$0	\$0	\$0	\$0	\$0
Contingency	\$23,113	\$0	\$0	\$0	\$0	\$0	\$0
<b>TOTAL</b>	<b>\$280,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>

**Operating Description:** No additional O and M is needed for this project.

**Project:** 61047 - Citywide Meter Vault Imp (I) **Funding Source:** Water & Sewer Revenues

**Project Description:** Based on a field condition assessment conducted by staff, modifications to large meter vaults are recommended to enhance safe entry. The meter vault covers will be replaced with spring-torsion type covers per the city's design standards and meter vaults will be retrofitted or replaced as needed. Meter vaults are the structure that house the meters.

Capital Costs:	Carryover	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FYs 18-22
Construction	\$106,000	\$212,000	\$0	\$0	\$0	\$0	\$0
Engineering Charges	\$6,996	\$13,992	\$0	\$0	\$0	\$0	\$0
Arts	\$1,060	\$2,120	\$0	\$0	\$0	\$0	\$0
Contingency	\$10,944	\$21,888	\$0	\$0	\$0	\$0	\$0
<b>TOTAL</b>	<b>\$125,000</b>	<b>\$250,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>

**Operating Description:** No additional O and M is needed for this project.

**Project:** 61048\* - City Wide Well Rehab (I) **Funding Source:** Water & Sewer Revenues

**Project Description:** This project is to rehabilitate or replace the existing City Well No. 5 which will be used as a recharge well to enhance water quality within the water distribution system and help the city obtain groundwater recharge credit.

Capital Costs:	Carryover	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FYs 18-22
Design	\$0	\$240,000	\$240,000	\$0	\$0	\$0	\$0
Construction	\$0	\$271,000	\$450,000	\$0	\$0	\$0	\$0
Finance Charges	\$0	\$7,665	\$12,600	\$0	\$0	\$0	\$0
Engineering Charges	\$0	\$18,296	\$24,704	\$0	\$0	\$0	\$0
Arts	\$0	\$2,710	\$4,500	\$0	\$0	\$0	\$0
Contingency	\$0	\$60,329	\$68,196	\$0	\$0	\$0	\$0
<b>TOTAL</b>	<b>\$0</b>	<b>\$600,000</b>	<b>\$800,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>

**Operating Description:** No additional O and M is needed for this project.

\* New Project

N=New Asset, R=Replacement of Existing Asset, I=Improvement of Existing Asset



**PROJECT DETAIL: 2400-Water** **Category: Revenue**

**Project:** T3540 - WTPs Chlorine Gas Elimination (I) **Funding Source:** Water & Sewer Revenues

**Project Description:** This project includes the design and construction of a chlorine gas elimination system as well as the removal of the current onsite storage system for chlorine gas, which is the current disinfection method for potable water. The chlorine gas will be replaced with equipment that will provide onsite generation of sodium hypochlorite as the disinfection chemical for Pyramid Peak and Cholla Water Treatment Plants.

Capital Costs:	Carryover	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FYs 18-22
Design	\$0	\$0	\$0	\$0	\$0	\$0	\$1,400,000
Construction	\$0	\$0	\$0	\$0	\$0	\$0	\$6,900,000
Finance Charges	\$0	\$0	\$0	\$0	\$0	\$0	\$124,500
Engineering Charges	\$0	\$0	\$0	\$0	\$0	\$0	\$92,500
Arts	\$0	\$0	\$0	\$0	\$0	\$0	\$69,000
Contingency	\$0	\$0	\$0	\$0	\$0	\$0	\$758,653
<b>TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$9,344,653</b>

**Operating Description:** Based on a start date of 7/1/2019 additional annual inflated cost for supplies will be \$76,028 and electricity will be \$57,021. Costs are based on engineering studies. A supplemental budget request will be submitted once the project is near completion.

Operating Costs:	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FYs 18-22
Supplies/Contr	\$0	\$0	\$0	\$0	\$0	\$76,028
Utilities	\$0	\$0	\$0	\$0	\$0	\$57,021
<b>TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$133,049</b>

**Project:** T3555 - Fiber Optic Cable at Reservoir (I) **Funding Source:** Water & Sewer Revenues

**Project Description:** This project includes the installation of fiber optic cables at Thunderbird Reservoir and Zone 4 Reservoir. A recent assessment recommends fiber optic cables as the least expensive, long-term solution for wide area network communications at Thunderbird and Zone 4 Reservoirs to replace the T1 data line that currently is being leased from Qwest. The new fiber optic cables will permit remote monitoring of the numerous security cameras at the reservoirs and also provide more reliable access for the Supervisory Control and Data Acquisition (SCADA) system.

Capital Costs:	Carryover	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FYs 18-22
Design	\$0	\$0	\$0	\$0	\$0	\$0	\$10,000
Construction	\$0	\$0	\$0	\$0	\$0	\$0	\$200,000
IT/Phone/Security	\$0	\$0	\$0	\$0	\$0	\$0	\$2,000
Engineering Charges	\$0	\$0	\$0	\$0	\$0	\$0	\$11,000
Arts	\$0	\$0	\$0	\$0	\$0	\$0	\$2,000
<b>TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$225,000</b>

**Operating Description:** A supplemental budget request will be submitted once the project is near completion.

\* New Project

N=New Asset, R=Replacement of Existing Asset, I=Improvement of Existing Asset

**FY 2013-2022 CAPITAL IMPROVEMENT PLAN**  
**Fund Summary and Project Detail**



**PROJECT DETAIL: 2400-Water** **Category: Revenue**

**Project:** T3561 - Northern Ave PRV Station Reloc (I) **Funding Source:** Water & Sewer Revenues

**Project Description:** The city needs to relocate the pressure reducing valve (PRV) station on Northern Avenue to provide more operational flexibility and better access to conduct maintenance work, meet safety requirements, and increase sustainability of chlorine residual. The relocation of the PRV station will assist the city in meeting the federal and state regulation of disinfection byproduct such as trihalomethanes formation.

Capital Costs:	Carryover	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FYs 18-22
Design	\$0	\$0	\$0	\$0	\$0	\$0	\$48,000
Construction	\$0	\$0	\$0	\$0	\$0	\$0	\$124,000
Engineering Charges	\$0	\$0	\$0	\$0	\$0	\$0	\$11,000
Arts	\$0	\$0	\$0	\$0	\$0	\$0	\$1,240
Contingency	\$0	\$0	\$0	\$0	\$0	\$0	\$15,760
<b>TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$200,000</b>

**Operating Description:** No additional O and M is needed for this project.

**Project:** T3563\* - Pyramid Peak Trains Improv (I) **Funding Source:** Water & Sewer Revenues

**Project Description:** This project will include engineering evaluation, design and construction of existing treatment trains improvements. The original equipment will be over 20 years old and will be nearing the end of its useful life.

Capital Costs:	Carryover	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FYs 18-22
Design	\$0	\$0	\$0	\$0	\$0	\$0	\$1,600,000
Construction	\$0	\$0	\$0	\$0	\$0	\$0	\$6,250,000
Finance Charges	\$0	\$0	\$0	\$0	\$0	\$0	\$117,750
Engineering Charges	\$0	\$0	\$0	\$0	\$0	\$0	\$92,500
Arts	\$0	\$0	\$0	\$0	\$0	\$0	\$62,500
Contingency	\$0	\$0	\$0	\$0	\$0	\$0	\$987,042
<b>TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$9,109,792</b>

**Operating Description:** No additional O and M is needed for this project.

**Project:** 61001 - Fire Hydrant Replacement (R) **Funding Source:** Water & Sewer Revenues

**Project Description:** This project funds a replacement program for approximately 800 existing fire hydrants. To date, 349 fire hydrants have been replaced. The existing fire hydrants need to be replaced due to age and lack of replacement parts. The new fire hydrants will be installed to meet the city and industry spacing guidelines. In addition, the new fire hydrants will be accessible for routine maintenance to ensure fire system integrity.

Capital Costs:	Carryover	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FYs 18-22
Construction	\$520,571	\$0	\$0	\$262,000	\$262,000	\$262,000	\$0
Engineering Charges	\$23,843	\$0	\$0	\$13,200	\$13,200	\$13,200	\$0
Arts	\$5,206	\$0	\$0	\$2,620	\$2,620	\$2,620	\$0
Contingency	\$46,454	\$0	\$0	\$23,380	\$23,380	\$22,380	\$0
<b>TOTAL</b>	<b>\$596,074</b>	<b>\$0</b>	<b>\$0</b>	<b>\$301,200</b>	<b>\$301,200</b>	<b>\$300,200</b>	<b>\$0</b>

**Operating Description:** No additional O and M is needed for this project.

\* New Project

N=New Asset, R=Replacement of Existing Asset, I=Improvement of Existing Asset



**PROJECT DETAIL: 2400-Water** **Category: Revenue**

**Project:** 61012 - Citywide Irrigation System (R) **Funding Source:** Water & Sewer Revenues

**Project Description:** Irrigation pipelines and related irrigation structure in the city owned portion of the flood irrigation system will be rehabilitated or replaced.

Capital Costs:	Carryover	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FYs 18-22
Miscellaneous/Other	\$0	\$0	\$0	\$200,000	\$200,000	\$200,000	\$200,000
<b>TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$200,000</b>	<b>\$200,000</b>	<b>\$200,000</b>	<b>\$200,000</b>

**Operating Description:** No additional O and M is needed for this project.

**Project:** 61013 - Water Line Replacement (R) **Funding Source:** Water & Sewer Revenues

**Project Description:** The Water Distribution System Evaluation Study conducted by CH2M-Hill identified the segments of water lines to be rehabilitated and/or replaced, based on historic repair and maintenance records. This project will include water line rehabilitation and/or replacement to ensure effective water distribution system operations and regulatory compliance.

Capital Costs:	Carryover	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FYs 18-22
Design	\$209,957	\$200,000	\$0	\$200,000	\$330,000	\$330,000	\$2,300,000
Construction	\$370,492	\$1,550,800	\$0	\$1,550,800	\$2,730,000	\$2,730,000	\$10,000,000
Finance Charges	\$0	\$26,262	\$0	\$26,262	\$45,900	\$45,900	\$184,500
Engineering Charges	\$5,397	\$9,744	\$0	\$9,744	\$17,030	\$17,030	\$68,453
Arts	\$7,455	\$15,508	\$0	\$15,508	\$27,300	\$27,300	\$100,000
Contingency	\$96,691	\$197,686	\$0	\$197,686	\$349,770	\$349,770	\$1,347,047
<b>TOTAL</b>	<b>\$689,992</b>	<b>\$2,000,000</b>	<b>\$0</b>	<b>\$2,000,000</b>	<b>\$3,500,000</b>	<b>\$3,500,000</b>	<b>\$14,000,000</b>

**Operating Description:** No additional O and M is needed for this project.

**Project:** 61015 - Outer Loop Effluent Line (R) **Funding Source:** Water & Sewer Revenues

**Project Description:** The Arrowhead Ranch Water Reclamation Facility (ARWRF) effluent transmission line has been in service since the late 1980's. This effluent transmission line is essential for conveying and disposal of the effluent from the ARWRF. This project will include applicable rehabilitation to ensure effluent transmission system integrity and reliability.

Capital Costs:	Carryover	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FYs 18-22
Design	\$0	\$0	\$0	\$0	\$0	\$300,000	\$300,000
Construction	\$0	\$0	\$0	\$0	\$0	\$1,100,000	\$1,970,000
Finance Charges	\$0	\$0	\$0	\$0	\$0	\$21,000	\$34,050
Engineering Charges	\$0	\$0	\$0	\$0	\$0	\$25,900	\$41,995
Arts	\$0	\$0	\$0	\$0	\$0	\$11,000	\$19,700
Contingency	\$0	\$0	\$0	\$0	\$0	\$142,100	\$234,255
<b>TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,600,000</b>	<b>\$2,600,000</b>

**Operating Description:** No additional O and M is needed for this project.

\* New Project  
N=New Asset, R=Replacement of Existing Asset, I=Improvement of Existing Asset

**FY 2013-2022 CAPITAL IMPROVEMENT PLAN**  
**Fund Summary and Project Detail**



**PROJECT DETAIL: 2400-Water** **Category: Revenue**

**Project:** 61043 - Pyramid Pk WTP Train #1 Equip (R) **Funding Source:** Water & Sewer Revenues

**Project Description:** This project will include equipment improvements and rehabilitation (FY's 2012 through 2014), an engineering assessment (FY 2015) and equipment replacement (FY 2016 and beyond) at the Pyramid Peak Water Treatment Plant related to Train No. 1 and other related equipment. The original equipment will be approximately 23 years old and will be at the end of its useful life. Based on the existing Intergovernmental Agreement (IGA) between Glendale and Peoria, this cost will be split between the two cities - with Peoria being responsible for approximately 23% of the project costs.

Capital Costs:	Carryover	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FYs 18-22
Design	\$89,500	\$0	\$0	\$0	\$0	\$0	\$0
Engineering Charges	\$1,645	\$0	\$0	\$0	\$0	\$0	\$0
Contingency	\$8,855	\$0	\$0	\$0	\$0	\$0	\$0
<b>TOTAL</b>	<b>\$100,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>

**Operating Description:** No additional O and M is needed for this project.

**Project:** T3550 - Hillcrest Ranch Booster Rehab (R) **Funding Source:** Water & Sewer Revenues

**Project Description:** Hillcrest Ranch booster station will be rehabilitated to ensure the station operates effectively and efficiently. This booster station will provide an emergency backup supply for the Zone 3 Water Pressure Zone. Zone 3 is in the northernmost part of the city.

Capital Costs:	Carryover	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FYs 18-22
Design	\$0	\$0	\$0	\$0	\$0	\$0	\$450,000
Construction	\$0	\$0	\$0	\$0	\$0	\$0	\$1,650,000
Finance Charges	\$0	\$0	\$0	\$0	\$0	\$0	\$31,500
Engineering Charges	\$0	\$0	\$0	\$0	\$0	\$0	\$55,000
Arts	\$0	\$0	\$0	\$0	\$0	\$0	\$16,500
Contingency	\$0	\$0	\$0	\$0	\$0	\$0	\$185,015
<b>TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$2,388,015</b>

**Operating Description:** No additional O and M is needed for this project.

**Project:** 61009 - Drinking Water Well Head Trmt (N) **Funding Source:** Water & Sewer Revenues

**Project Description:** This project will include the design of a new Zone 4 wellhead treatment system for groundwater to meet federal drinking water standards. This new wellhead treatment system was recommended in the Groundwater Master Plan in 2008 in order to meet the projected growth in the west areas of the city.

Capital Costs:	Carryover	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FYs 18-22
Design	\$0	\$0	\$0	\$0	\$0	\$0	\$140,000
Construction	\$0	\$0	\$0	\$0	\$0	\$0	\$1,400,000
Finance Charges	\$0	\$0	\$0	\$0	\$0	\$0	\$23,100
Engineering Charges	\$0	\$0	\$0	\$0	\$0	\$0	\$43,000
Arts	\$0	\$0	\$0	\$0	\$0	\$0	\$14,000
Contingency	\$0	\$0	\$0	\$0	\$0	\$0	\$154,900
<b>TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,775,000</b>

**Operating Description:** No additional O and M is needed.

\* New Project

N=New Asset, R=Replacement of Existing Asset, I=Improvement of Existing Asset



**PROJECT DETAIL: 2400-Water** **Category: Revenue**

**Project:** 61019 - Storage and Recovery Well (N) **Funding Source:** Water & Sewer Revenues

**Project Description:** The project will result in the installation of groundwater recharge and recovery wells for the purpose of recharging effluent and/or "recovering" recharge credits by pumping groundwater resulting in cost savings for the city..

<b>Capital Costs:</b>	<b>Carryover</b>	<b>FY 2013</b>	<b>FY 2014</b>	<b>FY 2015</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FYs 18-22</b>
Design	\$0	\$0	\$0	\$0	\$0	\$500,000	\$500,000
Construction	\$0	\$0	\$0	\$0	\$0	\$148,000	\$3,300,000
Finance Charges	\$0	\$0	\$0	\$0	\$0	\$9,720	\$57,000
Engineering Charges	\$0	\$0	\$0	\$0	\$0	\$11,988	\$70,300
Arts	\$0	\$0	\$0	\$0	\$0	\$1,480	\$33,000
Contingency	\$0	\$0	\$0	\$0	\$0	\$74,265	\$45,175
<b>TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$745,453</b>	<b>\$4,005,475</b>

**Operating Description:** O and M projected start date January 2, 2019. Ongoing O and M before inflationary increases \$68,870. Additional O and M expenses are related to \$33,831 in chemical supplies, \$24,165 in utility expenses, and \$10, 874 for equipment maintenance based on pilot studies. A supplemental budget request will be submitted once the project is near completion.

<b>Operating Costs:</b>	<b>FY 2013</b>	<b>FY 2014</b>	<b>FY 2015</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FYs 18-22</b>
Supplies/Contr	\$0	\$0	\$0	\$0	\$0	\$33,831
Utilities	\$0	\$0	\$0	\$0	\$0	\$24,165
Equip. Maint.	\$0	\$0	\$0	\$0	\$0	\$10,874
<b>TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$68,870</b>

**Project:** 61021 - N River/Agua Fria Storage Proj (N) **Funding Source:** Water & Sewer Revenues

**Project Description:** Maintain a 20% ownership in the New River/Agua Fria Underground Storage Facility administered by the Salt River Project. The additional recharge capacity developed through this project will accommodate the effluent produced at the West Area Water Reclamation Facility.

<b>Capital Costs:</b>	<b>Carryover</b>	<b>FY 2013</b>	<b>FY 2014</b>	<b>FY 2015</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FYs 18-22</b>
Miscellaneous/Other	\$1,257,030	\$1,257,030	\$0	\$0	\$0	\$0	\$0
<b>TOTAL</b>	<b>\$1,257,030</b>	<b>\$1,257,030</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>

**Operating Description:** No additional O and M is needed for this project.

\* New Project  
N=New Asset, R=Replacement of Existing Asset, I=Improvement of Existing Asset

**FY 2013-2022 CAPITAL IMPROVEMENT PLAN**  
**Fund Summary and Project Detail**



**PROJECT DETAIL: 2400-Water** **Category: Revenue**

**Project:** 61027 - Water Line Extension (N) **Funding Source:** Water & Sewer Revenues

**Project Description:** Water line extensions are installed where needed to extend the city's water transmission and distribution systems to meet projected demand from future development. Projects funded from this account typically involve city participation in pipeline over sizing and other distribution piping extensions as needed to accommodate projected growth.

Capital Costs:	Carryover	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FYs 18-22
Design	\$0	\$0	\$0	\$0	\$900,000	\$400,000	\$400,000
Construction	\$0	\$0	\$0	\$875,000	\$860,000	\$2,000,000	\$915,000
Finance Charges	\$0	\$0	\$0	\$13,125	\$26,400	\$36,000	\$19,725
Engineering Charges	\$0	\$0	\$0	\$12,746	\$25,638	\$34,961	\$19,156
Arts	\$0	\$0	\$0	\$8,750	\$8,600	\$20,000	\$9,150
Contingency	\$0	\$0	\$0	\$90,379	\$179,362	\$509,039	\$136,969
<b>TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,000,000</b>	<b>\$2,000,000</b>	<b>\$3,000,000</b>	<b>\$1,500,000</b>

**Operating Description:** No additional O and M is needed for this project.

**Project:** 61038 - Loop 101 Water Treatment Plant (N) **Funding Source:** Water & Sewer Revenues

**Project Description:** Land for the Loop 101 water treatment plant was purchased in FY 2009 with payments from FY 2009 through FY 2013. The funding allocated in FY 2013 is for the final land purchase payment . The design and construction of the new plant has been deferred beyond FY 2022 due to reduced growth estimates.

Capital Costs:	Carryover	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FYs 18-22
Land	\$0	\$756,000	\$0	\$0	\$0	\$0	\$0
<b>TOTAL</b>	<b>\$0</b>	<b>\$756,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>

**Operating Description:** No additional O and M is needed at this time.

**Project:** 61044 - New River Waterline Crossing (N) **Funding Source:** Water & Sewer Revenues

**Project Description:** A new water line will be installed to connect Zone 1 (south central part of the city) and Zone 4 (western part of the city) to enhance water quality in the west area of the city.

Capital Costs:	Carryover	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FYs 18-22
Design	\$198,000	\$0	\$0	\$0	\$0	\$0	\$0
Construction	\$887,454	\$0	\$0	\$0	\$0	\$0	\$0
Finance Charges	\$18,000	\$0	\$0	\$0	\$0	\$0	\$0
Engineering Charges	\$41,000	\$0	\$0	\$0	\$0	\$0	\$0
Arts	\$9,100	\$0	\$0	\$0	\$0	\$0	\$0
Contingency	\$121,900	\$0	\$0	\$0	\$0	\$0	\$0
<b>TOTAL</b>	<b>\$1,275,454</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>

**Operating Description:** No additional O and M is needed for this project.

\* New Project  
 N=New Asset, R=Replacement of Existing Asset, I=Improvement of Existing Asset



**PROJECT DETAIL: 2400-Water** **Category: Revenue**

**Project:** T3552 - Additional Water Supply (N) **Funding Source:** Water & Sewer Revenues

**Project Description:** Acquisition and development of renewable water supplies to meet increasing demand for water, maintain city's designation of assured water supply, and to minimize drought impacts on Glendale water system customers. The \$6,394,660 represents the cost of acquiring a 100-year lease of water rights per the White Mountain Apache Tribe Water Settlement anticipated in FY 2014.

<b>Capital Costs:</b>	<b>Carryover</b>	<b>FY 2013</b>	<b>FY 2014</b>	<b>FY 2015</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FYs 18-22</b>
Finance Charges	\$0	\$0	\$94,660	\$0	\$0	\$0	\$0
Miscellaneous/Other	\$0	\$0	\$6,300,000	\$0	\$0	\$0	\$0
<b>TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$6,394,660</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>

**Operating Description:** O and M includes projected payment to Central Arizona Water Conservation District for water delivery costs and city treatment costs relating to the additional water supply. Starting in FY 2015, O and M costs are projected to be \$335,546 per year. A supplemental budget request will be submitted once the project is near completion.

<b>Operating Costs:</b>	<b>FY 2013</b>	<b>FY 2014</b>	<b>FY 2015</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FYs 18-22</b>
Supplies/Contr	\$0	\$0	\$335,546	\$345,612	\$355,981	\$1,946,649
<b>TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$335,546</b>	<b>\$345,612</b>	<b>\$355,981</b>	<b>\$1,946,649</b>

\* New Project  
 N=New Asset, R=Replacement of Existing Asset, I=Improvement of Existing Asset

**FY 2013-2022 CAPITAL IMPROVEMENT PLAN**  
**Fund Summary and Project Detail**



**FUND SUMMARY: 2420-Sewer** **Category: Revenue**

	<u>FY 2013:</u>		<u>FY 2014:</u>	<u>FY 2015:</u>	<u>FY 2016:</u>	<u>FY 2017:</u>	<u>FYs 18-22:</u>
<b>Capital Project Expenses</b>	<u>Carrrover</u>	<u>New Funding</u>					
<b>Existing Assets</b>							
<i>Improvement of Existing Assets</i>							
63006 Arrowhead Sewer Lines	0	0	0	1,719,575	2,035,490	0	0
63007 Sewer 99th Ave. W. Water Meter	0	0	0	0	0	0	5,389,952
63010 91st Ave. Construction	0	700,000	500,000	1,077,500	2,800,000	1,015,000	4,060,000
63020 Security Enhance Wastewtr Ops	0	0	0	0	0	0	8,756,702
63023 City Wide Sewer Odor Control	0	0	0	770,000	1,112,000	0	0
<i>Replacement of Existing Assets</i>							
63003 99th Ave Interceptor Line	0	345,000	392,000	1,431,034	2,100,000	2,100,000	0
63016 Sewer Line Replacement	2,576,429	3,316,586	0	3,435,272	3,503,190	3,503,190	14,006,697
63018 Camelback Swr Rehab	1,000,001	0	0	0	0	0	0
63021 Sweetwater & 55th Ave SLS	0	463,000	1,600,000	0	0	0	0
63024 Citywide Manhole Rehab	56,888	521,364	521,364	521,364	521,364	0	0
<b>Sub-Total - Existing Assets</b>	<b>3,633,318</b>	<b>5,345,950</b>	<b>3,013,364</b>	<b>8,954,745</b>	<b>12,072,044</b>	<b>6,618,190</b>	<b>32,213,351</b>
<b>New Assets</b>							
63000 67th-115th, Northern-C'Back	0	0	0	0	0	0	11,887,985
63008 Sewers for Areas on Septic Sys	231,787	0	200,000	0	0	0	0
63015 CMOM Implementation	0	0	0	100,000	0	0	0
63017 Sewer Line Extension	309,929	0	0	0	0	0	1,600,000
T3610 Bethany Hme Rd Interceptor	0	0	0	0	0	0	4,911,877
T3611 Glendale Ave 93rd-99th Ave	0	0	0	0	0	0	1,118,591
T3612 Influent Pump Sta (RSPS) Imp	0	0	0	0	500,970	2,434,391	2,548,272
<b>Sub-Total - New Assets</b>	<b>541,716</b>	<b>0</b>	<b>200,000</b>	<b>100,000</b>	<b>500,970</b>	<b>2,434,391</b>	<b>22,066,725</b>
<b>Total Project Expenses:</b>	<b>\$4,175,034</b>	<b>\$5,345,950</b>	<b>\$3,213,364</b>	<b>\$9,054,745</b>	<b>\$12,573,014</b>	<b>\$9,052,581</b>	<b>\$54,280,076</b>
<b>Total FY 2013 Funding:</b>		<b>\$9,520,984</b>					

\* New Project  
 N=New Asset, R=Replacement of Existing Asset, I=Improvement of Existing Asset



**PROJECT DETAIL: 2420-Sewer** **Category: Revenue**

**Project:** 63006 - Arrowhead Sewer Lines (I) **Funding Source:** Water & Sewer Revenues

**Project Description:** Replacement or rehabilitation of various wastewater collection lines in the Arrowhead Ranch area to improve sewer flow conditions and reduce sewer odors. This work was identified in a report completed by the consulting firm, Damon Williams and Associates. The work will be done in phases.

Capital Costs:	Carryover	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FYs 18-22
Design	\$0	\$0	\$0	\$350,000	\$480,000	\$0	\$0
Construction	\$0	\$0	\$0	\$1,158,000	\$1,300,000	\$0	\$0
Finance Charges	\$0	\$0	\$0	\$22,620	\$26,700	\$0	\$0
Engineering Charges	\$0	\$0	\$0	\$27,898	\$32,930	\$0	\$0
Arts	\$0	\$0	\$0	\$11,580	\$13,000	\$0	\$0
Contingency	\$0	\$0	\$0	\$149,477	\$182,860	\$0	\$0
<b>TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,719,575</b>	<b>\$2,035,490</b>	<b>\$0</b>	<b>\$0</b>

**Operating Description:** No additional O and M is needed for this project.

**Project:** 63007 - Sewer 99th Ave. W. Water Meter (I) **Funding Source:** Water & Sewer Revenues

**Project Description:** The existing meter station, GL03, is located within the 99th Avenue Alignment and needs to be relocated due to safety reasons. This project will include relocation of the GL03 meter station to the existing influent pump station site located on the northeast corner of Camelback Road and 99th Avenue. The project will also upgrade the meter station to meet the Sub-Regional Operating Group (SROG) standards.

Capital Costs:	Carryover	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FYs 18-22
Design	\$0	\$0	\$0	\$0	\$0	\$0	\$1,015,000
Construction	\$0	\$0	\$0	\$0	\$0	\$0	\$3,680,000
Finance Charges	\$0	\$0	\$0	\$0	\$0	\$0	\$70,425
Engineering Charges	\$0	\$0	\$0	\$0	\$0	\$0	\$86,858
Arts	\$0	\$0	\$0	\$0	\$0	\$0	\$36,800
Contingency	\$0	\$0	\$0	\$0	\$0	\$0	\$500,869
<b>TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$5,389,952</b>

**Operating Description:** O and M includes service and replacement of automatic sampling units, miscellaneous telemetry and flow recording equipment at the metering stations on a periodic basis. O and M projected start date July 1, 2019. Ongoing O and M before inflationary increases \$41,864 yearly. A supplemental budget request will be submitted once the project is near completion.

Operating Costs:	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FYs 18-22
Utilities	\$0	\$0	\$0	\$0	\$0	\$20,934
Equip. Maint.	\$0	\$0	\$0	\$0	\$0	\$104,658
<b>TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$125,592</b>

\* New Project  
N=New Asset, R=Replacement of Existing Asset, I=Improvement of Existing Asset

**FY 2013-2022 CAPITAL IMPROVEMENT PLAN**  
**Fund Summary and Project Detail**



**PROJECT DETAIL: 2420-Sewer** **Category: Revenue**

**Project:** 63010 - 91st Ave. Construction (I) **Funding Source:** Water & Sewer Revenues

**Project Description:** This project consists of continuing improvements to the Regional 91st Ave Wastewater Treatment Plant (WWTP) of which Glendale is part owner as a member of the Sub-Regional Operating Group (SROG). SROG consists of Glendale, Mesa, Phoenix, Tempe and Scottsdale. The last 91st Ave WWTP expansion decommissioned one of the oldest sections of the facility and replaced that section with new biological treatment, enlarged blowers and new clarifiers.

Capital Costs:	Carryover	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FYs 18-22
Finance Charges	\$0	\$0	\$0	\$7,500	\$42,000	\$15,000	\$60,000
Miscellaneous/Other	\$0	\$700,000	\$500,000	\$1,070,000	\$2,758,000	\$1,000,000	\$4,000,000
<b>TOTAL</b>	<b>\$0</b>	<b>\$700,000</b>	<b>\$500,000</b>	<b>\$1,077,500</b>	<b>\$2,800,000</b>	<b>\$1,015,000</b>	<b>\$4,060,000</b>

**Operating Description:** No additional O and M is needed for this project.

**Project:** 63020 - Security Enhance Wastewtr Ops (I) **Funding Source:** Water & Sewer Revenues

**Project Description:** Provide security enhancements to the water reclamation facilities, the various effluent recharge facilities and sewer lift stations. These improvements will enable the city staff to more closely monitor water reclamation and domestic water from remote locations.

Capital Costs:	Carryover	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FYs 18-22
Design	\$0	\$0	\$0	\$0	\$0	\$0	\$650,000
Construction	\$0	\$0	\$0	\$0	\$0	\$0	\$7,000,000
Finance Charges	\$0	\$0	\$0	\$0	\$0	\$0	\$114,750
Engineering Charges	\$0	\$0	\$0	\$0	\$0	\$0	\$92,500
Arts	\$0	\$0	\$0	\$0	\$0	\$0	\$70,000
Contingency	\$0	\$0	\$0	\$0	\$0	\$0	\$829,452
<b>TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$8,756,702</b>

**Operating Description:** No additional O and M is needed.

**Project:** 63023 - City Wide Sewer Odor Control (I) **Funding Source:** Water & Sewer Revenues

**Project Description:** Addition of permanent hydrogen peroxide chemical dosing stations to various sewer lines for odor control and control of hydrogen sulfide gas.

Capital Costs:	Carryover	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FYs 18-22
Design	\$0	\$0	\$0	\$100,000	\$0	\$0	\$0
Construction	\$0	\$0	\$0	\$575,000	\$975,000	\$0	\$0
Engineering Charges	\$0	\$0	\$0	\$18,563	\$26,813	\$0	\$0
Arts	\$0	\$0	\$0	\$5,750	\$9,750	\$0	\$0
Contingency	\$0	\$0	\$0	\$70,687	\$100,437	\$0	\$0
<b>TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$770,000</b>	<b>\$1,112,000</b>	<b>\$0</b>	<b>\$0</b>

**Operating Description:** No additional O and M is needed for this project.

\* New Project  
 N=New Asset, R=Replacement of Existing Asset, I=Improvement of Existing Asset



**PROJECT DETAIL: 2420-Sewer**

**Category: Revenue**

**Project: 63003 - 99th Ave Interceptor Line (R)**

**Funding Source: Water & Sewer Revenues**

**Project Description:**

The Sewer Condition Assessment Study conducted by Project Engineering Consultants recommended that the 99th Avenue sewer line be repaired or rehabilitated by the Sub-Regional Operating Group (SROG) partners. This project will include rehabilitation of Glendale's portion of the 99th Avenue sewer line; Glendale currently owns 70% of the 99th Avenue sewer line. Pipe lining will be replaced and the corroded manhole structures will be rehabilitated.

Capital Costs:	Carryover	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FYs 18-22
Finance Charges	\$0	\$0	\$0	\$31,034	\$31,034	\$0	\$0
Miscellaneous/Other	\$0	\$345,000	\$392,000	\$1,400,000	\$2,068,966	\$2,100,000	\$0
<b>TOTAL</b>	<b>\$0</b>	<b>\$345,000</b>	<b>\$392,000</b>	<b>\$1,431,034</b>	<b>\$2,100,000</b>	<b>\$2,100,000</b>	<b>\$0</b>

**Operating Description:**

No additional O and M is needed.

**Project: 63016 - Sewer Line Replacement (R)**

**Funding Source: Water & Sewer Revenues**

**Project Description:**

Replacement and/or rehabilitation of existing sanitary sewer lines and manholes as identified by the Sewer Evaluation Study prepared by HDR and Camp, Dresser and McKee (CDM) Engineers. Projects will be developed as funds are available.

Capital Costs:	Carryover	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FYs 18-22
Design	\$0	\$280,000	\$0	\$290,000	\$300,000	\$300,000	\$700,000
Construction	\$2,086,440	\$2,520,000	\$0	\$2,610,000	\$2,700,000	\$2,700,000	\$10,300,000
Finance Charges	\$39,825	\$42,000	\$0	\$43,500	\$45,000	\$45,000	\$165,000
Engineering Charges	\$0	\$15,048	\$0	\$15,586	\$16,123	\$16,123	\$59,119
Arts	\$26,550	\$25,200	\$0	\$26,100	\$27,000	\$27,000	\$103,000
Contingency	\$423,614	\$434,338	\$0	\$450,086	\$415,067	\$415,067	\$2,679,578
<b>TOTAL</b>	<b>\$2,576,429</b>	<b>\$3,316,586</b>	<b>\$0</b>	<b>\$3,435,272</b>	<b>\$3,503,190</b>	<b>\$3,503,190</b>	<b>\$14,006,697</b>

**Operating Description:**

No additional O and M is needed for this project.

**Project: 63018 - Camelback Swr Rehab (R)**

**Funding Source: Water & Sewer Revenues**

**Project Description:**

This project will include sewer and manhole rehabilitation or replacement in the area of Camelback Road and 75th Avenue. The 75th Avenue and Camelback Road Sewer and Manhole Rehabilitation Study conducted by Camp, Dresser, and McKee (CDM) in 2008 identified the sewer segments and manholes that need to be rehabilitated or replaced.

Capital Costs:	Carryover	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FYs 18-22
Construction	\$1,000,001	\$0	\$0	\$0	\$0	\$0	\$0
<b>TOTAL</b>	<b>\$1,000,001</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>

**Operating Description:**

No additional O and M is needed for this project.

\* New Project

N=New Asset, R=Replacement of Existing Asset, I=Improvement of Existing Asset

**FY 2013-2022 CAPITAL IMPROVEMENT PLAN**  
**Fund Summary and Project Detail**



**PROJECT DETAIL: 2420-Sewer** **Category: Revenue**

**Project:** 63021 - Sweetwater & 55th Ave SLS (R) **Funding Source:** Water & Sewer Revenues

**Project Description:** The sewage lift station (SLS) at Sweetwater and 55th Avenue requires upgrades to ensure continued system reliability, sufficient treatment capacity, safety, and public health. This project includes the design and construction for the improvements and rehabilitation of the upstream sewer line and lift station including new submersible pumps, valves, piping, and electrical system.

Capital Costs:	Carryover	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FYs 18-22
Design	\$0	\$288,000	\$200,000	\$0	\$0	\$0	\$0
Construction	\$0	\$120,000	\$1,200,000	\$0	\$0	\$0	\$0
Finance Charges	\$0	\$6,120	\$21,000	\$0	\$0	\$0	\$0
Engineering Charges	\$0	\$11,220	\$38,500	\$0	\$0	\$0	\$0
Arts	\$0	\$1,200	\$12,000	\$0	\$0	\$0	\$0
Contingency	\$0	\$36,460	\$128,500	\$0	\$0	\$0	\$0
<b>TOTAL</b>	<b>\$0</b>	<b>\$463,000</b>	<b>\$1,600,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>

**Operating Description:** No additional O and M is needed for this project.

**Project:** 63024 - Citywide Manhole Rehab (R) **Funding Source:** Water & Sewer Revenues

**Project Description:** The requested funding will be used to rehabilitate existing sewer manholes that have reached the end of their expected life as identified in the Sewer Master Plan and Evaluation by Camp, Dresser, and McKee (CDM).

Capital Costs:	Carryover	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FYs 18-22
Construction	\$48,343	\$500,000	\$500,000	\$500,000	\$500,000	\$0	\$0
Engineering Charges	\$6,545	\$16,364	\$16,364	\$16,364	\$16,364	\$0	\$0
Arts	\$2,000	\$5,000	\$5,000	\$5,000	\$5,000	\$0	\$0
<b>TOTAL</b>	<b>\$56,888</b>	<b>\$521,364</b>	<b>\$521,364</b>	<b>\$521,364</b>	<b>\$521,364</b>	<b>\$0</b>	<b>\$0</b>

**Operating Description:** No additional O and M is needed for this project.

**Project:** 63000 - 67th-115th, Northern-C'Back (N) **Funding Source:** Water & Sewer Revenues

**Project Description:** Installation of new sewer lines to improve existing sewer mains as identified by the HDR West Area Sewer Depth Study. This project will provide deeper outfall sewers for development in the area and will relieve or replace existing sewers that have inadequate slope.

Capital Costs:	Carryover	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FYs 18-22
Design	\$0	\$0	\$0	\$0	\$0	\$0	\$2,040,000
Construction	\$0	\$0	\$0	\$0	\$0	\$0	\$8,600,000
Finance Charges	\$0	\$0	\$0	\$0	\$0	\$0	\$129,900
Engineering Charges	\$0	\$0	\$0	\$0	\$0	\$0	\$115,000
Arts	\$0	\$0	\$0	\$0	\$0	\$0	\$86,000
Contingency	\$0	\$0	\$0	\$0	\$0	\$0	\$917,085
<b>TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$11,887,985</b>

**Operating Description:** No additional O and M is needed for this project.

\* New Project  
 N=New Asset, R=Replacement of Existing Asset, I=Improvement of Existing Asset



**PROJECT DETAIL: 2420-Sewer** **Category: Revenue**

**Project:** 63008 - Sewers for Areas on Septic Sys (N) **Funding Source:** Water & Sewer Revenues

**Project Description:** This project will include installation of sewers in the areas currently on septic systems. This is a citizen driven program in which citizens must request that their area (subdivision, neighborhood, street, etc.) be served by the city sewer system.

Capital Costs:	Carryover	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FYs 18-22
Design	\$0	\$0	\$30,000	\$0	\$0	\$0	\$0
Construction	\$231,787	\$0	\$140,000	\$0	\$0	\$0	\$0
Engineering Charges	\$0	\$0	\$11,000	\$0	\$0	\$0	\$0
Arts	\$0	\$0	\$1,400	\$0	\$0	\$0	\$0
Contingency	\$0	\$0	\$17,600	\$0	\$0	\$0	\$0
<b>TOTAL</b>	<b>\$231,787</b>	<b>\$0</b>	<b>\$200,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>

**Operating Description:** No additional O and M is needed for this project.

**Project:** 63015 - CMOM Implementation (N) **Funding Source:** Water & Sewer Revenues

**Project Description:** The Environmental Protection Agency has mandated a new Capacity Management Operations and Maintenance (CMOM) program for the sanitary sewer systems nationwide. The proposed program will assist in protecting the sanitary sewer system. Work completed includes the development of an infrastructure inventory of sanitary sewer manholes by means of the Global Positioning Satellite System (GPS).

Capital Costs:	Carryover	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FYs 18-22
Design	\$0	\$0	\$0	\$82,900	\$0	\$0	\$0
Engineering Charges	\$0	\$0	\$0	\$9,119	\$0	\$0	\$0
Contingency	\$0	\$0	\$0	\$7,981	\$0	\$0	\$0
<b>TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$100,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>

**Operating Description:** No additional O and M is needed for this project.

**Project:** 63017 - Sewer Line Extension (N) **Funding Source:** Water & Sewer Revenues

**Project Description:** This project will include sewer line extensions at various locations to meet projected demand is needed. These extensions will transfer wastewater from new developments.

Capital Costs:	Carryover	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FYs 18-22
Construction	\$309,929	\$0	\$0	\$0	\$0	\$0	\$1,400,000
Engineering Charges	\$0	\$0	\$0	\$0	\$0	\$0	\$50,400
Arts	\$0	\$0	\$0	\$0	\$0	\$0	\$14,000
Contingency	\$0	\$0	\$0	\$0	\$0	\$0	\$135,600
<b>TOTAL</b>	<b>\$309,929</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,600,000</b>

**Operating Description:** No additional O and M is needed for this project.

\* New Project  
N=New Asset, R=Replacement of Existing Asset, I=Improvement of Existing Asset

**FY 2013-2022 CAPITAL IMPROVEMENT PLAN**  
**Fund Summary and Project Detail**



**PROJECT DETAIL: 2420-Sewer** **Category: Revenue**

**Project:** T3610 - Bethany Hme Rd Interceptor (N) **Funding Source:** Water & Sewer Revenues

**Project Description:** Installation of an interceptor sewer along the Bethany Home Road alignment from 83rd to 95th Avenue. The interceptor is designed to intercept flows from the existing sewers in 83rd and 91st Avenues that had to be altered due to construction of the Bethany Home Outfall Channel.

Capital Costs:	Carryover	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FYs 18-22
Design	\$0	\$0	\$0	\$0	\$0	\$0	\$650,000
Construction	\$0	\$0	\$0	\$0	\$0	\$0	\$3,720,000
Finance Charges	\$0	\$0	\$0	\$0	\$0	\$0	\$65,550
Engineering Charges	\$0	\$0	\$0	\$0	\$0	\$0	\$80,845
Arts	\$0	\$0	\$0	\$0	\$0	\$0	\$37,200
Contingency	\$0	\$0	\$0	\$0	\$0	\$0	\$358,282
<b>TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$4,911,877</b>

**Operating Description:** No additional O and M is needed.

**Project:** T3611 - Glendale Ave 93rd-99th Ave (N) **Funding Source:** Water & Sewer Revenues

**Project Description:** Improvements will be needed to handle the additional wastewater flows generated by projected growth at build-out in the west area of the city. Improvements include the design and construction of a parallel relief sewer on Glendale Avenue from 93rd to 99th Avenue.

Capital Costs:	Carryover	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FYs 18-22
Design	\$0	\$0	\$0	\$0	\$0	\$0	\$160,000
Construction	\$0	\$0	\$0	\$0	\$0	\$0	\$785,000
Finance Charges	\$0	\$0	\$0	\$0	\$0	\$0	\$14,175
Engineering Charges	\$0	\$0	\$0	\$0	\$0	\$0	\$40,635
Arts	\$0	\$0	\$0	\$0	\$0	\$0	\$7,850
Contingency	\$0	\$0	\$0	\$0	\$0	\$0	\$110,931
<b>TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,118,591</b>

**Operating Description:** No additional O and M is needed for this project.

\* New Project  
 N=New Asset, R=Replacement of Existing Asset, I=Improvement of Existing Asset



**PROJECT DETAIL: 2420-Sewer** **Category: Revenue**

**Project:** T3612 - Influent Pump Sta (RSPS) Imp (N) **Funding Source:** Water & Sewer Revenues

**Project Description:** The requested funding is for a new screening system to reduce maintenance efforts required for the waste activated sludge pumps at the West Area Water Reclamation Facility. The new screening system will include mechanical bar screens, a washer compactor conveyor system with dumpster storage area, a building and odor control system. This project will include an enclosed self cleaning bar screen and ancillary system.

<b>Capital Costs:</b>	<b>Carryover</b>	<b>FY 2013</b>	<b>FY 2014</b>	<b>FY 2015</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FYs 18-22</b>
Design	\$0	\$0	\$0	\$0	\$460,000	\$220,000	\$220,000
Construction	\$0	\$0	\$0	\$0	\$0	\$1,920,000	\$2,000,000
Finance Charges	\$0	\$0	\$0	\$0	\$0	\$32,100	\$35,000
Engineering Charges	\$0	\$0	\$0	\$0	\$8,510	\$39,590	\$41,070
Arts	\$0	\$0	\$0	\$0	\$0	\$19,200	\$20,000
Contingency	\$0	\$0	\$0	\$0	\$32,460	\$203,501	\$232,202
<b>TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$500,970</b>	<b>\$2,434,391</b>	<b>\$2,548,272</b>

**Operating Description:** No additional O and M is needed for this project.

\* New Project  
 N=New Asset, R=Replacement of Existing Asset, I=Improvement of Existing Asset