

Existing Inventory

The Utilities Department served an estimated 29,389 residential and non-residential wastewater customers as of December 31, 2015. Average daily treatment in thousands of gallons for calendar year 2015 was 4,493. Annual wastewater treatment for 2015 was 1.64 billion gallons.

The Utilities Department operates and maintains:

- 5 Wastewater Treatment Plants (WWTPs)
- 26 Lift Stations
- 383 Miles of Wastewater line

Current Capacity and Condition of Assets and Infrastructure

Wastewater Treatment Plants:

The wastewater system inventory includes five treatment plants of varying age, condition, and treatment capacities. The largest plant is WWTP #2 capable of treating 5.5 million gallons per day while the smallest is WWTP #3 capable of treating 0.8 million gallons per day. Currently, the total operational capacity of all active wastewater treatment plants is approximately 7 million gallons per day. WWTP 3 is currently not in operation. In calendar year 2015 the actual average daily gallons treated are approximately 4.5 million gallons per day. The city discharges into the Rio Grande at two locations under an Office of State Engineer (OSE) water permit and two National Pollution Discharge Elimination System (NPDES) permits.

Expansion of WWTP #6 from a 0.6 million gallons per day into a 1.2 million gallons per day treatment facility was completed in July 2013. The project also included a new 4,000 gallon per minute booster station, approximately 29,000 linear feet of reuse water line to WWTP #2, and a 3 million gallon recycled water storage tank. The expansion increased treatment capacity at WWTP #6, while the pump station, recycled water line, and storage tank will provide recycled water for irrigation and aquifer recharge purposes. The ICIP contains plans to expand and retrofit WWTPs #1 to Membrane Bio Reactor (MBR) facilities in 2017.

Reuse and Aquifer Recharge:

The WWTP #6 Phase 1 Expansion and the Aquifer Recharge Demonstration projects include construction of recycled water storage tanks, pumping capacity, recycled water lines, and water treatment and direct injection wells in support of the city's water reuse and aquifer recharge initiatives. The series of subprojects began in 2006 and continues with construction of a recycled water storage tank and an advanced water treatment facility and related infrastructure near the Loma Colorado subdivision. The initiative will result in widespread delivery of recycled water to strategic locations for irrigation, industrial uses, and aquifer replenishment. The city was awarded \$3.8 million dollars from the New Mexico Finance Authority (NMFA) Water Trust Board to complete the Advanced Water Treatment Facility (AWTF) and the recycled water tank is funded with utility net operating revenue. In March 2017 the Utilities Department will begin to inject recycled water into the aquifer. It is the city's goal to directly inject approximately 1,000 acre feet per year. This goal is supported by the permits the city received from the New Mexico Environment Department and the Office of the State Engineer for direct injection.

Lift Stations and Sewer lines:

The city operates 26 lift stations responsible for moving wastewater to treatment plants within the force main sewer line system. The wastewater system also includes 383 miles of gravity sewer line. The ICIP contains various projects for lift station replacement, relocation, and/or capital repair, mostly notably relocation and expansion of Lift Station#10 currently under construction. The new lift station will divert additional wastewater flows from WWTP#2 to WWTP#1 providing relief for WWTP#2.

Capital Repair and Maintenance Programs/Activities

WWTP #2 has undergone a significant rebuild of the aeration basins to ensure continued compliance with the New Mexico Environmental Department (NMED) and Environmental Protection Agency (EPA) regulations.

Replacing Lift Station #10 (LS 10) located near the intersection of Southern Blvd. and New Mexico Highway 528 is currently under construction and is anticipated to be completed in Fiscal Year 2017. The new Lift Station 10 will divert wastewater from Southern Boulevard to WWTP#1 located on Sara Road or WWTP#2 on Industrial Park Loop.

Indicators

Indicator	Calendar Year				
	2011	2012	2013	2014	2015
Average Daily Sewage Treated (1,000 of gallons)	4,546	4,469	4,641	4,765	4,493

Wastewater Utility Infrastructure and Capital Improvement Plan Development

The Utilities Department updates its capital improvement plan concurrent with the annual budget process by which current year capital appropriations are requested pursuant to established departmental priorities for maintaining, expanding, and/or improving wastewater infrastructure and assets. Various departmental plans guide development of the ICIP, including those detailed below. Additionally, asset replacement needs, such as equipment and renovations are also included in the department’s overall ICIP. Beginning in Fiscal Year 2014, the Wastewater ICIP has focused on capital needs and financing for non-growth related improvements in accordance with the recent series of wastewater rate increases first authorized by the Governing Body in January 2013. The current capital program plans for capital investment necessary to maintain the system at its current size and level of service provision. Notwithstanding, growth related projects have been included in the ICIP as deferred items until such a time when new growth necessitates such improvements and funding is identified.

Wastewater Master Plan

The FY2017 budget includes funding to develop a new Wastewater Master Plan. This plan will assist Utilities Department staff with determining future needs for the wastewater and recycled water systems.

Asset Management Plan:

The purpose of the Asset Management Plan is to document the current state of system assets, and plans for their repair and/or replacement in order to

minimize life cycle costs and provide for an acceptable level of service. The Utilities Department has finalized a five year project detailing the status and asset management plans of water and wastewater system equipment. The next step is to populate the model with the original cost of the asset as well as the replacement cost. The asset management program will provide an evaluation and decision making mechanism for repair and replacement of assets that considers the risk of asset failure, the cost effectiveness of operations, and the condition and age of assets.

Developer Contributions

The city’s Impact Fee Plan and Ordinance, adopted in 2005 establishes a standard level of service stated as average and peak day demand for a single family equivalent (SFE) connector service unit. SFE is a standard measure of use attributable to an individual unit of development and is defined as having the average water use characteristics of a customer with a 5/8” water meter. Customers with a 5/8” water meter constitute approximately eighty eight percent (88%) of all accounts.

Standard Level of Service-Wastewater Utility

Average Day Demand	
Average Daily Flow	175 gallons per day (gpd)
Peak Day Demand	
Peak Hourly Flow	525 gpd

Developers are assessed impact fees or provide physical improvements in lieu of impact fees valued at \$2,298 for a 5/8” meter; \$3,447 for a ¾” meter;

\$5,745 for a 1” meter; \$11,490 for a 1 ½’ meter; and \$18,384 for a 2” meter. System level infrastructure improvements are accepted by the city in exchange for impact fee credits granted to developers via development agreements. There are a significant number of wastewater impact fee credits outstanding the city currently accepts credits for sixty three (63%) of assessments generated by annual development

activity. Thirty seven (37%) of assessments generated by annual development activity are collected as revenue. City staff, with the assistance of a consultant, is currently reviewing and updating impact fees. A final report and recommendation will be presented to the Governing Body in Fiscal Year 2017.

Developer Improvements and Dedications since Fiscal Year 2010 include:

- Northern Meadows (Unit 19): 1.23 miles of sewer line
- High Range III: 1.15 miles of sewer line
- Paseo Vulcan Crossing: 0.15 miles of sewer line
- Diamond Ridge: 1.54 miles of sewer line
- Cabezon Tract 1A: 0.34 miles of sewer line
- Cabezon Commons Tract 11: 0.22 miles of sewer line
- Loma Colorado Realignment: 0.26 miles of sewer
- Joiner Plaza: 0.26 miles of sewer line and 1 lift station
- Cielo Norte I and II: 1.16 miles of sewer line
- Plaza @ Enchanted Hills: 0.25 miles of sewer line
- UNM/Sandoval County Regional Medical Center: 0.254 miles of sewer line
- The Village at Rio Rancho: 0.47 miles of sewer line
- Cielo Norte 3 and 4: 0.32 miles of sewer line
- Loma Colorado Commercial Area: 0.16 miles of sewer line
- Solcito Phase I: 0.78 miles of sewer line

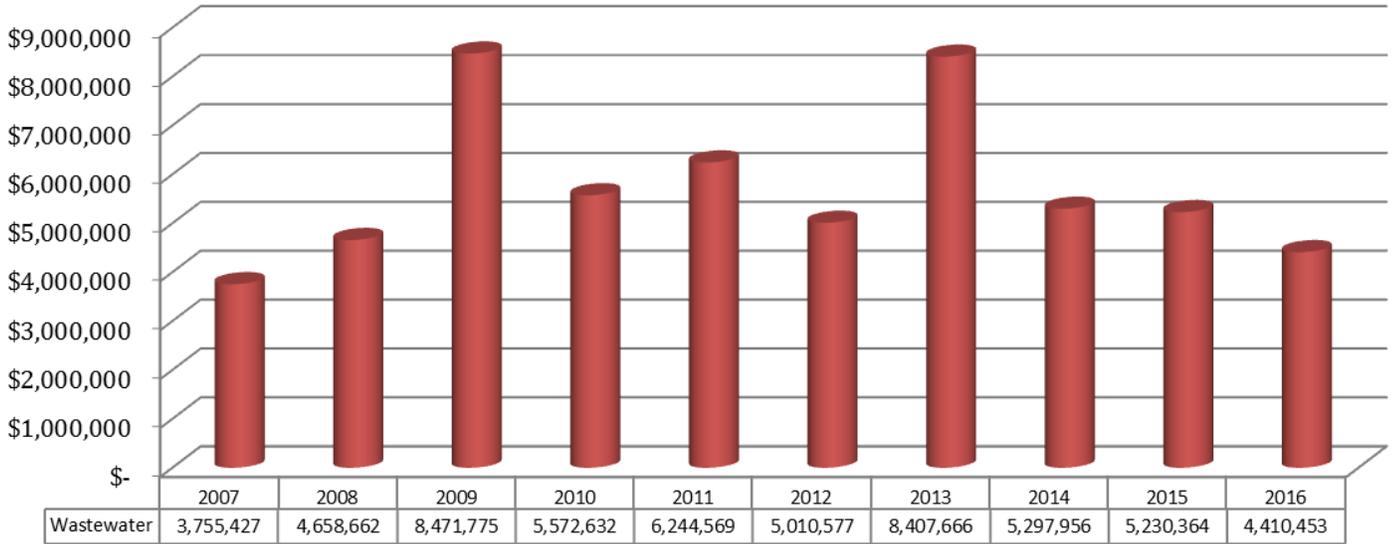
Funding Sources

Wastewater Utility capital projects are funded through various sources, including:

- Utility Bond and Loan Proceeds
- State and County Grants
- Utility Net Operating Revenues
- Wastewater Impact Fees
- Environmental Gross Receipts Tax Revenue

Capital spending for wastewater utility infrastructure topped \$8.5 million in Fiscal Year 2009, and that level of capital investment was nearly matched in 2013 due to the ongoing expansion of Wastewater Treatment Plant #6 and related recycled water infrastructure. Construction of WWTP#6 and recycled water infrastructure continued into Fiscal Years 2014-2016, accounting for sixty eight percent (68%) of total capital expenditures during that period. In recent years, an otherwise waning investment in wastewater capital assets was propped up by the \$20 million New Mexico Environment Department (NMED) loan for this expansion project. The wastewater capital program has been historically, and will continue to be heavily supported by debt financing pledging the net revenues of the system. The city issued \$25 million in new debt in FY2017 for rebuild of Wastewater Treatment Plant #1 into a membrane bioreactor plant. Cash financing for wastewater projects in the approximate amount of \$1 million has also been programmed in the ICIP through FY2022.

Wastewater Capital Expenditures: FY2007-2016



FY2017-FY2022: ICIP Summary

Rank Priority	Fund/Project No.	Project Title	Project to Date	2017 Budget	2017 Additional Spending Anticipated	2017 Total	2018	2019	2020	2021	2022	Funding Requested: FY17-FY22	Funding Source	Funding Source	Funding Source	Funding Source	Total Funding	
													(A)	(B)	(C)	(D)	(A) + (B) + (C) + (D)	
1	WW0673; WW0928; WW1389	Lift Station 10 (WWIP# 6) Expansion, Effluent Tank and Pump Station and Reuse Line to WWTP# 2, Cabezon Switchover	\$ 20,014,666	\$ -	\$ 93,777	\$ 93,777	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 93,777	Utility Funds Operating Revenues					
													\$ 93,777					\$ 93,777
2	WW1495	Recycled Water Storage Tank (Loma Colorado Terminal Effluent Reuse Tank)	\$ 306,853	\$ -	\$ 2,796,368	\$ 2,796,368	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,796,368	Impact Fees-Water	Impact Fees-Wastewater	Utility Funds Operating Revenues			
													\$ 214,419	\$ 1,208,545	\$ 1,373,405			\$ 2,796,369
3	WA0770; WA1496; WW1650	Advanced Water Treatment Facility (AWTF)	\$ 9,505,834	\$ -	\$ 4,705,332	\$ 4,705,332	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,705,332	State Grants	Utility Funds Operating Revenues	Utility Loan Proceeds			
													\$ 3,346,308	\$ 975,024	\$ 384,000			\$ 4,705,332
4	WW1501	Industrial Park Loop Sewer Line	\$ 49,828	\$ -	\$ 316,897	\$ 316,897	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 316,897	Impact Fees-Wastewater	Utility Funds Operating Revenues				
													\$ 16,896	\$ 300,001				\$ 316,897
5	WW1494; WW1620	Rebuild WWTP# 1 into 1.5MGD MBR Facility	\$ 160,335	\$ -	\$ 25,146,766	\$ 25,146,766	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 25,146,766	Utility Loan Proceeds	Utility Funds Operating Revenues				
													\$ 25,000,000	\$ 146,766				\$ 25,146,766
6	WW1770	Lift Station 15 Property Purchase	\$ -	\$ 500,000	\$ -	\$ 500,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 500,000	Utility Funds Operating Revenues					
													\$ 500,000					\$ 500,000
7	WW1771; WW1779	Lift Stations 15, 21, and 22 Upgrades (incl. Variable Frequency Drives)	\$ -	\$ 160,025	\$ -	\$ 160,025	\$ 900,000	\$ -	\$ -	\$ -	\$ -	\$ 1,060,025	Utility Funds Operating Revenues	To Be Determined				
													\$ 160,025	\$ 900,000				\$ 1,060,025

FY2017-FY2022: ICIP Summary

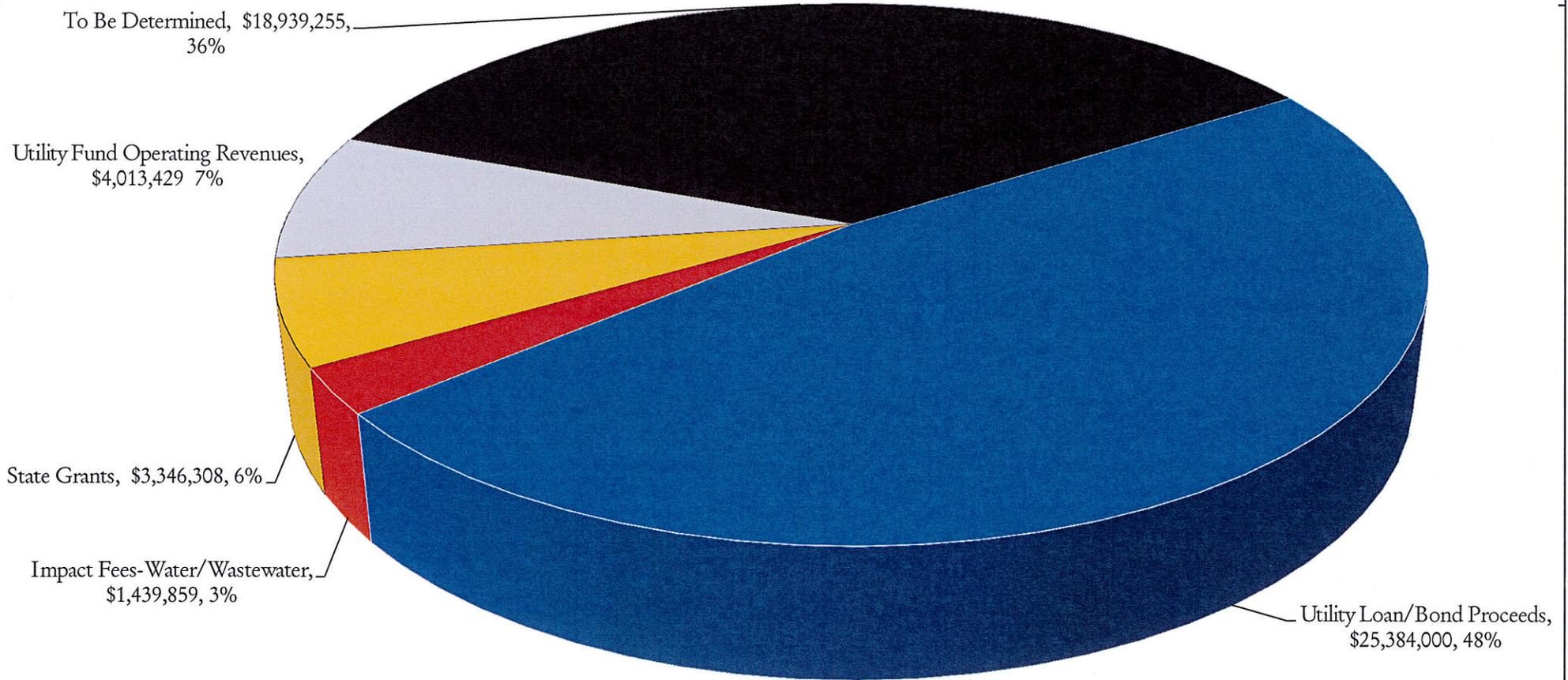
Rank Priority	Fund/Project No.	Project Title	Project to Date	2017 Budget	2017 Additional Spending Anticipated	2017 Total	2018	2019	2020	2021	2022	Funding Requested: FY17-FY22	Funding Source	Funding Source	Funding Source	Funding Source	Total Funding
													(A)	(B)	(C)	(D)	(A) + (B) + (C) + (D)
8	N/A	Lift Station 2 Relocate and Rebuild	\$ -	\$ -	\$ 3,150,000	\$ 3,150,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,150,000	To Be Determined				
													\$ 3,150,000				\$ 3,150,000
9	N/A	Replace Membrane Filters at Cabezon (WWIP# 6) and Mariposa (WWIP# 6) Wastewater Treatment Plants	\$ -	\$ -	\$ -	\$ -	\$ 320,000	\$ -	\$ -	\$ -	\$ -	\$ 320,000	To Be Determined				
													\$ 320,000				\$ 320,000
10	N/A	Wastewater Treatment Plant 2 (WWIP# 2) Ultraviolet (UV) Disinfection System	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,750,000	\$ -	\$ -	\$ -	\$ 4,750,000	To Be Determined				
													\$ 4,750,000				\$ 4,750,000
11	Fund 512	Vehicles and Heavy Machinery	\$ 675,823	\$ 231,200	\$ -	\$ 231,200	\$ -	\$ -	\$ -	\$ 45,000	\$ 45,000	\$ 321,200	Utility Funds Operating Revenues	To Be Determined			
													\$ 231,200	\$ 90,000			\$ 321,200
12	Fund 501	Major Equipment for Wastewater Treatment	\$ 130,326	\$ -	\$ 47,731	\$ 47,731	\$ 85,000	\$ 45,000	\$ 84,000	\$ 44,000	\$ 12,000	\$ 317,731	Utility Funds Operating Revenues	To Be Determined			
													\$ 47,731	\$ 270,000			\$ 317,731
13	WW1778	Security Improvements at WWTPs	\$ -	\$ 7,000	\$ -	\$ 7,000	\$ 203,658	\$ 211,804	\$ 220,276	\$ 229,088	\$ 238,251	\$ 1,110,077	Utility Funds Operating Revenues	To Be Determined			
													\$ 7,000	\$ 1,103,077			\$ 1,110,077
14	WW1772; WW1760; WW1761	SCADA Improvements	\$ 109,682	\$ 108,500	\$ -	\$ 108,500	\$ 112,840	\$ 117,354	\$ 122,048	\$ 126,930	\$ 132,007	\$ 719,678	Utility Funds Operating Revenues	To Be Determined			
													\$ 108,500	\$ 611,178			\$ 719,678



2017-2022 Infrastructure and Capital Improvement Plan
 Utilities-Wastewater

FY2017-FY2022: ICIP Summary

Rank Priority	Fund/ Project No.	Project Title	Project to Date	2017 Budget	2017 Additional Spending Anticipated	2017 Total	2018	2019	2020	2021	2022	Funding Requested: FY17-FY22	Funding Source	Funding Source	Funding Source	Funding Source	Total Funding
													(A)	(B)	(C)	(D)	(A) + (B) + (C) + (D)
15	WW1773	Install/Replace Sanitary Sewer lines	\$ -	\$ -	\$ 300,000	\$ 300,000	\$ 1,200,000	\$ 1,245,000	\$ 1,325,000	\$ 300,000	\$ 3,375,000	\$ 7,745,000	To Be Determined				
													\$ 7,745,000				\$ 7,745,000
16	WW1754	Sodium Hypochlorite System at WWTP# 2	\$ -	\$ 70,000	\$ -	\$ 70,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 70,000	Utility Funds Operating Revenues				
													\$ 70,000				\$ 70,000
TOTALS			\$ 30,953,346	\$ 1,076,725	\$ 36,556,871	\$ 37,633,596	\$ 2,821,498	\$ 6,369,158	\$ 1,751,324	\$ 745,017	\$ 3,802,258	\$ 53,122,851					\$ 53,122,851



	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	TOTAL
Impact Fees-Water/Wastewater	\$ 1,439,859						\$ 1,439,859
State Grants	\$ 3,346,308						\$ 3,346,308
Utility Fund Operating Revenues	\$ 4,013,429						\$ 4,013,429
To Be Determined	\$ 3,450,000	\$ 2,821,498	\$ 6,369,158	\$ 1,751,324	\$ 745,017	\$ 3,802,258	\$ 18,939,255
Utility Loan/Bond Proceeds	\$ 25,384,000						\$ 25,384,000
TOTAL	\$ 37,633,596	\$ 2,821,498	\$ 6,369,158	\$ 1,751,324	\$ 745,017	\$ 3,802,258	\$ 53,122,851

**WASTEWATER
PROJECTS UNDER CONSIDERATION**

Rank	Project Name	Fiscal Year(s)	Project Estimate
17	WWTP# 2 Retrofit for Recycled Water System	2019-2020	TBD
18	Lift Station # 15 Relief Force Main to Willow Creek	2021	\$ 1,500,000
19	Barranca Sewer Line-Phase II-Idalia Rd. to City Center	2021	\$ 4,000,000
20	Broadmoor/Chessman Sewer Line	2022	\$ 400,000
21	Northern Blvd. Phase B-Unser to 30th St. Sanitary Sewerline	2022	\$ 370,887
22	Paseo Gateway Wastewater Line	2022	\$ 4,145,744
23	Lift Station # 16 (Gateway South) New Well, Pumps with Flow Meter	2019	\$ 900,000
24	Land Purchase adjacent to WWTP# 2	2022	TBD
25	New Warehouse, Laboratory, and Office Complex at WWTP# 2	2022	TBD
26	Sludge De-Watering Building @ WWTP# 2	2018-2019	TBD
27	WWTP# 2 Expansion and Retrofit	2020-2021	TBD
	TOTAL		\$ 11,316,631

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1. PROJECT INFORMATION					
Project Title	WWTP #6 Expansion, Effluent Tank and Pump Station, Reuse Line to WWTP #2, Cabezon Switchover, and Lift Station 10 Relocation	Requesting Department	Dept. of Utilities	Department Rank Priority No.	1
Project Category	Utilities-Wastewater	CIP Year	FY2006	Project No.:	WW0673; WW0928; WW1389
Estimated Useful Life	Greater than 25 Years	District Location	Multiple Districts	Project Request Status	Revised Project Request

2. PROJECT DESCRIPTION AND SCOPE

The project consists of 1. Expansion of Wastewater Treatment Plant (WWTP) #6 from 0.6 Million Gallon per Day (MGD) to 1.2 MGD (COMPLETE); 2. A new 6 MGD Booster Station and new 3 MG effluent storage tank; 3. Approximately 29,000 feet of 12" and 18" transmission mains extending generally north and east from WWTP#6 to WWTP#2; and, 4. Relocation of Lift Station 10 currently located on Southern Boulevard & New Mexico Highway 528.

3. PROJECT JUSTIFICATION

The WWTP#6 expansion will increase treatment capacity while the pump station and transmission lines will deliver reuse water from WWTP#6 (located in the Cabezon subdivision) to the WWTP#2 site. Reuse water treated at WWTP#6 will provide irrigation water for various city parks, the Rio Rancho Sports Complex, the Cabezon subdivision, and the Chamisa Hills Country Club, therefore reducing the city's potable water demand. At a future time, WWTP#6 will also be the prime source of water for the city's direct injection program which will replenish ground water supplies. A new Lift Station 10 will be constructed to divert wastewater to reduce the flow to WWTP #2, thus providing hydraulic and solids loading relief at WWTP #2. The additional capacity will allow WWTP #2 to be more readily able to handle the increased flow that will be seen by the City Center development until WWTP #2 can be expanded. The diverted flow will then be routed for treatment to WWTP #1.

4. PROJECT HISTORY AND STATUS

The WWTP#6 expansion project received categorical exclusion for environmental clearance in July 2009, while the effluent line environmental assessment was completed in November 2009. The city closed on a Clean Water State Revolving Fund Loan in June 2009 with the NMED in the amount of \$25M to fully fund the project and design commenced in February 2010. Construction of the 27th Street reuse line from WWTP#6 to the intersection of 27th Street and Southern Blvd. was completed in September 2010 (\$407,238) and construction of the Phase I-Reuse line in the Montoyas Arroyo was completed in December 2011 (\$693,227). Construction of Phase II-Reuse line through the Chamisa Greens Golf Course was completed in June 2012 (\$1,833,588) and construction of the WWTP#6 plant expansion was completed in November 2013 (\$5,380,573). Construction of the 9,200' reuse line from the Montoyas Arroyo to the Loma Colorado direct injection site just south of Eagle Ridge Middle School (WA0770) was completed in June 2013 (\$1,833,588). Construction of the Reuse Booster Station and Storage Tank commenced in January 2014 and was substantially completed in April 2015 (\$4,705,868). Lastly, design of the Lift Station 10 Relocation project was completed in June 2015 and a location has been identified and property acquired. Construction commenced in September 2015 to be completed in early summer 2016.

5. CAPITAL COSTS

PHASE	SOURCE(S) OF COST INFO	PRIOR YEARS	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
Planning and Feasibility									\$ -
Pre Design and Env. Review	Recent City project	\$ 57,359							\$ 57,359
Land Acq./ROW	Recent City project	\$ 420,292							\$ 420,292
Design and Specifications	Recent City project	\$ 3,036,653	\$ 7,801						\$ 3,044,454
Construction	Recent City project	\$16,283,379	\$ 85,976						\$16,369,356
Construction Management	Recent City project	\$ 22,558							\$ 22,558
Equipment/ Vehicle									\$ -
Other	Recent City project	\$ 194,424							\$ 194,424
TOTAL		\$20,014,666	\$ 93,777	\$ -	\$ - \$20,108,444				

6. PROPOSED SOURCES OF FUNDING

REVENUE SOURCE	EXPENDITURE FUND	PRIOR YEARS	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
Impact Fees-Wastewater	555 Wastewater Impact Fees	\$ 443,561							\$ 443,561
Utility Funds Operating Revenues	552 Effluent Fund	\$ 259,894	\$ 93,777						\$ 353,672
Utility Loan Proceeds	576-NMED Loan WWTP6	\$19,311,211							\$19,311,211
TOTAL		\$20,014,666	\$ 93,777	\$ -	\$ - \$20,108,444				

1. PROJECT INFORMATION

Project Title	Recycled Water Storage Tank (Loma Colorado Terminal Effluent Reuse Storage Tank)	Requesting Department	Dept. of Utilities	Department Rank Priority No.	2
Project Category	Utilities-Wastewater	CIP Year	FY2014	Project No.:	WW1495
Estimated Useful Life	Greater than 25 Years	District Location	Council District 4	Project Request Status	Revised Project Request

2. PROJECT DESCRIPTION AND SCOPE

The project consists of construction of a 2 Million Gallon Recycled Water Tank for operation of the reuse system.

3. PROJECT JUSTIFICATION

The population growth in the city has increased the demand for potable and nonpotable water. The city has acquired and continues to purchase water rights to help meet this demand, though the process is slow and expensive. In order to protect this valuable resource, a water reuse program will be implemented to augment the water supply. Water will be put in aquifers by means of direct injection. The tank is necessary as a supply source for the direct injection program and recycled water irrigation. A tank will allow utilities to fill the tank at night during (lower electrical costs for off peak pumping) off peak hours. The tank will aide in the proper control of the reuse system.

4. PROJECT HISTORY AND STATUS

Construction of the Mariposa recharge system was completed in December 2008. The direct injection site, injection well, and monitoring system are also in place, all completed in 2010 and 2011. Additional potable water testing at the Loma Colorado injection well site was completed in November 2012 and permitting and design of the full scale treatment site was completed in 2015. Construction of a 6,000 sq. ft. building that will house future treatment equipment, steel storage tanks, and yard piping at the Loma Colorado site, and the last segment of a reuse pipeline from the area of the Sports Complex to the Loma Colorado site were substantially completed in late Spring 2013. The remaining phases of the advanced water treatment facility is estimated to cost an additional \$4.7 million, while the 2 million gallon reuse storage tank to be located at the Loma Colorado site will cost an additional \$2.7M.

5. CAPITAL COSTS

PHASE	SOURCE(S) OF COST INFO	PRIOR YEARS	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
Planning and Feasibility	City contract or price agreement	\$ 45,124							\$ 45,124
Pre Design and Env. Review									\$ -
Land Acq./ROW									\$ -
Design and Specifications	City contract or price agreement	\$ 252,306	\$ 236,996						\$ 489,302
Construction	City contract or price agreement	\$ 9,423	\$ 2,344,954						\$ 2,354,377
Construction Management									\$ -
Equipment/ Vehicle									\$ -
Other	Other		\$ 214,419						\$ 214,419
TOTAL		\$ 306,853	\$ 2,796,368	\$ -	\$ 3,103,222				

6. PROPOSED SOURCES OF FUNDING

REVENUE SOURCE	EXPENDITURE FUND	PRIOR YEARS	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
Impact Fees-Water	545 Water Impact Fees Fund	\$ -	\$ 214,419						\$ 214,419
Impact Fees-Wastewater	555 Wastewater Impact Fees	\$ -	\$ 1,208,545						\$ 1,208,545
Utility Funds Operating Revenues	552 Effluent Fund	\$ 306,853	\$ 1,373,405						\$ 1,680,258
TOTAL		\$ 306,853	\$ 2,796,369	\$ -	\$ 3,103,222				

1. PROJECT INFORMATION					
Project Title	Advanced Water Treatment Facility	Requesting Department	Dept. of Utilities	Department Rank Priority No.	3
Project Category	Utilities-Wastewater	CIP Year	FY2007	Project No.:	WA0770; WA1496; WW1650
Estimated Useful Life	Greater than 25 Years	District Location	Council District 4	Project Request Status	Revised Project Request

2. PROJECT DESCRIPTION AND SCOPE

The project consists of construction of a subsurface injection system which will recharge aquifers that supply water to the city, including equipping of the advanced water treatment facility with an advanced oxidation process, installing activated carbon filtration system, canister filtration system, degasser and final disinfection process, retrofitting the direct injection well for routine backwash operations, and completion of controls and associated site improvements for operation of the facility.

3. PROJECT JUSTIFICATION

The population growth in the city has increased the demand for potable and non-potable water. The city has acquired and continues to purchase water rights to help meet this demand, though the process is slow and expensive. In order to protect this valuable resource, a water reuse program will be implemented to augment the water supply. Water will be put in aquifers by means of direct injection. Equipping of the facility will allow operational flexibility in directing recycled water from wastewater plant #6 (Cabezon) to the advanced water treatment facility to then direct inject recycled water via the direct injection well into the aquifer.

4. PROJECT HISTORY AND STATUS

Construction of the Mariposa recharge system was completed in December 2008. The direct injection site, injection well, and monitoring system are also in place, all completed in 2010 and 2011. Additional potable water testing at the Loma Colorado injection well site was completed in November 2012 and permitting and design of the full scale treatment site was completed in 2015. Construction of a 6,000 sq. ft. building that will house future treatment equipment, steel storage tanks, and yard piping at the Loma Colorado site, and the last segment of a reuse pipeline from the area of the Sports Complex to the Loma Colorado site were substantially completed in late Spring 2013. The remaining phases of the advanced water treatment facility is estimated to cost an additional \$4.7 million, while the 2 million gallon reuse storage tank to be located at the Loma Colorado site will cost an additional \$2.7M. The grant and loan financing package through the Water Trust Board administered by the New Mexico Finance Authority (NMFA) closed in January 2016 and construction commenced in June 2016.

5. CAPITAL COSTS

PHASE	SOURCE(S) OF COST INFO	PRIOR YEARS	FY16	FY17	FY18	FY19	FY20	FY21	TOTAL
Land Acq./ROW									\$ -
Design and Specifications	Actual	\$ 2,351,630							\$ 2,351,630
Construction	City contract or price agreement	\$ 6,981,721	\$ 4,454,723						\$11,436,444
Construction Management	City contract or price agreement	\$ 108,652	\$ 250,609						\$ 359,260
Equipment/Vehicle	Actual	\$ 26,601							\$ 26,601
Other	Actual	\$ 37,230							\$ 37,230
TOTAL		\$ 9,505,834	\$ 4,705,332	\$ -	\$ - 14,211,165				

6. PROPOSED SOURCES OF FUNDING

REVENUE SOURCE	EXPENDITURE FUND	PRIOR YEARS	FY16	FY17	FY18	FY19	FY20	FY21	TOTAL
State Grants	552 Effluent Fund	\$ 5,336,454	\$ 3,346,308						\$ 8,682,762
County Grants	552 Effluent Fund	\$ 1,500,000							\$ 1,500,000
Utility Funds Operating Revenues	552 Effluent Fund	\$ 321,446	\$ 975,024						\$ 1,296,469
Impact Fees-Wastewater	555 Wastewater Impact Fees	\$ 134,997							\$ 134,997
Utility Bond Proceeds	574-2009 UT Refunding Fund	\$ 1,752,937							\$ 1,752,937
Utility Loan Proceeds	552 Effluent Fund	\$ 460,000	\$ 384,000						\$ 844,000
TOTAL		\$ 9,505,834	\$ 4,705,332	\$ -	\$ - 14,211,165				

1. PROJECT INFORMATION

Project Title	Industrial Park Loop Sewer Line	Requesting Department	Dept. of Utilities	Department Rank Priority No.	4
Project Category	Utilities-Wastewater	CIP Year	FY2015	Project No.:	WW1501
Estimated Useful Life	Greater than 25 Years	District Location	Council District 6	Project Request Status	Revised Project Request

2. PROJECT DESCRIPTION AND SCOPE

The project consists of construction a sewer line along NM 528 Frontage Road and Industrial Park Place.

3. PROJECT JUSTIFICATION

The sewer line will be installed to serve commercial and industrial business properties currently served by septic tanks and leach fields. The project would allow businesses to have access to the city sewer system and groundwater protection.

4. PROJECT HISTORY AND STATUS

Design of the sewer line is currently in progress to be completed in summer 2016. Construction is anticipated to be completed by fall 2016.

5. CAPITAL COSTS

PHASE	SOURCE(S) OF COST INFO	PRIOR YEARS	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
Planning and Feasibility									\$ -
Pre Design and Env. Review									\$ -
Land Acq./ROW									\$ -
Design and Specifications	City contract or price agreement	\$ 49,828							\$ 49,828
Construction	Other		\$ 302,280						\$ 302,280
Construction Management	City contract or price agreement		\$ 14,617						\$ 14,617
Equipment/ Vehicle									\$ -
Other									\$ -
TOTAL		\$ 49,828	\$ 316,897	\$ -	\$ 366,725				

6. PROPOSED SOURCES OF FUNDING

REVENUE SOURCE	EXPENDITURE FUND	PRIOR YEARS	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
Impact Fees- Wastewater	555 Wastewater Impact Fees	\$ 49,828	\$ 16,896						\$ 66,724
Utility Funds Operating Revenues	552 Effluent Fund	\$ -	\$ 300,001						\$ 300,001
									\$ -
TOTAL		\$ 49,828	\$ 316,897	\$ -	\$ 366,725				

1. PROJECT INFORMATION					
Project Title	Rebuild WWTP#1 into 1.5MGD MBR Facility	Requesting Department	Dept. of Utilities	Department Rank Priority No.	5
Project Category	Utilities-Wastewater	CIP Year	FY2014	Project No.:	WW1494; WA1620
Estimated Useful Life	Greater than 25 Years	District Location	Council District 5	Project Request Status	Revised Project Request

2. PROJECT DESCRIPTION AND SCOPE

The project consists of rebuilding WWTP #1 located on Sara Rd. in Council District 5 to a 1.5 MGD Membrane Bioreactor (MBR) plant. The existing process basins will be converted into aeration tanks and MBR tanks, headworks facility, and a blower building will be added.

3. PROJECT JUSTIFICATION

Upgrading the WWTP #1 to an MBR facility will increase the effluent water quality, increase treatment capacity, improve operation stability and decrease odor emitted from the plant.

4. PROJECT HISTORY AND STATUS

WWTP#1 was built circa 1971. Building an MBR plant at the WWTP #1 site will: 1. Enable the city to treat more wastewater in a smaller area, and 2. Produce 1A quality recycled water. WWTP #1 facilities are structurally unsound due to the age of the plant. WWTP #1 was permitted and constructed as a 1 MGD plant however currently is only able to process 0.6 MGD. Building an MBR plant will ensure that the facility will continue to meet current and future NMED and EPA permit compliance. Preliminary engineering was completed in October 2015. Design/build of the project will be financed by a \$25 million limited obligation loan to be completed in Fiscal Years 2017 and 2018.

5. CAPITAL COSTS

PHASE	SOURCE(S) OF COST INFO	PRIOR YEARS	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
Planning and Feasibility									\$ -
Pre Design and Env. Review									\$ -
Land Acq./ROW									\$ -
Design and Specifications	City contract or price agreement	\$ 160,335	\$ 146,766						\$ 307,101
Construction	Cost Consultant		\$25,000,000						\$25,000,000
Construction Management									\$ -
Equipment/ Vehicle									\$ -
Other									\$ -
TOTAL		\$ 160,335	\$25,146,766	\$ -	\$ - \$25,307,101				

6. PROPOSED SOURCES OF FUNDING

REVENUE SOURCE	EXPENDITURE FUND	PRIOR YEARS	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
Utility Funds Operating Revenues	550 CIF Wastewater Fund	\$ 160,345	\$ 108,625						\$ 268,970
Utility Funds Operating Revenues	552 Effluent Fund		\$ 38,141						\$ 38,141
Utility Loan Proceeds	552 Effluent Fund		\$25,000,000						\$25,000,000
									\$ -
									\$ -
TOTAL		\$ 160,345	\$25,146,766	\$ -	\$ - \$25,307,111				

1. PROJECT INFORMATION

Project Title	Lift Station 15 Property Purchase	Requesting Department	Dept. of Utilities	Department Rank Priority No.	6
Project Category	Utilities-Wastewater	CIP Year	FY2017	Project No.:	WW1770
Estimated Useful Life	Greater than 25 Years	District Location	Council District 5	Project Request Status	Revised Project Request

2. PROJECT DESCRIPTION AND SCOPE

The project consists of purchasing additional property adjacent to Lift Station 15 (LS15) to be utilized as an operations staging area. The lift station serves the Enchanted Hills and Lomas Encantadas areas.

3. PROJECT JUSTIFICATION

Additional property is needed adjacent to Lift Station 15 in order to stage large semi truck haulers when emergencies or maintenance issues at LS 15 arise. The station has encountered a series of emergencies which include pump failures, motor control issues, and force main breaks. During the emergencies large semi trucks for hauling sewage to WWTP 2 are needed to keep up with influent from Enchanted Hills.

4. PROJECT HISTORY AND STATUS

Lift Station 15 was constructed circa 2005. The lift station pumps over 1,700 gallons per minute of sewage to wastewater treatment plant 2. The station has encountered a series of emergencies over the last 10 years. The land will need to be acquired before the adjacent property becomes commercial property.

5. CAPITAL COSTS

PHASE	SOURCE(S) OF COST INFO	PRIOR YEARS	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
Planning and Feasibility									\$ -
Pre Design and Env. Review									\$ -
Land Acq./ROW	Other		\$ 500,000						\$ 500,000
Design and Specifications									\$ -
Construction									\$ -
Construction Management									\$ -
Equipment/ Vehicle									\$ -
Other									\$ -
TOTAL			\$ 500,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 500,000

6. PROPOSED SOURCES OF FUNDING

REVENUE SOURCE	EXPENDITURE FUND	PRIOR YEARS	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
Utility Funds	550 CIF								
Operating Revenues	Wastewater Fund		\$ 500,000						\$ 500,000
									\$ -
									\$ -
TOTAL			\$ 500,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 500,000

1. PROJECT INFORMATION

Project Title	Lift Stations 15, 21, and 22 Upgrades (Variable Frequency Drives)	Requesting Department	Dept. of Utilities	Department Rank Priority No.	7
Project Category	Utilities-Wastewater	CIP Year	FY2017	Project No.:	WW1771; WW1779
Estimated Useful Life	Greater than 25 Years	District Location	Multiple Districts	Project Request Status	Revised Project Request

2. PROJECT DESCRIPTION AND SCOPE

The project consists of upgrades to Lift Stations 15, 21, and 22, including replacement of the crane system at LS15 in FY2017 and installation of Variable Frequency Drives (VFDs) at all three lift stations in Fiscal Year 2018.

3. PROJECT JUSTIFICATION

The three lift stations pump into a single force main. VFD's will allow the force main to operate at a more reasonable velocity and is expected to extend the life of the force main. The VFD's will allow continued buildout of the Enchanted Hills and Lomas Encantadas area.

4. PROJECT HISTORY AND STATUS

The three lift stations use the same force main. A consultant has advised the city switch to VFD's to extend the life of the force main. All three VFD's need to be placed at the same time. If all three VFD's are replaced at the same time buildout can continue in the areas served by the 14 inch force main including Enchanted Hills and Lomas Encantadas areas.

5. CAPITAL COSTS

PHASE	SOURCE(S) OF COST INFO	PRIOR YEARS	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
Planning and Feasibility									\$ -
Pre Design and Env. Review									\$ -
Land Acq./ROW									\$ -
Design and Specifications									\$ -
Construction	Other		\$ 160,025	\$ 900,000					\$ 1,060,025
Construction Management									\$ -
Equipment/ Vehicle									\$ -
Other									\$ -
TOTAL			\$ 160,025	\$ 900,000	\$ -	\$ -	\$ -	\$ -	\$ 1,060,025

6. PROPOSED SOURCES OF FUNDING

REVENUE SOURCE	EXPENDITURE FUND	PRIOR YEARS	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
Utility Funds	550 CIF								
Operating Revenues	Wastewater Fund		\$ 160,025						\$ 160,025
To Be Determined				\$ 900,000					\$ 900,000
									\$ -
TOTAL			\$ 160,025	\$ 900,000	\$ -	\$ -	\$ -	\$ -	\$ 1,060,025

1. PROJECT INFORMATION

Project Title	Lift Station 2 Relocate and Rebuild	Requesting Department	Dept. of Utilities	Department Rank Priority No.	8
Project Category	Utilities-Wastewater	CIP Year	FY2017	Project No.:	TBD
Estimated Useful Life	Greater than 25 Years	District Location	Multiple Districts	Project Request Status	Revised Project Request

2. PROJECT DESCRIPTION AND SCOPE

The project consists of relocating and rebuilding Lift Station 2 (LS2) currently located on the northwest corner of Nicklaus Drive and Southern Boulevard. The lift station will be similar to the newly constructed Lift Station 10 (LS10).

3. PROJECT JUSTIFICATION

Lift Station 2 is an old lift station that is in need of replacement. The new lift station would allow wastewater to be diverted to either the Cabezon Water Reclamation Facility (Wastewater Treatment Plant 6) or to Lift Station10. The project will allow additional development to continue in Unit 10.

4. PROJECT HISTORY AND STATUS

Lift Station 2 is an old lift station that can pump sewage to Lift Station 10 or be diverted to WWTP 6. The new lift station would be designed to do both concurrently if needed.

5. CAPITAL COSTS

PHASE	SOURCE(S) OF COST INFO	PRIOR YEARS	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
Planning and Feasibility									\$ -
Pre Design and Env. Review									\$ -
Land Acq./ROW									\$ -
Design and Specifications	Other		\$ 472,500						\$ 472,500
Construction	Other		\$ 2,677,500						\$ 2,677,500
Construction Management									\$ -
Equipment/ Vehicle									\$ -
Other									\$ -
TOTAL			\$ 3,150,000	\$ -	\$ 3,150,000				

6. PROPOSED SOURCES OF FUNDING

REVENUE SOURCE	EXPENDITURE FUND	PRIOR YEARS	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
To Be Determined			\$ 3,150,000						\$ 3,150,000
									\$ -
									\$ -
TOTAL			\$ 3,150,000	\$ -	\$ 3,150,000				

1. PROJECT INFORMATION

Project Title	Replace Membrane Filters at WWTPs	Requesting Department	Dept. of Utilities	Department Rank Priority No.	9
Project Category	Utilities-Wastewater	CIP Year	Recurring Capital Need	Project No.:	NA
Estimated Useful Life	10 Years	District Location	Multiple Districts	Project Request Status	Revised Project Request

2. PROJECT DESCRIPTION AND SCOPE

Replace Wastewater Membrane Filters at the Cabezon Water Reclamation Facility (1.2 MGD capacity) and Mariposa Water Reclamation Facility (0.25 MGD capacity) in Fiscal Year 2018.

3. PROJECT JUSTIFICATION

The project is necessary to ensure continued compliance with the City of Rio Rancho's National Pollution Discharge Elimination System (NPDES) permit issued by the Environmental Protection Agency (EPA). The Zenon Membrane Filters which produce a very high quality of effluent degrade over time and needs to be replaced prior to any potential violations or major failures.

4. PROJECT HISTORY AND STATUS

The Cabezon and Mariposa Water Reclamation Facilities were completed in March 2006 and membrane lifecycles are estimated to be 10 years.

5. CAPITAL COSTS

PHASE	SOURCE(S) OF COST INFO	PRIOR YEARS	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
Planning and Feasibility									\$ -
Pre Design and Env. Review									\$ -
Land Acq./ROW									\$ -
Design and Specifications									\$ -
Construction									\$ -
Construction Management									\$ -
Equipment/ Vehicle									\$ -
Other	Other			\$ 320,000					\$ 320,000
TOTAL		\$ -	\$ -	\$ 320,000	\$ -	\$ -	\$ -	\$ -	\$ 320,000

6. PROPOSED SOURCES OF FUNDING

REVENUE SOURCE	EXPENDITURE FUND	PRIOR YEARS	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
To Be Determined				\$ 320,000					\$ 320,000
									\$ -
									\$ -
									\$ -
TOTAL		\$ -	\$ -	\$ 320,000	\$ -	\$ -	\$ -	\$ -	\$ 320,000

1. PROJECT INFORMATION

Project Title	Wastewater Treatment Plant 2 (WWTP#2) Ultraviolet (UV) Disinfection System	Requesting Department	Dept. of Utilities	Department Rank Priority No.	10
Project Category	Utilities-Wastewater	CIP Year	FY2019	Project No.:	TBD
Estimated Useful Life	Greater than 25 Years	District Location	Council District 6	Project Request Status	New Project Request

2. PROJECT DESCRIPTION AND SCOPE

Construct a covered parallel ultraviolet effluent disinfection system prior to discharge of outflow into the Rio Grande River.

3. PROJECT JUSTIFICATION

The project is necessary to ensure continued compliance with the City of Rio Rancho's National Pollution Discharge Elimination System (NPDES) permit issued by the Environmental Protection Agency (EPA). The outflow can receive effluent from Wastewater Treatment Plant 1, 2, and 6.

4. PROJECT HISTORY AND STATUS

The current UV disinfection system was constructed in 2000 concurrent with upgrades at WWTP 2. The system was not designed to handle increased flows from WWTP 6. A parallel system was envisioned at some point in the future by CDM consulting engineers. A cover is needed over the facilities due to the dust created from the concrete plant and other industries in the area.

5. CAPITAL COSTS

PHASE	SOURCE(S) OF COST INFO	PRIOR YEARS	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
Planning and Feasibility									\$ -
Pre Design and Env. Review									\$ -
Land Acq./ROW									\$ -
Design and Specifications	Other				\$ 250,000				\$ 250,000
Construction	Other				\$ 4,500,000				\$ 4,500,000
Construction Management									\$ -
Equipment/ Vehicle									\$ -
Other									\$ -
TOTAL			\$ -	\$ -	\$ -	\$ 4,750,000	\$ -	\$ -	\$ -

6. PROPOSED SOURCES OF FUNDING

REVENUE SOURCE	EXPENDITURE FUND	PRIOR YEARS	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
To Be Determined					\$ 4,750,000				\$ 4,750,000
									\$ -
									\$ -
TOTAL			\$ -	\$ -	\$ -	\$ 4,750,000	\$ -	\$ -	\$ -

1. PROJECT INFORMATION

Project Title	Vehicles and Heavy Equipment	Requesting Department	Dept. of Utilities	Department Rank Priority No.	11
Project Category	Utilities-Wastewater	CIP Year	Recurring Capital Need	Fund	512-0000-505-7015
Estimated Useful Life	10 Years	District Location	Multiple Districts	Project Request Status	Revised Project Request

2. PROJECT DESCRIPTION AND SCOPE

Vehicles and heavy equipment will be purchased for use in wastewater utility operations. Vehicle and equipment acquisitions planned for Fiscal Year 2017 include a replacement pick up truck, a truck tractor, a new covered trailer, and a new 14' dump trailer.

3. PROJECT JUSTIFICATION

Vehicles and heavy equipment must be purchased on an annual basis to replace existing aging equipment. Replacement vehicles and heavy equipment purchases are necessary when the repair costs exceed the cost benefit of purchasing new equipment. A detailed vehicle acquisition schedule has been developed by the Utility Department and the annual cost has been incorporated into the Utility Enterprise's 5 Year Financial Plan.

4. PROJECT HISTORY AND STATUS

Heavy equipment and new vehicles are needed to repair water main breaks, service line leaks along with other routine maintenance needs.

5. CAPITAL COSTS

PHASE	SOURCE(S) OF COST INFO	PRIOR YEARS	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
Planning and Feasibility									\$ -
Pre Design and Env. Review									\$ -
Land Acq./ROW									\$ -
Design and Specifications									\$ -
Construction									\$ -
Construction Management									\$ -
Equipment/Vehicle	Other	\$ 675,823	\$ 231,200	\$ -	\$ -	\$ -	\$ 45,000	\$ 45,000	\$ 997,023
Other									\$ -
TOTAL		\$ 675,823	\$ 231,200	\$ -	\$ -	\$ -	\$ 45,000	\$ 45,000	\$ 997,023

6. PROPOSED SOURCES OF FUNDING

REVENUE SOURCE	EXPENDITURE FUND	PRIOR YEARS	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
Utility Funds Operating Revenues	512 Ut Eq Repl Fund	\$ 675,823	\$ 231,200						\$ 907,023
To Be Determined							\$ 45,000	\$ 45,000	\$ 90,000
									\$ -
									\$ -
TOTAL		\$ 675,823	\$ 231,200	\$ -	\$ -	\$ -	\$ 45,000	\$ 45,000	\$ 997,023

Utilities Department
FY2017 ICIP Fleet Vehicle and Heavy Equipment Detail

Rank	Vehicle #	Vehicle Type	Assignment	Year	Mileage	2017	2018	2019	2020	2021	2022
1	UT102	Kenworth Tractor Truck	Wastewater Treatment	1989	69,468	185,000					
2	UT142	Ford F150	Transmission & Distribution	2005	232,921	28,000					
3	UT163	Dodge Dakota	Transmission & Distribution	2006	142,121	28,000					
4	UT36	Chevy 1500	SCADA	2008	98,451	35,700					
5	UT118	Ford F-150 Truck	Wastewater Treatment	2002	124,007	28,000					
6	UT156	Ford Ranger	Water Production	2007	128,064	34,000					
7	New	Covered Trailer	Wastewater Treatment	2016	N/A	9,800					
8	New	Fork Lift	Transmission & Distribution	2016	N/A	51,000					
9	New	14x14 Dump Trailer	Transmission & Distribution	2016	N/A	8,000					
10	New	14' Dump Trailer	Transmission & Distribution	2016	N/A	8,400					
11	New	Ford F150	Environmental Management	2016	N/A	28,000					
12	UT11	Ford F-450 Truck	Water Production	2002	178,101		53,000				
13	EN20	Ford F-250 Truck	Engineering	2007	189,272		30,000				
14	CS152	Ford Ranger	Utility Services	2006	138,068		26,000				
15	UT35A	12CY Dump Truck	Transmission & Distribution	1997	39,117		120,000				
16	UT145	Chevy Colorado	Water Production	2006	156,558			26,000			
17	UT26	Ford F-250 Truck	Transmission & Distribution	1997	180,257			30,000			
18	UT27	Ford F-250 Truck	Transmission & Distribution	1997	206,859			30,000			
19	UT146	Ford F-350 Truck	Water Production	2006	153,264			50,000			
20	UT147	Ford F-350	Water Production	2006	119,796				45,000		
21	UT157A	Chevy S10	Wastewater Treatment	1995	58,443				26,000		
22	UT35	John Deere Backhoe	Transmission & Distribution	1996	5774 Hrs				90,000		
23	UT135-1	Ford F-350	Wastewater Treatment	2005	141,799					45,000	
24	CS23	Ford Ranger	Utility Services	2008	127,918					30,000	
25	CS29	Ford Ranger	Utility Services	2008	124,176					30,000	
26	UT134	GAP-VAX	Transmission & Distribution	2004	48,493					400,000	
27	CS137	Ford Ranger	Utility Services	2005	142,459					30,000	
28	UT12	Dodge 1500 Pick-up Truck	Water Production	2001	127,019						26,000
29	UT90	Ford F800 Vactor	Transmission & Distribution	1993	258,958						400,000
30	UT122	Chvrolet 1500 Truck	Water Production	2004	187,496						26,000
31	UT127	Ford F550 Truck	Transmission & Distribution	2004	126,765						65,000
32	UT138	Ford F-250 Truck	Wastewater Treatment	2005	122,943						45,000
33	UT141	Ford E-250 Cargo Van	SCADA	2005	108,228						38,000
34	UT154	Ford F-350 Truck	Transmission & Distribution	2007	105,798						38,000
					TOTAL	443,900	229,000	136,000	161,000	535,000	638,000
										FY2017-2022	2,142,900
					Water	212,700	229,000	136,000	161,000	490,000	593,000
					Wastewater	231,200	-	-	-	45,000	45,000
					Total	443,900	229,000	136,000	161,000	535,000	638,000

Wastewater Treatment Projects

Aquifer Storage Demonstration (WA0770), Advanced Water Treatment (WW1496), and Recycled Water Storage Tank (WW1495)



Project expenditures to date for the Aquifer Storage Demonstration, Advanced Water Treatment, and Recycled Water Storage Tank projects total nearly \$9.8 million. Various subprojects have been completed in support of advanced water treatment for aquifer recharge with high quality reclaimed water sources, including construction of the injection well at Loma Colorado in June 2011. Additional potable water testing at the Loma Colorado injection well site was completed in November 2012 and permitting and design of the full scale treatment site was completed in Fiscal Year 2016. Construction of a 6,000 sq. ft. building that will house future treatment equipment, steel storage

tanks, and yard piping at the Loma Colorado site, and the last segment of a reuse pipeline from the area of the Sports Complex to the Loma Colorado site were substantially completed in late spring 2013. The remaining phase of the advanced water treatment facility involves equipping at an estimated cost of \$5 million. The city has entered into a combination grant and loan financing package through the Water Trust Board to finance the project. A related project involves construction of a 3 million gallon ground storage reservoir located near the Loma Colorado site that will hold incoming recycled water pumped from the reclamation facility.

Construction commenced in June 2016 and the project is fully cash funded by a combination of utility operating sources (\$1,680,259), and water and wastewater impact fees (1,422,964).



Wastewater Treatment Plant (WWTP) #6 Expansion and Reuse Line to WWTP#2 (WW0673, WW0928, and WW1389)

In September 2009, the city entered into a loan agreement with the New Mexico Environment Department (NMED) in the principal amount of \$20 million for the expansion of and construction of reuse facilities at WWTP#6. The project consists of expansion of the wastewater treatment plant from 0.6 million gallons

per day to 1.2 million gallons per day, a new 6 Million Gallon Per Day (MGD) booster station, a new 3 MGD effluent storage tank, and approximately 29,000 linear feet of 12” and 18” transmission line extending generally north and east from WWTP#6 to WWTP#2. The expansion will increase treatment capacity at WWTP#6 while the booster station and transmission lines will deliver reuse water from WWTP#6 to the WWTP#2 site, providing irrigation water for various city parks, the Rio Rancho Sports Complex, the Cabezon subdivision, and the Club Rio Rancho Country Club. Treated effluent water will also be used for direct injection activities related to the aquifer recharge project described above. Constructions of various segments of the reuse pipeline from WWTP#6 to WWTP#2 have been completed including:



- WWTP#6 to the intersection of 27th Street and Southern Blvd.: September 2010
- Phase I reuse line with the Montoyas Arroyo from Sports Complex Dam to WWTP#2: December 2011
- Club Rio Rancho reuse line: June 2012



Construction of an expanded WWTP#6 facility and installation of the membrane filtration system was substantially completed in July 2013 and bid letting for the reuse tank and booster station occurred in late 2013. Construction of the tank and booster station, and the switchover of irrigation service connections at several parks and medians in the Cabezon area were substantially completed in April 2015. The last sub-project involves relocation of Lift Station No. 10 currently in progress. A new Lift Station 10 will be constructed to divert wastewater to reduce the flow to WWTP #2, thus providing hydraulic and solids loading relief at WWTP #2. The additional capacity will allow WWTP #2 to be more readily

able to handle the increased flow that will be seen by the City Center development until WWTP #2 can be expanded. The diverted flow will then be routed for treatment to WWTP #1. In addition to the \$20 million NMED loan, the project is funded through wastewater impact fees (\$386,205), and utility operating fund sources (\$278,308).

Rebuild of WWTP#1 (WW1494)

Preliminary engineering analysis for the WWTP#1 Rebuild project was completed in October 2015. The project will convert the plant into a 1.5 MGD Membrane Bioreactor and will expand the city's treatment capacity, improve effluent water quality, and decrease odor emitted from the plant. Preliminary design was funded by utility operating fund sources, while design/build of the project will be financed by a \$25 million limited obligation loan to be completed in Fiscal Years 2017 and 2018.

Sewer Lines

Industrial Park Sewer Line (WW1501)

The project consists of construction a sewer line along New Mexico Highway 528 Frontage Road and Industrial Park Place. The sewer line will be installed to serve commercial and industrial business properties currently served by septic tanks and leach fields. Design is in progress and construction is anticipated to commence in summer 2016 to be completed by fall 2016. Project funding consists of utility operating fund sources (\$300,000) and wastewater impact fees (\$66,724).

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