

### Existing Inventory

The Utilities Division of the Public Works Department served an estimated 28,508 residential and non-residential wastewater customers as of December 31, 2013. Average daily treatment in thousands of gallons for calendar year 2013 was 4,641. Annual wastewater treatment for 2013 was over 1.69 billion gallons.

The Utilities Division operates and maintains:

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

### Current Capacity and Condition of Assets and Infrastructure

#### *Wastewater Treatment Plants:*

The wastewater system inventory includes 5 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. Taken together the total capacity of all treatment plants is approximately 8.6 million gallons per day. The current actual average daily gallons treated are approximately 4.6 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 to 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 currently under construction. The expansion increases treatment capacity at WWTP #6, while the pump station, reuse line, and storage tank will provide recycled water for irrigation and aquifer recharge purposes. The ICIP contains plans to expand and retrofit WWTPs #1 and #3 to Membrane Bio Reactor (MBR) facilities in 2016 and 2020, respectively

#### *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, reuse 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 at WWTP #6 and an advanced water treatment facility and related infrastructure near the Loma Colorado subdivision. The initiative will result in widespread delivery of reuse water to strategic locations for irrigation, industrial uses, and aquifer replenishment. The city plans to apply for Water Trust Board funding in 2015 to complete the Advanced Water Treatment Facility (AWTF) and recycled water storage tank at the Loma Colorado site. The city is also engaged in the direct injection permitting process with the Office of the State Engineer.

#### *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 368 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 design. The new lift station will be constructed to 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. Additional work to WWTP #2 will continue upon the completion of the Cabezon Water Reclamation Facility (WWTP 6) and the Effluent Booster Station/Tank.

Lift station 10 (LS 10) replacement near the intersection of Southern Blvd. and New Mexico Highway 528 is currently under design,

to be bid in 2014 with construction anticipated to be complete in 2015. The new Lift Station 10b will divert wastewater from Southern Boulevard to Wastewater Treatment Plant 1 on Sara Road or Wastewater Treatment Plant 2 located on Industrial Park Loop.

**Indicators**

Indicator	Calendar Year				
	2009	2010	2011	2012	2013
Average Daily Sewage Treated (1,000 of gallons)	4,889	4,489	4,546	4,469	4,641

**Wastewater Utility Infrastructure and Capital Improvement Plan Development**

The Utilities Division 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 city is currently developing a wastewater master plan to understand the capacity needs for the build out of the city and to evaluate needed improvements to the existing system.

*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 Division is currently finalizing a 5 year project detailing the status and asset management plans of water and wastewater system equipment. 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

<b>Average Day Demand</b>	
Average Daily Flow	175 gallons per day (gpd)
<b>Peak Day Demand</b>	
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 and the city currently accepts credits for thirty six (36%) of assessments generated by annual development activity. Six percent (6%) of assessments generated by annual development activity are collected as revenue, while fifty eight percent (58%) represent foregone resources due to the impact fee moratorium. Effective September 22,

2012, impact fees were reduced by 50 percent (50%) for residential construction and by 100 percent (100%) for non-residential construction for two years. The amount of estimated foregone wastewater impact fee resources for Fiscal Year 2014 as a result of the moratorium was \$772,358. The city would have received these impact fees in the form of either assessment revenue or credits.

Developer Improvements and Dedications since Fiscal Year 2010 include:

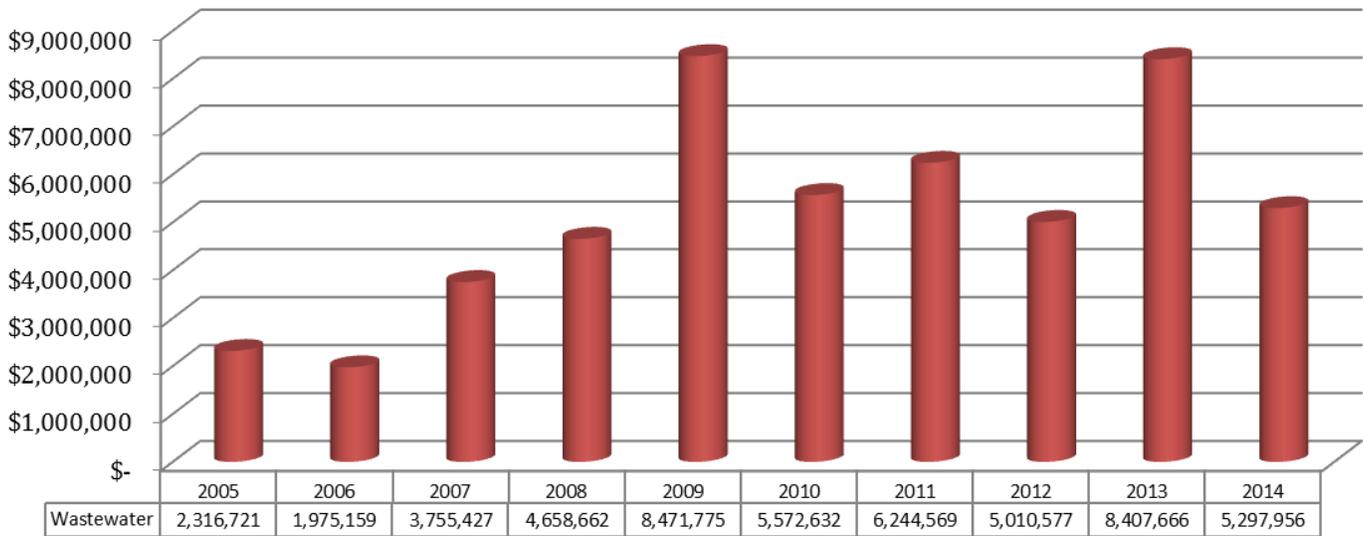
- Northern Meadows (Unit 19): 1.23 miles of sewer line
- High Range III: 1.15 miles of sewer line
- Paseo Vulcan Crossing: 0.15 miles of sewer line
- Diamond Ridge: 1.54 miles of sewer line
- Cabezon Tract 1A: 0.34 miles of sewer line
- Cabezon Commons Tract 11: 0.22 miles of sewer line
- Loma Colorado 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

### **Funding Sources**

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

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

### Wastewater Capital Expenditures: FY2005-2014



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 to a 1.2 million gallon per day facility. Construction of WWTP#6 continued in Fiscal Year 2015, accounting for sixty five percent (65%) of total capital expenditures during the year. In recent years, an otherwise waning investment in wastewater capital assets has been propped up by the \$25 million New Mexico Environment Department (NMED) loan for this expansion project. The wastewater capital program has been historically, and continues to be heavily supported by debt financing pledging the net revenues of the system. Aside from the NMED Loan, the city has not issued debt to support the Joint Utility capital program since 2009 due to revenue capacity constraints. Effective February 1, 2013, water rates increased by eight and eight tenths percent (8.8%) annually to provide sufficient funds for rising operating and maintenance costs, and to support non-growth related capital projects. On May 22, 2013 the Governing Body amended the increase for Fiscal Year 2014 to seven and eight tenths percent (7.8%) effective July 1, 2013 (O16, Enactment 13-13). In Fiscal Year 2015, the third of five scheduled rate increases took effect July 1, 2014 (O11, Enactment 14-09), maintaining the seven and eight tenths percent (7.8%) increase through Fiscal Year 2017. Bolstered by these revenue enhancements, the Utility enterprise anticipates issuing new bonds in calendar year 2014 and 2015.

**FY2015-FY2020: ICIP Summary**

Rank Priority	Fund/Project No.	Project Title	Project to Date	2015 Budget	2015 Additional Spending Anticipated	2015 Total	2016	2017	2018	2019	2020	Funding Requested: FY15-FY20	Funding Source	Funding Source	Funding Source	Funding Source	Total Funding
													(A)	(B)	(C)	(D)	(A) + (B) + (C) + (D)
1	WW0673; WW0928; WW1147; WW1389; WW1536	WWTP#6 Expansion, Effluent Tank and Pump Station and Reuse Line to WWTP#2-Phase I	\$ 13,183,428	\$ 71,000	\$ 13,456,019	\$ 13,527,019	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 13,527,019	Impact Fees-Wastewater	Utility Funds Operating Revenues	Utility Loan Proceeds		
													\$ 453,261	\$ 767,228	\$ 12,306,530		\$ 13,527,019
2	WW1251; WW1490	Significant Rebuild and Repair WWTP 2A and 3	\$ 474,769	\$ -	\$ 815,229	\$ 815,229	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 815,229	Utility Funds Operating Revenues				
													\$ 815,229				\$ 815,229
3	WW1494	Retrofit WWTP#1 into 1.5MGD MBR Facility	\$ -	\$ -	\$ 1,500,000	\$ 1,500,000	\$ 10,234,122	\$ -	\$ -	\$ -	\$ -	\$ 11,734,122	Utility Funds Operating Revenues	Utility Bond Proceeds			
													\$ 1,500,000	\$ 10,234,122			\$ 11,734,122
4	N/A	New Warehouse, Laboratory, and Office Complex at WWTP#2	\$ -	\$ -	\$ 2,121,098	\$ 2,121,098	\$ 500,000	\$ -	\$ -	\$ -	\$ -	\$ 2,621,098	Utility Bond Proceeds				
													\$ 2,621,098				\$ 2,621,098
5	WW1183; WW1492	Montoya's Arroyo Sewer Upgrade-Phase 3	\$ 1,320,667	\$ -	\$ 827,638	\$ 827,638	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 827,638	Impact Fees-Wastewater	Utility Funds Operating Revenues			
													\$ 422,213	\$ 405,425			\$ 827,638
6	WW1459; WW1537	SCADA Improvements	\$ 4,506	\$ 108,700	\$ -	\$ 108,700	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 608,700	Utility Funds Operating Revenues				
													\$ 608,700				\$ 608,700
7	WA0770	Aquifer Storage Demo/Direct Injection	\$ 9,256,719	\$ -	\$ 370,969	\$ 370,969	\$ 6,750,000	\$ -	\$ -	\$ -	\$ -	\$ 7,120,969	State Grants	Utility Funds Operating Revenues			
													\$ 6,770,969	\$ 350,000			\$ 7,120,969



2015-2020 Infrastructure and Capital Improvement Plan  
**Utilities-Wastewater**

**FY2015-FY2020: ICIP Summary**

Rank Priority	Fund/Project No.	Project Title	Project to Date	2015 Budget	2015 Additional Spending Anticipated	2015 Total	2016	2017	2018	2019	2020	Funding Requested: FY15-FY20	Funding Source	Funding Source	Funding Source	Funding Source	Total Funding	
													(A)	(B)	(C)	(D)	(A) + (B) + (C) + (D)	
8	N/A	Replace Membrane Filters at WWTPs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,000,000	Utility Funds Operating Revenues					\$ 1,000,000
												\$ 1,000,000						\$ 1,000,000
9	Fund 512	Vehicles and Heavy Machinery	\$ 132,351	\$ 435,520	\$ -	\$ 435,520	\$ 134,000	\$ -	\$ 25,000	\$ 26,000	\$ 45,000	\$ 665,520	Utility Funds Operating Revenues					\$ 665,520
												\$ 665,520						\$ 665,520
10	Fund 501	Major Equipment for Wastewater Treatment	\$ 21,505	\$ 35,757	\$ -	\$ 35,757	\$ 17,300	\$ 18,500	\$ 21,000	\$ 14,000	\$ -	\$ 106,557	Utility Funds Operating Revenues					\$ 106,557
												\$ 106,557						\$ 106,557
11	N/A	Broadmoor / Chessmen Sewer Line Repair	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 414,359	\$ -	\$ -	\$ -	\$ 414,359	Utility Bond Proceeds					\$ 414,359
												\$ 414,359						\$ 414,359
12	N/A	Security Wall @ WWTP#2	\$ -	\$ -	\$ -	\$ -	\$ 222,396	\$ -	\$ -	\$ -	\$ -	\$ 222,396	Utility Funds Operating Revenues					\$ 222,396
												\$ 222,396						\$ 222,396
13	N/A	Retrofit WWTP#3 into 1.5MGD MBR Facility	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,700,000	\$ 13,500,000	\$ 16,200,000	To Be Determined					\$ 16,200,000
												\$ 16,200,000						\$ 16,200,000
14	N/A	NM528 Forcemain Expansion and Lift Stations 15, 21, and 22 Upgrades	\$ -	\$ -	\$ -	\$ -	\$ 500,000	\$ -	\$ 3,029,133	\$ -	\$ -	\$ 3,529,133	To Be Determined					\$ 3,529,133
												\$ 3,529,133						\$ 3,529,133



2015-2020 Infrastructure and Capital Improvement Plan  
**Utilities-Wastewater**

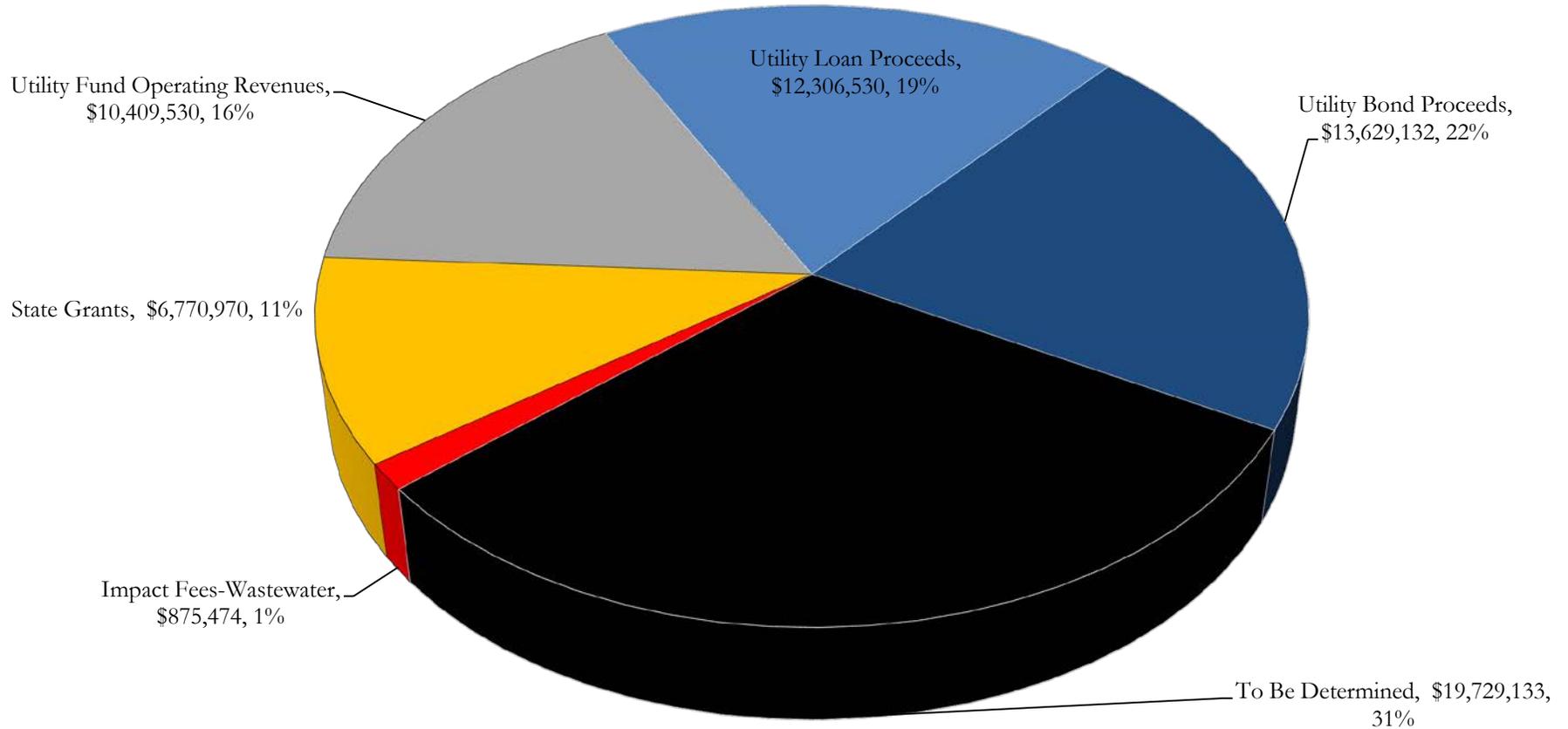
**FY2015-FY2020: ICIP Summary**

Rank Priority	Fund/Project No.	Project Title	Project to Date	2015 Budget	2015 Additional Spending Anticipated	2015 Total	2016	2017	2018	2019	2020	Funding Requested: FY15-FY20	Funding Source	Funding Source	Funding Source	Funding Source	Total Funding
													(A)	(B)	(C)	(D)	(A) + (B) + (C) + (D)
15	WW0887	Septic Dump Station	\$ 200,193	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,968,475	\$ -	\$ -	\$ 3,968,475	Utility Funds Operating Revenues				
													\$ 3,968,475				\$ 3,968,475
16	N/A	Industrial Park Loop Sewer Line	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 359,553	\$ -	\$ -	\$ -	\$ 359,553	Utility Bond Proceeds				
													\$ 359,553				\$ 359,553

---

**TOTALS**    \$ 24,594,137    \$ 650,977    \$ 19,090,954    \$ 19,741,931    \$ 18,457,818    \$ 892,412    \$ 7,143,608    \$ 2,840,000    \$ 14,645,000    \$ 63,720,769    \$ 63,720,769

---



	FY15	FY16	FY17	FY18	FY19	FY20	TOTAL
Environmental Gross Receipts Tax	\$ -						\$ -
Impact Fees-Wastewater	\$ 875,474						\$ 875,474
State Grants	\$ 20,970	\$ 6,750,000					\$ 6,770,970
Utility Fund Operating Revenues	\$ 4,417,859	\$ 473,696	\$ 118,500	\$ 4,114,475	\$ 140,000	\$ 1,145,000	\$ 10,409,530
Utility Loan Proceeds	\$ 12,306,530						\$ 12,306,530
Utility Bond Proceeds	\$ 2,121,098	\$ 10,734,122	\$ 773,912				\$ 13,629,132
To Be Determined		\$ 500,000		\$ 3,029,133	\$ 2,700,000	\$ 13,500,000	\$ 19,729,133
<b>TOTAL</b>	<b>\$ 19,741,931</b>	<b>\$ 18,457,818</b>	<b>\$ 892,412</b>	<b>\$ 7,143,608</b>	<b>\$ 2,840,000</b>	<b>\$ 14,645,000</b>	<b>\$ 63,720,769</b>

<b>WASTEWATER PROJECTS UNDER CONSIDERATION</b>			
<b>Rank</b>	<b>Project Name</b>	<b>Fiscal Year(s)</b>	<b>Project Estimate</b>
17	Sludge De-Watering Building @ WWTP#2	2017-2018	\$ 5,111,394
18	Lift Station #16 (Gateway South) New Well, Pumps with Flow Meter	2018-2019	\$ 180,000
19	Barranca Sewer Line-Phase II-Idalia Rd. to City Center	2018-2019	\$ 4,000,000
20	WWTP#2 Expansion and Retrofit	2019-2020	\$ 38,677,361
21	Southern and Unser Sanitary Sewer (SAS) Diversion	2019	\$ 1,471,288
22	Northern Blvd. Phase B-Unser to 30th St. Sanitary Sewerline	2019	\$ 370,887
23	Loma Colorado Terminal Effluent Reuse Storage Tank	2016	\$ 6,000,000
24	Paseo Gateway Wastewater Line	2019-2020	\$ 4,145,744
	<b>TOTAL</b>		<b>\$ 59,956,674</b>



**1. PROJECT INFORMATION**

Project Title	Significant Rebuild and Repair for WWTP #2A, 2B and 3	Requesting Department	Dept. of Public Works/Utilities Administration	Department Rank Priority No.	2
Project Category	Utilities-Wastewater	CIP Year	FY2012	Project No.:	WW1251; WW1490
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 includes baffle repair, influent line repair, mixer repairs, diffuser repairs, air manifold system modification and ultra-violet system repairs/upgrades to WWTP#2A, 2B, and 3.

**3. PROJECT JUSTIFICATION**

Due to the age and capacity of WWTP #2, a significant amount of repair is needed to handle not only the existing flows but also the expected increase in flows to the treatment plant in the future. A similar and successful rebuild was previously completed on a portion of the WWTP #2 treatment process and it is expected that this project will have equal success relative to increasing capacity and reducing operation and maintenance issues.

**4. PROJECT HISTORY AND STATUS**

Rebuild work at WWTP#2A and 2B commenced in Fiscal Year 2012 and continued through July 2012. Rebuild work is currently on hold at this time due to the construction of the Cabezon Reuse Tank and Booster Station at WWTP#6. WWTP #2A is receiving an additional 1.2MGD and cannot be taken down at this time.

**5. CAPITAL COSTS**

PHASE	SOURCE(S) OF COST INFO	PRIOR YEARS	FY15	FY16	FY17	FY18	FY19	FY20	TOTAL
Planning and Feasibility									\$ -
Pre Design and Env. Review									\$ -
Land Acq./ROW									\$ -
Design and Specifications	Recent City project	\$ -	\$ 50,000						\$ 50,000
Construction	Recent City project	\$ 474,769	\$ 765,229						\$ 1,239,998
Construction Management									\$ -
Equipment/Vehicle									\$ -
Other									\$ -
<b>TOTAL</b>		<b>\$ 474,769</b>	<b>\$ 815,229</b>	<b>\$ -</b>	<b>\$ 1,289,998</b>				

**6. PROPOSED SOURCES OF FUNDING**

REVENUE SOURCE	EXPENDITURE FUND	PRIOR YEARS	FY15	FY16	FY17	FY18	FY19	FY20	TOTAL
Utility Funds									
Operating Revenues	501 Utilities	\$ 474,769	\$ 815,229						\$ 1,289,998
									\$ -
									\$ -
									\$ -
									\$ -
<b>TOTAL</b>		<b>\$ 474,769</b>	<b>\$ 815,229</b>	<b>\$ -</b>	<b>\$ 1,289,998</b>				

**1. PROJECT INFORMATION**

Project Title	Retrofit WWTP #1 into 1.5 MGD MBR Facility	Requesting Department	Dept. of Public Works/Utilities Administration	Department Rank Priority No.	3
Project Category	Utilities-Wastewater	CIP Year	FY2014	Project No.:	WW1494
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 involves rebuilding WWTP #1 located on Sara Rd. in Council District 5 to a 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.

**5. CAPITAL COSTS**

PHASE	SOURCE(S) OF COST INFO	PRIOR YEARS	FY15	FY16	FY17	FY18	FY19	FY20	TOTAL
Planning and Feasibility									\$ -
Pre Design and Env. Review									\$ -
Land Acq./ROW									\$ -
Design and Specifications	Cost Consultant		\$ 1,500,000						\$ 1,500,000
Construction	Cost Consultant			\$ 10,234,122					\$ 10,234,122
Construction Management									\$ -
Equipment/Vehicle									\$ -
Other									\$ -
<b>TOTAL</b>		\$ -	\$ 1,500,000	\$ 10,234,122	\$ -	\$ -	\$ -	\$ -	\$ 11,734,122

**6. PROPOSED SOURCES OF FUNDING**

REVENUE SOURCE	EXPENDITURE FUND	PRIOR YEARS	FY15	FY16	FY17	FY18	FY19	FY20	TOTAL
Utility Funds	550 CIF		\$ 1,500,000						\$ 1,500,000
Operating Revenues	Wastewater Fund								\$ -
Utility Bond Proceeds				\$ 10,234,122					\$ 10,234,122
									\$ -
									\$ -
<b>TOTAL</b>		\$ -	\$ 1,500,000	\$ 10,234,122	\$ -	\$ -	\$ -	\$ -	\$ 11,734,122

**1. PROJECT INFORMATION**

Project Title	New Warehouse, Laboratory, and Office Complex at WWTP#2	Requesting Department	Dept. of Public Works/Utilities Administration	Department Rank Priority No.	4
Project Category	Utilities-Wastewater	CIP Year	FY2015	Project No.:	TBD
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 design and construction of a new warehouse with additional equipment storage space, a new laboratory, and office space at WWTP#2. Fleet Maintenance is also anticipated to operate/co-locate at this site. The project includes land acquisition for site expansion.

**3. PROJECT JUSTIFICATION**

Elevated treatment levels and population growth have put a strain on plant capacity at WWTP#2 as well as wastewater utility operating resources working from the site. The project is physically located in District 5, however will benefit multiple districts whose wastewater flows are conveyed to WWTP#2. The project is anticipated to allow fleet maintenance to move/co-locate to the site from its existing leased facility on 29th Street.

**4. PROJECT HISTORY AND STATUS**

WWTP #2 was built circa 1980. This facility does not have a warehouse; the parts distribution center for WWTP #2 are small temporary buildings. WWTP #2 was expanded in 1999 with NMED loan funds.

**5. CAPITAL COSTS**

PHASE	SOURCE(S) OF COST INFO	PRIOR YEARS	FY15	FY16	FY17	FY18	FY19	FY20	TOTAL
Planning and Feasibility									\$ -
Pre Design and Env. Review									\$ -
Land Acq./ROW									\$ -
Design and Specifications									\$ -
Construction	Cost Consultant		\$ 2,121,098	\$ 500,000					\$ 2,621,098
Construction Management									\$ -
Equipment/Vehicle									\$ -
Other									\$ -
<b>TOTAL</b>		\$ -	\$ 2,121,098	\$ 500,000	\$ -	\$ -	\$ -	\$ -	\$ 2,621,098

**6. PROPOSED SOURCES OF FUNDING**

REVENUE SOURCE	EXPENDITURE FUND	PRIOR YEARS	FY15	FY16	FY17	FY18	FY19	FY20	TOTAL
Utility Bond Proceeds			\$ 2,121,098	\$ 500,000	\$ -				\$ 2,621,098
									\$ -
									\$ -
									\$ -
									\$ -
<b>TOTAL</b>		\$ -	\$ 2,121,098	\$ 500,000	\$ -	\$ -	\$ -	\$ -	\$ 2,621,098

**1. PROJECT INFORMATION**

Project Title	Montoya's Arroyo Sewer Upgrade-Phase 3 and 4	Requesting Department	Dept. of Public Works/Utilities Administration	Department Rank Priority No.	5
Project Category	Utilities-Wastewater	CIP Year	FY2011	Project No.:	WW1183; WW1494
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 approximately 8,800 linear feet of new 30" and 36" sanitary sewer (SAS) pipe to be installed in the sandy bottom of Montoya's Arroyo from the Sports Complex Dam to Northern Boulevard. The existing 15" SAS pipe will be capped and abandoned in place. The city's portion consists of the segment extending from the Sportscomplex Dam to approximately 450 feet east of Broadmoor Boulevard (Phase 3), and the segment from Idalia Road to Northern Boulevard (Phase 4)

**3. PROJECT JUSTIFICATION**

Substantial wet weather events in the arroyo are problematic due to the location of the existing line as well as the capacity of the existing line to adequately convey storm sewer flows. The existing 15" pipe has an insufficient capacity for the current hydraulic flow conditions, therefore it is necessary to replace the existing pipe with a larger diameter SAS pipe.

**4. PROJECT HISTORY AND STATUS**

Phase 3 construction of the Montoya's Arroyo sanitary sewer line from the Sportsplex Dam to approximately 540 feet east of Broadmoor Boulevard was completed in February 2014 (\$1,017,578). A related developer managed project involves expansion of the Montoya's Arroyo sewer interceptor from the termination point of the Phase 3 project east of Broadmoor Blvd. to Idalia Road to serve development northwest of Northern Blvd. and Broadmoor Blvd. At the time the developer segment of the line is completed (estimated in 2014), the city would then continue with Phase 4, which would extend the line from Idalia Road to Northern Boulevard to connect to an existing sewer line.

**5. CAPITAL COSTS**

PHASE	SOURCE(S) OF COST INFO	PRIOR YEARS	FY15	FY16	FY17	FY18	FY19	FY20	TOTAL
Planning and Feasibility									\$ -
Pre Design and Env. Review	Actual	\$ 53,813							\$ 53,813
Land Acq./ROW									\$ -
Design and Specifications	Actual	\$ 210,817							\$ 210,817
Construction	Cost Consultant	\$ 1,017,578	\$ 430,413						\$ 1,447,991
Construction Management	Cost Consultant	\$ 38,459	\$ 22,382						\$ 60,841
Equipment/ Vehicle									\$ -
Other	Actual		\$ 374,843						\$ 374,843
<b>TOTAL</b>		<b>\$ 1,320,667</b>	<b>\$ 827,638</b>	<b>\$ -</b>	<b>\$ 2,148,305</b>				

**6. PROPOSED SOURCES OF FUNDING**

REVENUE SOURCE	EXPENDITURE FUND	PRIOR YEARS	FY15	FY16	FY17	FY18	FY19	FY20	TOTAL
Environmental GRT Revenues	260-EGRT Fund	\$ 925,182	\$ -						\$ 925,182
Impact Fees-Wastewater	555 Wastewater Impact Fees Fund	\$ 395,484	\$ 422,213						\$ 817,697
Utility Funds Operating Revenues	550 CIF Wastewater Fund	\$ -	\$ 405,425						\$ 405,425
									\$ -
<b>TOTAL</b>		<b>\$ 1,320,667</b>	<b>\$ 827,638</b>	<b>\$ -</b>	<b>\$ 2,148,304</b>				

**1. PROJECT INFORMATION**

Project Title	SCADA Improvements	Requesting Department	Dept. of Public Works/Utilities Administration	Department Rank Priority No.	6
Project Category	Utilities-Wastewater	CIP Year	Recurring Capital Need	Project No.:	WW1459; WW1537
Estimated Useful Life	Greater than 25 Years	District Location	Multiple Districts	Project Request Status	Revised Project Request

**2. PROJECT DESCRIPTION AND SCOPE**

Supervisory Control And Data Acquisition (SCADA) improvements will be constructed to improve automation of lift stations and wastewater treatment plants. Plans for Fiscal Year 2015 involve installation of cameras and a network video recorder (NVR) to provide video surveillance for water and wastewater facilities. Deployment will begin with the most critical facilities: Well 6, Well 12 & WWTP#6 (Cabezon). Wells 6 & 12 do not have video security installed. WWTP #6 has an antiquated system which is no longer adequate for the present upgraded facility. The new installations will include Ethernet capable recorders which will be accessible through the SCADA system.

**3. PROJECT JUSTIFICATION**

The improvements made to the SCADA system are an important step in controlling wastewater operations. Wastewater personnel are more readily able to observe, control, and respond to changes or emergencies in the Wastewater Collection and Treatment Systems. SCADA has become integral to the city's compliance with New Mexico Environmental Department Regulations and United States Environmental Protection Agency Regulations.

**4. PROJECT HISTORY AND STATUS**

SCADA improvements is a recurring capital expenditure. Recent SCADA expenditures have included computer hardware for Wastewater Treatment Plant (WWTP) #5.

**5. CAPITAL COSTS**

PHASE	SOURCE(S) OF COST INFO	PRIOR YEARS	FY15	FY16	FY17	FY18	FY19	FY20	TOTAL
Planning and Feasibility									\$ -
Pre Design and Env. Review									\$ -
Land Acq./ROW									\$ -
Design and Specifications									\$ -
Construction	Cost Consultant	\$ 4,506	\$ 108,700	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 613,206
Construction Management									\$ -
Equipment/Vehicle									\$ -
Other									\$ -
<b>TOTAL</b>		<b>\$ 4,506</b>	<b>\$ 108,700</b>	<b>\$ 100,000</b>	<b>\$ 613,206</b>				

**6. PROPOSED SOURCES OF FUNDING**

REVENUE SOURCE	EXPENDITURE FUND	PRIOR YEARS	FY15	FY16	FY17	FY18	FY19	FY20	TOTAL
Utility Funds									
Operating Revenues	501 Utilities	\$ 154							\$ 154
Utility Funds									
Operating Revenues	550 CIF Wastewater Fund	\$ 4,352	\$ 108,700	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 613,052
									\$ -
									\$ -
									\$ -
<b>TOTAL</b>		<b>\$ 4,506</b>	<b>\$ 108,700</b>	<b>\$ 100,000</b>	<b>\$ 613,206</b>				

### 1. PROJECT INFORMATION

Project Title	Aquifer Storage/Direct Injection	Requesting Department	Dept. of Public Works/Utilities Administration	Department Rank Priority No.	7
Project Category	Utilities-Wastewater	CIP Year	FY2007	Project No.:	WA0770; WA1495; WA1496
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 involves the construction of a subsurface injection system which will recharge aquifers that supply water to the city. This system includes the direct injection site, injection well, monitoring system, surface infrastructure for the direct injection system, two miles of pipeline from the Sports Complex to Loma Colorado and a partially buried reuse storage tank.

### 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 it 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.

### 4. PROJECT HISTORY AND STATUS

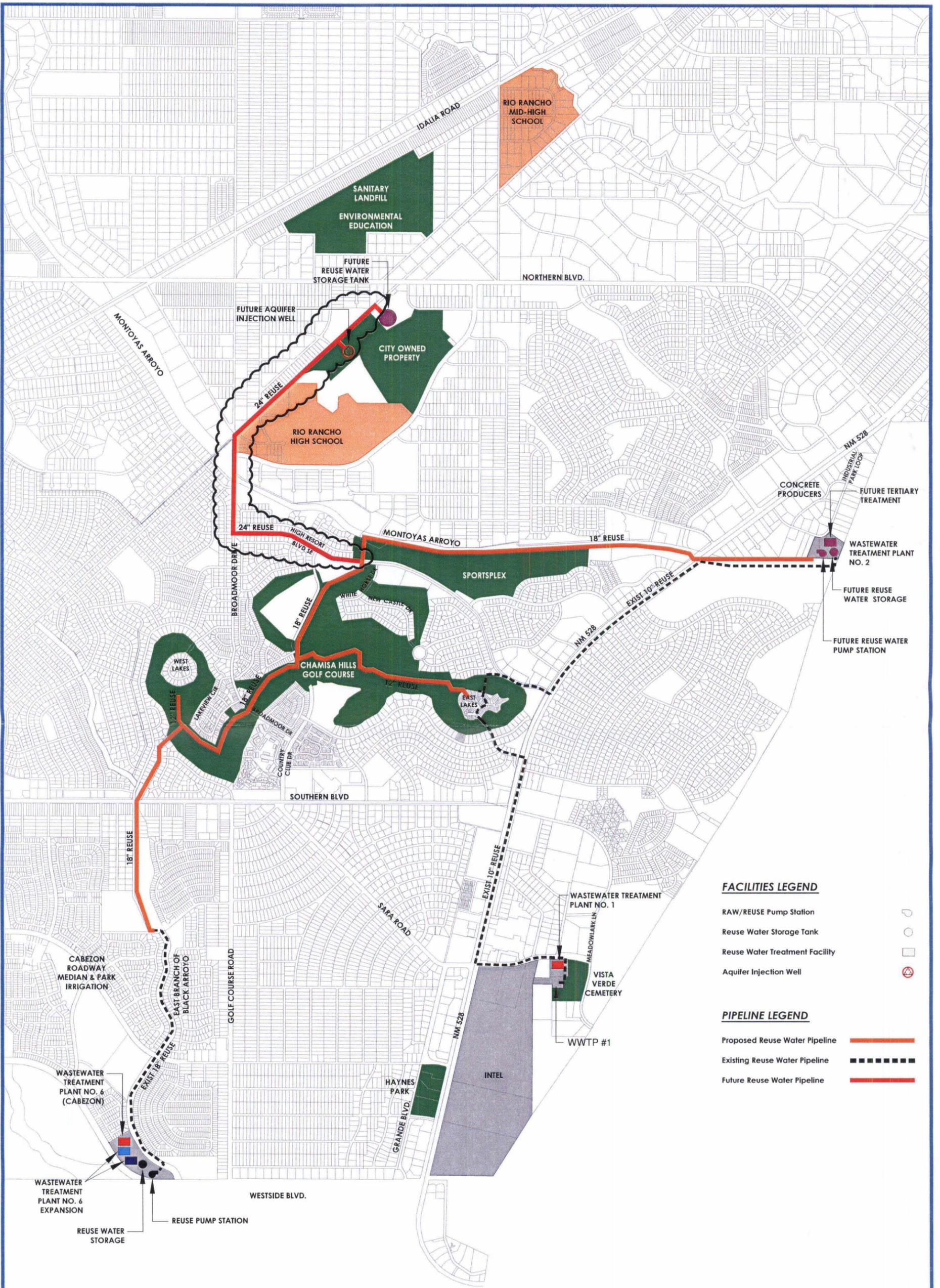
Construction of the Mariposa recharge system was completed in December 2008. The direct injection site, injection well, and monitoring system are also in place, all completed in 2010 and 2011. Additional potable water testing at the Loma Colorado injection well site was completed in November 2012 and permitting and design of the full scale treatment site will continue into Fiscal Year 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 phase of the advanced water treatment facility is estimated to cost an additional \$3 million, while the 3 million gallon reuse storage tank to be located at the Loma Colorado direct injection site will cost an additional \$3.75 million. The City plans to apply for water trust board funding administered through the State of New Mexico.

### 5. CAPITAL COSTS

PHASE	SOURCE(S) OF COST INFO	PRIOR YEARS	FY15	FY16	FY17	FY18	FY19	FY20	TOTAL
Land Acq./ROW									\$ -
Design and Specifications	Actual	\$ 2,272,663	\$ 370,969						\$ 2,643,632
Construction	Cost Consultant	\$ 6,260,680		\$ 6,750,000					\$ 13,010,680
Construction Management									\$ -
Equipment/Vehicle	Actual	\$ 693,146							\$ 693,146
Other	Actual	\$ 30,230							\$ 30,230
<b>TOTAL</b>		<b>\$ 9,256,719</b>	<b>\$ 370,969</b>	<b>\$ 6,750,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 16,377,688</b>

### 6. PROPOSED SOURCES OF FUNDING

REVENUE SOURCE	EXPENDITURE FUND	PRIOR YEARS	FY15	FY16	FY17	FY18	FY19	FY20	TOTAL
State Grants	552 Effluent Fund	\$ 5,315,486	\$ 20,969	\$ 6,750,000	\$ -				\$ 12,086,455
County Grants	552 Effluent Fund	\$ 1,500,000							\$ 1,500,000
Utility Funds Operating Revenues	552 Effluent Fund	\$ 93,299	\$ 350,000						\$ 443,299
Impact Fees-Wastewater	555 Wastewater Impact Fees Fund	\$ 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							\$ 460,000
<b>TOTAL</b>		<b>\$ 9,256,719</b>	<b>\$ 370,969</b>	<b>\$ 6,750,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 16,377,688</b>



# REUSE WATER DISTRIBUTION SYSTEM AND PHASING

DATE: 9-30-2010

PREPARED BY:  
**WILSON & COMPANY**  
 2600 The American Rd. SE, Ste. 100  
 Rio Rancho, New Mexico 87124  
 505-898-8021



**1. PROJECT INFORMATION**

Project Title	Replace Membrane Filters at WWTPs	Requesting Department	Dept. of Public Works/Utilities Administration	Department Rank Priority No.	8
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).

**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 lifetime are estimated to be 10 years. A capital reserve within the Utilities 5 Year Financial Plan will be established to ensure sufficient cash resources in FY2020 when all membranes will need to be replaced. Establishing a reserve will allow the Utility Enterprise to plan appropriately and proactively for this large capital expenditure.

**5. CAPITAL COSTS**

PHASE	SOURCE(S) OF COST INFO	PRIOR YEARS	FY15	FY16	FY17	FY18	FY19	FY20	TOTAL
Planning and Feasibility									\$ -
Pre Design and Env. Review									\$ -
Land Acq./ROW									\$ -
Design and Specifications									\$ -
Construction									\$ -
Construction Management									\$ -
Equipment/ Vehicle									\$ -
Other	Other							\$ 1,000,000	\$ 1,000,000
<b>TOTAL</b>		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,000,000	\$ 1,000,000

**6. PROPOSED SOURCES OF FUNDING**

REVENUE SOURCE	EXPENDITURE FUND	PRIOR YEARS	FY15	FY16	FY17	FY18	FY19	FY20	TOTAL
Utility Funds Operating Revenues	550 CIF Wastewater Fund	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,000,000	\$ 1,000,000
									\$ -
									\$ -
									\$ -
<b>TOTAL</b>		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,000,000	\$ 1,000,000

**1. PROJECT INFORMATION**

Project Title	Vehicles and Heavy Equipment	Requesting Department	Dept. of Public Works/Utilities Administration	Department Rank Priority No.	9
Project Category	Utilities-Wastewater	CIP Year	Recurring Capital Need	Fund/Project No.:	512-0000-505-7015
Estimated Useful Life	Greater than 25 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 2015 include an additional Vactor and new truck addition to the fleet for the Wastewater division.

**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	FY15	FY16	FY17	FY18	FY19	FY20	TOTAL
Planning and Feasibility									\$ -
Pre Design and Env. Review									\$ -
Land Acq./ROW									\$ -
Design and Specifications									\$ -
Construction									\$ -
Construction Management									\$ -
Equipment/Vehicle	Other	\$ 132,351	\$ 435,520	\$ 134,000	\$ -	\$ 25,000	\$ 26,000	\$ 45,000	\$ 797,871
Other									\$ -
<b>TOTAL</b>		<b>\$ 132,351</b>	<b>\$ 435,520</b>	<b>\$ 134,000</b>	<b>\$ -</b>	<b>\$ 25,000</b>	<b>\$ 26,000</b>	<b>\$ 45,000</b>	<b>\$ 797,871</b>

**6. PROPOSED SOURCES OF FUNDING**

REVENUE SOURCE	EXPENDITURE FUND	PRIOR YEARS	FY15	FY16	FY17	FY18	FY19	FY20	TOTAL
Utility Funds									
Operating Revenues	512 Ut Eq Repl Fund	\$ 132,351	\$ 435,520	\$ 134,000	\$ -	\$ 25,000	\$ 26,000	\$ 45,000	\$ 797,871
									\$ -
									\$ -
									\$ -
<b>TOTAL</b>		<b>\$ 132,351</b>	<b>\$ 435,520</b>	<b>\$ 134,000</b>	<b>\$ -</b>	<b>\$ 25,000</b>	<b>\$ 26,000</b>	<b>\$ 45,000</b>	<b>\$ 797,871</b>

Utilities Department  
FY15 ICIP Fleet Vehicle and Heavy Equipment Detail

Rank	Vehicle #	Vehicle Type	Assignment	Year	Mileage	2015	2016	2017	2018	2019	2020
1	CS137	Ford Ranger	Utility Customer Service	2005	91,900	26,000					
2	UT16	Chevy 1500	Water Production	1997	161,490	25,000					
3	UT30	John Deere 3100 Backhoe	Transmission and Distribution	1993	4931 Hrs	82,800					
4	UT30	Lowboy Trailer	Transmission and Distribution	1986	N/A	20,200					
5	UT114	Gardner-Denver Compressor	Transmission and Distribution	Unknown	N/A	17,550					
6	UT127	Ford F-550	Transmission and Distribution	2004	123,497	65,000					
7	UT141	Ford Panel Van	SCADA	2005	103,489	35,000					
8	New	Ford XLE 4x4	Water Production	N/A	N/A	26,000					
9	New	Ford XLE 4x4	Wastewater	N/A	N/A	26,000					
10	New	Vactor	Wastewater	N/A	N/A	409,520					
11	New	Street Sweeper	Transmission and Distribution	N/A	N/A	255,346					
12	UT124	Chevy 1500	Wastewater	2004	120,125		26,000				
13	UT156	Ford Ranger	Water Production	2007	106,096		26,000				
14	EN20	Ford F-250 Truck	Engineering	2007	122,794		30,000				
15	CS152	Ford Ranger	Utility Customer Service	2006	90,309		26,000				
16	UT118	Ford F-250 Truck	Wastewater	2002	101,774		30,000				
17	UT102	Kenworth Truck Tractor	Wastewater	1989	61,208		50,000				
18	UT124	Chevrolet 1500	Wastewater	2004	120,125		28,000				
19	35A	12CY Dump Truck	Transmission and Distribution	1997	39,117			120,000			
20	UT142	Ford F150	Transmission and Distribution	2005	170,690			26,000			
21	UT145	Chevy Colorado	Water Production	2006	173,522			26,000			
22	UT26	Ford F-250 Truck	Transmission and Distribution	1997	180,257			30,000			
23	UT27	Ford F-250 Truck	Transmission and Distribution	1997	206,859			30,000			
24	UT118	Ford F-150 Truck	Wastewater	2002	101,774				25,000		
25	UT16	Chevy 1500	Water Production	1997	161,490				25,000		
26	UT36	Chevy 1500	SCADA	2008	180,357				25,000		
27	UT145	Chevy Colorado	Water Production	2006	144,113				25,000		
28	UT124	Chevy 1500	Water Production	2004	120,125				25,000		
29	UT146	Ford F350	SCADA	2006	97,199				50,000		
30	UT145	Chevrolet Colorado	Water Production	2006	173,522				30,000		
31	UT147	Ford F-350	Water Production	2006	83,921					45,000	
32	UT163	Dodge Dakota	Transmission and Distribution	2006	95,327					25,000	
33	UT142	Ford F-150 Truck	Transmission and Distribution	2005	170,690					26,000	
34	UT157A	Chevy S10	Wastewater	1995	96,139					26,000	
35	UT35	John Deere Backhoe	Transmission and Distribution	1996	3,844					90,000	
36	UT135-1	Ford F-350	Wastewater	2005	89,633						45,000
37	CS23	Ford Ranger	Utility Customer Service	2008	68,900						30,000
38	CS29	Ford Ranger	Utility Customer Service	2008	66,545						30,000
39	UT134	GAP-VAX	Transmission and Distribution	2004	16,099						350,000
					<b>Total</b>	<b>988,416</b>	<b>216,000</b>	<b>232,000</b>	<b>205,000</b>	<b>212,000</b>	<b>455,000</b>
									<b>FY15-20</b>		<b>2,308,416</b>
					Water	552,896	82,000	232,000	180,000	186,000	410,000
					Wastewater	435,520	134,000	-	25,000	26,000	45,000
					<b>Total</b>	<b>988,416</b>	<b>216,000</b>	<b>232,000</b>	<b>205,000</b>	<b>212,000</b>	<b>455,000</b>

**Wastewater Treatment Projects**

*Aquifer Storage Demonstration (WA0770)*

Feasibility analysis, planning, and engineering activities began in January 2007 in support of advanced water treatment systems for aquifer recharge with high quality reclaimed water sources. In December 2008, city contractor's completed work on a 3 vadose zone well clusters and 3 monitoring wells around the reclaimed water infiltration gallery located at the Mariposa Wastewater Reclamation Facility (WRF).



Between October 2009 and March 2010, the city conducted pilot scale testing of advanced water treatment systems post treatment at WWTP#6 at Cabezon, and in December 2009 the city issued a notice to proceed with construction of a ground water monitoring system around a planned injection well located approximately ½ mile southeast of the intersection of Broadmoor Dr. and Northern Blvd. Installation and equipping of 5 monitoring wells drilled within 200' of the planned injection well site was completed in Spring 2010. Construction of the injection well was accomplished under a separate contract and was completed 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 will continue into

Fiscal Year 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.

Project expenditures to date total \$9.25 million while outstanding contracts for work in progress total an additional \$20,696. Sources of financing secured to date include: grant funding from Sandoval County (\$1.5 million); a special one-time state capital outlay appropriation (\$3 million); a combination loan/grant from the Water Trust Board (\$350,000); a combination loan/grant from the Water Trust Board (\$1.95 million); a grant from the Water Innovation Fund (\$496,458); utility operating fund transfers (\$93,300), utility bond proceeds (\$1.77 million), and wastewater impact fees (\$203,513). The remaining phases of the advanced water treatment facility is estimated to cost an additional \$6.75 million. Staff will apply for Water Trust Board funding in 2015.

*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 \$25 million for the expansion of and construction of reuse facilities at WWTP#6. The project consists of expansion from 0.6 million gallons per day to 1.2 million gallons per day, a new 4,000 gallon per minute (gpm) booster station, a new 3 Million Gallon Per Day (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 pump station and transmission line 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. Construction of various segments of the reuse pipeline from WWTP#6 to WWTP#2 have been completed including:

- WWTP#6 to the intersection of 27<sup>th</sup> Street and Southern Blvd.: Septemer 2010
- Phase I reuse line with the Montoyas Arroyo from Sports Complex Damn to WWTP#2: December 2011
- Club Rio Rancho resuse 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 will be completed in January 2015. The project also involves relocation of Lift Station No. 10 which is currently in design. In addition to the \$25 million NMED loan, the project is funded through wastewater impact fees (\$892,947), and utility operating fund revenue (\$817,500).

**Sewer Lines**

*Los Montoyas Arroyo Sewer line Phase III (WW1183)*



The project consists of installation of new 30” and 36” sanitary sewer pipe to replace the existing 15” pipe that will be capped and abandoned in place. Phase III construction from the Sports Complex Dam to approximately 500 feet east of Broadmoor Boulevard was completed in February 2013 at a cost of \$1,321,528. A related developer managed project involves expansion of the sewer interceptor from the termination point of Phase III to Idalia Road to serve developments northwest of Northern and Broadmoor Boulevards. At the time the developer segment of the line is completed (estimated in 2014), staff

will commence Phase IV which will extend from Idalia Road to Northern Boulevard to connect to an existing sewer line. Phase IV improvements will be funded by wastewater impact fees and utility operating sources.

**THIS PAGE LEFT INTENTIONALLY BLANK**

