

**Existing Inventory**

The Utilities Division of the Public Works Department currently serves an estimated 31,299 residential and non-residential water customers. Average daily production in thousands of gallons for calendar year 2011 was 12,156. Annual water produced for 2011 was 4.4 billion gallons.

The Utilities Division operates and maintains:

- 17 Production Wells
- 8 Booster Pump Stations
- 18 Storage Tanks (Storage Capacity: 34,500 thousands of gallons)
- 10 Arsenic Treatment Facilities, and;
- 563 Miles of Water line

**Current Capacity and Condition of Assets and Infrastructure**

*Production Wells*

The water system inventory includes 17 production wells of varying age, condition, and production capacities. Seventeen wells are in active production status and the City produced an estimated 13,617 acre feet of water in Calendar Year 2011. Any number of wells at different locations may be under repair at any given time. The significance of wells under repair depends on location and time of year the well breaks down. Well ages generally range from 1969 through 2004 with most wells drilled in the 1980's and 1990's. The conditions of the wells vary from site to site.

*Arsenic Treatment Facilities*

The U.S. Environmental Protection Agency (EPA) adopted a regulation changing the arsenic standard of 50 micrograms per liter to 10 micrograms per liter of arsenic allowed in drinking water in 2003. The EPA action prompted the City to invest in water treatment systems to remove arsenic from the groundwater to meet the safe drinking water act beginning in 2005. An estimated \$45.4 million has been spent to design, construct, and equip 10 arsenic treatment facilities at

various wells through the city. Full production at all sites began in fall of 2010.

*Waterlines*

The water distribution system includes approximately 563 miles of water line of various sizes. The water distribution system has water line sizes which typically range from 6 inches to 24 inches in diameter.

**Repair and Maintenance Programs/Activities**

Well repair and maintenance are perpetually included in the ICIP. Any number of wells may be in need of repair during a fiscal year. Costs may range from \$250,000 per year to \$500,000 per year depending on how many wells are in need of repair. Booster Stations are constructed to move water from one area of the city, where possible, to other areas of the city when wells are out of service. Although boosters are not a source of water, they are a very useful tool in maintaining redundancy throughout the water system.

**Indicators**

Indicator	Calendar Year				
	2007	2008	2009	2010	2011
Population (Census Projection)	72,219	76,762	79,723	82,574	87,521
Annual Water Production (acre-feet, 1 acre foot equals 325,851 gallons.)	12,827	13,095	12,545	13,563	13,617
Annual Water Production (1,000 of gallons)	4,179,369	4,267,022	4,087,804	4,419,521	4,437,117
Per Account Water Production (1,000 of gallons)	148.22	149.12	137.25	145.64	141.77
Single Family Residential Per Account Production (1,000 of gallons)	87.15	79.18	78.05	78.95	78.13
Non Revenue Water Ratio Percent	13.6	16.6	15.8	13.1	12.8
Water Main Breaks per Calendar Year	31	32	52	35	43
Water Service Leaks per Calendar Year	652	694	664	954	950

*Indicator Analysis*

Capacity to Peak Demand: The capacity to peak demand ratio has decreased due to additional population and can be dramatically affected if an active well is out of production. The City is at or near the point at which new wells and replacement wells must start being completed for a reliable water system for existing residents and for any of the anticipated additional growth of the city population or business. Maximum water production capacity with all wells operating is approximately 33 million gallons per day. The current peak day demand of the City in 2012 is 23 million gallons per day or 69 percent of maximum production. Currently, a number of wells are under repair for various reasons and the City has approximately 25 million gallons a day production capacity available. The 23 million gallon peak day demand is 88 percent of current production capacity. Any additional well failures could trigger a shortage of water and water rationing in various areas depending on the location of an additional well failure.

Per Account Water Production has decrease four and four tenths percent (4.4%) since 2007. Important water conservation initiatives include Automatic Meter Reading (AMR) water meters, water use evaluations requested by customers, and education outreach which includes the Children’s Water Festival. Water use evaluations requested by residents have increased from 74 in 2007 to 944 in 2012.

Water loss as measured by non revenue water has trended downward since 2007. In 2007, 13.6 percent of water production was non-revenue water. In 2011, 12.8 percent of water production was non-revenue water.

Water Main breaks have become more frequent since 2007. Thirty One main breaks occurred in 2007. Thirty Eight main breaks occurred in 2011. The overall trend has shown an increase in main breaks as water demand has increased over the years.

**Water Utility Infrastructure and Capital Improvement Plan (ICIP) 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 water 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.

*Water Model:*

Over the years, the City has developed a water system model to evaluate the existing water system. The City uses the model to ensure new and existing developments have adequate water supply and fire protection. A prudent water system operation requires redundancy in the event of an unforeseen event, such as a facility failure, to ensure uninterrupted service to the customers (both domestic and commercial service) plus fire protection. More recently, Bohannon Huston Incorporated (BHI) has been tasked with an Electric Optimization Study to evaluate if adequate water supply and pumping capacity are available in the existing water system such that wells can be operated during off-peak hours to reduce electric costs.

*Water Master Plan*

The Water Master Plan was originally developed in 1998 and updated in 2011 as the City Limits Ultimate Development Water System Master Plan by BHI. BHI used the existing water system model as the base for the study. Using projections based on current water use by land usage, the study indicated the City will need 56,000+ acre-feet of water to serve the current city limits at full build-out. By way of comparison the City currently has 26,420 acre-feet of pumping permits from the Office of the State Engineer.

*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 3 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-Water Utility

<b><u>Average Day Demand</u></b>	
Average Day Demand	340 gallons per day (gpd)
<b><u>Peak Day Demand</u></b>	
Peak Day to Ave. Day Ratio	2.20
Peak Day Demand	750 gpd
<b><u>Peak Hour Demand</u></b>	
Peak Hour to Ave. Day Ratio	3.30
Peak Hour Demand	1,120 gpd
<b><u>Storage Requirements</u></b>	800 gallons

Developers are assessed impact fees or provide physical improvements in lieu of impact fees valued at \$3,264 for a 5/8" meter; \$4,896 for a 3/4" meter; \$8,160 for a 1" meter; \$16,320 for a 1 1/2" meter; and \$26,112 for a 2" meter. There are a significant number of water impact fee credits outstanding and the City currently collects impact fee revenue on approximately fifteen percent (15%) of assessments generated by annual development activity.

Developer Improvements and Dedications since Fiscal Year 2010 include:

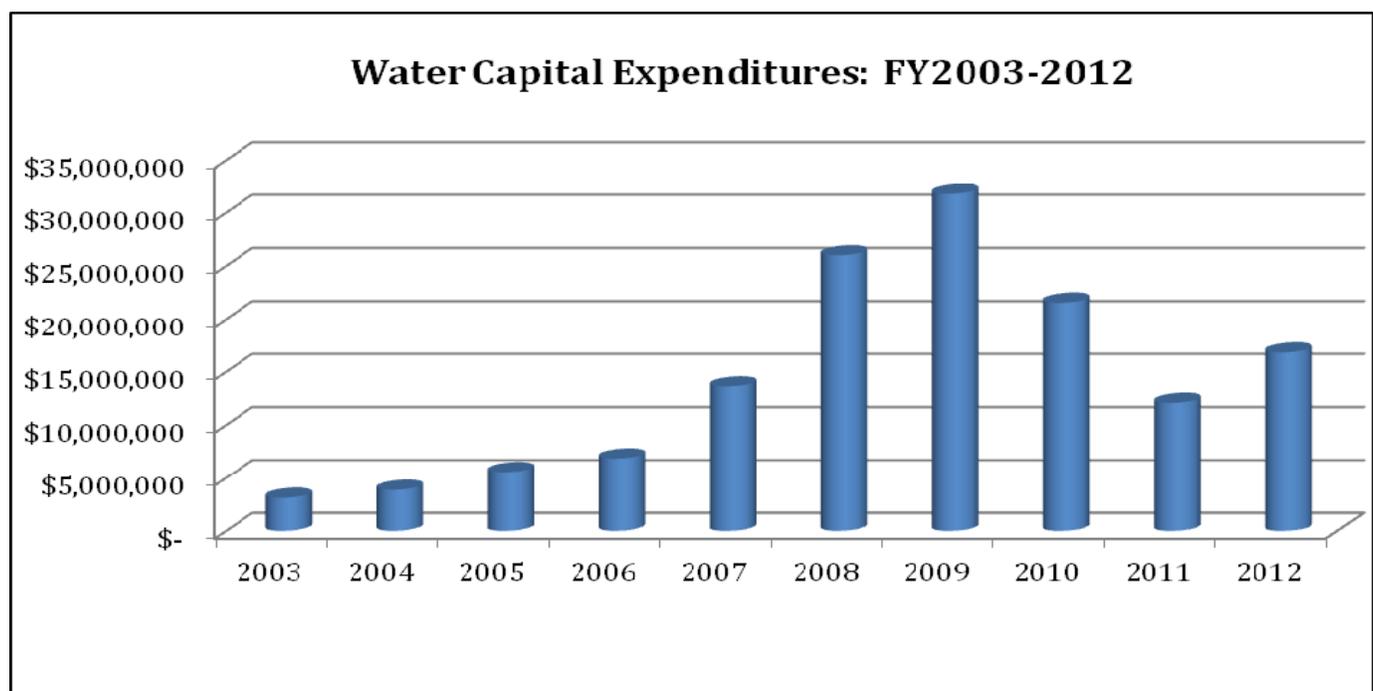
- Northern Meadows (Unit 19): 1.34 miles of water line
- High Range III: 1.29 miles of water line
- Paseo Vulcan Crossing: 0.12 miles of water line
- Diamond Ridge: 1.79 miles of water line
- Cabezon Tract 1A: 0.21 miles of water line
- Cabezon Commons Tract 11: 0.26 miles of water line

**Funding Sources**

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

- Utility Bond and Loan Proceeds
- Utility Net Revenues
- Federal and State Grants
- Water Impact Fees
- Environmental Gross Receipts Tax Revenue
- Water Rights Acquisition Fee

Capital spending for water utility infrastructure topped \$31.8 million in Fiscal Year 2009 however annual capital investment had declined to little more than half its 2009 peak by Fiscal Year 2011. Through Fiscal Year 2010, the capital program was supported heavily by several bond issues pledging the net revenues of the system. These bond issues were related to improvements, upgrades, and expansion of the system initially acquired in 1995 from the private sector. The decrease in spending is due in part to the City having not issued system bonds to support the capital program since 2009. Increase operating costs, due in part to 10 new arsenic treatment facilities coming online, have severely limited the system’s debt capacity and relief is not anticipated until debt associated with the initial system acquisition matures in 2022 or upon a rate increase to adequately fund system requirements. More recently, the City has focused on acquisition of water rights through a mix of cash and debt financing utilizing the \$5 Water Rights Acquisition Fee imposed on system users beginning in July 2010.



FY2013-FY2018: ICIP Summary

Rank Priority	Project No.	Project Title	Project To Date	2013 Budget Request	2013 Additional Funding Anticipated	2013 Total	2014	2015	2016	2017	2018	Funding Requested: FY13-FY18	Funding Source	Funding Source	Funding Source	Funding Source	Total Funding: FY13-FY18
													(A)	(B)	(C)	(D)	(A)+(B)+(C)+(D)
1	WA1244; WA1348	Water Rights Acquisitions	\$ 28,022,913	\$ 1,010,952	\$ 1,915,131	\$ 2,926,083	\$ 746,814	\$ 800,891	\$ 852,754	\$ 907,174	\$ 964,173	\$ 7,197,890	Water Rights Acquisition Fee	Utility Loan Proceeds			\$ 7,197,890
													\$ 5,282,758	\$ 1,915,131			\$ 7,197,890
2	WA1143; WA1243; WA1346	Repair / Rehab Wells	\$ 519,916	\$ 391,343	\$ 333,859	\$ 725,202	\$ 503,751	\$ 518,864	\$ 534,430	\$ 550,463	\$ 566,977	\$ 3,399,687	Environmenta I GRT Revenues	Utility Fund Operating Revenues	To Be Determined		\$ 3,399,687
													\$ 1,063,319	\$ 492,274	\$ 1,844,094		\$ 3,399,687
3	WA1041	City center Booster Pump Station and Transmission Main from 26th to 30 Street	\$ 1,171,734	\$ -	\$ 1,111,779	\$ 1,111,779	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,111,779	Impact Fees- Water	Utility Fund Operating Revenues	Environmental GRT Revenues		\$ 1,111,779
													\$ 511,139	\$ 418,317	\$ 182,323		\$ 1,111,779
4	N/A	Booster Station and Transmission Line from Tank 8 to Tank 13	\$ -	\$ -	\$ -	\$ -	\$ 936,000	\$ 5,476,487	\$ -	\$ -	\$ -	\$ 6,412,487	Impact Fees- Water	To Be Determined			\$ 6,412,487
													\$ 233,930	\$ 6,178,557			\$ 6,412,487
5	WA1211	Southern Boulevard Waterline Extensions, Finish Well 19 line near Puesta del Sol School	\$ -	\$ -	\$ 400,000	\$ 400,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 400,000	Utility Fund Operating Revenues	Impact Fees- Water	To Be Determined		\$ 400,000
													\$ 96,461	\$ 44,510	\$ 259,028		\$ 400,000
6	N/A	Redrill Well #4 or #5 and Equip for 1,500 gpm with Arsenic Treatment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 412,000	\$ 2,000,000	\$ 2,892,500	\$ 4,000,000	\$ 9,304,500	Impact Fees- Water	To Be Determined			\$ 9,304,500
													\$ 279,590	\$ 9,024,910			\$ 9,304,500
7	WA1270	New Pressure Reducing Valves	\$ -	\$ -	\$ 175,000	\$ 175,000	\$ 180,250	\$ 185,658	\$ 191,227	\$ 196,964	\$ 202,873	\$ 1,131,972	Utility Fund Operating Revenues	To Be Determined			\$ 1,131,972
													\$ 100,000	\$ 1,031,972			\$ 1,131,972
8	WA1065; WA1068; WA1245	Waterline Extension from Paseo Gateway to Enchanted Hills including MGD Paseo Gateway Water Tank.	\$ 575,801	\$ 200,000	\$ -	\$ 200,000	\$ 2,317,936	\$ 673,680	\$ -	\$ -	\$ -	\$ 3,191,616	Impact Fees- Water	To Be Determined			\$ 3,191,616
													\$ 511,414	\$ 2,680,202			\$ 3,191,616
9	WA0794	Equip Well Site S-27, including Arsenic Treatment, Water Quality Treatment, and new Transmission Main	\$ 3,961,136	\$ -	\$ -	\$ -	\$ -	\$ 7,089,745	\$ 8,443,148	\$ -	\$ -	\$ 15,532,893	Impact Fees- Water	To Be Determined			\$ 15,532,893
													\$ 572,378	\$14,960,515			\$ 15,532,893
10	WA1272; WA1347	SCADA Improvements	\$ 13,768	\$ 140,000	\$ 167,094	\$ 307,094	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 807,094	Utility Fund Operating Revenues	Impact Fees- Water	To Be Determined		\$ 807,094
													\$ 150,922	\$ 31,436	\$ 624,736		\$ 807,094

FY2013-FY2018: ICIP Summary

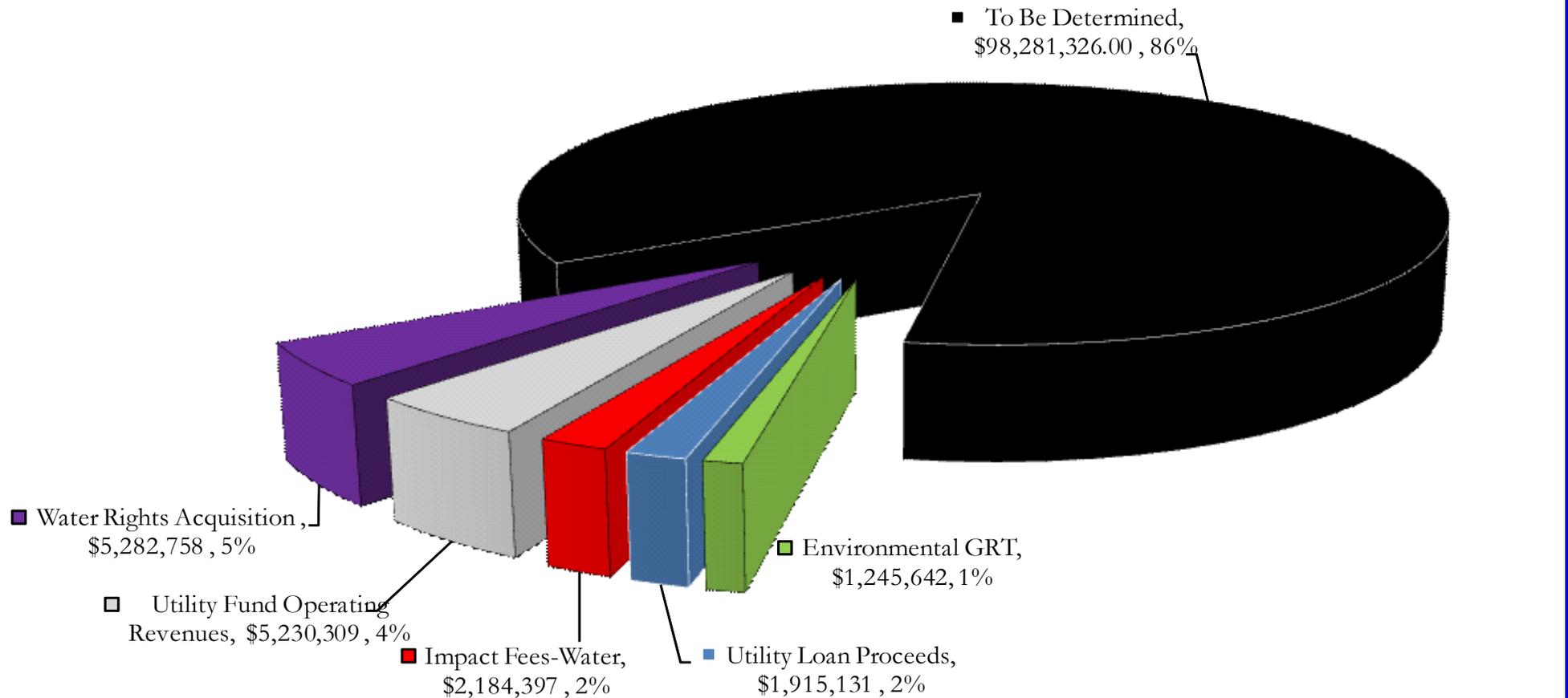
Rank Priority	Project No.	Project Title	Project To Date	2013 Budget Request	2013 Additional Funding Anticipated	2013 Total	2014	2015	2016	2017	2018	Funding Requested: FY13-FY18	Funding Source	Funding Source	Funding Source	Funding Source	Total Funding: FY13-FY18
													(A)	(B)	(C)	(D)	(A)+(B)+(C)+(D)
11	WA1357	Renovate/Paint Water Storage Tanks	\$ -	\$ 119,000	\$ 259,454	\$ 378,454	\$ 389,808	\$ 401,502	\$ 413,547	\$ 425,953	\$ 438,732	\$ 2,447,996	Utility Fund Operating Revenues	To Be Determined			\$ 2,447,996
													\$ 548,356	\$ 1,899,640			\$ 2,447,996
12	WA1248; WA1150; WA1358; WA1359	Automatic Meter Reading System, Meter Installations, and Meter Change-outs and Rehabs	\$ 630,393	\$ 1,008,000	\$ 19,689	\$ 1,027,689	\$ 1,080,000	\$ 1,155,000	\$ 1,236,000	\$ 1,322,000	\$ 1,415,000	\$ 7,235,689	Utility Fund Operating Revenues	To Be Determined			\$ 7,235,689
													\$ 1,777,689	\$ 5,458,000			\$ 7,235,689
13	501	Major Equipment: Rapid Mixers for Arsenic Removal	\$ 62,307	\$ 50,000	\$ 3,412	\$ 53,412	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 53,412	Utility Fund Operating Revenues				\$ 53,412
													\$ 53,412				\$ 53,412
14	501	Lighting in Back Area @ WWTP#1		\$ 28,760	\$ -	\$ 28,760	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 28,760	Utility Fund Operating Revenues				\$ 28,760
													\$ 28,760				\$ 28,760
15	N/A	Land Purchases for Future Utilities	\$ -	\$ -	\$ 392,533	\$ 392,533	\$ 404,309	\$ 416,438	\$ 428,931	\$ 441,799	\$ 455,053	\$ 2,539,063	To Be Determined				\$ 2,539,063
													\$ 2,539,063				\$ 2,539,063
16	512	Vehicles and Heavy Equipment	\$ -	\$ 750,350	\$ 18,438	\$ 768,788	\$ 100,000	\$ 350,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 1,518,788	Utility Fund Operating Revenues				\$ 1,518,788
													\$ 1,518,788				\$ 1,518,788
17	N/A	Equip Well #18 to Monitor Static Water Level	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 125,000	\$ -	\$ -	\$ 125,000	To Be Determined				\$ 125,000
													\$ 125,000				\$ 125,000
18	WA1268	Install/Replace Waterlines Concurrent with Roadway Projects	\$ 14,567	\$ -	\$ 1,118,762	\$ 1,118,762	\$ 1,152,325	\$ 1,186,895	\$ 1,222,501	\$ 1,259,176	\$ 1,296,952	\$ 7,236,611	Utility Fund Operating Revenues	To Be Determined			\$ 7,236,611
													\$ 45,330	\$ 7,191,282			\$ 7,236,611
19	WA0886	Well Site Security	\$ 799,644	\$ -	\$ 160,000	\$ 160,000	\$ 160,000	\$ 126,099	\$ 129,882	\$ 133,778	\$ 137,793	\$ 847,552	To Be Determined				\$ 847,552
													\$ 847,552				\$ 847,552
20	N/A	Re-Drill Well 9 and Equip for 2,400 ac-ft./yr and Transmission Line from Main St. to Northern Blvd.	\$ -	\$ -	\$ -	\$ -	\$ 412,000	\$ 6,580,389	\$ 10,639,580	\$ -	\$ -	\$ 17,631,969	To Be Determined				\$ 17,631,969
													\$ 17,631,969				\$ 17,631,969



2013-2018 Infrastructure and Capital Improvement Plan  
**Utilities-Water**

FY2013-FY2018: ICIP Summary

Rank Priority	Project No.	Project Title	Project To Date	2013 Budget Request	2013 Additional Funding Anticipated	2013 Total	2014	2015	2016	2017	2018	Funding Requested: FY13-FY18	Funding Source	Funding Source	Funding Source	Funding Source	Total Funding: FY13-FY18
													(A)	(B)	(C)	(D)	(A)+(B)+(C)+(D)
21	N/A	New 4MGD Tank 6C	\$ -	\$ -	\$ -	\$ -	\$ 361,867	\$ 1,867,712	\$ -	\$ -	\$ -	\$ 2,229,579	To Be Determined				
													\$ 2,229,579				\$ 2,229,579
22	N/A	New 4MGD Tank 17B	\$ -	\$ -	\$ -	\$ -	\$ 361,867	\$ 1,867,712	\$ -	\$ -	\$ -	\$ 2,229,579	To Be Determined				
													\$ 2,229,579				\$ 2,229,579
23	WA0910	New 3 MGD Tank @ Enchanted Hills West	\$ 97,214	\$ -	\$ -	\$ -	\$ -	\$ 25,882	\$ 207,911	\$ 2,970,152	\$ -	\$ 3,203,945	To Be Determined				
													\$ 3,203,945				\$ 3,203,945
24	N/A	Upgrade Enchanted Hills East Booster Station	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 122,094	\$ 1,571,961	\$ -	\$ -	\$ 1,694,055	To Be Determined				
													\$ 1,694,055				\$ 1,694,055
25	N/A	Drill Well S-25 and Equip for 3,000 gpm	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 412,000	\$ 5,285,960	\$ 10,329,688	\$ -	\$ 16,027,648	To Be Determined				
													\$ 16,027,648				\$ 16,027,648
26	N/A	Enclose #8 Well House	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 150,000	\$ 350,000	\$ -	\$ 500,000	To Be Determined				
													\$ 500,000				\$ 500,000
27	N/A	Redrill Well #1	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 100,000	\$ 100,000	To Be Determined				
													\$ 100,000				\$ 100,000
<b>TOTALS</b>			\$ 35,869,391	\$ 3,698,405	\$ 6,075,152	\$ 9,773,557	\$ 9,206,927	\$ 22,679,302	\$ 32,279,429	\$ 30,422,795	\$ 9,777,553	\$ 114,139,563					\$ 114,139,563



	FY13	FY14	FY15	FY16	FY17	FY18	TOTAL
Environmental GRT	\$ 415,252	\$ 116,974	\$ 129,758	\$ 166,646	\$ 208,506	\$ 208,506	\$ 1,245,642
Utility Loan Proceeds	\$ 1,915,131	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,915,131
Impact Fees-Water	\$ 787,085	\$ 545,344	\$ 279,590	\$ 283,966	\$ 288,412	\$ -	\$ 2,184,397
Utility Fund Operating Revenues	\$ 3,300,953	\$ 450,000	\$ 700,000	\$ 279,356	\$ 250,000	\$ 250,000	\$ 5,230,309
Water Rights Acquisition	\$ 1,010,952	\$ 746,814	\$ 800,891	\$ 852,754	\$ 907,174	\$ 964,173	\$ 5,282,758
To Be Determined	\$ 2,344,183	\$ 7,347,795	\$ 20,769,064	\$ 30,696,707	\$ 28,768,703	\$ 8,354,874	\$ 98,281,326
<b>TOTAL</b>	<b>\$ 9,773,557</b>	<b>\$ 9,206,927</b>	<b>\$ 22,679,302</b>	<b>\$ 32,279,429</b>	<b>\$ 30,422,795</b>	<b>\$ 9,777,552</b>	<b>\$ 114,139,563</b>

## 1. PROJECT INFORMATION

Project Title	Water Rights Acquisitions	Requesting Department	Dept. of Public Works/Utilities	Department Rank Priority	1
Project Category	Utilities-Water	CIP Year	Recurring Capital Need	Project No.:	WA1244; WA1348
Estimated Useful Life	Greater than 25 Years	District Location	Multiple Districts	Project Request Status	Revised Project Request

## 2. PROJECT DESCRIPTION AND SCOPE

Water Rights Acquisition to satisfy Office of the State Engineer (OSE) 1979 and 2003 permit requirements and to accomodate future growth.

## 3. PROJECT JUSTIFICATION

The City's acquisition liability is approximatley 16,000 acre feet within the next 50 years under two (2) OSE permits authorizing diversion (pumping) of up to 24,000 acre feet year. The 2003 OSE permit requires acquisition of 728 acre feet of water rights every five (5) year period through 2063, beinning at a time when the City reaches 12,000 acre feet of annual consumption (reached in December 2007). The 1979 permit requires an estimated water rights acquisition of 56.7 acre feet per year. This requirement will vary according to water model results of how the City's water consumption effects the Rio Grande River. To date, the City has acquired and applied approximately 3,800 acre feet of water rights for the 1979 permit.

## 4. PROJECT HISTORY AND STATUS

Acquisition of water rights since Fiscal Year 2009 has been funded through a combination of Utility Operating Transfers (\$2.8M), Uility Bond Proceeds (\$10.6M), Water Rights Acquisition Fees (\$1.7M), and two (2) New Mexico Finance Authority Loans (\$13M). A total of \$28.1M has been spent to acquire 1,928 acre feet since Fiscal Year 2009 (July 1, 2008). This is the equivalent of the planned annual water usage of 7,713 single family households, assuming desert southwest water conservation norms. The project is a revised project request. As revised, the project retains it's priority rank within the Water facility category at no. 1, and \$7.2M in expenditures are planned through Fiscal Year 2018.

## 5. CAPITAL COSTS

PHASE	SOURCE(S) OF COST INFO	PRIOR YEARS	FY13	FY14	FY15	FY16	FY17	FY18	TOTAL
Planning and Feasibility									\$ -
Pre Design and Env. Review									\$ -
Land Acq./ROW									\$ -
Design and Specifications									\$ -
Construction									\$ -
Construction Management									\$ -
Water Rights Acquisition	Other	\$ 28,022,913	\$ 2,926,083	\$ 746,814	\$ 800,891	\$ 852,754	\$ 907,174	\$ 964,173	\$ 35,220,803
<b>TOTAL</b>		<b>\$ 28,022,913</b>	<b>\$ 2,926,083</b>	<b>\$ 746,814</b>	<b>\$ 800,891</b>	<b>\$ 852,754</b>	<b>\$ 907,174</b>	<b>\$ 964,173</b>	<b>\$ 35,220,803</b>

## 6. PROPOSED SOURCES OF FUNDING

REVENUE SOURCE	EXPENDITUR E FUND	PRIOR YEARS	FY13	FY14	FY14	FY15	FY17	FY18	TOTAL
Utility Funds Operating Revenues	542-Water Rights Acquisition	\$ 2,794,114							\$ 2,794,114
Utility Bond Proceeds	572 (07) and 573 (08) Utility Bond	\$ 10,602,133							\$ 10,602,133
Water Rights Acquisition Fee	542-Water Rights Acquisition	\$ 1,660,191	\$ 1,010,952	\$ 746,814	\$ 800,891	\$ 852,754	\$ 907,174	\$ 964,173	\$ 6,942,949
Enterprise Fund Loan Proceeds	542-Water Rights Acquisition	\$ 12,966,476	\$ 1,915,131	\$ -					\$ 14,881,607
<b>TOTAL</b>		<b>\$ 28,022,913</b>	<b>\$ 2,926,083</b>	<b>\$ 746,814</b>	<b>\$ 800,891</b>	<b>\$ 852,754</b>	<b>\$ 907,174</b>	<b>\$ 964,173</b>	<b>\$ 35,220,803</b>

### 1. PROJECT INFORMATION

Project Title	Repair / Rehab Wells	Requesting Department	Dept. of Public Works/Utilities	Department Rank Priority	2
Project Category	Utilities-Water	CIP Year	Recurring Capital Need	Project No.:	WA1143; WA1243; WA1346
Estimated Useful Life	10 Years	District Location	Multiple Districts	Project Request Status	Revised Project Request

### 2. PROJECT DESCRIPTION AND SCOPE

Repair / Rehab Wells in all Council Districts as needed. All aging wells > 10 years are eligible.

### 3. PROJECT JUSTIFICATION

Annual repair/rehabilitation of wells and / or pump replacement in order to maintain delivery of water to the citizens at current minimum standard level of service. Cost increase at 3% per year.

### 4. PROJECT HISTORY AND STATUS

The project is ongoing to replace and repair existing wells and/or pumps as they fail or wear out. Rehabilitation work to aging wells in Fiscal Year 2011 and 2012 has included Wells 3, 6, 9, 10A, 12, 14, 16, and 21. The project is a revised project request. As revised, the project retains its priority ranking within the Water facility category at No. 2, and \$3,399,687 in expenditures in planned through Fiscal Year 2018.

### 5. CAPITAL COSTS

PHASE	SOURCE(S) OF COST INFO	PRIOR YEARS	FY13	FY14	FY15	FY16	FY17	FY18	TOTAL
Planning and Feasibility									\$ -
Pre Design and Env. Review									\$ -
Land Acq./ROW									\$ -
Design and Specifications									\$ -
Construction									\$ -
Construction Management									\$ -
Equipment/ Vehicle									\$ -
Equipment Repair	City contract or price agreement	\$ 519,916	\$ 725,202	\$ 503,751	\$ 518,864	\$ 534,430	\$ 550,463	\$ 566,977	\$ 3,919,603
<b>TOTAL</b>		<b>\$ 519,916</b>	<b>\$ 725,202</b>	<b>\$ 503,751</b>	<b>\$ 518,864</b>	<b>\$ 534,430</b>	<b>\$ 550,463</b>	<b>\$ 566,977</b>	<b>\$ 3,919,603</b>

### 6. PROPOSED SOURCES OF FUNDING

REVENUE SOURCE	EXPENDITURE FUND	PRIOR YEARS	FY13	FY14	FY15	FY16	FY17	FY18	TOTAL
Environmental GRT Revenues	260-EGRT Fund	\$ 216,354	\$ 232,929	\$ 116,974	\$ 129,758	\$ 166,646	\$ 208,506	\$ 208,506	\$ 1,279,673
Utility Funds Operating Revenues	540-CIF Water Operations	\$ 303,561	\$ 492,274						\$ 795,835
To Be Determined		\$ -	\$ (0)	\$ 386,777	\$ 389,106	\$ 367,784	\$ 341,957	\$ 358,471	\$ 1,844,094
									\$ -
<b>TOTAL</b>		<b>\$ 519,916</b>	<b>\$ 725,202</b>	<b>\$ 503,751</b>	<b>\$ 518,864</b>	<b>\$ 534,430</b>	<b>\$ 550,463</b>	<b>\$ 566,977</b>	<b>\$ 3,919,603</b>

## 1. PROJECT INFORMATION

Project Title	City Center Booster Pump Station and Transmission from 26th to 30th Street.	Requesting Department	Dept. of Public Works/Utilities	Department Rank Priority	3
Project Category	Utilities-Water	CIP Year	FY2010	Project No.:	WA1041
Estimated Useful Life	Greater than 25 Years	District Location	Council District 3	Project Request Status	Revised Project Request

## 2. PROJECT DESCRIPTION AND SCOPE

City Center Booster Pump Station will pump 3000 gallons per minute (gpm) through 2,400 linear feet of 20" transmission line from 26th to 30th Street.

## 3. PROJECT JUSTIFICATION

Development in the City is partially dependent on water availability and the project will allow the City the flexibility to allocate water resources in an efficient method to support planned development in the Central Business District, including the UNM West Campus, UNM/Sandoval County Hospital and the CNM Campus.

## 4. PROJECT HISTORY AND STATUS

The project is a revised project request. As revised, the project has retained its priority rank within the Water facility category at No. 3. Design and land acquisition is complete and construction is in progress anticipated for completion in November 2012.



## 5. CAPITAL COSTS

PHASE	SOURCE(S) OF COST INFO	PRIOR YEARS	FY13	FY14	FY15	FY16	FY17	FY18	TOTAL
Land Acq./ROW	City contract or price	\$ 54,528	\$ -						\$ 54,528
Design and Specifications	City contract or price	\$ 253,076	\$ 22,530						\$ 275,606
Construction	City contract or price	\$ 665,883	\$ 911,371						\$ 1,577,254
Construction Management									\$ -
Equipment/ Vehicle	City contract or price	\$ 193,162							\$ 193,162
Other	Quotes	\$ 5,084	\$ 177,878						\$ 182,962
<b>TOTAL</b>		<b>\$ 1,171,734</b>	<b>\$ 1,111,779</b>	<b>\$ -</b>	<b>\$ 2,283,513</b>				

## 6. PROPOSED SOURCES OF FUNDING

REVENUE SOURCE	EXPENDITURE FUND	PRIOR YEARS	FY13	FY14	FY15	FY16	FY17	FY18	TOTAL
Impact Fees-Water	545 Water Impact Fees Fund	\$ 488,175	\$ 511,139						\$ 999,315
State Capital Outlay Appropriation	540-CIF Water Operations	\$ 403,213							\$ 403,213
Utility Funds Operating Revenues	540-CIF Water Operations	\$ 37,798	\$ 418,317						\$ 456,115
Utility Bond Proceeds		\$ 242,547	\$ (0)						\$ 242,547
Environmental GRT Revenues	260-EGRT Fund	\$ -	\$ 182,323						\$ 182,323
<b>TOTAL</b>		<b>\$ 1,171,734</b>	<b>\$ 1,111,779</b>	<b>\$ -</b>	<b>\$ 2,283,513</b>				

## 1. PROJECT INFORMATION

Project Title	Booster Station and Transmission Line from Tank 8 to Tank 13	Requesting Department	Dept. of Public Works/Utilities	Department Rank Priority	4
Project Category	Utilities-Water	CIP Year	FY2013	Project No.:	N/A
Estimated Useful Life	Greater than 25 Years	District Location	Council District 2	Project Request Status	Revised Project Request

## 2. PROJECT DESCRIPTION AND SCOPE

This project will involve installing a new 4 Million Gallon Per Day (MGD) booster station and 18" transmission line between Tank 8 to Tank 13. This includes all necessary appurtenances, including but not limited to air relief valves and pits.

## 3. PROJECT JUSTIFICATION

The booster station at Tank 8 and the transmission line will provide a source of water to Tank 13 and the communities in upper Zone 8 should Well #9 and Well #13 fail. This provides redundancy to the communities in upper Zone 8.

## 4. PROJECT HISTORY AND STATUS

The need for a booster station at Tank 8 and transmission line to Tank 13 has been known for some time. This is a revised project request. As such, it has risen in priority rank within the Water facility category from No. 15 to No. 4 due to its upgraded importance with the increasing size of communities in the area that would benefit from this project.



## 5. CAPITAL COSTS

PHASE	SOURCE(S) OF COST INFO	PRIOR YEARS	FY13	FY14	FY15	FY16	FY17	FY18	TOTAL
Design and Specifications	Cost			\$ 936,000	\$ 12,500				\$ 948,500
	Consultant								
Construction	Cost				\$ 5,406,487				\$ 5,406,487
	Consultant								
Construction Management	Cost				\$ 55,000				\$ 55,000
	Consultant								
Other	Other				\$ 2,500				\$ 2,500
<b>TOTAL</b>		\$ -	\$ -	\$ 936,000	\$ 5,476,487	\$ -	\$ -	\$ -	\$ 6,412,487

## 6. PROPOSED SOURCES OF FUNDING

REVENUE SOURCE	EXPENDITURE FUND	PRIOR YEARS	FY13	FY14	FY15	FY16	FY17	FY18	TOTAL
Impact Fees-Water	545 Water Impact Fees Fund		\$ -	\$ 233,930	\$ -	\$ -	\$ -	\$ -	\$ 233,930
To Be Determined			\$ -	\$ 702,070	\$ 5,476,487	\$ -	\$ -	\$ -	\$ 6,178,557
									\$ -
<b>TOTAL</b>		\$ -	\$ -	\$ 936,000	\$ 5,476,487	\$ -	\$ -	\$ -	\$ 6,412,487

### 1. PROJECT INFORMATION

Project Title	Southern Boulevard Waterline Extensions: Southern Blvd. from Pecos Rd. to Rainbow Blvd. then to Rainbow Park Swimming Pool and Cedar Hills Subdivision	Requesting Department	Dept. of Public Works/Utilities Administration	Department Rank Priority No.	5
Project Category	Utilities-Water	CIP Year	FY2012	Project No.:	WA1211
Estimated Useful Life	Greater than 25 Years	District Location	Council District 1	Project Request Status	Revised Project Request

### 2. PROJECT DESCRIPTION AND SCOPE

Southern Boulevard Waterline Extension to Supply Cedar Hills Subdivision: Project will include construction of a new 14" waterline connecting at Southern Blvd. and Rainbow Blvd. going west to 4th Ave., and continuing on 4th Ave. going north and connecting to the existing waterline on Apache Loop. Total length of the waterline is approximately 4,224 linear feet. Southern Boulevard Waterline Extension and New Pressure Reducing Valve (PRV): Project includes construction of a new 18" waterline connecting at Pecos and Rainbow Blvd. going south to Southern Blvd., continuing on Southern Blvd. going east and connecting to the existing waterline in front of the Rainbow Park Swimming Pool. Total length of the waterline is approximately 3,696 linear feet. The PRV would be located approximately at the ending path of the waterline described above.

### 3. PROJECT JUSTIFICATION

The project will supply additional water to the fast growing Cedar Hills subdivision. Currently, the subdivision does not have redundancy and a water main break would result in water service outages in the area. The project will provide a second feed to Walmart and the surrounding area ensuring redundancy for the area.

### 4. PROJECT HISTORY AND STATUS

The project is a revised project request originally planned for design and construction in Fiscal Year 2010, however funding was unavailable. As revised, the project has risen in its priority ranking within the Water facility category from No. 6 to No. 5 and \$400,000 in expenditures are planned in Fiscal Year 2013 contingent upon identification of additional funding.

### 5. CAPITAL COSTS

PHASE	SOURCE(S) OF COST INFO	PRIOR YEARS	FY13	FY14	FY15	FY16	FY17	FY18	TOTAL
Planning and Feasibility									\$ -
Pre Design and Env. Review									\$ -
Land Acq./ROW									\$ -
Design and Specifications	Cost Consultant		\$ 40,000						\$ 40,000
Construction	Cost Consultant		\$ 360,000						\$ 360,000
Construction Management	Cost Consultant								\$ -
Equipment/Vehicle									\$ -
Other									\$ -
<b>TOTAL</b>		<b>\$ -</b>	<b>\$ 400,000</b>	<b>\$ -</b>	<b>\$ 400,000</b>				

### 6. PROPOSED SOURCES OF FUNDING

REVENUE SOURCE	EXPENDITURE FUND	PRIOR YEARS	FY13	FY14	FY15	FY16	FY17	FY18	TOTAL
Utility Funds Operating Revenues	540-CIF Water Operations		\$ 96,461						\$ 96,461
Impact Fees-Water	545 Water Impact Fees		\$ 44,510						\$ 44,510
To Be Determined			\$ 259,028						\$ 259,028
									\$ -
									\$ -
<b>TOTAL</b>		<b>\$ -</b>	<b>\$ 400,000</b>	<b>\$ -</b>	<b>\$ 400,000</b>				

### 1. PROJECT INFORMATION

Project Title	Redrill Well #4 or #5 and Equip for 1,500 gpm with Arsenic Treatment	Requesting Department	Dept. of Public Works/Utilities	Department Rank Priority	6
Project Category	Utilities-Water	CIP Year	FY2014	Project No.:	N/A
Estimated Useful Life	Greater than 25 Years	District Location	Council District 1	Project Request Status	Revised Project Request

### 2. PROJECT DESCRIPTION AND SCOPE

Redrill Well 4 or Well 5 to an approximate depth of 1,000 feet and equip the well site to produce 1,500 gallons per minute (gpm) with Arsenic Treatment.

### 3. PROJECT JUSTIFICATION

Well 4 or 5 redrill is necessary to replace production capacity lost from the failure of wells 4 and 5. Well replacement is necessary to ensure adequate water resources to existing and future residents.

### 4. PROJECT HISTORY AND STATUS

Well 4 was drilled in 1969 and operated with good quality water until approximately 2005 when the casing developed a hole and sand pumping caused the city to discontinue use of the well. Well 5 was drilled in 1969 and was used until the 1990's when well failure occurred.

### 5. CAPITAL COSTS

PHASE	SOURCE(S) OF COST INFO	PRIOR YEARS	FY13	FY14	FY15	FY16	FY17	FY18	TOTAL
Planning and Feasibility									\$ -
Pre Design and Env. Review									\$ -
Land Acq./ROW									\$ -
Design and Specifications	Cost Consultant				\$ 412,000				\$ 412,000
Construction	Cost Consultant					\$ 2,000,000	\$ 2,892,500	\$ 4,000,000	\$ 8,892,500
Construction Management	Cost Consultant								\$ -
Equipment/Vehicle									\$ -
Other									\$ -
<b>TOTAL</b>		\$ -	\$ -	\$ -	\$ 412,000	\$ 2,000,000	\$ 2,892,500	\$ 4,000,000	\$ 9,304,500

### 6. PROPOSED SOURCES OF FUNDING

REVENUE SOURCE	EXPENDITURE FUND	PRIOR YEARS	FY13	FY14	FY15	FY16	FY17	FY18	TOTAL
Impact Fees-Water	545 Water Impact Fees Fund	\$ -	\$ -	\$ -	\$ 279,590	\$ -	\$ -	\$ -	\$ 279,590
To Be Determined		\$ -	\$ -	\$ -	\$ 132,410	\$ 2,000,000	\$ 2,892,500	\$ 4,000,000	\$ 9,024,910
									\$ -
									\$ -
									\$ -
<b>TOTAL</b>		\$ -	\$ -	\$ -	\$ 412,000	\$ 2,000,000	\$ 2,892,500	\$ 4,000,000	\$ 9,304,500

### 1. PROJECT INFORMATION

Project Title	New Pressure Reducing Valves	Requesting Department	Dept. of Public Works/Utilities	Department Rank Priority	7
Project Category	Utilities-Water	CIP Year	Recurring Capital Need	Project No.:	WA1270
Estimated Useful Life	Greater than 25 Years	District Location	Multiple Districts	Project Request Status	Revised Project Request

### 2. PROJECT DESCRIPTION AND SCOPE

The project involves installation of new pressure reducing valves (PRVs) to aid in the function of the City's water distribution system at a rate of one per year. In fiscal year 2012, a new 14" PRV will be installed on Southern Boulevard.

### 3. PROJECT JUSTIFICATION

The project is ongoing to install new pressure reducing valves, allowing the City's water operation and maintenance staff to transfer water between pressure zones to benefit multiple districts.

### 4. PROJECT HISTORY AND STATUS

The project is a revised project request. As revised, the project retains its priority ranking within the Water facility category of No. 7, and \$1.1M in expenditures is planned through Fiscal Year 2017. Recent PRV installations have included the Eastlake Drive and NM HWY 528 PRV completed in Fiscal Year 2009 (TD0727: \$126,985.49).

### 5. CAPITAL COSTS

PHASE	SOURCE(S) OF COST INFO	PRIOR YEARS	FY13	FY14	FY15	FY16	FY17	FY18	TOTAL
Planning and Feasibility									\$ -
Pre Design and Env. Review									\$ -
Land Acq./ROW									\$ -
Design and Specifications									\$ -
Construction									\$ -
Construction Management									\$ -
Equipment/ Vehicle									\$ -
Other	City contract or price agreement		\$ 175,000	\$ 180,250	\$ 185,658	\$ 191,227	\$ 196,964	\$ 202,873	\$ 1,131,972
<b>TOTAL</b>		\$ -	\$ 175,000	\$ 180,250	\$ 185,658	\$ 191,227	\$ 196,964	\$ 202,873	\$ 1,131,972

### 6. PROPOSED SOURCES OF FUNDING

REVENUE SOURCE	EXPENDITURE FUND	PRIOR YEARS	FY13	FY14	FY15	FY16	FY17	FY18	TOTAL
Utility Funds Operating Revenues	540-CIF Water Operations		\$ 100,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 100,000
To Be Determined			\$ 75,000	\$ 180,250	\$ 185,658	\$ 191,227	\$ 196,964	\$ 202,873	\$ 1,031,972
									\$ -
									\$ -
									\$ -
<b>TOTAL</b>		\$ -	\$ 175,000	\$ 180,250	\$ 185,658	\$ 191,227	\$ 196,964	\$ 202,873	\$ 1,131,972

### 1. PROJECT INFORMATION

Project Title	Waterline Extension from Paseo Gateway to Enchanted Hills including 4MGD Paseo Gateway Water Tank.	Requesting Department	Dept. of Public Works/Utilities Administration	Department Rank Priority No.	8
Project Category	Utilities-Water	CIP Year	FY2010	Project No.:	WA 1065; WA 1068; WA 1245
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 includes three phases: Phase 2A: Zone 3 to Zone 2 Waterline and Pressure Reducing Valve; Phase 2B: 4 Million Gallon per Day (MGD) Reservoir; and Phase 3: Transmission line from 4 MGD Reservoir and Transmission Line and Altitude Valve Zone 2 to Reservoir 12.

### 3. PROJECT JUSTIFICATION

The project will provide additional water supply and storage to the Paseo Gateway and Enchanted Hills area. Enchanted Hills is currently served by one well and one transmission line. The area could possibly be without water if the well was out of service and the transmission main was under repair. This project will provide Enchanted Hills with a second source of water in order to prevent the aforementioned scenario.

### 4. PROJECT HISTORY AND STATUS

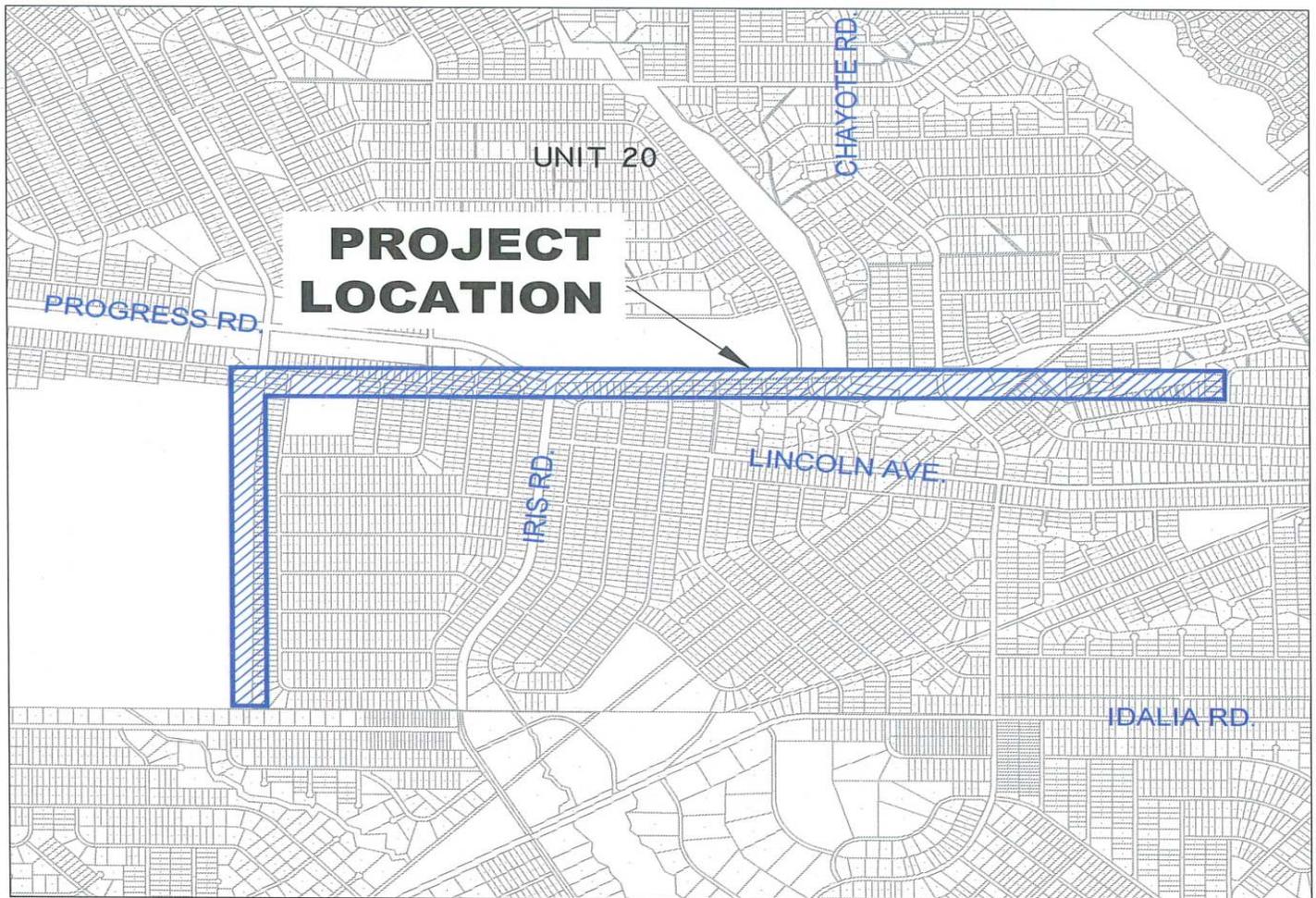
The project is a revised project request originally planned for design and construction in Fiscal Year 2010, however funding for construction remains unavailable. As revised, the project has fallen in priority rank within the Water facility category from No. 4 to No. 8. Construction of Phase 2A was completed in May 2010 and land acquisition and design activities for Phase 2B (Reservoir Tank) was completed in early 2012. Design of Phase 3 is planned in Fiscal Year 2013 and construction of all remaining phases of the project are planned in Fiscal Year 2014 and 2015 contingent upon identification of \$2.7M in funding.

### 5. CAPITAL COSTS

PHASE	SOURCE(S) OF COST INFO	PRIOR YEARS	FY13	FY14	FY15	FY16	FY17	FY18	TOTAL
Planning and Feasibility									\$ -
Pre Design and Env. Review									\$ -
Land Acq./ROW	Recent City project	\$ 200,906							\$ 200,906
Design and Specifications	Recent City project	\$ 98,640	\$ 200,000						\$ 298,640
Construction	City contract or price agreement	\$ 275,923		\$ 2,317,936	\$ 673,680				\$ 3,267,539
Construction Management									\$ -
Equipment/ Vehicle									\$ -
Other	Recent City project	\$ 332							\$ 332
<b>TOTAL</b>		<b>\$ 575,801</b>	<b>\$ 200,000</b>	<b>\$ 2,317,936</b>	<b>\$ 673,680</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 3,767,417</b>

### 6. PROPOSED SOURCES OF FUNDING

REVENUE SOURCE	EXPENDITURE FUND	PRIOR YEARS	FY13	FY14	FY15	FY16	FY17	FY18	TOTAL
Utility Bond Proceeds	572-2007 UT Bond	\$ 407,287							\$ 407,287
Impact Fees-Water	545 Water Impact Fees Fund	\$ 167,448	\$ 200,000	\$ 311,414					\$ 678,862
Utility Funds Operating Revenues	540-CIF Water Operations	\$ 1,066							\$ 1,066
To Be Determined				\$ 2,006,522	\$ 673,680				\$ 2,680,202
<b>TOTAL</b>		<b>\$ 575,801</b>	<b>\$ 200,000</b>	<b>\$ 2,317,936</b>	<b>\$ 673,680</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 3,767,417</b>



### 1. PROJECT INFORMATION

Project Title	Equip Well 23 (RG S-27), including arsenic/TDS treatment, and new transmission line and 4 MG Tank	Requesting Department	Dept. of Public Works/Utilities	Department Rank Priority	9
Project Category	Utilities-Water	CIP Year	FY2007	Project No.:	WA0794
Estimated Useful Life	Greater than 25 Years	District Location	Council District 6	Project Request Status	Revised Project Request

### 2. PROJECT DESCRIPTION AND SCOPE

Equip Well S-27 (Well 23) water supply well, including arsenic treatment, water quality treatment, and a new transmission line to a new 4 Million Gallon (MG) Tank. Project to include construction of a new well building with removable walls which will house the new pump, drive, disinfection and appurtenant equipment. New arsenic/TDS removal building will also be built on location. Electrical power will be required to be extended from the PNM powergrid.

### 3. PROJECT JUSTIFICATION

The project will produce a 2,400 gallon per minute (gpm) water supply. The well will meet water availability commitments for the Paseo Gateway development, accommodate future growth within the Central Business District, and provide a redundant source of water for the Enchanted Hills area.

### 4. PROJECT HISTORY AND STATUS

The project is a revised project request originally planned for design in Fiscal Year 2010 and construction in Fiscal Year 2011, however funding for construction activities remains unavailable. As revised, the project has fallen in priority ranking within the Water facility category from No. 5 to No. 9 and \$15.6M in expenditures are planned through Fiscal Year 2017 pending identification of funding for construction activities.

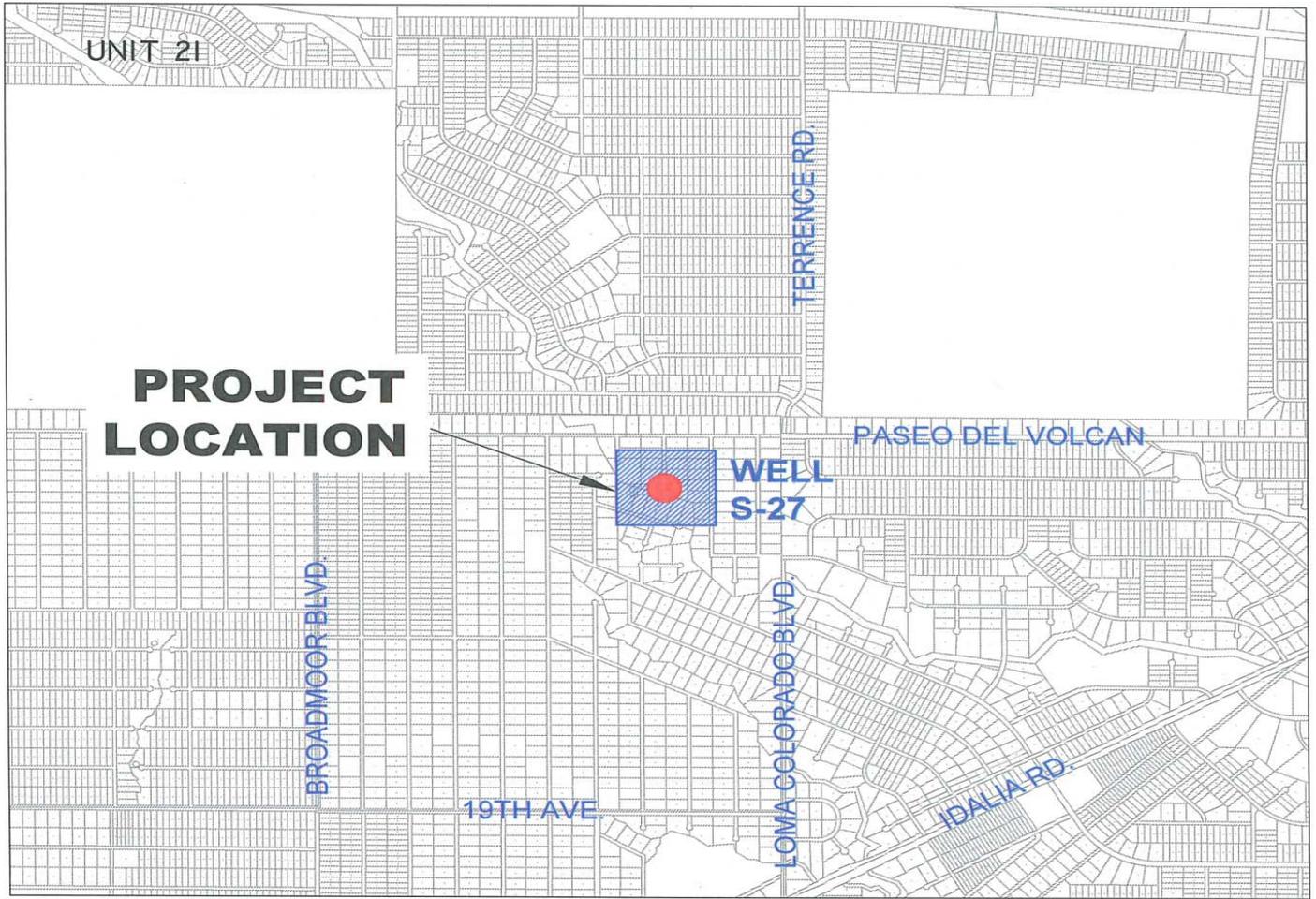
The well was drilled and capped in 2008. Planning and design analysis began in September 2009 and was completed in June 2010. Environmental assessment and final design was completed in November 2011. Project funds have included a special one-time State Capital Outlay Appropriation (\$3.8M) and 2007 Utility Bond Proceeds (\$119,614).

### 5. CAPITAL COSTS

PHASE	SOURCE(S) OF COST INFO	PRIOR YEARS	FY13	FY14	FY15	FY16	FY17	FY18	TOTAL
Pre Design and Env. Review	Cost Consultant	\$ 119,614	\$ -						\$ 119,614
Land Acq./ROW									\$ -
Design and Specifications	Cost Consultant	\$ 1,327,381							\$ 1,327,381
Construction	Cost Consultant	\$ 2,511,494				\$ 6,341,805	\$ 8,443,148		\$ 17,296,447
Construction Management	Cost Consultant				\$ 747,940				\$ 747,940
Equipment/Vehicle									\$ -
Other	Other	\$ 2,648							\$ 2,648
<b>TOTAL</b>		<b>\$ 3,961,136</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 7,089,745</b>	<b>\$ 8,443,148</b>	<b>\$ -</b>	<b>\$ 19,494,029</b>

### 6. PROPOSED SOURCES OF FUNDING

REVENUE SOURCE	EXPENDITURE FUND	PRIOR YEARS	FY13	FY14	FY15	FY16	FY17	FY18	TOTAL
State Capital Outlay Appropriation	540-CIF Water Operations	\$ 3,818,362	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,818,362
Utility Funds Operating Revenues	540-CIF Water Operations	\$ 23,160	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 23,160
Impact Fees-Water	545 Water Impact Fees Fund		\$ -	\$ -	\$ -	\$ 283,966	\$ 288,412	\$ -	\$ 572,378
Utility Bond Proceeds	572-2007 UT Bond Construction Fund	\$ 119,614	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 119,614
To Be Determined			\$ -	\$ -	\$ -	\$ 6,805,779	\$ 8,154,736	\$ -	\$ 14,960,515
<b>TOTAL</b>		<b>\$ 3,961,136</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 7,089,745</b>	<b>\$ 8,443,148</b>	<b>\$ -</b>	<b>\$ 19,494,029</b>



### 1. PROJECT INFORMATION

Project Title	SCADA Improvements	Requesting Department	Dept. of Public Works/Utilities	Department Rank Priority	10
Project Category	Utilities-Water	CIP Year	Recurring Capital Need	Project No.:	501-7007-540-7025; WA1272; WA1347
Estimated Useful Life	Greater than 25 Years	District Location	Multiple Districts	Project Request Status	Revised Project Request

### 2. PROJECT DESCRIPTION AND SCOPE

SCADA improvements will be constructed to improve well automation. For FY2012 and FY13, this project involves camera and DVR installations for Wells #2,4,7,8,19,21, and 22. Communications nodes will be installed at 7 locations for existing SCADA installations. An additional 15 miles of 144 single mode fiber-optic cable will also be installed with conduit.

### 3. PROJECT JUSTIFICATION

The improvements made to the SCADA and well security systems are an important step in controlling the operations of existing wells for more efficient delivery of water to customers.

### 4. PROJECT HISTORY AND STATUS

This project is a revised project request. As such, the project has risen in priority rank within the Water facility category from No. 12 to No. 10. \$807,094 in expenditures are planned through Fiscal Year 2018.

### 5. CAPITAL COSTS

PHASE	SOURCE(S) OF COST INFO	PRIOR YEARS	FY13	FY14	FY15	FY16	FY17	FY18	TOTAL
Planning and Feasibility									\$ -
Pre Design and Env. Review									\$ -
Land Acq./ROW									\$ -
Design and Specifications									\$ -
Construction	Cost Consultant	\$ 13,768	\$ 307,094	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 820,862
Construction Management									\$ -
Equipment/Vehicle									\$ -
Other									\$ -
<b>TOTAL</b>		<b>\$ 13,768</b>	<b>\$ 307,094</b>	<b>\$ 100,000</b>	<b>\$ 820,862</b>				

### 6. PROPOSED SOURCES OF FUNDING

REVENUE SOURCE	EXPENDITURE FUND	PRIOR YEARS	FY13	FY14	FY15	FY16	FY17	FY18	TOTAL
Utility Funds									
Operating Revenues	501 Utilities	\$ 2,204	\$ 150,922	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 153,126
Impact Fees-Water	545 Water Impact Fees Fund	\$ 11,564	\$ 31,436	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 43,000
To Be Determined			\$ 124,736	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 624,736
									\$ -
<b>TOTAL</b>		<b>\$ 13,768</b>	<b>\$ 307,094</b>	<b>\$ 100,000</b>	<b>\$ 820,862</b>				

### 1. PROJECT INFORMATION

Project Title	Renovate/ Paint Water Storage Tanks	Requesting Department	Dept. of Public Works/Utilities	Department Rank Priority	11
Project Category	Utilities-Water	CIP Year	Recurring Capital Need	Project No.:	WA1357
Estimated Useful Life	10 Years	District Location	Multiple Districts	Project Request Status	Revised Project Request

### 2. PROJECT DESCRIPTION AND SCOPE

The project involves renovation/repainting of existing water storage tanks at varying locations. Renovating existing tanks extends the useful life of the tanks. In Fiscal Year 2013, Reservoir 9 will be sand blasted and repainted.

### 3. PROJECT JUSTIFICATION

Asset preservation is required in order to ensure the City receives the maximum use over the lifetime of the steel reservoirs. Storage tanks are located throughout the city and will benefit multiple council districts.

### 4. PROJECT HISTORY AND STATUS

The City operates and maintains 18 steel reservoirs. This project is ongoing and will occur annually contingent upon availability of funding.

### 5. CAPITAL COSTS

PHASE	SOURCE(S) OF COST INFO	PRIOR YEARS	FY13	FY14	FY15	FY16	FY17	FY18	TOTAL
Planning and Feasibility									\$ -
Pre Design and Env. Review									\$ -
Land Acq./ROW									\$ -
Design and Specifications									\$ -
Construction	City contract or price agreement		\$ 378,454	\$ 389,808	\$ 401,502	\$ 413,547	\$ 425,953	\$ 438,732	\$ 2,447,996
Construction Management									\$ -
Equipment/ Vehicle									\$ -
Other									\$ -
<b>TOTAL</b>		\$ -	\$ 378,454	\$ 389,808	\$ 401,502	\$ 413,547	\$ 425,953	\$ 438,732	\$ 2,447,996

### 6. PROPOSED SOURCES OF FUNDING

REVENUE SOURCE	EXPENDITURE FUND	PRIOR YEARS	FY13	FY14	FY15	FY16	FY17	FY18	TOTAL
Utility Funds									
Operating Revenues	501 Utilities		\$ 119,000	\$ 200,000	\$ 200,000	\$ 29,356	\$ -	\$ -	\$ 548,356
To Be Determined			\$ 259,454	\$ 189,808	\$ 201,502	\$ 384,191	\$ 425,953	\$ 438,732	\$ 1,899,640
									\$ -
									\$ -
									\$ -
<b>TOTAL</b>		\$ -	\$ 378,454	\$ 389,808	\$ 401,502	\$ 413,547	\$ 425,953	\$ 438,732	\$ 2,447,996

### 1. PROJECT INFORMATION

Project Title	Automatic Meter Reading System	Requesting Department	Dept. of Public Works/Utilities	Department Rank Priority	12
Project Category	Utilities-Water	CIP Year	Recurring Capital Need	Project No.:	WA1248; WA1249; WA1250; WA1358; WA1359
Estimated Useful Life	Greater than 25 Years	District Location	Multiple Districts	Project Request Status	Revised Project Request

### 2. PROJECT DESCRIPTION AND SCOPE

The project involves replacement of meters in older established neighborhoods in the City with new meters with automatic meter reading capability. Meters serving commercial land uses have been replaced while approximately half of meters serving residential land uses have been replaced. The estimated cost for remaining replacements through Fiscal Year 2018 is \$7.3M.

### 3. PROJECT JUSTIFICATION

Replacement of obsolete meters will allow for more efficient and more accurate meter reading, and will prevent water loss.

### 4. PROJECT HISTORY AND STATUS

The project is a revised project request. As revised, the project has fallen in its priority ranking within the Water facility category from No. 10 to No. 12. Fiscal Year 2012 expenditures to date total: \$332,546.40.

### 5. CAPITAL COSTS

PHASE	SOURCE(S) OF COST INFO	PRIOR YEARS	FY13	FY14	FY15	FY16	FY17	FY18	TOTAL
Planning and Feasibility									\$ -
Pre Design and Env. Review									\$ -
Land Acq./ROW									\$ -
Design and Specifications									\$ -
Construction									\$ -
Construction Management									\$ -
Equipment/Vehicle									\$ -
Other	Other	\$ 630,393	\$ 1,027,689	\$ 1,080,000	\$ 1,155,000	\$ 1,236,000	\$ 1,322,000	\$ 1,415,000	\$ 7,866,081
<b>TOTAL</b>		<b>\$ 630,393</b>	<b>\$ 1,027,689</b>	<b>\$ 1,080,000</b>	<b>\$ 1,155,000</b>	<b>\$ 1,236,000</b>	<b>\$ 1,322,000</b>	<b>\$ 1,415,000</b>	<b>\$ 7,866,081</b>

### 6. PROPOSED SOURCES OF FUNDING

REVENUE SOURCE	EXPENDITURE FUND	PRIOR YEARS	FY13	FY14	FY15	FY16	FY17	FY18	TOTAL
Utility Funds									
Operating Revenues	501 Utilities	\$ 630,393	\$ 1,027,689	\$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ 2,408,081
To Be Determined			\$ -	\$ 930,000	\$ 1,005,000	\$ 1,086,000	\$ 1,172,000	\$ 1,265,000	\$ 5,458,000
									\$ -
									\$ -
									\$ -
<b>TOTAL</b>		<b>\$ 630,393</b>	<b>\$ 1,027,689</b>	<b>\$ 1,080,000</b>	<b>\$ 1,155,000</b>	<b>\$ 1,236,000</b>	<b>\$ 1,322,000</b>	<b>\$ 1,415,000</b>	<b>\$ 7,866,081</b>

### 1. PROJECT INFORMATION

Project Title	Land Purchases for Future utilities, well 9, Tank 9 & Another tank, staging area	Requesting Department	Dept. of Public Works/Utilities	Department Rank Priority	15
Project Category	Utilities-Water	CIP Year	Recurring Capital Need	Project No.:	NA
Estimated Useful Life	Greater than 25 Years	District Location	Multiple Districts	Project Request Status	New Project Request

### 2. PROJECT DESCRIPTION AND SCOPE

Land purchases will be necessary for future utilities.

### 3. PROJECT JUSTIFICATION

Land purchases will be necessary to obtain property for future Utility projects such as Well 9 Redrill, New Tank, and Transmission Line. Land purchases will allow the city to plan for replacement wells, additional, tanks, and future well sites to ensure a reliable water supply for the city.

### 4. PROJECT HISTORY AND STATUS

Well 9 replacement has been planned in previous ICIP's. Well 9 is planned to be redrilled to replace the current well which was poorly constructed.

### 5. CAPITAL COSTS

PHASE	SOURCE(S) OF COST INFO	PRIOR YEARS	FY13	FY14	FY15	FY16	FY17	FY18	TOTAL
Planning and Feasibility									\$ -
Pre Design and Env. Review									\$ -
Land Acq./ROW	Recent City project		\$ 392,533	\$ 404,309	\$ 416,438	\$ 428,931	\$ 441,799	\$ 455,053	\$ 2,539,063
Design and Specifications									\$ -
Construction									\$ -
Construction Management									\$ -
Equipment/ Vehicle									\$ -
Other									\$ -
<b>TOTAL</b>		<b>\$ -</b>	<b>\$ 392,533</b>	<b>\$ 404,309</b>	<b>\$ 416,438</b>	<b>\$ 428,931</b>	<b>\$ 441,799</b>	<b>\$ 455,053</b>	<b>\$ 2,539,063</b>

### 6. PROPOSED SOURCES OF FUNDING

REVENUE SOURCE	EXPENDITURE FUND	PRIOR YEARS	FY13	FY14	FY15	FY16	FY17	FY18	TOTAL
To Be Determined			\$ 392,533	\$ 404,309	\$ 416,438	\$ 428,931	\$ 441,799	\$ 455,053	\$ 2,539,063
									\$ -
									\$ -
									\$ -
<b>TOTAL</b>		<b>\$ -</b>	<b>\$ 392,533</b>	<b>\$ 404,309</b>	<b>\$ 416,438</b>	<b>\$ 428,931</b>	<b>\$ 441,799</b>	<b>\$ 455,053</b>	<b>\$ 2,539,063</b>

**Water Production and Treatment Projects**

*Drilling and Equipping of Well 23 @ Site-27 (WA0794)*

Well drilling activities for Well 23 (located at Perla Court) were completed in December 2008 at a total cost of \$2.8 million. Design for equipping and constructing the well and related treatment facilities was completed in November 2011 at a total cost of \$1.1 million. Components of Well 23 will include arsenic treatment, water quality treatment for total dissolved solids and other water contaminants, and a new transmission line to a new storage tank. Construction cost is estimated to be \$15.5 million. The future well site will meet water availability commitments for the Paseo Gateway Development, accommodate future growth in the Central Business District, and provide a redundant source of water for the Enchanted Hills area. Based on preliminary well testing, water supply is estimated at 1,600 gallons per minute (gpm). Funding for project expenditures to date (\$3.9M) has come primarily from a special one-time State Capital Outlay Appropriation (\$3.8M) and Utility Bond Proceeds (\$119,614). Construction is planned for Fiscal Years 2017 and 2018 subject to availability of funding.

*Rehabilitation of Wells (WA1143 and WA1243)*

Well rehabilitation is a recurring capital maintenance activity to repair and replace wells and/or pump equipment as they fail or wear out. Rehabilitation work to aging wells in Fiscal Year 2012 included Wells 9, 10A, 14, 16 and 21 at a total cost of \$383,074.29. Funding for well rehabilitation projects come from a combination of Environmental Gross Receipts Tax revenue and Utility Operating Fund transfers.

*Well 8 Transformer (WA1173)*

Replacement of electrical service entrance equipment at Well #8, including a 500 KVA padmount transformer and 60kw generator was completed in winter 2011. Total cost of the replacement was \$113,036 and was funded by Environmental Gross Receipts Tax revenue.

**Storage, Transmission, and Distribution Projects**

*Surge Tanks @ Wells 21 and 22 (WA1006)*

Construction of surge tanks, appurtenances, and electrical system modifications at Wells 21 and 22 was substantially completed in January 2011. Final testing of the surge tank system will be completed upon repair of Well 21. Project cost is estimated to be \$812,825 with funding coming from Utility Bond Proceeds (\$387,305), Utility Operating revenue (\$139,521), and an Environmental Protection Agency grant (\$286,000). The project was required due to elevation differences between the wells and the treatment plant and the need to address potential down surge (negative pressure) conditions that would result in pipe failures.



*City Center Booster Station (WA1041)*

Construction of a 3,000 gallon per minute (gpm) booster pump station and approximately 2,400 linear feet of 20" transmission line from 26<sup>th</sup> St to 30<sup>th</sup> St. commenced in April 2012. The total estimated cost of the project is \$2.1 million. The project will allow the Utility Department flexibility in allocating water resources to planned development in the Central Business District, including the UNM West Campus, the UNM/Sandoval County



Hospital, and the CNM Campus. The project is expected to be completed in fall 2012 and is fully funded by a special one time State Capital Outlay Appropriation (\$403,213), Utility Operating Fund transfers (\$278,237), Water Impact Fees (\$999,315), Utility Bond Proceeds (\$242,547), and Environmental Gross Receipts Tax revenue (\$182,323).

*Paseo Gateway Phase II (WA1065; WA1068; WA1245)*

Phase IIA, consisting of the waterline extension within the Paseo Gateway Master Plan Area that ties to the existing line that serves Sue V. Cleveland High School, was completed in May 2010. Total project cost, including engineering, construction, and construction management services was \$365,440 with funding coming entirely from Utility Bond Proceeds.

Design plans for Phase IIB (Paseo Gateway 4 Million Gallon Per Day Reservoir) are one hundred percent (100%) complete and land acquisition is complete. Construction of the 4 MGD reservoir is anticipated for Fiscal Year 2014 and 2015 contingent upon identification of funding. Construction of Phase III, which includes a transmission line and Altitude Valve for Zone 2 to Reservoir 12 is also anticipated for Fiscal Year 2015 contingent upon identification of funding. The total to be determined amount of funding for all remaining phases is \$2.7 million.

*Well 14 Booster Station and Fill Station (WA1126)*



Work consisting of construction of a booster station and potable water fill station commenced in March 2011 and was completed in June 2012. Total project cost is estimated to be \$1.3 million and was funded through a combination of Environmental Gross Receipts Tax revenue (\$629,037), Utility Operating Fund transfers (\$201,699), Utility Bond Proceeds (\$427,590), and Water Impact Fees (\$38,408). The project enables Well 14 to be used to augment the reservoir supply by pumping water treated at the Arsenic Treatment Facility to a storage tank and provides a water fill station for use by local construction businesses and for domestic use.

**Other Major Water Projects**

*Water Rights Acquisition (UT0922; WA0833)*

The City's acquisition liability is approximately 16,000 acre feet within the next 50 years under two (2) Office of State Engineer (OSE) permits authorizing diversion (pumping) of up to 24,000 acre feet year year. The 2003 OSE permit requires acquisition of 728 acre feet of water rights every five (5) year period through 2063, beginning at a time when the City reaches 12,000 acre feet of annual consumption (reached in December 2007). The 1979 permit requires an estimated water rights acquisition of 56.7 acre feet per year. This requirement will vary according to water model results of how the City's water consumption effects the Rio Grande River. To date, the City has acquired and applied approximately 3,800 acre feet of water rights for the 1979 permit.

Acquisition of water rights since Fiscal Year 2009 has been funded through a combination of Utility Operating transfers (\$2.8 million), Utility Bond Proceeds (\$10.6 million), Water Rights Acquisition Fees (\$1.6 million), and two (2) New Mexico Finance Authority Loans (\$13 million). A total of \$28 million has been spent to acquire 1,928 acre feet since Fiscal Year 2009 (July 1, 2008). This is the equivalent of the planned annual water usage of 7,713 single family households, assuming desert southwest water conservation norms. The balance of loan proceeds available for purchase of water rights through Fiscal Year 2018 is \$1.9 million and the estimated recurring revenue from the Water Rights Acquisition Fee available through Fiscal Year 2018 is \$5.3 million.