



# Albuquerque Bernalillo County Water Utility Authority

Albuquerque/Bernalillo  
County  
Government Center  
One Civic Plaza  
Albuquerque, NM 87102

## Agenda

*Commissioner Debbie O'Malley, Chair*  
*Councilor Klarissa J. Peña, Vice-Chair*  
*Commissioner Maggie Hart Stebbins*  
*Councilor Trudy E. Jones*  
*Mayor Timothy M. Keller*  
*Commissioner Steven Michael Quezada*  
*Councilor Ken Sanchez*  
*Trustee Pablo Rael*

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Wednesday, April 17, 2019

5:00 PM

Vincent E. Griego Chambers

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1. **CALL TO ORDER**
2. **INVOCATION/PLEDGE OF ALLEGIANCE**
3. **APPROVAL OF MINUTES - March 20, 2019**
4. **PROCLAMATIONS AND AWARDS**
  - A. **Quarterly Employee Incentive Awards**
5. **PUBLIC COMMENT**
6. **ANNOUNCEMENTS/COMMUNICATIONS**
  - A. **Next Scheduled Meeting – May 22, 2019 at 5:00 PM**
7. **INTRODUCTION (FIRST READING) OF LEGISLATION**
  - A. [O-19-2](#) Amending the Albuquerque Bernalillo County Water Utility Authority Water and Sewer Rate Ordinance to update the Utility Financial Policy to replace the Water Supply Charge with the Water Resource Charge, establish a Water Assistance Fund, add and update terms, update the Utility Expansion Charge, Septic Tank, and Chemical Toilet Charge by 3.1% based on the Engineering News Report Indexes; and update Appendix C Post Issuance Compliance Policy
  - B. [R-19-8](#) Appropriating Funds for Operating the Albuquerque Bernalillo County Water Utility Authority for Fiscal Year Beginning July 1, 2019 and Ending June 30, 2020
  - C. [R-19-9](#) Appropriating Funds for the Capital Implementation of the Albuquerque

Bernalillo County Water Utility Authority for the Fiscal Year Beginning July  
1, 2019 and Ending June 30, 2020

**8. CONSENT AGENDA**

**9. APPROVALS**

- A. [R-19-7](#) Establishing One-Year Objectives for the Albuquerque Bernalillo County Water Utility Authority in Fiscal Year 2020 to Meet Five-Year Goals
- B. [C-19-14](#) Approving Supplemental Agreement with EMA Inc., in Relation to the Asset Management/Maximo System Upgrade, Phase III
- C. [C-19-15](#) Approval of Memorandum of Understanding (MOU) with the Village of Tijeras
- D. [C-19-16](#) Approval of the Storage Agreement with Ohkay Owingeh for San Juan-Chama Water in Abiquiu Reservoir

**10. OTHER BUSINESS**

- A. [OB-19-8](#) Status Update for the Kirtland Air Force Base Bulk Fuels Facility Fuel Leak Cleanup
- B. [OB-19-9](#) Water and Drought Report

**11. ADJOURNMENT**

*Visit Our Website at [www.abcwua.org](http://www.abcwua.org)*

NOTICE TO PERSONS WITH DISABILITIES: If you have a disability and require special assistance to participate in this meeting, please contact the Authority Office as soon as possible before the meeting date at 289-3100 or by the TTY at 1-800-659-8331.



Meeting Date: April 17, 2019  
Staff Contact: Mark S. Sanchez, Executive Director

**TITLE: Quarterly Employee Recognition Awards**

**ACTION: Information Only**

**SUMMARY:**

The Water Authority recognizes with an award employees who have done something extraordinary for the Water Authority each quarter. Nominations can come from a fellow Water Authority employee or supervisor. A committee meets to discuss and evaluate the nominees and make recommendations on the final employees to be recognized.

The following employees are receiving recognition awards for contributions to the Water Authority above-and-beyond and for the example they have set for fellow employees:

Kathryn Mendoza	\$250 + 8 hours	Ms. Mendoza is recognized for taking over as the Water Authority's representative in the Endangered Species Collaborative Program after a co-worker fell ill and was no longer able to serve. She added this to her portfolio in addition to her existing job duties and has excelled in the role, cementing important working relationships with the U.S. Fish and Wildlife Service.
Jose Garcia, Joseph Cave, and Joshua Sena	\$50 each	These individuals are recognized for volunteering much-needed assistance in the relocation of files during a recent renovation of the warehouse records center
Karen Hovey	\$150 + 4 hours	Ms. Hovey is recognized for her recent efforts to ensure that the Water Authority was not wrongfully held responsible for substandard work performed by another entity, saving the utility time and dollars while upholding our public image.
Carlos Sena	\$50	Mr. Sena is recognized for taking the initiative to train utility stock-keepers regarding the material requirements of field crews.
Deborah Garcia	\$50	Ms. Garcia is recognized for the assistance and support she provided to an outside department that requested her expertise in completing an analysis at the Water Quality Lab.

Kris Johnson	\$150 + 4 hours	Mr. Johnson is recognized for his leadership role in the development of the utility's new comprehensive safety manual.
Aura Gonzalez-Aller, Mark Denis, and CJ Riggins	\$50 each	These individuals are recognized for their success in taking over a Safety Department that had been operating without a full staff and, over the past year, successfully reorganizing and upgrading our internal safety program.
Victoria Dery	\$150 + 4 hours	Ms. Dery is recognized for her heroic efforts as project manager of the recently completed, \$8 million Yucca/Central sewer relocation project. This extremely challenging engineering project will eliminate a decades-old sewer problem in the Yucca/Central area.
Richard Costales	\$150 + 4 hours	Mr. Costales is recognized for his outstanding project management effort in the completion of the new Solids Dewatering Facility at the Southside Water Reclamation Plant.
Martin Louissena	\$50	Mr. Louissena is recognized for the innovations in management and leadership he has brought to his position following his promotion to assistant superintendent in the groundwater division.
Robert Moraga	\$50	Mr. Moraga is recognized for his efforts to improve security features at utility facilities and for handling many important welding fabrication jobs internally that would otherwise have to be contracted out.
Cody Elwell	\$50	Mr. Elwell is recognized for his important efforts in cataloguing safety equipment to bring records into compliance with evolving OSHA standards.
Trina Norman, Debra Walz-Burkett, John Vance, Eric Murray, Yvonne Lara, Blythe Mireles, Anissa Pennington-Pink, and Celeste Rael	\$150 + 2 hours	This team is recognized for its successful implementation, over the course of many months, evenings and weekends, of the Customer Care and Billing System upgrade.
Lisa Carreon	\$50	Mrs. Carreon is recognized for her outstanding contributions towards helping the less fortunate in our community through the annual Adopt-a-Family Holiday program.
Ernesto Unale, Wally Gurule, Abraham Rameriz, and Aaron Arzola	\$50 each	These individuals are recognized for their successful repair of an extremely complex and hazardous water main break in early March of this year.

<p>Felimon Martinez,  Marcus Sena,  Richard Vasquez,  Matthew Montano,  Anthony Wood  Anthony Contreras,  George Cordova,  Joseph Sais, Pedro  Benitez, Juan  Archuleta, Richard  Gutierrez, Michael  Gallegos, Derrick  Baca, Vernon  Velarde, and  Raymond Garcia</p>	<p>\$50 each</p>	<p>These individuals of the Collection Section Construction Group are recognized for their leadership in bringing 148 manholes across different jurisdictions up to standards to allow completion of a comprehensive inspection of the sewer interceptor system.</p>
<p>James Ruiz, Carlos  Griego, Randy  Baca, James  Muniz, Daniel  Altamirano, Victor  Martinez, Arlo  Gonzales, Sammy  Sena, Nelson  Gallegos, Robert  Lucero, Jesus  Cordova, Yosette  Yonek, Canon  Duby, Henry  Ortega, Steven  Bottijliso, Daniel  Perez, Michael  Leeds, Jacob  Chavez, Paul  Smith, Jacob  Chavez, Daniel  Bogue, and Brian  Romero</p>	<p>\$50 each</p>	<p>These members of the Vactor Group are recognized for their leadership in implementation of new documentation procedures allowing for greatly improved asset management practices.</p>

**FISCAL IMPACT:**

None. The award amounts are budgeted yearly.

# Memo

To: Mark Sanchez, Executive Officer  
From: Judy Bentley, HR Manager, Committee Chair  
Date: **4/10/2019**  
Re: FY 19 Third Quarter Employee Recognition Awards

9.f

NOTE: GROSS UP AMOUNTS

The Employee Recognition Review Committee Convened on April 9<sup>th</sup>, 2019 to review nominations for the Third Quarter Awards. The Committee consisted of: In attendance; Judy Bentley (Chair), John Stomp, David Morris and Cody Stinson. Not in attendance: Stan Allred, Adrienne Candelaria, Mark Kelly, Charles Leder Hobert Warren and Katherine Yuhas. Committee reviewed all the nominations and selected 65 employees to receive awards. The committee is recommending the following:

<u>NAME</u>	<u>EMP#</u>	<u>AMOUNT</u>	<u>HOURS</u>	<u>NAME</u>	<u>EMP#</u>	<u>AMOUNT</u>	<u>HOURS</u>
Kathryn Mendoza	33870	\$250.00	8.00	Anissa Pennington-Pink	31102	\$150.00	2.00
Jose Garcia	6306	\$50.00		Celeste Rael	7582	\$150.00	2.00
Joseph Cave	33557	\$50.00		Lisa Carreon	6022	\$50.00	
Joshua Sena	33817	\$50.00		Ernesto Unale	29292	\$50.00	
Karen Hovey	14169	\$150.00	4.00	Wally Gurule	33850	\$50.00	
Carlos Sena	27012	\$50.00		Abraham Ramirez	33953	\$50.00	
Deborah Garcia	20940	\$50.00		Aaron Arzola	30297	\$50.00	
Kris Johnson	33539	\$150.00	4.00	Felimon Martinez	19571	\$50.00	
Aura Gonzalez-Aller	33566	\$50.00		Marcus Sena	21514	\$50.00	
Mark Denis	33932	\$50.00		Ricardo Vasquez	33520	\$50.00	
Clyde James Riggins	33939	\$50.00		Matthew Montano	8962	\$50.00	
Victoria Dery	1695	\$150.00	4.00	Anthony Wood	30462	\$50.00	
Richard Costales	33609	\$150.00	4.00	Anthony Contreras	6328	\$50.00	
Martin Louissena	26995	\$50.00		George Cordova	12164	\$50.00	
Robert Moraga	27346	\$50.00		Joseph Sais	14134	\$50.00	
Cody Elwell	33636	\$50.00		Pedro Benitez	22414	\$50.00	
Trina Norman	25572	\$150.00	2.00	Juan Archuleta	16540	\$50.00	
Debra Walz-Burkett	9678	\$150.00	2.00	Richard Gutierrez	16175	\$50.00	
John Vance	33786	\$150.00	2.00	Michael Gallegos	33135	\$50.00	
Eric Murray	33914	\$150.00	2.00	Derrick Baca	33804	\$50.00	
Yvonne Lara	3768	\$150.00	2.00	Daniel Bogue	29451	\$50.00	
Blythe Mireles	33549	\$150.00	2.00	Jacob Gabaldon	33955	\$50.00	
Vernon Velarde	33678	\$50.00		Robert Lucero	26044	\$50.00	

Raymond Garcia	33733	\$50.00	Jesus Cordova	33644	\$50.00
Carlos Griego	15504	\$50.00	Josette Yonek	8594	\$50.00
Randy Baca	18625	\$50.00	Canon Duby	33882	\$50.00
James Muniz	25369	\$50.00	Henry Ortega	18096	\$50.00
Daniel Altamirano	27088	\$50.00	Steven Bottijliso	14517	\$50.00
Victor Martinez	33620	\$50.00	Daniel Perez	33728	\$50.00
Ario Gonzales	12851	\$50.00	Michael Leeds	13314	\$50.00
Sammy Sena	22269	\$50.00	Jacob Chavez	33642	\$50.00
Nelson Gallegos	33985	\$50.00	Paul Smith	5839	\$50.00
Brian Romero	33773	\$50.00			
			<b><u>TOTALS:</u></b>		<b>\$4,650.00</b>
					<b>40.00</b>

Approved: \_\_\_\_\_  
Mark S. Sanchez, Eutive Director

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Meeting Date: April 17, 2019  
Staff Contact: Mark S. Sanchez, Executive Director

**TITLE:**       **O-19-2 – Amending the Albuquerque Bernalillo County Water Utility Authority Water and Sewer Rate Ordinance to update the Utility Financial Policy to replace the Water Supply Charge with the Water Resource Charge, establish a Water Assistance Fund, add and update terms, update the Utility Expansion Charge, Septic Tank, and Chemical Toilet Charge by 3.1% based on the Engineering News Report Indexes; and update Appendix C Post Issuance Compliance Policy**

**ACTION:**       **Introduction April 17, 2019; Final Action May 22, 2019**

**SUMMARY:**

This Legislation amends the Albuquerque Bernalillo County Water Utility Authority (Water Authority) Water and Sewer Rate Ordinance to update the Utility Financial Policy to replace the Water Supply Charge with the Water Resource Charge. The Water Resource Charge, formerly known as the Water Supply Charge, now includes water resources infrastructure costs in place of water rights acquisition. The rates are recommended to be phased in over a 8-year time period, per section 1-1-8(D)(1) of the Ordinance based on the escalated costs to sustain a water supply into the future.

The Ordinance is amended to establish a Water Assistance Fund in order to offer one-time, emergency assistance for qualifying low-income Water Authority customers having difficulty paying their water and sewer bills.

In addition, the Ordinance is amended to increase the Utility Expansion Charge, Septic Tank Charge, and Chemical Toilet Charge by 3.1%, based on the January 2019 ENR Building and Construction Cost Indexes. This is the annual adjustment made in accordance to sections 1-1-8(A)(1) and 1-1-9(G)(1)(2) of the Ordinance.

Also, the amendments include the addition of two terms, Class Average and Conservation Surcharge, to the Definition of Terms section; both terms appear in the body of the ordinance and as such should be defined. Another change to the Definition of Terms section is the replacement of the word “mean” with “average” in the term “winter mean”. This change to “winter average” is consistent with the language on the bill and is a familiar term to customers.



Finally, Appendix C related to the Post Issuance Compliance Policy has been updated with the current listing of outstanding System Revenue Bonds and Loans as of April 2019.

**FISCAL IMPACT:**

The Water Resource Charge would be increased by approximately \$416 annually for eight-years for a  $\frac{3}{4}$  inch residential meter.

The net increase on Water and Sewer Utility Expansion Charges for the average residential connection will be \$100 for water and \$75 for sewer.

The net increase in Septic Tank Charges will be \$.00077 per gallon and the Chemical Toilet Charge will be \$.00161 per gallon.

The proposed amendments are consistent with the Water Authority's ten-year Financial Plan and Rate Ordinance and with Water 2120, the Authority's Resource Management Strategy and Policy.

# ALBUQUERQUE BERNALILLO COUNTY WATER UTILITY AUTHORITY

BILL NO. O-19-2

## ORDINANCE

AMENDING THE ALBUQUERQUE BERNALILLO COUNTY WATER UTILITY  
AUTHORITY WATER AND SEWER RATE ORDINANCE TO UPDATE THE UTILITY  
FINANCIAL POLICY TO ~~ESTABLISH A WATER 2120 FUND (R-16-12); UPDATE THE~~  
~~MINIMUM COMMITTED EXPENDITURES TO 40 MILLION IN THE WATER AND SEWER~~  
~~REHABILITATION FUND; REPLACE THE WATER SUPPLY CHARGE WITH THE WATER~~  
~~RESOURCE CHARGE, ESTABLISH A WATER ASSISTANCE FUND, ADD AND UPDATE~~  
~~TERMS, UPDATE THE UTILITY EXPANSION CHARGE, WATER SUPPLY CHARGE,~~  
SEPTIC TANK, AND CHEMICAL TOILET CHARGE BY ~~2.60~~ 3.1% BASED ON THE  
ENGINEERING NEWS REPORT INDEX; AND UPDATE APPENDIX C POST ISSUANCE  
COMPLIANCE POLICY

NOW, THEREFORE, BE IT ORDAINED BY THE BOARD, THE GOVERNING BODY OF  
THE WATER AUTHORITY:

~~Section 1. Section 1 is amended as follows:~~

Section 1 WATER AND SEWER RATES

1-1-1. SHORT TITLE.

This Ordinance will be known and may be cited as the "Albuquerque Bernalillo County Water  
Utility Authority Water and Sewer Rate Ordinance."

1-1-2. COMPUTATION OF REVENUES, EXPENSES AND DEBT SERVICE;  
DETERMINATION OF DEBT COVERAGE; REQUIRED MONTHLY FIXED CHARGE.

(A) Definition of Terms.

AWWA. American Water Works Association.

CLASS AVERAGE. The Class Average is the average monthly water use billed  
in the winter months (December, January, February and March) for each customer class and  
meter size. This calculation is completed annually.

1           CONSERVATION SURCHARGE. During the billing months of May thru  
2 November, a surcharge is billed to customers that have used over a determined percentage  
3 (200%, 300%, and/or 400%) of their conservation average (the conservation average is  
4 determined by their individual Winter Average).

5           ~~CONSUMERS ASSOCIATION (CMDWWCA). Non-profit organization~~  
6 ~~generally located in the Carnuel land grant established in 2001 under the laws of New Mexico~~  
7 ~~Sanitary Projects Act.~~

8           COST OF SERVICE.       A rate setting methodology that is legally and  
9 fiscally required by bond covenants which sets sewer charges based upon EPA guidelines,  
10 uses a standard rate setting approach within the industry, requires users to pay their  
11 proportionate cost of the system and creates equity within classes of customers and among  
12 classes of customers.

13           CITY. The City of Albuquerque, New Mexico.

14           COUNTY.   Bernalillo County, New Mexico.

15           CUSTOMER.       Any person, association, corporation, or entity receiving  
16 Utility service, related products or services in the metropolitan Service Area.

17           DEBT SERVICE REQUIREMENTS.       With respect to System Obligations  
18 for any given period, the sum of: (1) the amount required to pay the interest, or to make  
19 reimbursements for payments of interest, becoming due on System Obligations during that  
20 period, plus (2) the amount required to pay the principal or Accreted Value, becoming due  
21 on System Obligations during that period, whether at maturity, an accretion term date or upon  
22 mandatory sinking fund redemption dates, plus (3) the periodic payments required to be  
23 made by the Water Authority pursuant to a Qualified Exchange Agreement minus (4) the  
24 periodic payments to be received by the Water Authority pursuant to a Qualified Exchange  
25 Agreement. No payments required for any System Obligations which may be tendered or  
26 otherwise presented for payment at the option or demand of the owners of System  
27 Obligations, or which may occur because of the exercise of an option by the Water Authority,  
28 or which may otherwise become due by reason of any other circumstance or contingency,  
29 including acceleration or early termination payments, which constitute other than regularly  
30 scheduled payments of principal, Accreted Value, interest or other regularly scheduled  
31 payments on System Obligations shall be included in any computation of Debt Service  
32 Requirements for that period.

1 DROUGHT. Drought occurs when there is insufficient precipitation combined  
2 with other environmental factors that cause an increase of overall water usage.

3 DROUGHT MANAGEMENT STRATEGY. The Water Authority's Drought  
4 Management Plan which contains four different drought severity levels, with each level  
5 containing increasingly stringent measures to reduce demand on the Water Authority's water  
6 system.

7 EXECUTIVE DIRECTOR. The Executive Director of the Water Authority.

8 EXPENSES. All expenses necessary for the operation and maintenance of the  
9 water and sewer systems, excluding depreciation, amortization and payments in lieu of taxes  
10 and expenditures for capital items.

11 FISCAL YEAR. July 1 through June 30.

12 FRANCHISE. The authorizations granted by the City of Albuquerque,  
13 City of Rio Rancho, Bernalillo County or Village of Los Ranchos to the Water Authority to use  
14 their respective rights-of-way and public places to construct, operate, and maintain Water  
15 Authority water and wastewater systems.

16 LOW INCOME HOUSING DEVELOPMENTS. Any multi-family residential  
17 development constructed by the City of Albuquerque or Bernalillo County or a non-profit  
18 developer in conjunction with one of these local governments which is substantially intended  
19 to provide affordable housing to very low income citizens as defined by 60 percent or less of  
20 median income as established by the US Department of Housing and Urban Development.

21 METER SIZE. The physical size of a water meter as designated by  
22 AWWA Standard.

23 NET REVENUES. The Revenues of the Utility less the Expenses. For  
24 purposes of calculating compliance with Sections 1-1-2(B) and 1-1-2(C) and the Additional  
25 Bonds Tests and Rate Covenants in the Debt Management and Policy & Guidelines, Net  
26 Revenues shall be defined and calculated in accordance with the definition of Net Revenues  
27 established in the applicable ordinance authorizing the issuance of the relevant System  
28 Obligations.

29 PAJARITO MESA MUTUAL DOMESTIC WATER AND WASTEWATER  
30 CONSUMERS ASSOCIATION (PMMDWWCA). Non-profit organization generally located in  
31 the Pajarito land grant established in 2000 under the laws of New Mexico Sanitary Projects  
32 Act.

1               REVENUES.       Revenues will include all charges for current water and  
2 sewer service, income from miscellaneous services or property, interest on investments of  
3 the Joint Water and Sewer Funds, connection fees, and interest on notes or other  
4 receivables.

5               RIO RANCHO.       The City of Rio Rancho, New Mexico.

6               SENIOR OBLIGATIONS.   System Obligations now outstanding or hereafter  
7 issued with a first lien, but not an exclusive first lien, on the Net Revenues on a parity with  
8 the lien of the Outstanding Senior Obligations.

9               SERVICE AREA.   Those parts of Bernalillo County and contiguous territory  
10 served by the Water Authority.

11              SERVICE SIZE.   Service sizes range from size 1 to size 8. Each size is  
12 based upon the meter size or equivalent for each account.

13              SUBORDINATE OBLIGATIONS.   System Obligations now outstanding or  
14 hereafter issued with a lien on the Net Revenues subordinate to the lien thereon of the Senior  
15 Obligations but superior to the lien thereon of the Super Subordinated Obligations.

16              SUPER SUBORDINATED OBLIGATIONS.   System Obligations now  
17 outstanding or hereafter issued with a lien on the Net Revenue subordinate to the lien thereon  
18 of the Senior Obligations and subordinate to the lien thereon of the Subordinate Obligations.

19              SYSTEM OBLIGATIONS. All bonds and other similar indebtedness payable  
20 solely or primarily from the Net Revenues, including, without limitation, the Senior  
21 Obligations, the Subordinate Obligations, and the Super Subordinated Obligations.

22              UEC. Utility Expansion Charge

23              UTILITY.   The water and wastewater facilities and all operations and  
24 management of such facilities necessary to provide water and wastewater service in the  
25 Service Area.

26              VILLAGE OF LOS RANCHOS.   Village of Los Ranchos de Albuquerque,  
27 New Mexico.

28              WATER 2120 SECURING OUR WATER FUTURE. A 100-year water resource  
29 management strategy and policy document (R-16-12) which provides ratepayers a resilient  
30 and sustainable water supply for the next century.

31              WATER AUTHORITY.   The Albuquerque Bernalillo County Water Utility  
32 Authority or its authorized agent.

1                   WATER ~~SUPPLY~~ RESOURCE CHARGE (WSCWRC).           A charge that will  
2 be assessed by the Water Authority at the time of meter sale or application for service to any  
3 new water user customer requesting connection to the water system in an area not located  
4 within the Water Authority's service area and requiring a development agreement.

5                   WINTER ~~MEAN~~ AVERAGE.           For all customers, the average monthly  
6 water use billed in the months of December, January, February and March for each account.  
7 If a customer has a new account and does not have a full four months to calculate a winter  
8 ~~mean~~ average or if a customer's winter ~~mean~~ average is zero, then the ~~mean~~ average for  
9 that customer will be based off the class and size average ~~mean~~. For those residential  
10 customers that have a winter ~~mean~~ average greater than zero units but less than four units  
11 and does not fall in the category of a new account, then their winter ~~mean~~ average used for  
12 the Conservation Surcharge will be four units. For those residential customers that have a  
13 winter ~~mean~~ average greater than 15 units their winter ~~mean~~ average used for the  
14 Conservation Surcharge will be 15 units.

15           (B)   Computation of Revenues, Expenses and Debt Service. At the end of each  
16 quarter of the fiscal year a determination will be made as to the total revenues, expenses  
17 and current debt service requirements of the system in accordance with definitions in §1-1-  
18 2(A). The determination will be made by the end of the first month following the end of each  
19 quarter. The results of the determination will be transmitted to the Water Authority.

20           (C)   Increasing Minimum Monthly Fixed Charges. So long as there are Senior  
21 Obligations outstanding, if the determination of §1-1-2(B) above shows that the Net  
22 Revenues are less than 133 percent of the Debt Service Requirements on the outstanding  
23 Senior Obligations, the fixed monthly charge will be increased for water and sewer accounts.  
24 So long as there are Subordinate Obligations outstanding, if the determination of §1-1-2(B)  
25 above shows that the Net Revenues are less than 120 percent of the Debt Service  
26 Requirements on the outstanding Senior Obligations and outstanding Subordinate  
27 Obligations, the fixed monthly charge will be increased for water and sewer accounts. The  
28 increase in the fixed monthly charges will be a percentage of the established fixed monthly  
29 charges that produce additional revenues so that if the adjusted charges had been effective  
30 the previous quarter, the total Net Revenues would have been sufficient to meet the  
31 requirements of this paragraph. If the determination of §1-1-2(B) above shows that the Net  
32 Revenues are insufficient to meet the requirements above, it shall be determined if the

revenue loss is due to efforts of Water Authority Customers to conserve water by reviewing usage patterns. If the usage study shows that the reduced revenues are due to conservation efforts, the Executive Director shall analyze the Utility's operations for the purpose of determining whether or not corresponding expense reductions can be effected and shall present any such expense reduction proposals to the Water Authority.

(D) Increasing Water Commodity Charges. If the quarterly analysis of power cost related to water pumping shows that costs are increasing or decreasing, the Executive Director is authorized to adjust the water commodity charge to reflect the change. An adjustment in the commodity charge will only be made if the needed commodity charge adjustment is \$0.01 or greater, and shall be in \$0.01 increments. The Electric Fuel Cost Adjustment is to be calculated:  $(\text{Fuel Rider} - \$0.50) \times \text{Average annual kWh} / \text{Annual Billed Consumption in CCF}$ .

(E) General Procedural Provisions. The Executive Director may enact administrative procedures to carry out the purposes of this Ordinance.

#### 1-1-3. WATER RATES.

(A) Definitions. As used in this Section, unless the context otherwise requires: CUSTOMER CLASSIFICATIONS Include:

(1) RESIDENTIAL. Single-family detached, condominiums served by individual meters, townhouses served by individual meters, duplexes served by individual meters, or mobile homes served by individual meters.

(2) MULTI-FAMILY. Any metered/account serving more than one dwelling unit; i.e., duplexes, residences with guests houses, triplexes, four-plexes, apartment complexes, condominiums, town-homes, or mobile homes served by common meters.

(3) COMMERCIAL. Retail, offices, hotels, motels, shopping centers, none of which use process water in the conduct of business.

(4) INDUSTRIAL. Manufacturing, or process facility which is engaged in producing a product.

(5) INSTITUTIONAL. Government buildings, hospitals, schools, and other facilities that provide public and quasi-public services.

(B) Water Credit Eligibility and Procedures.

(1) Single-family detached, condominiums, townhouses, duplexes or triplexes served by common or individual meters; mobile homes served by individual meters;

but limited to those Customers who own the dwelling in which they reside and qualify under the United States Department of Health and Human Services poverty guidelines.

(2) The Executive Director shall establish procedures regarding certification for water credits and shall periodically make administrative changes to the income guidelines as circumstances require.

(C) Metered Water Service.

(1) The rates and compensation to be paid to the Water Authority for public and private use of water supplied by the Water Authority for any and all purposes shall be in accordance with the following schedule of charges.

Fixed Monthly Charge - Metered Service

Serv Size	Meter Size	Residential	Commercial	Industrial	Institutional	Multi-family
1	$\frac{5}{8} \times \frac{3}{4}$	\$9.79	\$10.26	\$19.22	\$10.55	\$12.03
2	1	20.22	20.65	40.31	21.02	24.58
3	1½	56.61	58.83	120.32	61.42	72.00
4	2	121.35	125.77	262.46	131.74	155.63
5	3	232.26	241.37	497.91	252.17	290.05
6	4	524.56	543.03	1143.32	569.75	675.21
7	6	889.87	901.53	1850.64	940.83	1104.04
8	8 & over	1863.70	1933.16	4036.09	2196.26	2391.09

(2) The rates and compensation to be paid to the Water Authority for public and private use of water supplied by the Water Authority for Wholesale Water Users shall be in accordance with the following schedule of charges.

Fixed Monthly Charges- Pajarito Mutual Domestic

Meter Size

$\frac{3}{4}$	\$13.86
1	27.97
1½	80.92
2	173.76
3	361.13
4	802.69



1                   6       1354.92

2                   8       2873.97

3           (D)    Unmetered Water Service.

4                   (1)    For service connections to the utility for private fire protection. Applicable  
5 to all service through which water is used solely for extinguishing accidental fires.

6           Fixed Monthly Charge

7           Line Size       Service Area

8           (inches)

9                   2               \$4.85

10                  3               7.28

11                  4               9.70

12                  6               18.20

13                  8               27.90

14                  10              38.81

15                  12              57.00

16                   (2)    Unmetered water service for any purpose other than standby fire  
17 protection will be a violation of this Ordinance and subject to the penalties specified herein;  
18 except by written agreement approved by the Executive Director.

19           (E)    Private Use of Fire Hydrants for Non-Potable Use.

20                   (1)    Permits.

21                           (a)    Connections to fire hydrants at any location are prohibited except  
22 by the Water Authority, Fire Departments within the service area or by written permit (fire  
23 hydrant meter permit) issued by the Water Authority. The Fire Departments within the service  
24 area are given permission to use fire hydrants based upon written agreements with the  
25 Executive Director which pertain to inspection and maintenance. Each Fire Department is  
26 required to perform agreed upon maintenance on all fire hydrants within their service area as  
27 a condition of use.

28                           (b)    A qualified applicant (business owner or licensed contractor) or  
29 designated agent wishing to obtain a fire hydrant meter permit must submit a completed  
30 application form to the Water Authority. Completed and signed applications may be  
31 submitted online or hand delivered. If the applicant assigns a designated agent to obtain the

1 permit, a designated agent certification form must be signed and notarized by the business  
2 owner or licensed contractor and submitted with the completed application.

3 (c) Fire hydrant meter permits may be issued for a period not to  
4 exceed one year. Failure to comply with one or more of the terms and conditions shall be  
5 cause for terminating the permit.

6 (d) Under a standard fire hydrant meter permit, the applicant may  
7 use any fire hydrant from the Water Authority's designated network of green-top fire hydrants.  
8 Applicants desiring to use an out-of-network hydrant must submit an alternate location  
9 application stating the reason(s) for needing to use the out-of-network hydrant. Water  
10 Authority staff will review such requests on a case by case basis and a decision shall be  
11 issued within three business days of receiving the request.

12 (e) The Water Authority reserves the right to refuse to issue a fire  
13 hydrant meter permit to any applicant or to require an applicant to pay all current charges on  
14 the applicant's Water Authority account as a condition to the issuance of a permit.

15 (2) System Connection and Water Use.

16 (a) Water taken from fire hydrants may be used only for non-potable,  
17 non-recreational purposes within the Water Authority service area. The use of non-potable  
18 water taken from fire hydrants for swimming pools is prohibited.

19 (b) The permit holder shall utilize a backflow prevention method or  
20 device acceptable to the Water Authority at all times the fire hydrant meter is in use to protect  
21 the Water Authority's water supply. Failure to use an acceptable backflow prevention method  
22 or device shall be cause for confiscating the fire hydrant meter and terminating the permit.

23 (c) The Executive Director may appoint employees to inspect fire  
24 hydrant meters at any time, but not less than once per annum. Permit holders shall make  
25 provisions for such inspections.

26 (d) For permit holders that contract with the Water Authority, the  
27 Executive Director is authorized to withhold all or a portion of the surety bond for outstanding  
28 fire hydrant meter charges including but not limited to repair and replacement of the hydrant  
29 meter and usage.

30 (3) Loss, Damage and Payment Surety Bond.

31 (a) A loss, damage and payment surety deposit of \$3,000.00 for each  
32 fire hydrant meter is required at the time the permit is issued. If a fire hydrant meter is lost

1 or stolen, the \$3,000.00 deposit shall be forfeited and the permit holder shall be assessed up  
2 to a \$1,000.00 charge for water usage.

3 (b) All or a portion of the loss, damage and payment surety deposit  
4 will be refunded depending upon the cost of repairing the fire hydrant meter and the  
5 outstanding balance for meter charges when it is returned to the Water Authority. The Water  
6 Authority shall cause the repair work to be done and compute the time and materials  
7 necessary to rehabilitate the fire hydrant meter.

8 (c) The Executive Director may waive the loss, damage and payment  
9 surety deposit for special events or non-construction related short term projects. (4)

10 Reporting. The permit holder shall be required to report and pay for fire hydrant  
11 water usage on a monthly basis. Fire hydrant meter readings shall be submitted, in writing  
12 between the first (1st) and tenth (10th) day of the month for water usage during the previous  
13 calendar month, regardless of whether any water usage occurred during that month. Failure  
14 to submit meter readings between the first (1st) and the tenth (10th) of the month shall result  
15 in a \$20.00 late meter reading fee per occurrence. Failure to report meter readings on or  
16 before the last day of the month the readings are due shall be cause for confiscation of the  
17 meter and termination of the permit.

18 (5) Fees and Charges.

19 (a) A nonrefundable program fee of \$230.00 will be charged for each  
20 fire hydrant meter permit.

21 (b) All fire hydrant meter permit holders shall pay a monthly base  
22 charge of \$70.00. This monthly base charge shall not be prorated.

23 (c) All water withdrawn from a fire hydrant shall be charged at the  
24 current commodity rate. Connections to fire hydrants in violation of this Ordinance will be  
25 subject to the penalties specified herein and shall be considered an illegal connection and  
26 be subject to hydrant meter confiscation.

27 (d) The permit holder shall be required to remit payment for all water  
28 withdrawn from fire hydrants on a monthly basis. Failure to remit payment in full within ten  
29 (10) days after final notice is issued shall result in a \$50.00 late payment fee per occurrence,  
30 and shall be cause for confiscation of the fire hydrant meter and termination of the permit.

31 (F) Water Commodity Charge.

1                   (1)    (a)    In addition to the Fixed Monthly Charge, all water used by a  
2 Customer within the Service Area for any purpose whatsoever shall be charged at the rate  
3 of \$2.018 per unit (one unit equals 100 cubic feet). In addition, there shall be a charge of  
4 0.024 per unit, added to this commodity charge, which is the amount necessary to  
5 compensate the Water Authority for the water conservation fee charged by the State of New  
6 Mexico. This is determined by the meter reading or by estimating the usage by statistical  
7 methods. Customers shall pay bills monthly.

8                   (b)    Included in the commodity charge is a \$0.116 charge per unit that  
9 will be dedicated to the Water Resources Management Program in Fund 621 to fund the  
10 Ground-Water Protection Policy and Action Plan, the Water Conservation Program, Water  
11 Resources Management Planning and Arsenic Investigations. All interest earned on these  
12 dedicated funds shall be used only for this purpose.

13                   (c)    In addition to the Fixed Monthly Charge customers with a  
14 wholesale water rate shall be charged at the rate in accordance with the following schedule  
15 of charges.

16 Pajarito Mutual Domestic -         \$1.400 per 100 CCF

17                   (2)    Bills may be based on the estimated average annual water use in units,  
18 annualized and divided by 12 months, plus the fixed monthly charge. Any special charges,  
19 such as UEC, shall be included on the bill. The Executive Director may administratively  
20 adjust bills periodically by crediting and debiting accounts as appropriate if errors have been  
21 found and verified.

22                   (3)    (a)    Surcharges for irrigation-only water accounts shall be assessed  
23 annually in the year following the water usage based upon an annual irrigation budget  
24 allowance established for such accounts and in accordance with the following:

25                           (i)    Water budgets will be established by the Water Authority  
26 whenever a new irrigation account is established or an existing account is converted to an  
27 irrigation account.

28                           (ii)   All usage will be calculated annually on a per site basis. Any  
29 usage of individual wells at these sites shall be submitted in writing to the Water Authority  
30 by the 15<sup>th</sup> of the month following the use.

31                           (iii)   All golf courses existing prior to October 1, 1995 will be allowed  
32 up to 40 inches of water over the entire landscaped area per calendar year.

(iv) All new golf courses or existing golf course expansions permitted after October 1, 1995 will be allowed up to 37 inches of water over the entire landscaped area per calendar year.

(v) Athletic fields will be allowed up to 45 inches of water over the entire landscaped area per calendar year.

(vi) All other landscaped areas will receive a water budget of 35 inches of water over the entire landscaped area per calendar year.

A surcharge will be applied to the usage above the annual irrigation budget allowance. For excess usage up to 150 percent (first tier) of the annual irrigation budget, the surcharge shall be 50 percent of the commodity rate shown in §1-1-3(F)(1)(a). For excess usage greater than 150 percent (second tier) of the annual irrigation budget, the surcharge shall be 100 percent of the commodity rate shown in §1-1-3(F)(1)(a). For excess usage greater than 200 percent (third tier) of the annual irrigation budget, the surcharge shall be 150 percent of the commodity rate shown in §1-1-3(F)(1)(a).

(b) The conservation surcharge amount added for each unit exceeding 200 percent of the Winter ~~Mean~~ Average water usage as calculated in §1-1-2(A), shall be equal to 50 percent of the commodity charges in §1-1-3(F)(1)(a), and shall be added to the total charge determined in §1-1-3(F)(1)(a) for usage during the following months of April through October. For those residential customers that have a Winter ~~Mean~~ Average equal to or greater than 15 units, the conservation surcharge amount added for each unit exceeding 200 percent of the Winter ~~Mean~~ Average water usage as calculated in §1-1-2(A), shall be equal to 100 percent of the commodity charges in §1-1-3(F)(1)(a), and shall be added to the total charge determined in §1-1-3(F)(1)(a) for usage during the months of April through October.

(c) The conservation surcharge amount added for each unit exceeding 300 percent of the Winter ~~Mean~~ Average water usage as calculated in §1-1-2(A), shall be equal to 50 percent of the commodity charges in §1-1-3(F)(1)(a), and shall be added to the total charge determined in §1-1-3(F)(3)(b) for usage during the months of April through October. For those residential customers that have a Winter ~~Mean~~ Average equal to or greater than 15 units, the conservation surcharge amount added for each unit exceeding 300 percent of the Winter ~~Mean~~ Average water usage as calculated in §1-1-2(A), shall be equal

to 100 percent of the commodity charges in §1-1-3(F)(1)(a), and shall be added to the total charge determined in §1-1-3(F)(3)(b) for usage during the months of April through October.

(d) The conservation surcharge amount added for each unit exceeding 400 percent of the Winter ~~Mean~~ Average water usage as calculated in §1-1-2(A) shall be equal to 50 percent of the commodity charges in §1-1-3(F)(1)(a), and shall be added to the total charge determined in §1-1-3(F)(3)(c) for usage during the months of April through October. For those residential customers that have a Winter ~~Mean~~ Average equal to or greater than 15 units, the conservation surcharge amount added for each unit exceeding 400 percent of the Winter ~~Mean~~ Average water usage as calculated in §1-1-2(A), shall be equal to 100 percent of the Commodity Charges §1-1-3(F)(1)(a), and shall be added to the total charge determined in §1-1-3(F)(3)(c) for usage during the months of April through October.

(e) Drought Related Surcharges. Under the four levels of Drought defined in the Drought Management Strategy, the Water Authority may, at its sole discretion, increase surcharges described in §1-1-3 by a factor of two, three or more as may be necessary to assist in water use reduction during a drought. During a drought, the Water Authority shall declare to the public the Drought Level, which can be raised and lowered by the Water Authority, and the proposed increase in surcharges. The Drought level only applies to the current year and must be approved by the Water Authority on a year by year basis. The Water Authority delegates the implementation of the Drought Management Strategy including the increase of surcharges to the Executive Director. Based on the Drought Level approved by the Water Authority, the Executive Director shall implement the Drought Management Strategy and announce the effective date of the new surcharges.

(f) For residential class Customers only having service sizes 1 through 3, a 50 percent discount shall be applied to the commodity charges in §1-1-3(F)(1)(a) for water usage greater than the customer's Winter ~~Mean~~ Average water usage during the months of April through October when water usage is equal or less than 150 percent of the Class Winter ~~Mean~~ Average water usage.

(G) Multiple Meter Service. Customers with service by more than one meter to any premise shall be charged the applicable fees associated with each meter except for single-family residential Customers who have two meters, of which one is used for irrigation. The monthly fixed charge for these single-family residential Customers will be based on the largest meter at the single-family residence.

(H) Water Credit. For those accounts included within the Water Credit classification, a credit of \$10.31 per month will be applied to their billing; the billing shall be calculated using the Fixed Monthly Charge and Commodity Charge as set forth in this Ordinance.

(I) Water Assistance Fund (WAF).

(1) The WAF is established to offer one-time, emergency assistance for qualifying low-income Water Authority customers having difficulty paying their water and sewer bills.

(2) The Executive Director is authorized to establish program guidelines for qualification and eligibility procedures and shall periodically make administrative changes to the guidelines as circumstances require.

(J) Tag and Testing Charge. When a Customer disputes meter accuracy, a "Tag & Test" service will be done after all the steps taken by the Water Authority have been exhausted and if requested in writing by the legal property owner or his/her authorized representative.

(1) Meters 5/8 X 3/4" to 2"

Meter Size	Tag and Testing Charge Service
------------	--------------------------------

5/8" x 3/4"	\$140
-------------	-------

1"	185
----	-----

1-1/2"	380
--------	-----

2"	455
----	-----

The meter in question will be removed and a new one installed so that service can be maintained. The removed meter will be bench tested by the Water Authority in accordance with AWWA Standard C705. Should the meter fail the accuracy test such that the requestor was being overcharged, there would be no charge to the requestor.

(2) Meter 3" and greater. The meter in question will be tested in place in accordance with AWWA Standard C701, C702 or C703 and AWWA manual M6. Should the meter fail the accuracy test such that the requestor was being over charged, there would be no charge to the requestor. The testing charge for this will be \$500 for all sizes.

(K) Customer utility statements shall contain the following itemized element: "Facility Rehabilitation: \$`x,' where `x' shall be the cost of the rate increase to fund facility rehabilitation."

(K~~L~~) Real property owners receiving water service from the Water Authority are responsible for hiring a licensed plumber to connect their customer service line to the Water Authority system at the point of metered service, or obtain a Homeowner Permit from the permitting Agency, allowing the property owner to make the connection.

#### 1-1-4. NON-POTABLE WATER RATES.

(A) Definitions. Refer to §1-1-3(A) Water Rates for the definitions of Customer Classifications, which apply to this Section.

(B) Metered Service. The rates and compensation to be paid to the Water Authority for public and private use of non-potable water supplied by the Water Authority within the Service Area for any and all purposes shall be in accordance with the schedule of charges listed in §1-1-3(A) for potable water metered service.

(C) Commodity Charge.

(1) In addition to the Fixed Monthly Charge, all non-potable water used by a Customer within the Service Area shall be charged at the rate corresponding to 80 percent of the potable water commodity rate (one unit equals 100 cubic feet). This is determined by the meter reading or by estimating the usage by statistical methods. Customers shall pay bills monthly.

(2) Bills may be based on the estimated average annual non-potable water use by units, annualized and divided by 12 months, plus the fixed monthly charge. Any special charges, such as UEC, shall be included on the bill. The Executive Director may administratively adjust bills periodically by crediting and debiting accounts as appropriate if errors have been found and verified.

(3) All surcharges for irrigation-only water accounts shall be charged at the rate based upon the non-potable water commodity rate (one unit equals 100 cubic feet).

(D) Multiple Meter Service. Customers with non-potable water service by more than one meter to any premise shall be charged the applicable fees associated with each meter.

(E) Tag and Testing Charge. Refer to §1-1-3 (I) for applicable provisions and charges.

(F) Utility Expansion Charge (UEC).

(1) A Utility Expansion Charge shall be paid to the Water Authority at the time of non-potable meter sale or application for non-potable water service for all new



services connecting to the non-potable water system. The UEC may be paid in full at the time of non-potable service application, or paid over time with an initial minimum of 5 percent down payment. The balance shall be subject to a fixed monthly charge to include a carrying charge set at 7 percent per annum. On all connections, the balance shall be paid in full within 120 months.

(2) The UEC for non-potable water service shall be the same as the UEC for potable water service. Refer to §1-1-8(A) for applicable provisions and charges.

(3) Existing water Customers wishing to receive non-potable water shall not be charged a UEC unless the new combined potable and non-potable system capacity exceeds the Customer's previous existing potable system capacity.

(4) Redundant potable water and non-potable water metered services are not required for non-potable service.

(G) Non-potable Water Meter and Service Installation Fees. Refer to §1-1-9 for applicable provisions and charges.

(H) Customers that are currently using potable water for irrigation or other qualified industrial purposes as determined by the Water Authority and whose property is located within 200-feet of a non-potable water line are required to connect to the non-potable system within one year of service availability. Connection to non-potable system is a condition of service. The Water Authority is required to provide written notification to the property owner that non-potable water is available and that connection to the system is mandatory. If requested, the Water Authority will meet with the affected property owners and provide additional information regarding service availability, connection locations and other information that may be deemed necessary. The property owner has one year from the date of notification to connect to the system. Failure to connect may result in termination of service.

(I) Water Rights Leases. Beginning July 1, 2006, except for lease agreements that provide for periodic rate increases, water rights leases entered into by the Water Authority for the purpose of offsetting depletive effects on the Rio Grande from pumping by others shall be charged at the non-potable water rate.

#### 1-1-5. SEWER RATES.

(A) Definitions. For the purpose of this Section, the following definitions shall apply unless the context clearly indicates or requires a different meaning.

1 BOD or BIOCHEMICAL OXYGEN DEMAND. The quantity of oxygen utilized  
2 in the biochemical oxidation of organic matter by Standard Methods procedures in five days  
3 at 20° C. expressed in milligrams per liter (mg/l).

4 CLEANOUT. A tee section in the sanitary sewer located outside any structure  
5 accessible 24 hours a day and constructed according to the Utility's standard detail.

6 COD or CHEMICAL OXYGEN DEMAND. A measure of the oxygen-consuming  
7 capacity of organic and inorganic matter present in wastewater as milligrams per liter (mg/l),  
8 by Standard Methods procedures.

9 NH<sub>3</sub>N OR AMMONIA NITROGEN. Total Ammonia – A measure of the  
10 total ammonia as nitrogen concentration as milligrams per liter (mg/L) by Standard Methods  
11 or EPA approved procedures.

#### 12 CUSTOMER CLASSIFICATIONS.

13 (1) RESIDENTIAL. Single-family detached, condominiums served by  
14 individual meters, townhouses served by individual meters, duplexes served by individual  
15 meters, or mobile homes served by individual meters.

16 (2) MULTI-FAMILY. Any metered/account serving more than one dwelling  
17 unit; i.e., duplexes, residences with guests houses, triplexes, four-plexes, apartment  
18 complexes, condominiums, town-homes, or mobile homes served by common meters.

19 (3) COMMERCIAL. Retail, offices, hotels, motels, shopping centers, none  
20 of which use process water in the conduct of business.

21 (4) INDUSTRIAL. Manufacturing, or process facility which is engaged in  
22 producing a product.

23 (5) INSTITUTIONAL. Government buildings, hospitals, schools, and other  
24 facilities that provide public and quasi-public services.

25 (6) WHOLESALE-SPECIAL CONTRACTS. Contract Customers that are  
26 responsible for a collection system beyond the point where their respective wastewater  
27 discharges into the Water Authority's interceptors.

28 (7) KIRTLAND AIR FORCE BASE (KAFB).

29 (8) FOOD SERVICE ESTABLISHMENT or FSE. Any establishment,  
30 commercial or noncommercial, such as a restaurant, cafeteria, snack bar, temple, mosque,  
31 church, synagogue, worship hall, banquet facility, preschool, school, or meeting place, with  
32 a kitchen that is used for preparing, serving, or otherwise making available for consumption

1 foodstuffs in commercial amounts in or on a receptacle that requires washing and that  
2 discharges to the Water Authority's POTW.

3 INDUSTRIAL WASTE. Wastes resulting from any process of industry,  
4 manufacturing, trade, or business, or from the development, recovery, or processing of  
5 natural resources.

6 LATERAL SEWER. An individual user's sewer pipe beginning at the public  
7 sewer and extending to the premises actually served. The lateral sewer includes the stub to  
8 which a user connects to the public sewer and all appurtenances on such lateral sewer. The  
9 user is responsible for the maintenance of the lateral sewer including those portions that may  
10 be within any right-of-way. The term is interchangeable with "house service connection,"  
11 "sewer service line," or "building sewer."

12 NORMAL DOMESTIC WASTEWATER. Effluent which contains constituents  
13 and characteristics similar to effluent from a residence and specifically for the purposes of  
14 this Ordinance does not contain BOD, COD, NH<sub>3</sub>N and TSS in excess of the following  
15 concentration:

16 BOD -- 250 mg/l

17 COD -- 500 mg/l

18 TSS -- 330 mg/l

19 NH<sub>3</sub>N – 25 mg/l

20 PUBLICLY OWNED TREATMENT WORKS or POTW. A treatment works as  
21 defined by §212 of the Clean Water Act, (33 USC 1292) which is owned by the Water  
22 Authority. The term also includes Water Authority works, as defined in §502 of the Clean  
23 Water Act, (33 USC 1362) which has jurisdiction over the indirect discharges to and the  
24 discharges from such a treatment works. The "treatment works" includes all plants, sanitary  
25 sewers, lift stations, odor control stations, and all other properties, now or hereafter existing,  
26 used or useful in connection with the collection, pumping, disposal and treatment of  
27 wastewater, as now or hereafter added to, expanded or improved.

28 SEWER CREDIT ELIGIBILITY AND PROCEDURES. Single-family detached,  
29 condominiums, townhouses, duplexes or triplexes served by common or individual meters;  
30 mobile homes served by individual meters; but limited to those Customers who own the  
31 dwelling in which they reside and qualify under the United States Department of Health and  
32 Human Service poverty guidelines.

STANDARD METHODS. The laboratory procedures set forth in the latest edition, at the time of analysis, of Standard Methods for Examination of Water and Wastewater, as prepared, approved and published jointly by the American Public Health Association and American Water Works Association and the Water Pollution Control Federation.

TOTAL SUSPENDED SOLIDS or TSS. Those solids which are retained by a standard glass fiber filter and dried to constant weight at 103 – 105° C. expressed in milligrams per liter (mg/l), by Standard Methods procedures.

WASTEWATER. The used water of a community. Such used water may be a combination of the liquid waterborne wastes from residences, commercial buildings, industrial plants and institutions.

(B) Methodology and Calculation of Rates and Charges.

(1) The rates and charges described in this Ordinance are developed in conformance with standard cost-of-service rate making principles as recommended by the American Water Works Association, the Water Environment Federation, and the United States Environmental Protection Agency (USEPA).

(2) The Water Authority's rates and charges are calculated based on each customer classification's use of the system. Historical billed flows by classification and a systematic allocation of operation, maintenance, and capital costs were used to calculate the schedule of charges contained in this Ordinance.

(C) Fixed Monthly Charge.

(1) The rates and compensation to be paid to the Water Authority for public or private use by discharge of liquid waste into the Water Authority within the Service Area for any and all purposes whatsoever shall be in accordance with the following schedules of charges. The Fixed Monthly Charge for Customers with Water Authority water service shall be based on the water service size. The Fixed Monthly Charge for Customers without Water Authority water service shall be based on the liquid waste flow. Liquid waste flow will be calculated in accordance with the methodology set forth in the Commodity Charge Section of §1-1-5(D).

(2) Fixed Monthly Charge for Customers with water service:

Serv Size	Meter	Resid	Comm	Indust	Instit	Multi-family
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1	1	$\frac{5}{8} \times \frac{3}{4}$	\$2.99	\$3.70	\$16.82	\$2.87	\$4.97
2	2	1	4.84	5.90	28.49	4.63	8.22
3	3	1½	19.84	25.11	122.72	18.88	34.62
4	4	2	49.37	62.62	308.35	46.94	86.31
5	5	3	66.11	83.90	413.63	62.86	115.68
6	6	4	140.83	178.85	883.44	133.88	246.77
7	7	6	187.56	237.02	1177.19	178.30	328.73
8	8	8 & over	333.41	423.55	2094.23	316.95	584.60
9	(3) Fixed Monthly Charge for Customers without water service:						
10	Liquid Waste						
11	Flow (CCF)		Residential	Commercial	Industrial	Institutional	Multi-
12							family
13	0 - 10	$\frac{5}{8} \times \frac{3}{4}$	\$2.99	\$3.70	\$16.82	\$2.87	\$4.97
14	11-19	1	4.84	5.90	28.49	4.63	8.22
15	20-63	1½	19.84	25.11	122.72	18.88	34.62
16	64-82	2	49.37	62.62	308.35	46.94	86.31
17	83-343	3	66.11	83.90	413.63	62.86	115.68
18	344-599	4	140.83	178.85	883.44	138.88	246.77
19	600-803	6	187.56	237.02	1177.19	178.30	328.73
20	804-over	8 & over	333.41	423.55	2094.23	316.95	584.60
21	(4) Fixed Monthly Charges for Wholesale and KAFB						
22	Serv Size	Wholesale		Item	KAFB		
23	1	\$3.78		Per Month	\$12,038.74		
24	2	6.19					
25	3	13.70					
26	4	64.09					
27	5	85.88					
28	6	183.06					
29	7	243.83					
30	8	412.91					
31							

(D) Commodity Charge. All wastewater discharge shall be charged on the basis of the Commodity Charges for Retail and Special Customers rate table on a per unit basis (one unit equals 100 cubic feet).

Commodity Charges for Retail and Special Contract Customers

Customer Classification	Base (\$/CCF)	Rehab (\$/CCF)	Total Commodity (\$/CCF)
Retail Customers			
Residential	\$1.394	\$0.288	\$1.682
Commercial	1.394	0.288	1.682
Industrial	1.394	0.288	1.682
Institutional	1.394	0.288	1.682
Multi-family	1.394	0.288	1.682
Special Contracts			
Wholesale	\$0.727	\$0.151	\$0.878
KAFB	0.727	0.151	0.878

(1) Customers with Water Service. The commodity charge for usage during the months of December, January, February and March (winter months) shall be based upon 95 percent of the metered or estimated volume of water usage during each of these months for each account. The commodity charge for usage during other months shall be based upon 95 percent of the metered or estimated volume of water usage during that month or shall be based upon 95 percent of the prior winter months' average, whichever is less for each account. The winter months' average is determined by averaging the metered or estimated volume of water used during the winter months.

(2) Customers without Water Service. The volume of wastewater discharge shall be determined by the physical measurement at the expense of the customer; however, where accurate and reasonable estimates can be made by statistical methods, such estimates shall be considered the volume of discharge upon which the Commodity Charge is based. The Water Authority expressly reserves the right to determine the estimated wastewater volume for any customer without water service, which determination may be appealed to the Executive Director.

(3) Special Wastewater Discharge Volume. The Water Authority recognizes that sewage discharge patterns for individual Customers may vary to a great extent from the norms of any particular class; therefore, any Customer may, at their own expense, provide

the Water Authority with sewage flow data for consideration of a special wastewater discharge volume. Such data shall be certified by an engineer registered in the state. The Water Authority expressly reserves the right to determine the estimated wastewater volume for any Customer, which determination may be appealed to the Executive Director.

(E) Extra-Strength Surcharge.

(1) All Customers discharging wastewater into the POTW are subject to a surcharge if the discharged wastewater exceeds normal domestic wastewater strength. NORMAL STRENGTH is defined as:

- (a) Chemical Oxygen Demand (COD) less than or equal to 500 mg/l;
- and
- (b) Biochemical Oxygen Demand (BOD) less than or equal to 250 mg/l; and
- (c) Total Suspended Solids (TSS) less than or equal to 330 mg/l; and
- (d) Ammonia Nitrogen (NH<sub>3</sub>N) less than or equal to 25 mg/l.

(2) The Water Authority shall determine strength as defined by the above parameters in §1-1-5(E)(1) above. The procedures are described §1-1-5(I) below. If it is determined that the wastewater strength exceeds the limits specified, a surcharge shall be levied at the rate of:

- (a) \$.17 per pound of COD for the excess of 500 mg/l of COD; and
- (b) \$.33 per pound of BOD for the excess of 250 mg/l BOD; and
- (c) \$.27 per pound of TSS for the excess of 330 milligrams per liter of TSS; and
- (d) \$.81 per pound of NH<sub>3</sub>N for the excess of 25 mg/l of NH<sub>3</sub>N.

(3) Any customer that is a Food Service Establishment permitted by the City of Albuquerque, Village of Los Ranchos, Bernalillo or Sandoval County shall be charged an extra strength surcharge of \$1.96 per unit (100 cubic feet).

(4) The Water Authority shall promulgate administrative procedures to carry out the provisions of the extra-strength surcharge.

(F) Septic Tank Truck Discharge. No user owning vacuum or "cesspool" type pumping trucks or other liquid waste transport trucks shall discharge such waste into the POTW, unless such person shall first have applied for and received a Septic Tank Discharge

1 or Chemical Toilet Discharge Permit from the Industrial Pretreatment Engineer pursuant to  
2 the Sewer Use and Wastewater Control Ordinance Section 3-3-7.

3 (G) Sewer Use Regulations. The Water Authority's Sewer Use and Wastewater  
4 Control or successor Ordinance, shall govern all discharges of wastewater to the POTW.

5 (H) Sampling; Metering Manhole Requirements. When required by the Utility, the  
6 owner of property serviced by a lateral sewer carrying industrial wastes shall install a suitable  
7 control manhole or cleanout together with such necessary meter and other appurtenances in  
8 the lateral sewer to facilitate observation, sampling, and measurement of the wastes. Such  
9 monitoring locations shall be accessible, safely located, and constructed in such a manner  
10 as to prevent infiltration of ground and surface waters. They shall be constructed in  
11 accordance with plans approved by the Utility. The Utility has established standard details.  
12 The monitoring location and all equipment shall be installed by the owner at his expense,  
13 and shall be maintained by him so as to be safe and accessible at all times.

14 (I) Sampling and Testing Procedures.

15 (1) All dischargers subject to monitoring according to the Water Authority's  
16 Sewer Use and Wastewater Control Ordinance, will be monitored by the Water Authority.  
17 The discharge will be sampled and tested for compliance with the Water Authority's Sewer  
18 Use and Wastewater Control Ordinance, and to determine the surcharge amount.

19 (2) All measurements, tests and analysis of the characteristics of waters  
20 and wastes shall be determined in accordance with the latest edition of Standard Methods  
21 for the Examination of Water and Wastewater, published jointly by the American Public  
22 Health Association and Water Pollution Control Federation, and the American Water ~~w~~Works  
23 Association.

24 (3) Sampling shall be carried out by customarily accepted methods. The  
25 particular analyses involved will determine whether a 24-hour composite of all outfalls of a  
26 premise is appropriate or whether a grab sample or samples should be taken. Normally, but  
27 not always, BOD, COD, NH3N and TSS analyses are obtained from 24-hour composites of  
28 all outfalls.

29 (4) Those industries suspected of discharging either high COD, BOD,  
30 NH3N wastes or high TSS wastes shall be sampled for four consecutive days by grab  
31 samples or 24-hour composite samples from a Utility manhole. If COD results exceed 500  
32 mg/l, BOD results exceed 250 mg/l, NH3N results exceed 25 mg/l, or TSS results exceed



330 mg/l on any of the two of the four consecutive days, or in any of the 24-hour composite samples, a sampling manhole may be required for industries discharging greater than 25,000 gallons per day or if required by the Water Authority's Sewer Use and Wastewater Control Ordinance or successor Ordinance. Upon installation of the sampling manhole, an automatic sampler will be used to gather a composite which shall be used to compute a monthly surcharge. Industries discharging less than 25,000 gallons per day and not otherwise requiring a sampling manhole may be required to install a cleanout and an automatic sampler will be used to gather a composite which shall be used to compute a monthly surcharge. Pretreatment may be required according to the Water Authority's Sewer Use and Wastewater Control Ordinance or successor Ordinance.

(5) The Water Authority may assess penalties for noncompliance with the Sewer Use and Wastewater Control Ordinance or successor Ordinance.

(J) Sewer Credit. For those accounts included within the Sewer Credit classification, a credit of \$9.62 per month will be applied to their billing; the billing shall be calculated using the Fixed Monthly Charge and Commodity Charge as set forth in this Ordinance.

(K) Customer utility statements shall contain the following itemized element: "Facility Rehabilitation: \$`x,' where `x' shall be the cost of the rate increase to fund facility rehabilitation."

1-1-6. WATER AND SEWER REHABILITATION FUND.

(A) An established portion of the revenue generated by fixed water rates and the Water Commodity Charge shall be distributed to a Water and Sewer Rehabilitation Fund. The fixed rate portion of the Water Rates contained in §1-1-3(B) which shall be distributed to the Water and Sewer Rehabilitation Fund are contained in the following schedule of charges. The portion of the water commodity rate to be distributed to the Water and Sewer Rehabilitation Fund shall be 0.392 per unit.

Fixed Water Rates (per month)

Serv Size	Meter Size	Residential	Commercial	Industrial	Institutional	Multi-family
1	5/8 X 3/4	\$6.12	\$6.41	\$12.01	\$6.59	\$7.52
2	1	12.63	12.90	25.19	13.13	15.36
3	1½	35.37	36.76	75.17	38.37	44.98
4	2	75.82	78.58	163.99	82.31	97.24

1	5	3	145.11	150.81	311.10	157.55	181.22
2	6	4	327.75	339.29	714.36	355.98	421.88
3	7	6	555.99	563.28	1156.29	587.84	689.81
4	8	8 & over	1164.45	1207.85	2521.77	1372.24	1493.97

5 (B) In addition to the portion of the commodity rate to be distributed to the Water  
6 and Sewer Rehabilitation fund as identified in §1-1-5(D) above, the following fixed rate  
7 portions of the sewer rates contained in §1-1-5(C) shall be distributed to the Water and Sewer  
8 Rehabilitation Fund.

#### 9 Fixed Monthly Rehabilitation Charges

#### 10 Fixed Sewer Rates (per month)

11	Serv Size	Meter Sz	Resid	Comm	Indust	Instit	Multi-fam	Wholesale
12	1	5/8 X 3/4	\$7.54	\$9.33	\$42.40	\$7.22	\$12.52	\$9.53
13	2	1	12.21	14.87	71.83	11.67	20.73	15.61
14	3	1 - 1½	50.02	63.29	309.39	47.59	87.28	34.53
15	4	2	124.45	157.88	777.37	118.34	217.58	161.57
16	5	3	166.66	211.51	1042.77	158.47	291.64	216.50
17	6	4	355.04	450.89	2227.17	337.52	622.11	461.50
18	7	6	472.83	597.53	2967.73	449.50	828.74	614.71
19	8	8 & over	840.54	1067.78	5279.60	799.03	1473.80	1040.96

#### 20 Monthly Rehabilitation Charges for KAFB

21	Item	KAFB
22	Per Month	\$30,349.92

23 (C) Committed expenditures for the rehabilitation of water wells, pump stations,  
24 reservoirs, service lines, other water lines, gate valves and the committed expenditures for  
25 rehabilitation of sewer lines, odor control stations, pumping stations and treatment facilities  
26 from revenues in the Water and Sewer Rehabilitation Fund shall not be less than \$40 million  
27 dollars per year.

28 (D) The distributions from water and sewer rates to the Water and Sewer  
29 Rehabilitation Fund shall be reviewed every five years and updated as needed to adjust for  
30 construction inflation, new capital inventory, rate increases and other factors.

1-1-7. WATER AND SEWER SYSTEM AND UTILITY FINANCIAL POLICIES.

(A) The term of each and every instrument of debt shall be 12 years or less; except for sustainable water supply projects. This policy shall not apply to the possible acquisition of other operating water and wastewater utility systems or to mitigate short term rate impacts.

(B) At a minimum, an average of 50 percent of the cost of capital projects which constitute the normal capital program of the water and sewer system including the rehabilitation and replacement of existing facilities, and the construction of water wells, pump stations, reservoirs, service lines, other water lines, gate valves, revenue meters and meter boxes, sewer lines, odor control stations, and pumping stations, and treatment facilities shall be paid with cash rather than borrowed funds. The normal capital program excludes special capital projects such as the expansion of the wastewater treatment plants, arsenic mitigation, state and federal grant projects, state and federal mandated projects, and related to water resources management to achieve a sustainable supply of water. This policy shall not apply to the possible acquisition of other operating water and wastewater utility systems or to mitigate short term rate impacts.

(C) At a minimum, 25 percent of the cost of capital projects not included in the normal capital program of the water and sewer system shall be paid with cash rather than borrowed funds. This policy shall not apply to the possible acquisition of other operating water and wastewater utility systems sustainable water supply or to mitigate short term rate impacts.

(D) Utility Expansion Charge (UEC) revenues or those of successor development fees in excess of \$6 million per year shall be transferred to the Joint Water and Sewer Capital Funds. The transfer of these funds shall be made in the fiscal year following the most recent audited Comprehensive Annual Financial Report.

(E) Utility Expansion Charge rates shall be based on adopted policies of the Water Authority.

(F) Appropriations of cash transfers from water and sewer utility operating funds or debt service funds to a Joint Water and Sewer Capital Fund shall be made in the amounts appropriated during the year for which the appropriations have been made.

(G) The Water Authority has implemented an asset management program to manage its capital infrastructure focusing on minimizing the total cost of designing, acquiring, operating, maintaining, replacing, and disposing of capital assets over their life cycle while

1 achieving desired service levels. It will allow the Water Authority to manage existing assets  
2 more effectively, make informed decisions on policy and budgetary matters, and plan for  
3 future needs. Based upon this program the Water Authority will begin to incrementally  
4 increase its Capital Implementation Program spending at approximately \$3 million a year  
5 until the Water Authority can reach and sustain a spending level of approximately \$76 million  
6 a year.

7 (H) A Rate Reserve Fund is established for reserving water and sewer revenues in  
8 a dedicated fund for the purpose of offsetting declines in rate revenue and to mitigate future  
9 rate increases. This Rate Reserve Fund will be funded at \$2 million per year. The goal for  
10 the Water Authority is to achieve and maintain a Working Capital Balance that will be 1/12 of  
11 the Water Authority's annual budgeted expenditures. The Rate Reserve Fund will be  
12 counted in the Working Capital Balance calculation, however any expenditure from the Rate  
13 Reserve Fund will require an appropriation approved by the Water Authority Board.

14 (I) The Water Authority's Investment Policy is attached as Appendix A and  
15 provides the policy guidance on the investment of funds. The Water Authority's Debt  
16 Management Policy and Guidelines is attached as Appendix B and sets forth the parameters  
17 for issuing debt and managing the outstanding debt portfolio and provides guidance  
18 regarding the purposes for which debt may be issued, types and amounts of permissible  
19 debt, timing and method of sale that may be used, and structural features that may be  
20 incorporated. The Water Authority's Post Issuance Compliance Policy is attached as  
21 Appendix C, and provides the post-issuance tax compliance controls and procedures related  
22 to financial obligations.

23 (J) A Water 2120 Fund is established to fund water ~~supply~~ resource infrastructure  
24 projects in implementing the adopted Water 2120: Securing Our Water Future (R-16-12).  
25 Revenue from the Water ~~Supply~~ Resource Charge shall be earmarked solely for the projects  
26 identified in Water 2120 into this fund. Beginning in Fiscal Year 2020~~1~~, this fund will be  
27 funded at a minimum of \$2 million per year.

28 1-1-8. UTILITY EXPANSION CHARGE (UEC) and WATER ~~SUPPLY~~ RESOURCE CHARGE  
29 (WSRC).

30 (A) (1) A UEC charge will be paid to the Water Authority at the time of meter  
31 sale or application for service for all properties connecting to the water and/or wastewater  
32 system in accordance with the following schedule. The amount of the UEC's shall be adjusted

annually by building cost or construction cost indices (BCI or CCI) as published by the Engineering News Record (ENR). Where water service does not exist and sewer service is to be taken and the sewer UEC is applicable, the charge shall be based upon the wastewater flow. A unit of flow is equal to 100 cubic feet.

(a) Financing for Water UEC

~~Finance for Water UEC~~

Water Meter Size	Water Payment	Minimum Cash Down	Balance to Finance
<del>5/8 X 3/4"</del>	<del>\$3,233</del>	<del>\$162</del>	<del>\$3,071</del>
<del>1"</del>	<del>5,388</del>	<del>269</del>	<del>5,119</del>
<del>1-1/2"</del>	<del>10,775</del>	<del>539</del>	<del>10,236</del>
<del>2"</del>	<del>17,245</del>	<del>862</del>	<del>16,383</del>
<del>3"</del>	<del>34,482</del>	<del>1,724</del>	<del>32,758</del>
<del>4"</del>	<del>53,879</del>	<del>2,694</del>	<del>51,185</del>
<del>6"</del>	<del>107,762</del>	<del>5,388</del>	<del>102,374</del>
<del>8" or More</del>	<del>172,417</del>	<del>8,621</del>	<del>163,796</del>
<del>5/8 X 3/4"</del>	<del>\$3,333</del>	<del>\$167</del>	<del>\$3,167</del>
<del>1"</del>	<del>\$5,555</del>	<del>\$278</del>	<del>\$5,277</del>
<del>1-1/2"</del>	<del>\$11,109</del>	<del>\$555</del>	<del>\$10,554</del>
<del>2"</del>	<del>\$17,780</del>	<del>\$889</del>	<del>\$16,891</del>
<del>3"</del>	<del>\$35,551</del>	<del>\$1,778</del>	<del>\$33,773</del>
<del>4"</del>	<del>\$55,549</del>	<del>\$2,777</del>	<del>\$52,772</del>
<del>6"</del>	<del>\$111,103</del>	<del>\$5,555</del>	<del>\$105,547</del>
<del>8" or More</del>	<del>\$177,762</del>	<del>\$8,888</del>	<del>\$168,874</del>

(b) Financing for Sewer UEC

~~Finance for Wastewater UEC~~

Water Meter Size	Liquid Waste Flow	Sewer Payment	Minimum Cash Down	Balance to Finance
<del>5/8 X 3/4"</del>	<del>0-10</del>	<del>\$2,425</del>	<del>\$121</del>	<del>\$2,304</del>
<del>1"</del>	<del>11-19</del>	<del>4,041</del>	<del>202</del>	<del>3,839</del>
<del>1-1/2"</del>	<del>20-63</del>	<del>8,082</del>	<del>404</del>	<del>7,678</del>
<del>2"</del>	<del>64-82</del>	<del>12,930</del>	<del>646</del>	<del>12,284</del>
<del>3"</del>	<del>83-343</del>	<del>25,923</del>	<del>1,296</del>	<del>24,627</del>

1	4"	344-599	41,432	2,072	39,360
2	6"	600-803	82,869	4,143	78,726
3	8" or More	804 & over	129,307	6,465	122,842
4	5/8 X 3/4"	0-10	\$2,500	\$125	\$2,375
5	1"	11-19	\$4,166	\$208	\$3,958
6	1-1/2"	20-63	\$8,333	\$417	\$7,916
7	2"	64-82	\$13,331	\$667	\$12,664
8	3"	83-343	\$26,727	\$1,336	\$25,390
9	4"	344-599	\$42,716	\$2,136	\$40,581
10	6"	600-803	\$85,438	\$4,272	\$81,166
11	8" or More	804 & over	\$133,316	\$6,666	\$126,650

12                   (2)     The UEC may be paid in full or paid over time with an initial minimum of  
13 5 percent down payment and the balance shall be subject to a fixed monthly charge to include  
14 a carrying charge set at 7 percent per annum. On all connections, the balance shall be paid  
15 in full within 120 months.

16                   (3)     The fixed monthly charge for the UEC shall run against the property and  
17 be the responsibility of any subsequent owner until paid in full. All monies collected through  
18 the imposition of the UEC, including the fixed monthly charge, shall be placed in a separate  
19 account to be used for financing the expansion for the water and sewer system.

20                   (B)     Reactivation of disconnected service. No refund of UEC will be made for a  
21 service downsizing. Reconnections requesting larger service than was originally installed  
22 shall pay UEC determined by subtracting the current charge for the original service size from  
23 the current charge for the new service size requested.

24                   (C)     Charges for multiple residential units:

25                           (1)     Requests for residential or commercial water and/or sewer service which  
26 will provide for more than one residential unit will pay UEC according to one of the following  
27 schedules:

28                                   (a)     Apartment Complexes.

29   (i)     With 30 dwelling units or less shall pay 50 percent of the  
30 product of the total number of units times the water and/or sanitary sewer UEC for a 5/8" x  
31 3/4" water meter.

(ii) With more than 30 dwelling units shall pay the amount given by the equation below:

$$\text{Equivalent Units} = (0.45) \times (\text{No. of Units}) + 1.49$$

$$\text{Total UEC} = (\text{Equivalent Units}) \times (5/8" \times 3/4" \text{ Meter UEC})$$

(b) Mobile Home Parks, regardless of size, shall pay 53 percent of the product of the total number of dwelling units times the water and/or sanitary sewer UEC for a 5/8" x 3/4" water meter.

(c) Condominiums, regardless of size, shall pay 53 percent of the product of the total number of dwelling units times the water and/or sanitary sewer UEC for a 5/8" x 3/4" water meter.

(d) Commercial service shall pay the larger of the following:

(i) The water and/or sewer UEC as shown in §1-1-8(A).

(ii) 50 percent of the product of the number of equivalent residential units times the water and/or sewer UEC charge for a 5/8" x 3/4" meter.

(e) Low income housing developments shall pay the greater of either:

(i) Eight percent of the product of the total number of dwelling units times the water and sanitary sewer UEC set forth in §1-1-8(A)(1) of this Ordinance for a 5/8" x 3/4" water meter; or,

(ii) The UEC set forth in §1-1-8(A)(1) of this Ordinance for the meter size required to service the development. The size shall be determined by the Water Authority based on the number of water fixture units described in AWWA M-22.

(f) At the time the water and sewer UEC is due and payable for a low income housing development, the owner of the low income housing development shall give the Water Authority a promissory note in the principal amount that is equal to the difference between the amount of the water and sewer UEC set forth in §1-1-8(A)(1) of this Ordinance for a 5/8" x 3/4" water meter and the amount of the water and sewer UEC set forth in §1-1-8(C)(1)(e). The promissory note shall be due and payable on the date the Low Income Housing Development ceases to qualify as a low income housing development as defined in §1-1-2(A), which shall constitute its maturity date. The promissory note shall not bear any interest from the date of the promissory note to its maturity date, but shall bear interest thereafter at the rate imposed by §1-1-8(A)(2) from the maturity date of the

promissory note until the date the promissory note is paid. The promissory note shall be secured by a mortgage on the low income housing development that is subject and subordinate only to mortgages securing the costs to purchase the land for the low income housing development and to design and construct the low income housing development.

(2) If the service requested necessitates modification and/or installation of additional facilities other than those already in existence and available to serve the property, then the cost of such modifications and/or additional facilities shall be applied and apportioned according to existing Water Authority policy.

(D) (1) A Water Supply Resource Charge (WSRC), as specified herein, will be assessed by the Water Authority at the time of meter sale or application for service to any new water user customer requesting connection to the water system in an area requiring new or enhanced infrastructure through a service expansion in accordance with §1-1-8(D)(1). ~~The proceeds from this charge will be dedicated and restricted to the development of new water resources, rights or supplies to serve the beneficiary new customers outside of the established infrastructure consistent with the Water Authority's Regional Water Plan and Water Resources Management Strategy and other guiding principles adopted by the Water Authority.~~ The proceeds from this charge will be dedicated to the Water 2120 Fund. The amount of the WSRC shall be adjusted annually by building cost or construction cost indices (BCI or CCI) as published by the Engineering News Record (ENR).

(a) Financing for Water Supply Resource Charge – WSRC

Year 1 Phase-in:

Water Meter Size	Water Payment	Minimum Cash Down	Balance to Finance
5/8 X 3/4"	\$1,669	\$83	\$1,586
1"	2,793	140	2,653
1-1/2"	5,564	278	5,286
2"	8,902	445	8,457
3"	17,806	890	16,916
4"	27,627	1,381	26,246
6"	55,760	2,788	52,972
8" or More	89,023	4,451	84,572
5/8 X 3/4"	\$2,085	104	1,980
5/8 X 3/4"	\$2,085	\$104	\$1,980



1	1"	\$3,474	\$174	\$3,301
2	1-1/2"	\$6,949	\$347	\$6,602
3	2"	\$11,118	\$556	\$10,562
4	3"	\$24,321	\$1,216	\$23,105
5	4"	\$41,694	\$2,085	\$39,609
6	6"	\$93,811	\$4,691	\$89,120
7	8" or More	\$111,183	\$5,559	\$105,624
8	<u>Year 2 Phase-in:</u>			
9	5/8 X 3/4"	\$2,500	\$125	\$2,375
10	1"	\$4,167	\$208	\$3,959
11	1-1/2"	\$8,335	\$417	\$7,918
12	2"	\$13,335	\$667	\$12,669
13	3"	\$34,021	\$1,701	\$32,320
14	4"	\$50,008	\$2,500	\$47,507
15	6"	\$112,517	\$5,626	\$106,891
16	8" or More	\$133,354	\$6,668	\$126,686
17	<u>Year 3 Phase-in:</u>			
18	5/8 X 3/4"	\$2,916	\$146	\$2,770
19	1"	\$4,860	\$243	\$4,617
20	1-1/2"	\$9,720	\$486	\$9,234
21	2"	\$15,552	\$778	\$14,775
22	3"	\$34,021	\$1,701	\$32,320
23	4"	\$58,321	\$2,916	\$55,405
24	6"	\$131,223	\$6,561	\$124,662
25	8" or More	\$155,524	\$7,776	\$147,748
26	<u>Year 4 Phase-in:</u>			
27	5/8 X 3/4"	\$3,332	\$167	\$3,165
28	1"	\$5,553	\$278	\$5,275
29	1-1/2"	\$11,106	\$555	\$10,551
30	2"	\$17,769	\$888	\$16,881
31	3"	\$38,871	\$1,944	\$36,927
32	4"	\$66,635	\$3,332	\$63,303

1	6"	\$149,929	\$7,496	\$142,433
2	8" or More	\$177,694	\$8,885	\$168,809
3	<u>Year 5 Phase-in:</u>			
4	5/8 X 3/4"	\$3,747	\$187	\$3,560
5	1"	\$6,246	\$312	\$5,933
6	1-1/2"	\$12,491	\$625	\$11,867
7	2"	\$19,986	\$999	\$18,987
8	3"	\$43,720	\$2,186	\$41,534
9	4"	\$74,949	\$3,747	\$71,202
10	6"	\$168,635	\$8,432	\$160,203
11	8" or More	\$199,864	\$9,993	\$189,871
12	<u>Year 6 Phase-in:</u>			
13	5/8 X 3/4"	\$4,163	\$208	\$3,955
14	1"	\$6,939	\$347	\$6,592
15	1-1/2"	\$13,877	\$694	\$13,183
16	2"	\$22,203	\$1,110	\$21,093
17	3"	\$48,570	\$2,428	\$46,141
18	4"	\$83,263	\$4,163	\$79,100
19	6"	\$187,341	\$9,367	\$177,974
20	8" or More	\$222,034	\$11,102	\$210,932
21	<u>Year 7 Phase-in:</u>			
22	5/8 X 3/4"	\$4,579	\$229	\$4,350
23	1"	\$7,631	\$382	\$7,250
24	1-1/2"	\$15,263	\$763	\$14,500
25	2"	\$24,420	\$1,221	\$23,199
26	3"	\$53,420	\$2,671	\$50,749
27	4"	\$91,577	\$4,579	\$86,998
28	6"	\$206,047	\$10,302	\$195,745
29	8" or More	\$244,204	\$12,210	\$231,994
30	<u>Year 8 Phase-in:</u>			
31	5/8 X 3/4"	\$4,995	\$250	\$4,745
32	1"	\$8,324	\$416	\$7,908

1	1-1/2"	\$16,648	\$832	\$15,816
2	2"	\$26,637	\$1,332	\$25,306
3	3"	\$58,269	\$2,913	\$55,356
4	4"	\$99,890	\$4,995	\$94,896
5	6"	\$224,753	\$11,238	\$213,516
6	8" or More	\$266,374	\$13,319	\$253,056

7 (2) The WSRC may be paid in full or paid over time with an initial minimum  
8 of 5 percent down payment and the balance shall be subject to a fixed monthly charge to  
9 include a carrying charge set at seven percent per annum. On all new hook-up connections,  
10 the balance shall be paid in full within 120 months.

11 (3) The fixed monthly fee for the WSRC shall run against the property and  
12 be the responsibility of any subsequent owner until paid in full. All monies collected through  
13 the imposition of the WSRC shall be placed in a separate account to be used for financing  
14 the development of additional long term water supplies to serve expansions of the Water  
15 Authority's service area subsequent to June 15, 2007.

16 (4) The WSRC is not reimbursable under the line extension policy except  
17 for master planned water, wastewater, and reuse supply projects as contained in  
18 development agreements. All revenues generated from the WSRC will be maintained in its  
19 own activity and to be used only as specified in §1-1-8(D)(1).

20 (5) Master planned developments outside the service area shall meet  
21 additional water, wastewater, and reuse service provision requirements in accordance with  
22 Water Authority policies and plans.

23 (6) The WRC for multiple residential units will be calculated in a manner  
24 consistent with the UEC charges as set forth in 1-1-8(C).

#### 25 1-1-9. SPECIFIC SERVICES.

26 Fees for specific services shall be as follows:

27 (A) Metered Service Lines.

28 (1) 5/8 X 3/4" meter set only, \$295

29 (2) 1" meter set only, \$355

30 (3) 1 1/2" meter set only, \$555

31 (4) 2" meter set only, \$635

32 (5) 3" metered service line installation.

- (a) 3" meter set only with compound meter without vault, \$2,185
- (6) 4" metered service line installation.
- (a) 4" meter set only with compound meter without vault, \$3,125
- (b) 4" meter set only with fire assembly meter without vault \$7,210
- (7) 6" metered service line installation.
- (a) 6" meter set only with compound meter without vault, \$5,140
- (b) 6" meter set only with fire assembly meter without vault \$7,520
- (8) 8" metered service line installation.
- (a) 8" meter set only with fire assembly without vault \$13,040
- (9) 10" and larger: Contact the Utility for price quote
- (B) Meter Size Reduction Installation.
- (1) 5/8 X 3/4" through 1-1/2", contact the Utility for price quote
- (2) 2", contact the Utility for price quote
- (3) 3" and larger, contact the Utility for price quote
- (C) Nonpayment Delinquency Fee.
- (1) 5/8 X 3/4" and 1", \$45
- (2) 1-1/2" through 10", \$60
- (D) Combined Fire-Domestic Meters.
- (1) Requests for this type of metered service, which provide both fire protection and domestic-irrigation service, may be made at the New Services Section of Utility Development. Upon the satisfactory determination of peak flow water delivery requirements, as certified by an engineer registered in the State of New Mexico, in accordance with the City and the County fire codes and the AWWA M22 an equivalent meter size will be determined for the service. Fixed monthly charges for private fire protection shall also be applied commensurate with the degree of fire protection capacity being provided.
- (2) Fees for installation (set only) is in §1-1-9(A).
- (E) Cross Connection Fees
- (1) Containment Inspection Fees. An inspection fee of \$50 shall be assessed to all customers required to have premise inspections to cover expenses incurred by the Water Authority during the initial inspection of the premise. The inspection fee shall be assessed only to those customers whose premise are in compliance with this Ordinance at the time of inspection.

(2) Backflow Prevention Assembly Administrative Charge. All customers required to provide cross-connection control by containment and/or isolation shall be assessed an annual administrative fee of \$30 (fee is not to be prorated in case of change in ownership) for each backflow prevention assembly located at the premise. This fee incorporates expenses incurred by the Water Authority to maintain records, to process required testing notices and to enter data as required.

(3) Late report fee. A late report fee of \$100 per month may be assessed for passing test reports submitted more than 30 days past the due date. The late report fee will be assessed monthly until a passing test report is submitted.

(4) Non-existent containment backflow preventer assembly fee. A non-existent containment backflow preventer assembly fee of \$200 per month may be assessed for each service line without a backflow preventer or with an unapproved backflow preventer.

(5) Unauthorized connection fee. An unauthorized connection fee of \$200 per month may be assessed for each service line with an unauthorized tee, branch, connection fitting, or opening between the containment backflow prevention assembly and the service connection.

(F) Meter Reset

(1) Contact the Utility for a price quote.

(G) Septage Fees. Each time the septage hauler enters the septage disposal site at the Southside Water Reclamation Plant, the permittee will be assessed a charge based on the type of permitted waste and based on 85% of the permitted septage hauler tank capacity no matter the amount discharged. The amount of the Septic Tank and Chemical Toilet charge shall be adjusted annually by building cost or construction cost indices (BCI or CCI) as published by the Engineering News Record (ENR).

(1) Septic Tank Charge. The septic tank charge is ~~\$.02489~~ .02566 per gallon.

(2) Chemical Toilet Charge. The chemical toilet charge is ~~\$.05209~~ .0537 per gallon.

(3) Septage Hauler Registration Charge. A septage hauler registration charge of \$25 per vehicle shall be assessed to all septage haulers submitting a septage hauler application.

1-1-10. FRANCHISE FEE.

1           There shall be a charge of four percent on the total sales of water and sewer services  
2 added to customer billings to compensate the Water Authority for the franchise fee charged  
3 by the City, County and the Village of Los Ranchos and a charge of two percent on the total  
4 sales of water and sewer services added to customer billings to compensate the Water  
5 Authority for the franchise fee charged by the City of Rio Rancho for the granted authorization  
6 to use rights-of-way and public places to construct, operate, and maintain water and  
7 wastewater systems.

8   1-1-11. PAYMENT.

9           All charges shall be payable at any location as designated by the Water Authority and  
10 will become delinquent 15 days following the "due by" date on the Customer's utility  
11 statement.

12   1-1-12. PENALTY FOR DELINQUENT ACCOUNTS.

13           A penalty of 1.5 percent per month may be imposed on all delinquent accounts.

14   1-1-13. PENALTY FOR NONCOMPLIANCE WITH THE SEWER USE AND WASTEWATER  
15 CONTROL ORDINANCE

16           (A)   Any permitted Industrial ~~U~~user who has violated, or continues to violate, any  
17 Pretreatment Standard or Requirement as defined in the Sewer Use and Wastewater Control  
18 Ordinance shall be assessed a penalty of up to \$1,000 per violation per day.

19           (B)   Any other violations of the Sewer Use and Wastewater Control Ordinance may  
20 be subject to a penalty up to \$1,000 per violation per day.

21   1-1-14. RESPONSIBILITY OF PAYMENT, LIENS, AND DEPOSIT.

22           (A)   The assessed fees and service charges provided for herein are the personal  
23 responsibility of the owner of record, as reported by the Bernalillo County Assessor for the  
24 real property served.

25           (B)   The Water Authority may file a lien of record on such real property for such  
26 charges including any interest or penalties accruing on same.

27           (C)   Reasonable deposits may be required of any Customer including tenants.  
28 Deposits not to exceed six months in duration. Such deposits and accrued interest shall be  
29 applied to the utility account immediately upon becoming delinquent or the expiration of six  
30 month period. Any credit status created by applying the deposit will be absorbed by the  
31 monthly service charges and considered prepayments for services. Such deposits shall draw  
32 reasonable interest.

(D) The Executive Director is authorized to establish and issue guidelines for billing procedures, including but not limited to payment plans for delinquent accounts.

1-1-15. DISCONTINUANCE OF SERVICE; HEARING.

(A) The Water Authority may cause the water supply to be turned off and discontinue service to the property if any charge provided for herein remains unpaid for a period of 30 days from the "due by" date on the Customer's utility statement. Service may not be discontinued for delinquencies of a previous owner unless a lien, or a record has been filed prior to the real property changing ownership or responsibility with the Bernalillo County Clerk indicating that outstanding Utility charges remain.

(B) In order to discontinue service, a written notice shall be sent to the Customer at least ten calendar days' notice before termination of service and notice of the right to protest the Water Authority's proposed action at an administrative hearing.

(C) The Customer must request in writing that a hearing be held and such request must be received by the Executive Director on or before the date the services are to be terminated. If the Customer requesting the hearing is not the owner of record, the Customer must provide proof that the owner of record will be bound by the decision of the hearing officer.

(D) At such hearing, the Customer may present evidence as the Water Authority and the Executive Director, or his designated hearing officer, may affirm, overrule or modify the decision to terminate the services. The decision shall be final.

(E) In the event a hearing is requested, the services shall not be terminated pending the conclusion of the hearing and this issuance of a decision.

(F) A nonrefundable hearing fee of \$50.00 shall accompany each appeal filed pursuant to this §1-1-15.

(G) For purposes of expediting the satisfaction of delinquent accounts the Executive Director may at his discretion waive, credit, and or remove penalty fees or other fees from any account.

1-1-16. EFFECTIVE DATE AND PUBLICATION.

The effective date of this Ordinance will be July 1, ~~2018~~ 2019 unless otherwise stated.

1-1-98. PROHIBITIONS.

(A) No person shall use or cause to be used any water produced or distributed by the Water Authority without the consent of Water Authority. Water distributed through an

1 authorized meter or obtained by any means authorized by ordinances or administration rules  
2 and regulations shall constitute the consent of the Water Authority.

3 (B) No person shall discharge or cause to be discharged any liquid waste to the  
4 liquid waste collection or treatment system operated by the Water Authority without the  
5 consent of the Water Authority and in compliance with the Water Authority's Sewer Use and  
6 Waste Water Control Ordinance. Approved connections or permits shall constitute such  
7 consent.

8 (C) No person shall willfully break, injure, or tamper with any property of the Water  
9 Authority, including but not limited to: wells, pump stations, reservoirs, sewage treatment  
10 plants, lift stations, distribution lines, fire hydrant service lines, meters, gate valves, manhole  
11 covers or grates.

12 (D) Violation of any of the above described Prohibitions constitutes a violation of  
13 the conditions of Water Authority service and may be subject to a connection service charge  
14 of \$400.00 per occurrence and charges of four years of usage based upon prior usage or the  
15 customer class average or termination of service.

16 **Section 2. SEVERABILITY CLAUSE.** If any Section, paragraph, sentence, clause, word  
17 or phrase of this Ordinance is for any reason held to be invalid or unenforceable by any court  
18 of competent jurisdiction, such decision shall not affect the validity of the remaining provisions  
19 of this Ordinance. The Water Authority hereby declares that it would have passed this  
20 Ordinance and each Section, paragraph, sentence, clause, word or phrase thereof  
21 irrespective of any provision being declared unconstitutional or otherwise invalid.





## **POST ISSUANCE COMPLIANCE POLICY**

As of April 17, 2019



## **Post-Issuance Tax and Securities Compliance Guidelines for Bonds**

### **Overview**

This guide lists the post-issuance tax compliance controls and procedures related to financial obligations ("Post-Issuance Compliance Guidelines") maintained by Albuquerque Bernalillo County Water Utility Authority (the "Water Authority"). Post-Issuance Compliance Guidelines are intended to ensure that the Water Authority complies, and is able to demonstrate such compliance with applicable legal provisions including certain recordkeeping and reporting requirements in order (a) to maintain the tax status of the bonds for federal income tax purposes under the Internal Revenue Code and the Treasury Regulations, (b) to ensure that the bonds continue to comply with the securities laws contained in Rule 15c2-12 of the Securities Exchange Board. References herein to "Tax-exempt bonds" include the issuance of tax exempt and tax-advantaged bonds, loans and other similar debt instruments that may be issued by the Water Authority. This guideline is designed to formalize compliance procedures so that the Water Authority utilizes the proceeds of all issues of bonds in accordance with applicable federal tax requirements, and complies with all other applicable federal requirements with respect to bond issues.

A list of currently outstanding bond issues, inclusive of taxable and tax advantaged issues when applicable is attached hereto as Exhibit A. Such exhibit will be updated from time to time as new bond issues arise or existing bond issues cease to be outstanding. Certain additional transactional covenants and recurring reporting and similar obligations of the Water Authority relevant to the Water Authority's current bonds and leases are set forth in Exhibit B hereto, which may be amended from time to time to address future leases or bond issues.

### **Section I: Issuance of Bonds**

Financing with tax-exempt bonds is determined by the Water Authority's Board with consultation from the following:

- Water Authority's Finance Staff
- Financial Advisor (RBC Capital Markets as of May 1, 2013)
- Bond Counsel (Brownstein Hyatt Farber Schreck as of May 1, 2013)
- Disclosure Counsel (Modrall Sperling as of May 1, 2013)

#### ***Bond Counsel***

The Water Authority will retain a firm of nationally recognized bond counsel ("Bond Counsel") to deliver a legal opinion upon issuance of Bonds. The Water Authority will consult with Bond Counsel, other legal counsel and advisors throughout the bond financing process as well as during the post-issuance term of the bonds.

#### ***External Counsel Advisors***

The Water Authority maintains a relationship with a firm to serve as financial advisor ("Financial Advisor") in

connection with the issuance of tax exempt bond financing to advise with respect to outstanding tax-exempt bonds and for future capital projects.

### ***Tax Certificate***

The federal tax requirements relating to each issue of Bonds will be set forth in a related Tax Certificate, which will be included in the closing transcript for each issue. The certifications, representations, expectations and covenants set forth in the Tax Certificate relate primarily to the restriction on use of the Bond-financed facilities by persons or entities other than the Water Authority, changes in use of Bond-financed assets, restrictions applicable to the investment of Bond proceeds and other moneys relating to the Bonds, arbitrage rebate requirements, and economic life of the Bond-financed assets. Bond Counsel will rely in part on the Tax Certificate in rendering its opinion that interest on the Bonds is excluded from gross income for federal income tax purposes.

### ***IRS Form 8038-G***

Bond Counsel, with assistance from the Water Authority and other professionals associated with each Bond issuance, shall prepare an IRS Form 8038-G. The Chief Financial Officer (“CFO”) or designee will review and sign at closing, and will confirm that the IRS Form 8038-G with respect to all Bond issues is timely filed by Bond Counsel, including any required schedules and attachments. The Form 8038-G filed with the IRS, together with an acknowledgement copy or IRS Notice CP152, will be included as part of the closing transcript for each Bond issue.

### ***Bond Financing Transcript***

The transcript associated with each Bond financing, will include copies of the executed Opinion of Bond Counsel, Tax Certificate, and IRS Form 8038-G. The CFO will keep a copy of the transcript in accordance with the provisions of Section V-“Records Retention”, of these Post-Issuance Compliance Guidelines.

## **Section II. Application of Bond Proceeds**

The CFO will monitor and report to the Executive Director (“ED”) the use of Bond Proceeds. Bond Proceeds will be used for the purpose set forth in the respective Tax Certificate.

### **Reimbursement / Official Intent**

If it is anticipated that a capital expenditure will eventually be reimbursed with proceeds of a bond issue, at the time of expenditure, or in any event, not later than 60 days after payment of the original expenditure, the Water Authority will adopt an official intent that complies with Section 1.150-2(e) of the Treasury Regulations. Further, the actual reimbursement allocation must be made not later than 18 months after the later of either the date the original expenditure is paid; or the date the project is placed in service or abandoned, but in no event more than 60 days after the fifth anniversary of the issue date or the date 60 days after the retirement of the issue, if earlier.

### ***Assignment of Responsibility and Establishment of Calendar***

On the date of issuance of any bond, the CFO will identify for the bond issue:

- The funds and/or accounts into which bond proceeds are deposited
- The types of expenditures expected to be made with the bond proceeds deposited into those funds and/or accounts and any expenditures prohibited from being made from such funds or accounts.

- The dates by which all bond proceeds must be spent or become subject to arbitrage yield limitations ("Expenditure Deadlines") and all interim dates by which funds and/or accounts must be checked to ensure compliance with the applicable Expenditure Deadlines.

### ***Timely Expenditure of Bond Proceeds***

At the time of issuance of any Bond issue, the Water Authority must reasonably expect to spend at least 85% of all proceeds expected to be used to finance improvements, which proceeds would exclude proceeds in a reasonably required reserve fund, ("Net Sale Proceeds") within three (3) years of issuance. In addition, the Water Authority must have incurred or expect to incur within six months after issuance expenditures or a binding obligation of not less than 5% of such amount of proceeds, and must expect to complete the project and allocate the proceeds to costs with due diligence. Satisfaction of these requirements allows project-related Bond proceeds to be invested at an unrestricted yield for three (3) years. The CFO will review the anticipated Project construction and funding timeline. The Water Authority's finance staff will monitor the appropriate capital project accounts and ensure that Bond proceeds are spent in the time period required under federal tax law. If the CFO discovers that an Expenditure Deadline has not been met, said person will consult with Bond Counsel to determine the appropriate course of action with respect to such unspent bond proceeds. Special action may need to be taken with such unspent bond proceeds, including yield restriction, or redemption of Bonds.

### ***Final Allocation***

Expenditures will be summarized in a final allocation of bond proceeds ("Final Allocation") in a manner consistent with allocations made to determine compliance with arbitrage yield restriction and rebate requirements. The Final Allocation will memorialize the assets or portion thereof financed with bond proceeds and the assets or portion thereof financed with other funds.

The Final Allocation must occur not later than 18 months after the later of the date the expenditure is paid or the date the Project to which the expenditure relates is completed and actually operating at substantially the level for which it was designed. This allocation must be made in any event not later than 60 days after the end of the fifth year after issuance of the Bonds or 60 days after none of the Bonds are outstanding, if earlier.

The CFO will be responsible for ensuring that such Final Allocation is made for the bonds.

### ***Modification of Bond Terms***

The CFO is responsible for identifying any events resulting in (a) changes or modifications of any of the contractual terms of bonds (including, without limitation, modifications of the bond interest rates, maturity dates or payment schedule), (b) changes to any credit enhancement of or liquidity facility for bonds, (c) changes in the nature of the security for the bonds, (d) purchase of bonds by the Water Authority or any entities related to the Water Authority or (e) any deferral or forbearance of default of payment of principal and interest due on bonds. Such actions may result in a deemed reissuance of the bonds for federal income tax purposes and could require protective actions to maintain the tax status of the bonds. Bond Counsel should be consulted prior to taking any of these actions.

### ***Use of Bond Proceeds***

Bond Proceeds generally should be used for long-term capital projects and not more than 5% of the proceeds should be loaned to one or more Nongovernmental Persons. Bond Proceeds (including earnings on original sale proceeds), other than proceeds deposited in a reasonably required reserve fund or used to pay costs of issuance, should be spent on Capital Expenditures. For this purpose, Capital Expenditures generally mean costs to acquire, construct, or improve property (land, buildings and equipment), or to adapt the property to a new

or different use. The property must have a useful life longer than one (1) year. Capital Expenditures include design and planning costs related to the Project, and include architectural, engineering, surveying, soil testing, environmental, and other similar costs incurred in the process of acquiring, constructing, improving or adapting the property. Capital Expenditures do not include operating expenses of the projects or incidental or routine repair or maintenance of the Project, even if the repair or maintenance will have a useful life longer than one (1) year.

### ***Segregation of Bond Proceeds***

Bond Proceeds shall be maintained in separate accounts or subaccounts to ensure accurate calculations and accounting as required by the Internal Revenue Code. The Water Authority shall establish separate accounts or subaccounts as provided in the related Bond Resolution.

### **Section III: Use of Bond Financed Assets**

The Water Authority reviews, and will continue to review, any third-party uses of its Bond-financed facilities (“Projects”) for private business use. In addition, the Water Authority will continue to consult regularly with Bond Counsel and Financial Advisor regarding applicable federal tax limitations imposed on the Water Authority’s outstanding tax-exempt obligations and whether arrangements with third parties give rise to private business use of the Projects. The CFO will maintain records identifying the assets or portion of assets that are financed with proceeds of a Bond issue, the uses and the users (including terms of use and type of use). Such records may be kept in any combination of paper or electronic form. In the event the use of Bond proceeds or the Project is different from the covenants and representations in the Tax Certificate, the CFO shall be notified at that time and Bond Counsel will be promptly notified and consulted to ensure that there is no adverse effect on the tax-exempt status of the Bond issue.

### ***Ownership and Use of Project***

For the life of the Bond issue, the Project must be owned and operated by the Water Authority (or another state or local governmental entity). At all times while the Bond issue is outstanding, no more than 10% (or \$15,000,000, if less) of the Bond proceeds or the Project may be used, directly or indirectly, in a trade or business carried on by a person other than a state or local governmental unit (“Private Use”). Generally, Private Use consists of any contract or other arrangement, including leases, management contracts, operating agreements, guarantee contracts, take or pay contracts, output contracts or research contracts, which provides for use by a person who is not a state or local government on a basis different than the general public. Use may include: (i) owning, leasing, providing services, operating, or managing the Project; (ii) acquiring the output (or throughput) of the Project; or (iii) acquiring or using technology developed at the Project. The Project may be used by any person or entity, including any person or entity carrying on any trade or business, if such use constitutes “General Public Use”. General Public Use is any arrangement providing for use that is available to the general public at either no charge or on the basis of rates that are generally applicable and uniformly applied. Water Authority staff will monitor all leases and subleases on property that has been financed with tax-exempt long-term obligations. Prior to entering into any lease or sublease on a bond-financed property, Water Authority staff will consult with Bond Counsel to determine the impact, if any, such lease or sublease would have on the tax status of outstanding tax-exempt obligations.

The Water Authority will use long-term obligations to finance those projects that are intended to be owned and operated by the Authority for the entire term of the long-term financing. Prior to selling or otherwise disposing of any tax-exempt debt financed project for which debt remains outstanding, the Water Authority will consult with Bond Counsel to determine the impact, if any, such sale or disposition would have on the tax status of outstanding tax-exempt debt.

### ***Management or Operating Agreements***

Any management, operation or service contracts whereby a non-exempt entity is using Bond-financed assets must relate to portions of the Project that fit within the above-mentioned 10% allowable Private Use or the contracts must meet the IRS safe harbor for management contracts. Any replacements of or changes to such contracts should be reviewed by Bond Counsel. The Water Authority shall contact Bond Counsel if there may be a lease, sale, disposition or other change in use of Bond-financed assets. The CFO will maintain records on contracts related with Water Authority real estate on the Facility Management System. In general, management or service contracts related to Projects must provide for reasonable compensation for services rendered with no compensation based on a share of net profits from operations.

The CFO will inform the persons responsible for the management and operation of the Bond-financed assets (“Asset Managers”) of the Private Business Use restrictions relating to the Bond-financed assets. The CFO will require Asset Managers to submit any management contract with respect to any portion of Bond-financed Assets for his or her review prior to entering into such management contract. The CFO will meet at least annually with Asset Managers to identify and discuss any existing or planned use of Bond-financed assets that may give rise to Private Business Use.

### ***Useful Life Limitation***

The weighted average maturity of the Bond issue cannot exceed 120% of the weighted average economic life of the Bond-financed assets. In other words, the weighted average economic life of the Project must be at least 80% of the weighted average maturity of the Bond issue. The term of a long-term obligation should not exceed the useful life of a project financed by those obligations; or in the case of multiple projects, the term of the long-term obligation will not exceed the average useful life. The useful life of an object is confirmed at the time of issuance. Also, each asset of the Authority has a useful life that is recorded in the Authority enterprise resource program.

## **Section IV: Investment Restrictions, Arbitrage Liability**

### ***Investment Restrictions***

Investment restrictions relating to Bond proceeds and other moneys relating to the Bonds are set forth in the Tax Certificate. The Authority’s finance staff will monitor the investment of Bond proceeds to ensure compliance with yield restriction rules. The Authority’s CFO is responsible for directing the investment of proceeds of Bonds or other funds related to the Water Authority’s Bonds and will provide periodic updates on the investments of Bond proceeds to the Water Authority investment committee.

### ***Arbitrage Yield Calculations and Rebate***

Investment earnings on Bond proceeds will be tracked and monitored to comply with applicable yield restrictions and/or rebate requirements. The Authority is responsible for calculating (or causing the calculation of) rebate liability for each Bond issue, and for making any required rebate payments. Any funds of the Authority set aside or otherwise pledged or earmarked to pay debt service on Bonds should be analyzed to assure compliance with the tax law rules on arbitrage, invested sinking funds and pledged funds (including gifts or donations linked to the Bond-financed assets).

### ***Arbitrage Rebate Consultant***

The Authority will retain an arbitrage rebate consultant, to perform rebate calculations as required in the Tax Certificate of each Bond financing. The CFO is responsible for providing the arbitrage rebate consultant with requested documents and information on a prompt basis, reviewing applicable rebate reports and other

calculations and generally interacting with the arbitrage rebate consultant to ensure the timely preparation of rebate reports and payment of any rebate liability.

### ***Arbitrage Rebate Payments***

The reports and calculations provided by the arbitrage rebate consultant will confirm compliance with rebate requirements, which include the Authority to make rebate payments, if any rebate liability exists, no later than the fifth (5th) anniversary date and each fifth (5th) anniversary date thereafter through the final maturity or redemption date of a Bond issue. A final rebate payment must be made within sixty (60) days of the final maturity or redemption date of a Bond issue. The CFO or their designee will confer and consult with the arbitrage rebate consultant to determine whether any rebate spending exception may be met. Rebate spending exceptions are available for periods of 6 months, 18 months and 2 years. The Authority will review the Tax Certificate and/or consult with the arbitrage rebate consultant or Bond Counsel for more details regarding the rebate spending exceptions. Copies of all arbitrage rebate reports, related return filings with the IRS (i.e., IRS Form 8038-T), copies of cancelled checks with respect to any rebate payments, and information statements must be retained as described in Section V below. The Authority's finance staff will follow the procedures set forth in the Tax Certificate entered into with respect to any Bond issue that relate to compliance with the rebate requirements.

## **Section V: Record Retention**

The CFO will maintain, or cause to be maintained, copies of all relevant documents and records sufficient to support that the tax requirements relating to a Bond issue have been satisfied will be maintained by the Water Authority for the later of: (i) the term of a Bond issue, or (ii) the term of any subsequent issue that refunds the original Bond issue, plus three (3) years, including the following documents and records:

- Bond closing transcript
- All records of investments, arbitrage reports, returns filed with the IRS and underlying documents
- Construction contracts, purchase orders, invoices and payment records
- Documents relating to costs reimbursed with Bond proceeds
- All contracts and arrangements involving Private Use of the Bond-financed property
- All reports relating to the allocation of Bond proceeds and Private Use of Bond-financed property
- Itemization of property financed with Bond proceeds
- Subscription information related to United States Treasury Securities – State and Local Government Series (SLGs)
- Solicitation and all responses received from the bidding of any guaranteed investment contracts and Government Obligations

## **Section VI. Annual Review of Post Issuance Compliance Controls**

The Water Authority will conduct periodic reviews of compliance with these Post-Issuance Compliance Guidelines to determine whether any violations have occurred so that such violations can be remedied through the “remedial action” regulations (Treas. Reg. Section 1.141-12) or the Voluntary Closing Agreement Program (VCAP) described in IRS Notice 2008-31 (or successor guidance). If any changes to the terms or provisions of a Bond issue are contemplated, the Water Authority will consult Bond Counsel. The Water Authority recognizes and acknowledges that such modifications could result in a “reissuance” for federal tax purposes (i.e., a deemed refunding) of the Bond issue and thereby jeopardize the tax-exempt status of interest on the Bonds after the modifications. At least annually, the CFO will conduct an evaluation of the effectiveness of the design and operation of the Water Authority’s Post-Issuance Compliance Guidelines with the assistance of the Water Authority’s Financial Advisor as needed and internal finance staff of the Water Authority as appropriate, to the extent determined by any of them to be necessary or appropriate.

### ***Annual Review and Training***

The CFO will coordinate an annual review process to investigate, monitor, assure and document compliance with the tax and continuing disclosure requirements described in these guidelines. CFO or other staff responsible for monitoring post-issuance tax compliance matters will attend regular training or educational forums necessary to stay up to date on tax-exempt bond compliance requirements.



### ***Continuing Disclosure Compliance Requirements***

In each year that the Water Authority has bonds or taxable obligations outstanding subject to SEC Rule 15c2-12, it must provide updated information or its designee, must file or cause to be filed its annual report (the "Annual Report") with the Municipal Securities Rulemaking Board (the "MSRB") through its Electronic Municipal Market Access system for municipal securities disclosure ("EMMA"). Aforementioned updated information must be provided by the Water Authority or designee by the date specified in each bond's official statement. Refer to Exhibit B for the required disclosure dates for Water Authority's existing bonds.

In preparing its Annual Report, the Water Authority should review each of its outstanding continuing disclosure undertakings (if any) (collectively, the "Undertakings") to determine the quantitative financial information and operating data which, together with the audited financial statements, will constitute the content of the Annual Report. Certain quarterly reports may also need to be filed with the MSRB through EMMA.

The Water Authority, through its Disclosure Counsel, will also continuously monitor other events relevant to the bonds and provide proper notice to the MSRB through EMMA as may be required by the Undertakings. A list of relevant events is included on Exhibit C hereto, which may be amended from time to time to reflect updates in the law.

The Water Authority will coordinate any submissions with the MSRB through EMMA with Disclosure Counsel or other legal counsel.

## EXHIBIT A

### TO POST-ISSUANCE COMPLIANCE GUIDELINES

#### LIST OF CURRENTLY OUTSTANDING BONDS

##### SYSTEM REVENUE BONDS

- \$135,990,000 (original principal amount; dated April 8, 2009) Senior Lien Albuquerque Bernalillo County Water Utility Authority, New Mexico, System Revenue Bonds, **Series 2009A-1** (Final Maturity: July 1, 2034)
- \$62,950,000 (original principal amount; dated October 22, 2013) Senior Lien Albuquerque Bernalillo County Water Utility Authority, New Mexico, System Revenue Bonds, **Series 2013A** (Final Maturity: July 1, 2038)
- \$55,265,000 (original principal amount; dated October 22, 2013) Senior Lien Albuquerque Bernalillo County Water Utility Authority, New Mexico, System Revenue Bonds, **Series 2013B** (Final Maturity: July 1, 2024)
- \$97,270,000 (original principal amount; dated September 24, 2014) Senior Lien Albuquerque Bernalillo County Water Utility Authority, New Mexico, System Revenue Bonds, **Series 2014A** (Final Maturity: July 1, 2026)
- \$87,005,000 (original principal amount; dated September 24, 2014) Subordinate Lien Albuquerque Bernalillo County Water Utility Authority, New Mexico, System Revenue Bonds, **Series 2014B** (Final Maturity: July 1, 2025)
- \$211,940,000 (original principal amount; dated April 27, 2015) Senior Lien Albuquerque Bernalillo County Water Utility Authority, New Mexico, System Revenue Bonds, **Series 2015** (Final Maturity: July 1, 2033)
- \$87,970,000 (original principal amount; dated March 1, 2017) Senior Lien Albuquerque Bernalillo County Water Utility Authority, New Mexico, System Revenue Bonds, **Series 2017** (Final Maturity: July 1, 2034)
- \$75,085,000 (original principal amount; dated October 16, 2018) Senior Lien Albuquerque Bernalillo County Water Utility Authority, New Mexico, System Revenue Bonds, **Series 2018** (Final Maturity: July 1, 2030)

##### NMFA LOANS

- \$10,426,232 (original principal amount) Subordinate Lien Albuquerque Bernalillo County Water Utility Authority, New Mexico, System Revenue NMFA DWRFL, **Series 2008** (Final Maturity: May 1, 2025)
- \$1,000,000 (original principal amount) Senior Lien Albuquerque Bernalillo County Water Utility Authority, New Mexico, System Revenue NMFA DWRFL, **Series 2009** (Final Maturity: July 1, 2031)

- \$53,400,000 (original principal amount) Senior Lien Albuquerque Bernalillo County Water Utility Authority, New Mexico, System Revenue NMFA PPRF, **Series 2011** (Final Maturity: June 1, 2036)
- \$505,000 (original principal amount) Senior Lien Albuquerque Bernalillo County Water Utility Authority, New Mexico, System Revenue NMFA DWRFL, **Series 2018** (Final Maturity: May 1, 2039)
- \$250,000 (original principal amount) Senior Lien Albuquerque Bernalillo County Water Utility Authority, New Mexico, System Revenue NMFA DWRFL, **Series 2018** (Final Maturity: May 1, 2039)

**EXHIBIT B**  
**TO POST-ISSUANCE COMPLIANCE GUIDELINES**

THE FOLLOWING SUMMARIES ARE NOT COMPLETE DESCRIPTIONS OF THE COVENANTS DESCRIBED IN THE BOND DOCUMENTS, AND REFERENCE MUST BE MADE TO THE APPLICABLE DOCUMENT SECTIONS FOR A FULL DESCRIPTION OF SUCH COVENANTS. The Water Authority should seek advice of Bond Counsel or other legal counsel to assist in reviewing tax, insurance, disclosure and business covenants summarized below.

<b>ISSUE</b>	<b>ADDITIONAL BOND TEST</b>	<b>CDU DATE</b>	<b>RATE COVENANT</b>	<b>RESERVE REQUIREMENT</b>
<b>NET SYSTEM REVENUE BONDS</b>				
SERIES 2009A-1	1.33X Max Combined Annual Debt Svc & Historic or Proj. Test	Mar 31	Sufficient To Pay 1.33X Debt Svc	N/A
SERIES 2013A	1.33X Max Combined Annual Debt Svc & Historic or Proj. Test	Mar 31	Sufficient To Pay 1.33X Debt Svc	N/A
SERIES 2013B	1.33X Max Combined Annual Debt Svc & Historic or Proj. Test	Mar. 31	Sufficient To Pay 1.33X Debt Svc	N/A
SERIES 2014A	1.33X Max Combined Annual Debt Svc & Historic or Proj. Test	Mar. 31	Sufficient To Pay 1.33X Debt Svc	N/A
SERIES 2014B	1.33X Max Combined Annual Debt Svc & Historic or Proj. Test	Mar. 31	Sufficient To Pay 1.33X Debt Svc	N/A
SERIES 2015	1.33X Max Combined Annual Debt Svc & Historic or Proj. Test	Mar. 31	Sufficient To Pay 1.33X Debt Svc	N/A
SERIES 2017	1.33X Max Combined Annual Debt Svc & Historic or Proj. Test	Mar. 31	Sufficient To Pay 1.33X Debt Svc	N/A
SERIES 2018	1.33X Max Combined Annual Debt Svc & Historic or Proj. Test	Mar. 31	Sufficient To Pay 1.33X Debt Svc	N/A

EXHIBIT C  
TO POST-ISSUANCE COMPLIANCE GUIDELINES  
**SEC RULE 15c2-12 DISCLOSURE REQUIREMENTS**

For its Undertakings with respect to bonds or other obligations issued before December 1, 2010, the Water Authority must monitor the following events and provide notice of such events to the MSRB through EMMA as required by the applicable Undertaking:

1. Principal and interest payment delinquencies
2. Non-payment related defaults
3. Unscheduled draws on debt service reserves reflecting financial difficulties
4. Unscheduled draws on credit enhancements reflecting financial difficulties
5. Substitution of credit or liquidity providers, or their failure to perform
6. Adverse tax opinions or events affecting the tax-exempt status of the security
7. Modifications to the rights of security holders
8. Bond calls
9. Defeasances
10. Release, substitution or sale of property securing repayment of the securities
11. Rating changes.

For its Undertakings with respect to bonds or other obligations issued on or after December 1, 2010, the Water Authority must monitor the following events and provide notice of such events to the MSRB through EMMA as required by the applicable Undertaking, but not later than 10 business days after occurrence:

1. Principal and interest payment delinquencies
2. Non-payment related defaults, if material
3. Unscheduled draws on debt service reserves reflecting financial difficulties
4. Unscheduled draws on credit enhancements reflecting financial difficulties
5. Substitution of credit or liquidity providers, or their failure to perform
6. Adverse tax opinions, the issuance by the Internal Revenue Service of proposed or final determinations of taxability, Notices of Proposed Issue (IRS Form 5701 TEB) or other material notices or determinations with respect to the tax status of the security, or other material events affecting the tax status of the security
7. Modifications to rights of bondholders, if material
8. Bond calls, if material, and tender offers
9. Defeasances
10. Release, substitution or sale of property securing repayment of the securities, if material
11. Rating changes
12. Bankruptcy, insolvency, receivership or similar event of the Water Authority
13. The consummation of a merger, consolidation or acquisition involving the Water Authority or the sale of all or substantially all of the assets of the Water Authority, other than in the ordinary course of business, the entry into a definitive agreement to undertake such an action or the termination of a definitive agreement relating to any such actions, other than pursuant to its terms, if material
14. Appointment of a successor or additional trustee or the change of name of a trustee, if material/applicable.



# Albuquerque Bernalillo County Water Utility Authority

## FY20 Rate Ordinance

# Rate Ordinance Highlights

- Conducted the evaluation of the Cost of Service Rate Principles as required to be done every two years by the Rate Ordinance
- Evaluated UEC's and changed the Water Supply Charge to the new Water Resource Charge based on Water 2120 infrastructure projects
- Made changes to the Water Assistance Fund
- Updated UEC's as required by the rate ordinance by the ENR index of 3.1%



Albuquerque Bernalillo County  
Water Utility Authority



# TCAC Review and Recommendations

- Conducted 3 TCAC meetings on rates and Water Resource Charge
- TCAC reviewed Rate Study, Water Resource Charge and Utility Expansion Charge
- TCAC recommended phasing in the Water Resource Charge
- TCAC recommended evaluating the Water Resources charge and the UEC charges every 2 years along with the cost of service evaluation of the rates



Albuquerque Bernalillo County  
Water Utility Authority



# Water Assistance Fund

- Funded by donations from Rate Payers
- Added an appropriation of \$150,000 to the operating budget to help fund the program
- One-time assistance to help customers pay their water bill
- Includes assistance to renters, occupying a single-family dwelling
- Also helps customers get current on bill so that they may qualify for the Low Income Assistance Program
- Helps customers in crisis and reduces staff time for unnecessary turn-offs

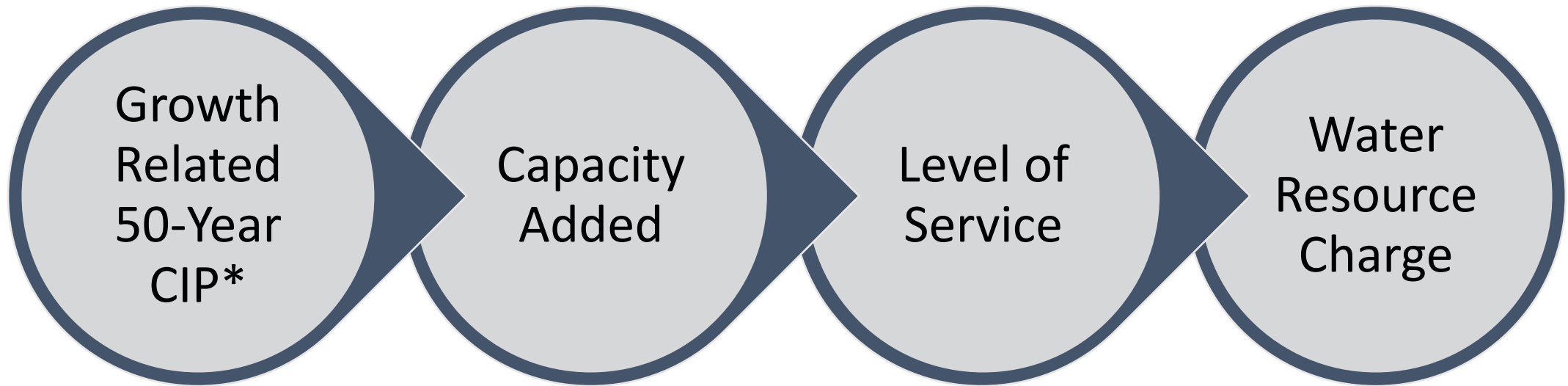


# Summary of Water Resource Charge

- Formerly known as Water Supply Charge
- Includes water resource infrastructure costs in place of water rights acquisition based on Water 2120
- Applicable to new customers outside of the Authority's existing service area under a development agreement
- No net expense to utility customers for growth



# Water Resource Charge Process

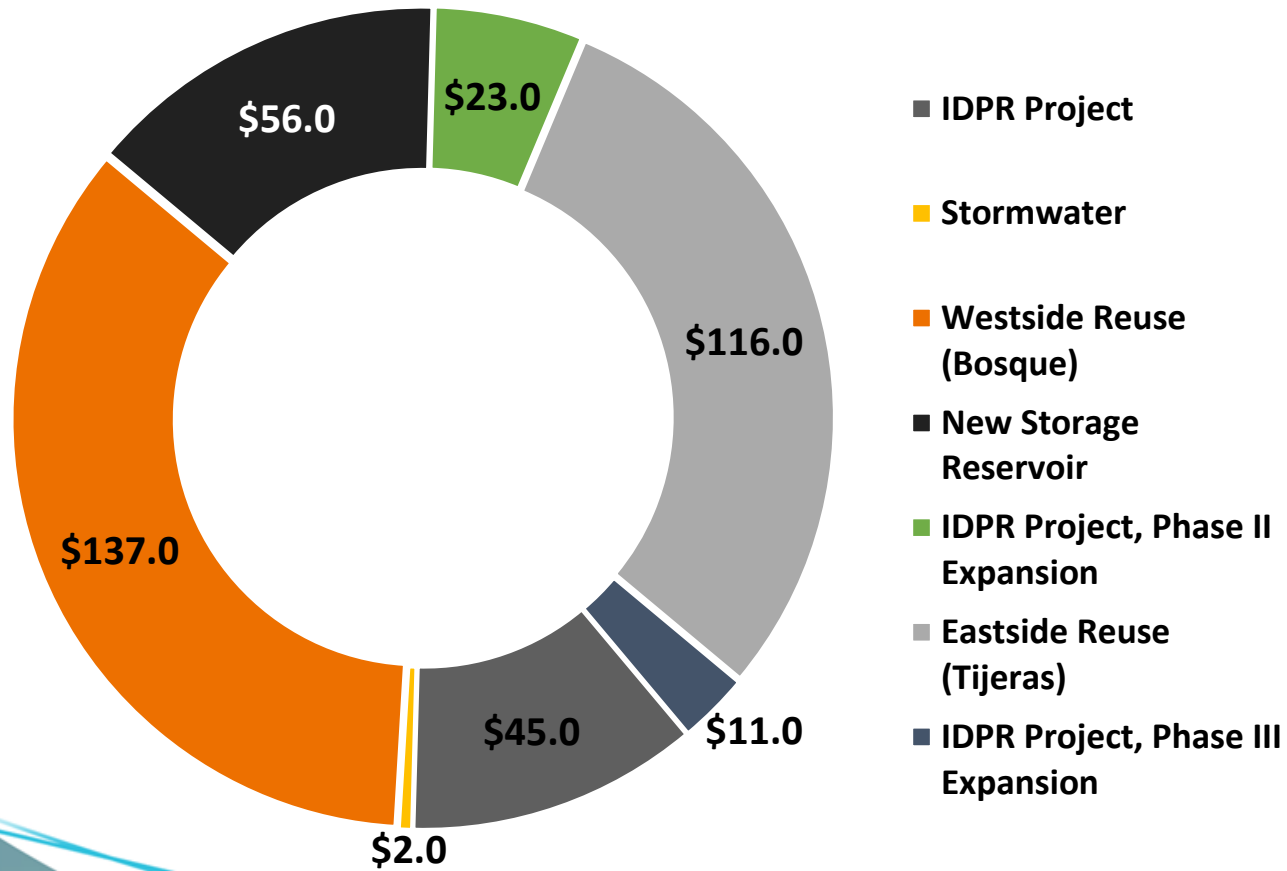


\*CIP costs based on Water 2120 Plan



Albuquerque Bernalillo County  
Water Utility Authority

# Water Resource Charge – Capital Projects & Capacity



Description	Capacity (afy)	Capacity (gpd)
IDPR Project	5,000	4,463,712
Stormwater	1,500	1,339,114
Westside Reuse (Bosque)	6,000	5,356,455
New Storage Reservoir	4,000	3,570,970
IDPR Project, Phase II Expansion	5,000	4,463,712
Eastside Reuse (Tijeras)	10,000	8,927,425
IDPR Project, Phase III Expansion	2,000	1,785,485
Total	33,500	29,906,873



Albuquerque Bernalillo County  
Water Utility Authority

# Water Resource Charge

## Water Resource

Meter Size	AWWA Meter Equivalents	Current Water Supply Charge	Calculated Water Resource Charge	\$ Difference
3/4"	1.00	\$ 1,669	\$ 4,061	\$ 2,392
1"	1.67	\$ 2,793	\$ 6,768	\$ 3,975
1.5"	3.33	\$ 5,564	\$ 13,537	\$ 7,973
2"	5.33	\$ 8,902	\$ 21,659	\$ 12,757
3"	11.67	\$ 17,806	\$ 47,378	\$ 29,572
4"	20.00	\$ 27,627	\$ 81,220	\$ 53,593
6"	45.00	\$ 55,760	\$ 182,745	\$ 126,985
8"	53.33	\$ 89,023	\$ 216,587	\$ 127,564



Albuquerque Bernalillo County  
Water Utility Authority

# Water Resource Charge – Phase-in Option: 8 Years

## Phase-In Fee Schedule

Escalation Factor\*

3.0%

Phase-In (years)

8

Meter Size	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8
3/4"	\$ 2,085	\$ 2,500	\$ 2,916	\$ 3,332	\$ 3,747	\$ 4,163	\$ 4,579	\$ 4,995
1"	\$ 3,474	\$ 4,167	\$ 4,860	\$ 5,553	\$ 6,246	\$ 6,939	\$ 7,631	\$ 8,324
1.5"	\$ 6,949	\$ 8,335	\$ 9,720	\$ 11,106	\$ 12,491	\$ 13,877	\$ 15,263	\$ 16,648
2"	\$ 11,118	\$ 13,335	\$ 15,552	\$ 17,769	\$ 19,986	\$ 22,203	\$ 24,420	\$ 26,637
3"	\$ 24,321	\$ 29,171	\$ 34,021	\$ 38,871	\$ 43,720	\$ 48,570	\$ 53,420	\$ 58,269
4"	\$ 41,694	\$ 50,008	\$ 58,321	\$ 66,635	\$ 74,949	\$ 83,263	\$ 91,577	\$ 99,890
6"	\$ 93,811	\$ 112,517	\$ 131,223	\$ 149,929	\$ 168,635	\$ 187,341	\$ 206,047	\$ 224,753
8"	\$ 111,183	\$ 133,354	\$ 155,524	\$ 177,694	\$ 199,864	\$ 222,034	\$ 244,204	\$ 266,374

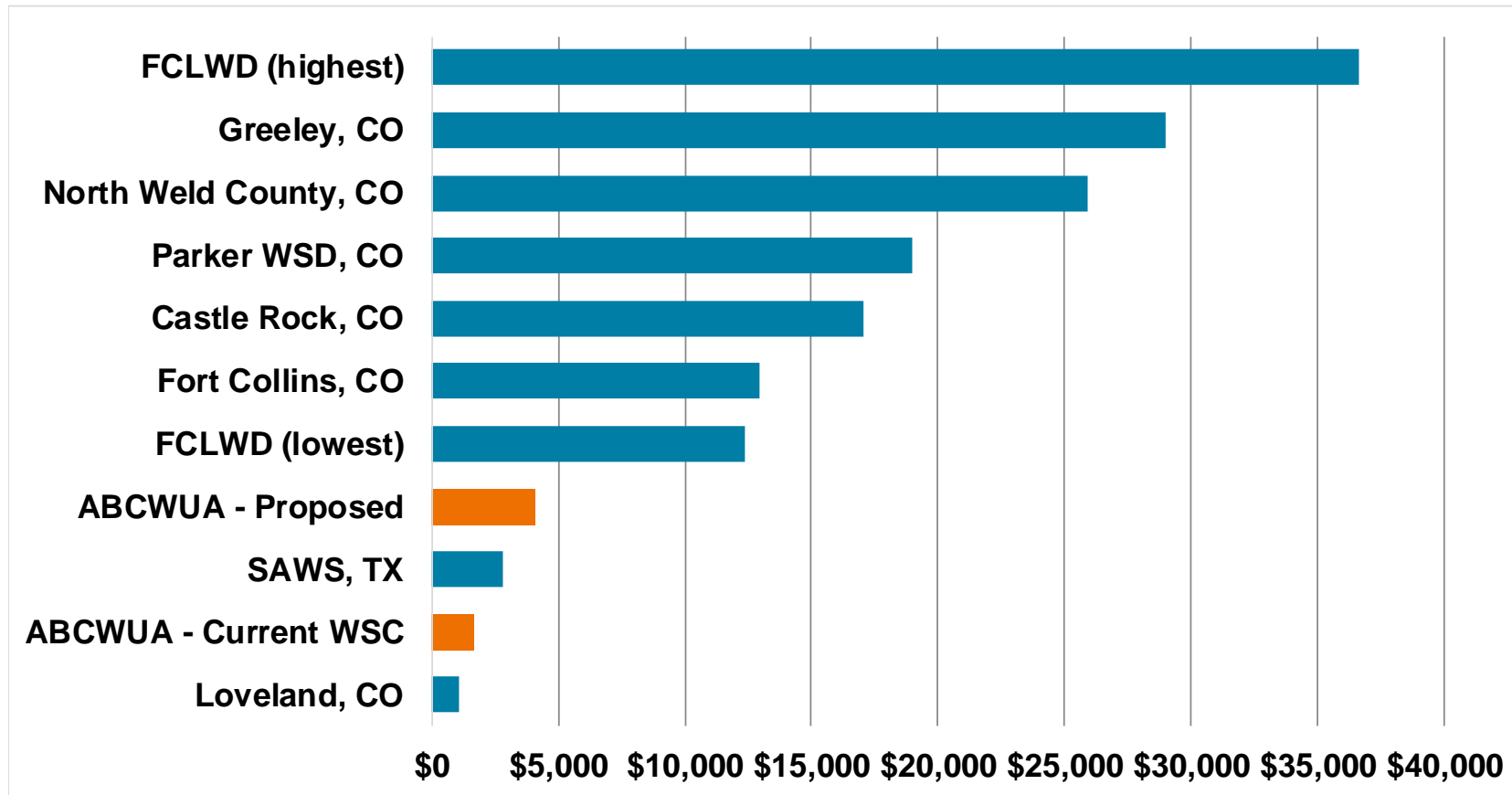
\* ENR CCI five-year average annual growth.



Albuquerque Bernalillo County  
Water Utility Authority

# Water Resource Charge Survey

## FY 2018 Residential 3/4" Meter Water Resource Fee



Albuquerque Bernalillo County  
Water Utility Authority

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Meeting Date: April 17, 2019  
Staff Contact: Stan Allred, Chief Financial Officer

**TITLE: R-19-8 – Appropriating Funds for Operating the Albuquerque Bernalillo County Water Utility Authority for Fiscal Year Beginning July 1, 2019 and Ending June 30, 2020**

**ACTION: Introduction April 17, 2019; Final Action May 22, 2019**

**SUMMARY:**

This legislation is the Water Authority's proposed budget appropriation for Fiscal Year 2020 beginning July 1, 2019. The FY20 budget was developed utilizing the Water Authority's Five-Year Goals, One-Year Objectives, Performance Plan and the Guiding Principles in determining the costs needed to effectively and efficiently run the utility operation.

**Fiscal Year 2020 HIGHLIGHTS:**

The FY20 Executive Director's Proposed Budget establishes the Water Authority's financial plan and uses the Goals, Adopted Policies, Objectives and the Performance Plan as guides for the appropriation of funds. The Water Authority, with input from the operating divisions, developed the budget by determining those essential costs necessary to successfully run the utility operation.

Helping to guide this effort is *Water 2120*, the Water Authority's 100-year water resources management strategy, adopted in September 2016. *Water 2120* incorporates the latest science regarding the effect of climate change on the availability of surface water supplies. Using climatic hydrologic simulation models from the Office of the State Engineer, Sandia National Laboratories and the U.S. Bureau of Reclamation and Geological Survey, among other agencies, it takes climate variability into account and for the first time looks at a 100-year time horizon for the greater Albuquerque area. Three different demand scenarios along with three supply alternatives are used to examine the need for new supplies while maintaining a ground water resource for future generations. A portfolio of supply options is used to fill the gaps to meet future demand over the next 100 years. A key component going forward will be the shift from acquisition of water rights to the development of reuse facilities to have a more resilient supply.

**Operations**

The operational cornerstone of *Water 2120* is the San Juan-Chama Drinking Water Project (DWP), which will continue to have a major positive impact on the ground water resources in the Middle Rio Grande. After ten years of operation, the DWP – along with



conservation and other resource management efforts – has resulted in rising aquifer levels throughout the service area as documented by the U.S. Geological Survey. A video documenting this success is available for viewing at: <https://www.youtube.com/watch?v=Z6stQZw2L1M&feature=youtu.be>

The Water Authority will continue to operate two potable water supply systems, the surface water and the ground water systems. This dual system operation will continue into the future with the primary source of supply being treated surface water from the DWP. The DWP provided 53% of all water distributed to Water Authority customers in calendar year 2018. The Water Authority's goal is to have the DWP supply 70-75% of all customer demand in calendar year 2019. Flow conditions in the Rio Grande may limit the ability to fully realize this goal on a consistent basis.

The Water Authority began a major renovation of the Southside Water Reclamation Plant (SWRP) in FY10 called the Reclamation Rehabilitation and Asset Management Plan (RRAMP). The RRAMP is a multi-year program to renew the treatment processes at the plant. Several key improvement projects in this program have been completed, including the Preliminary Treatment Facility (PTF), aeration basin and air piping renovations, final clarifier renovations, and major renovations and improvements to the Solids Dewatering Facility (SDF). Improvements will also be made to the Anaerobic Digesters, Primary Clarifiers, Secondary Sludge Thickening Facilities, plant-wide electrical systems, and other SWRP facilities.

Plans are to continue to increase the amount of wastewater bio-solids that are composted and sold while not “over-saturating” the regional market for bio-solids compost and sell at least 30% of the total quantity of bio-solids. SWRP staff will focus on completing work on the 9 areas selected for focused improvement from the AWWA Partnership for Clean Water Phase III Self-Assessment. Staff will also continue updating plant asset records, preventative maintenance, and preventative maintenance routes in Maximo.

In FY20, the SWTP will focus on construction of a dewatering system for iron sludge and managing the sludge discharges to the collection system. The permanent fluoride addition facility will be completed during the fiscal year. SWTP staff will complete work on the 8 areas selected for focused improvement from the AWWA Partnership for Safe Water-Treatment Phase II Self-Assessment.

For FY20, Groundwater Operations will fine-tune system operations to the State Drinking Water Act (SDWA) standards for arsenic and the prescribed range for fluoride. Staff will be renovating/replacing aging motor control centers and renovate interior piping and valves at several pump stations, replacing older ClorTec disinfection systems with new PSI systems, renovating the Charles Wells Reservoir, and repairing/replacing reservoir hatches in advance of the 2020 Sanitary Survey.

Wastewater Collections continues to implement the CMOM program and prepare the CMOM Program Self-Assessment during FY20. Staff will clean small diameter lines in major intersections that have not been cleaned in the last 10 years, televise and assess the condition of 5% of the small diameter system and develop and implement a process

to capture new construction CCTV for inclusion in both Maximo and IT Pipes Repository after GIS unique identifiers are established.

Water Distribution Field will continue the Automated Meter Infrastructure (AMI) Pressure Monitoring project and assess opportunities for operational efficiency within pressure one 4ER and the Paseo Del Norte/Eagle Ranch interconnection. To support the water loss audit and strategic water loss plan, staff will conduct a statistically significant number of small meter tests. Staff will continue implementation of the AMI project by modernizing aging meter infrastructure with smart meters to increase revenue, support conservation efforts and provide better customer service.

Water Resources will expand their conservation program by launching the 505Outside website to all customers, develop a program to assist low-income customers with water efficiency efforts, and end the rebates for pressure reduction valves and add rebates for organic mulch and flow and moisture sensors. Education efforts will continue with the design and implementation of a water project to engage high-risk middle school students, partner with Explora on the new STEAM Science Center water exhibits and create a new puppet show and coloring book for the 2019-20 school year. Water Resources will identify the location and type of the next ASR project and begin well capture zone analysis to identify the areas most in need of protection surrounding well heads. To further environmental goals, Water Resources will fund and collaborate on a study to age larval Rio Grande silvery minnow to tie life history events to hydrologic events, perform maintenance on the La Orilla and Paseo del Norte restoration sites in partnership with CABQ Open Space and fund and participate in the Executive Committee of the Rio Grande Water Fund.

Planning & Engineering will complete the Guide to Development, complete the Field Asset GPS Coordinates Program, and prepare a list of recommended modifications to the Expansion Ordinance in coordination with the Guide to Development. Staff will be developing a proposed fee schedule for Utility Development deliverables and begin work on a Construction Inspection Manual. Maps/Records staff will develop GIS layers for SAD Interceptor Flows and tapping permits.

## **Compliance**

Water and Wastewater Operations are regulated by a myriad of federal, state, and local environmental permits, regulations, and rules. The Compliance Division continues to maintain a matrix that is updated quarterly of regulatory requirements to monitor regulatory initiatives to define operational impacts and develop compliance strategies.

In FY20, the NPDES program will work with the EPA on obtaining a final NPDES permit. The new permit may require changes to the sampling plan. The report on Pharmaceuticals and Personal Care Products will be issued. UCMR4 sampling will continue on drinking water. The Water Quality Lab will continue optimizing LabVantage and move towards updated laboratory standards required by accreditation.

## **Administration, Employee Relations and Development**

The Water Authority will continue to conduct periodic activities to engage, educate, and provide updates to customers, legislators and neighborhood associations regarding Water Authority activities and initiatives, and offer opportunities for dialogue and feedback.

In FY20, Risk/Safety will research defensive & over-the-road driving programs, develop safety posters for various Water Authority locations including hazard/exposure information, chemicals in buildings and safety gear required posters and develop the use of Informacast for safety use.

Human Resources wellness staff will continue offering wellness challenges for individuals and departments. At least two fitness challenges per quarter will be offered in conjunction with nutrition, physical activity and weight loss tips as well as disease and injury prevention topics to employees.

Human Resources staff will be distributing an Employee Satisfaction and Engagement Survey in the fall of 2019. Staff will then prepare a report on the results and distribute by the spring of 2020. With the new AuthorityWorks online application system, staff will create new recruitment brochures and a new benefits flyer for interviewees. Other areas of focus for FY20 include: new and improved employee incentives, improve the intern programs, continue with succession planning and knowledge transfer efforts and continue to update procedures and administrative instructions.

The proposed budget also includes nonrecurring funding for an employee safety incentive program. This program will reward employees for cost savings that result from a decrease in work-related losses. Funding for this program is contingent on the Water Authority generating the same or a greater amount in savings. This incentive program has been an effective tool in the reduction of the Water Authority's Workers Compensation expense.

### **Budget, Finance and Business Management**

Finance will submit to GFOA the FY20 Approved Budget for the Distinguished Budget Presentation Award, the FY19 Comprehensive Annual Financial Report (CAFR) for the Certificate of Achievement for Excellence in Financial Reporting and the FY19 Popular Annual Financial Report (PAFR) for the Popular Annual Financial Reporting Award. The division believes that all three financial documents meet or exceed the recommended requirements to successfully receive each award and to also be nationally recognized by GFOA for these accomplishments.

In FY20, Accounting Services will continue the Maximo implementation with the inventory of all assets, updating the data for each asset, updating install dates, purchase price and replacement cost, updating depreciation schedules and developing risk/insurance management reports of the assets.

Purchasing will fully implement the new Warehouse Ordering and Inventory Management Policy, complete the implementation and go-live of the new online bidding/proposal evaluation tool, prepare for moving all inventory and staff from the Pino Warehouse

location to the new warehouse at Surface Water and solicit and award new on-call construction/engineering agreements and implement new administrative procedures to improve the effectiveness of those contracts.

Budget will continue to provide budget and ERP system training to utility staff and schedule monthly budget update meetings with staff.

In FY20, Treasury will complete the transition of banking services per the RFP issued in FY19, partner with CSD, ITD and Public Affairs to update bill presentment and payment navigation on the Authority's website and maintain a diversified investment portfolio.

In FY20, dispatching functions will transfer from WA Field Operations to Customer Services. CSD staff will utilize the increased functionality of the upgraded CC&B system to expand the use of templates, known as campaigns, to convert existing business processes and to convert current rates to the new rate engine and to implement the Water Resources Charge. CSD will issue an RFP and award a contract with a vendor to implement a meter data management (MDM) system to store and manage data from AMI and non-AMI meters. CSD staff will participate in the AWWA Rate Study.

ITD Quality Assurance staff will upgrade utility desktop operating systems to Windows 10, identify and document all IT assets into Maximo, support the buildout of the new administration building and develop enterprise training initiatives.

ITD Infrastructure objectives for FY20 include upgrading the card key and video surveillance system to build in redundancy, implement backup and recovery solutions for SCADA and enterprise and support the buildout of the new administration building.

ITD Network staff will upgrade the SCADA fiber and network equipment at the Surface Water Treatment Plant, upgrade core network equipment for the new administration building and upgrade end-of-life network equipment from previously leased equipment.

ITD Application staff will continue the Maximo upgrade, including: training, life cycle accounting, asset onboarding, storeroom, barcoding and mobile assessment. Staff will also perform a CC&B archive and purge, report standardization for Splunk-AVL and MeterSense applications, and lead upgrades to various enterprise applications: OneSolution, Kronos, Cognos and GIS.

IT Security will be a major focus in FY20. Staff will be: completing security awareness training videos for all Water Authority staff including a New Employee Orientation/Supervisor training security video, completing security policies and procedures, and reducing the overall risk assessment scores.

The rate reserve fund balance is \$9.0 million. The Water Authority will also provide deferred UEC collections on up to 50 affordable housing units developed by non-profit housing developers.

## **FISCAL IMPACT:**

This appropriation consists of the Water Authority General Fund which totals \$231,347,000 and the Water Authority Debt Service Fund which totals \$88,496,000.

**COMMENTS:**

For FY20, General Fund revenue is estimated to be \$231.3 million with proposed expenses of \$231.3 million. This amount will bring the Working Capital or Fund Balance to \$38.5 million at June 30, 2020, net of the rate reserve fund balance. The Water Authority's target is to maintain its Fund Balance at 1/12 of the annual budgeted operating expenses as defined by the Water Authority's Rate Ordinance.

**Revenues**

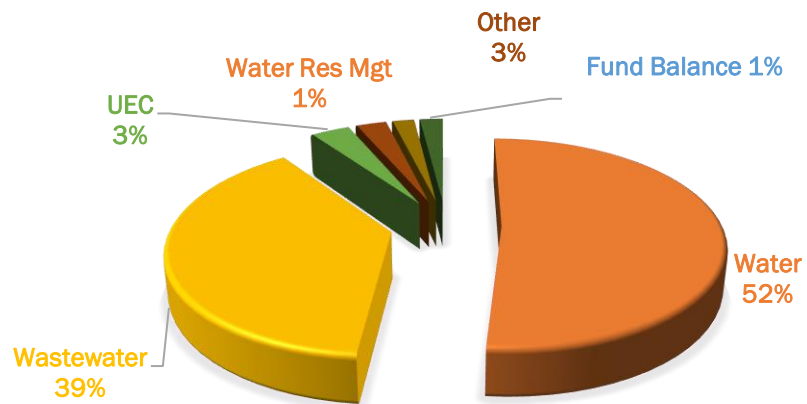
The revenue table is an estimate of revenues projected next year. The following is a revenue comparison of the FY18 Audited Actuals, FY19 Revised and the FY20 Proposed budgets:

**WATER AUTHORITY GENERAL FUND - 21**

<b>ACCOUNT NAME</b>	<b>AUDITED FY18</b>	<b>REVISED BUDGET FY19</b>	<b>PROPOSED BUDGET FY20</b>	<b>DIFFERENCE FY20-FY19</b>
Interest	322	540	1,000	460
Miscellaneous	2,826	3,109	3,109	-
Water	143,472	123,355	123,355	-
Water Resources Management	4,418	4,500	4,500	-
Wastewater	76,078	92,471	92,471	-
CIP Employees	943	-	-	-
Solid Waste Admin Fee	1,480	1,509	1,637	128
DMD Admin Fee	348	359	496	137
PNM Pass Thru	-	-	-	-
Fund Balance	-	-	4,779	4,779
<b>FUND TOTAL</b>	<b>229,887</b>	<b>225,843</b>	<b>231,347</b>	<b>5,504</b>

General Fund revenue for FY20 is estimated to be \$5.5 million above the FY19 revised budget due to increases in interest income and administrative fees and the use of fund balance. Revenue in the Debt Service Fund has a \$5.6 million increase, comprised of a \$1.5 million decrease in UEC Revenue and a \$7.1 million increase in the transfer from the General Fund for debt service payments.

## REVENUE SOURCES



\* Consolidated for Reporting Purposes

\* \* Other includes Interest, Miscellaneous, SW Admin Fee, DMD Admin Fee

**Expenses**

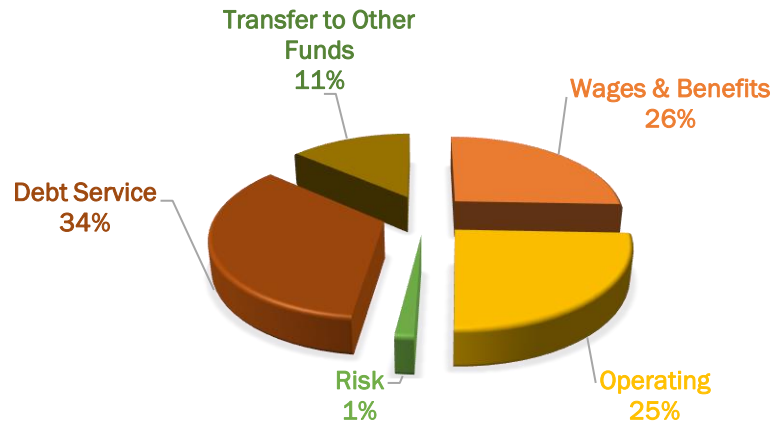
The following is the appropriation comparison of the FY18 Audited Actuals, FY19 Revised and the FY20 Proposed budgets:

**WATER AUTHORITY GENERAL FUND - 21**

<b>PROGRAM</b>	<b>AUDITED FY18</b>	<b>REVISED BUDGET FY19</b>	<b>PROPOSED BUDGET FY20</b>	<b>DIFFERENCE FY20-FY19</b>
Administration	3,140	2,718	2,224	(494)
Risk	3,616	4,411	4,397	(14)
Legal	863	760	790	30
Human Resources	1,473	1,588	1,799	211
Finance	3,867	4,020	4,124	104
Customer Services	8,682	9,050	5,192	(3,858)
Information Technology	6,998	7,213	7,370	157
Wastewater Plant	10,978	11,351	11,786	435
San Juan-Chama Water Treat Plant	3,479	4,142	4,285	143
Groundwater Operations	6,288	6,539	6,614	75
Wastewater Collection	6,824	6,701	7,077	376
Water Field Operations	18,154	19,651	23,824	4,173
Compliance	4,242	5,261	5,424	163
Planning & Engineering	2,960	3,899	4,008	109
Water Resources	3,631	3,936	4,675	739
Power & Chemicals	20,566	19,987	21,487	1,500
Taxes	262	656	656	-
Overhead	2,247	1,660	1,839	179
San Juan-Chama	2,109	2,747	2,747	-
Tfr Gen Fund to Rehab Fund	30,250	26,589	31,618	5,029
Tfr Gen Fund to Debt Serv Fund	70,908	72,267	79,411	7,144
<b>FUND TOTAL</b>	<b>211,539</b>	<b>215,145</b>	<b>231,347</b>	<b>16,202</b>

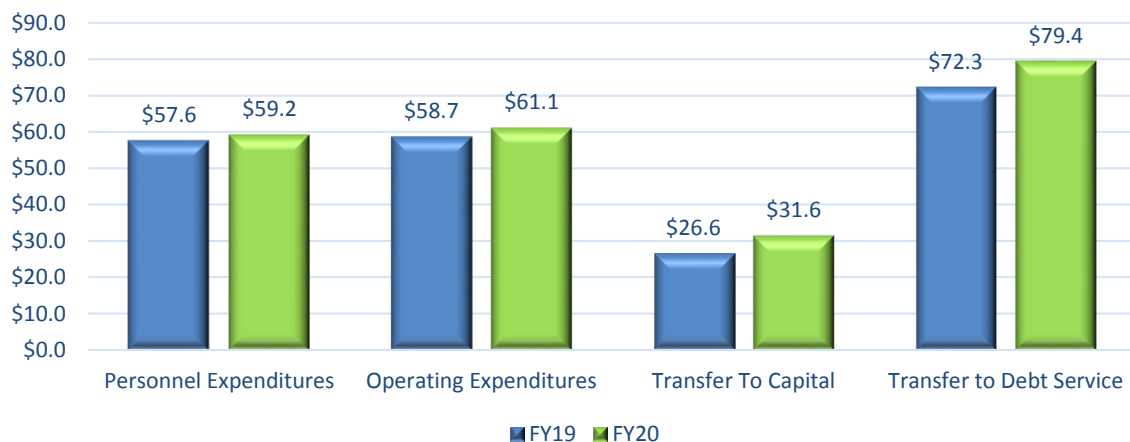
The FY20 proposed General Fund expenses contain a net increase of \$16.2 million from the FY19 Revised Budget. Total personnel costs have increased by \$1.6 million as compared to FY19; general operating expenses increase \$2.4 million; and interfund transfers increase \$12.2 million.

## EXPENSES



\* Consolidated for Reporting Purposes

### Difference between FY19 and FY20 Expenses (in millions)



Personnel expenses include a 2.0% step increase in wages and a 12.0% increase in health benefit costs. Total personnel costs have increased by \$1.6 million as compared to FY19. Total general operating costs increase \$2.4 million. The interfund transfers increase by \$12.2 million.

The Working Capital balance at June 30, 2020 is estimated to be \$38.5 million, net of the rate reserve fund balance. The Water Authority's target is to maintain its Fund Balance at 1/12 of the annual budgeted operating expenses as defined by the Water Authority's Rate Ordinance.

The Water Authority's goals and objectives focus on improving the Utility's operations and improving customer conditions. The Budget Ordinance requires the Water Authority's operating budget be consistent with the goals and objectives, and that they be major factors in determining funding for Water Authority programs and improvements in both the operating and capital Implementation budgets. Many of the objectives also reflect policy direction. With the establishment of goals and objectives that have policy as well as budgetary implications, the Water Authority must actively manage the daily operations of the Utility.



# ALBUQUERQUE BERNALILLO COUNTY WATER UTILITY AUTHORITY

BILL NO. R-19-8

1 **RESOLUTION**  
2 **APPROPRIATING FUNDS FOR OPERATING THE ALBUQUERQUE BERNALILLO**  
3 **COUNTY WATER UTILITY AUTHORITY FOR THE FISCAL YEAR BEGINNING JULY**  
4 **1, 2019 AND ENDING JUNE 30, 2020**

5 WHEREAS, the Albuquerque Bernalillo County Water Utility Authority (Water  
6 Authority) as a political subdivision of the State of New Mexico is required to budget and  
7 account for all money received or spent in accordance with New Mexico laws; and

8 WHEREAS, the Board, by Ordinance, has established a budget process for the  
9 Water Authority; and

10 WHEREAS, the Budget Ordinance requires the Executive Director to formulate  
11 the operating budget for the Water Authority; and

12 WHEREAS, the Budget Ordinance requires the Water Authority Board to  
13 approve or amend and approve the Executive Director's proposed budget; and

14 WHEREAS, the Board has received the budget formulated by the Executive  
15 Director and has deliberated on it and provided public notice and input; and

16 WHEREAS, appropriations for the operation of the Water Authority must be  
17 approved by the Board.

18 BE IT RESOLVED BY THE WATER AUTHORITY:

19 Section 1. That the following amounts are hereby appropriated to the following  
20 funds for operating The Albuquerque Bernalillo County Water Utility Authority during  
21 Fiscal Year 2020:

22 <u>GENERAL FUND – 21</u>	231,347,000
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23 This appropriation is allocated to the following programs:

24 Administration	2,224,000
25 Risk	4,397,000
26 Legal	790,000
27 Human Resources	1,799,000
28 Finance	4,124,000

1	Customer Services	5,192,000
2	Information Technology	7,370,000
3	Wastewater Plant	11,786,000
4	San Juan-Chama Water Treatment Plant	4,285,000
5	Groundwater Operations	6,614,000
6	Wastewater Collections	7,077,000
7	Water Field Operations	23,824,000
8	Compliance	5,424,000
9	Planning & Engineering	4,008,000
10	Water Resources	4,675,000
11	Power & Chemicals	21,487,000
12	Taxes	656,000
13	Authority Overhead	1,839,000
14	San Juan-Chama	2,747,000
15	Transfers to Other Funds:	
16	Rehab Fund (28)	31,618,000
17	Debt Service Fund (31)	79,411,000
18	<u>DEBT SERVICE FUND – 31</u>	88,496,000
19	This appropriation is allocated to the following programs:	
20	Debt Service	84,496,000
21	Transfer to Other Funds:	
22	Growth Fund (29)	4,000,000
23	Section 2. The Executive Director is authorized to develop and establish a	
24	nonrecurring safety/performance incentive program. This program will provide	
25	employees with an incentive based on cost reductions or performance enhancements	
26	resulting in operating efficiencies and/or a reduction in work related losses. Funding for	
27	this program is contingent on savings in the same or a greater amount.	
28	Section 3. The Water Authority shall continue its partnership with non-profit	
29	affordable housing developers under contract with local government whereby the first-	
30	time homebuyer will not be required to pay the Utility Expansion Charge until the	
31	property is sold. No more than 50 units per year will be authorized under this program.	
32	The Water Authority will secure its position with a second mortgage.	
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Section 4. The Executive Director is authorized to carry out all appropriations contained in this budget in accordance with established policies and procedures.

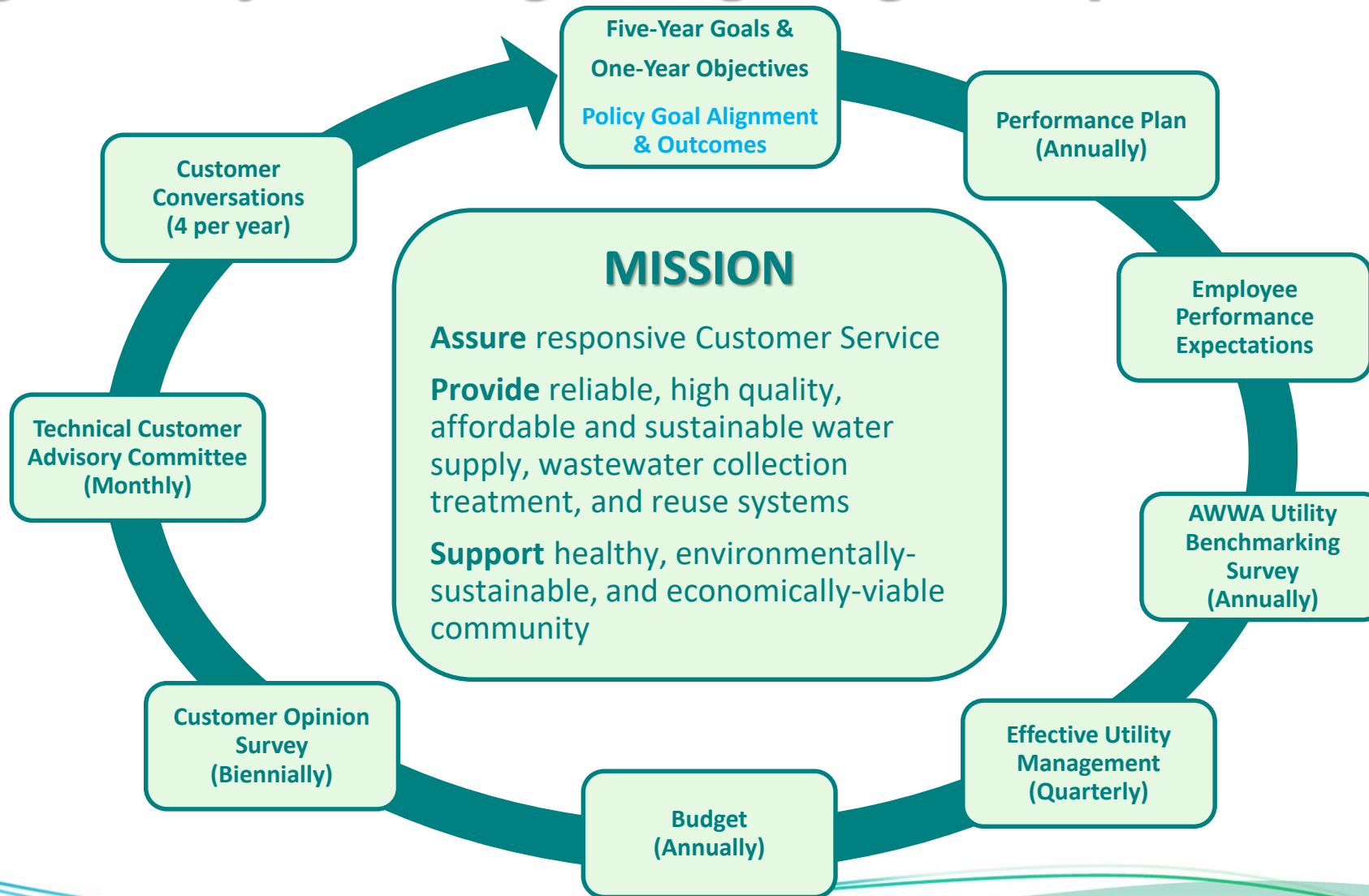


Albuquerque Bernalillo County  
Water Utility Authority

# FY20 Proposed Budget

Operating & Capital Improvement Plan (CIP) Budgets

# Strategic Policy Planning, Budgeting & Improvement Process



Albuquerque Bernalillo County  
Water Utility Authority

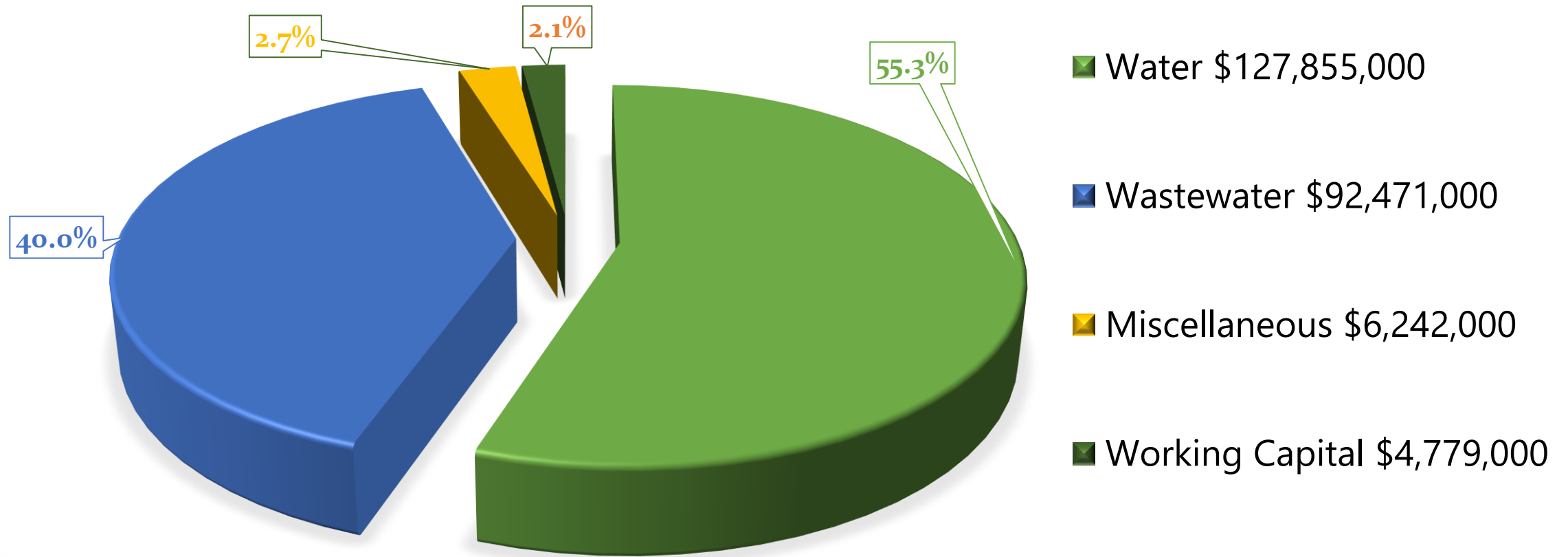
# FY20 Budget Assumptions

- No Rate Revenue Adjustment
- No New FTE's
- Expenses Increased by 2%
- Nominal Growth in Service Area
- FY18 Consumption Levels at 125 Gallons Per Capita
- Capital Spending Increase by \$3.0 million
- Rate Reserve funded at \$9.0 million
  - Rate Reserve dedicated for the purpose of offsetting declines in rate revenue
- Fund Balance at 1/12<sup>th</sup> of Operating Expenses



# FY20 General Fund Projected Revenues

## \$231,347,000

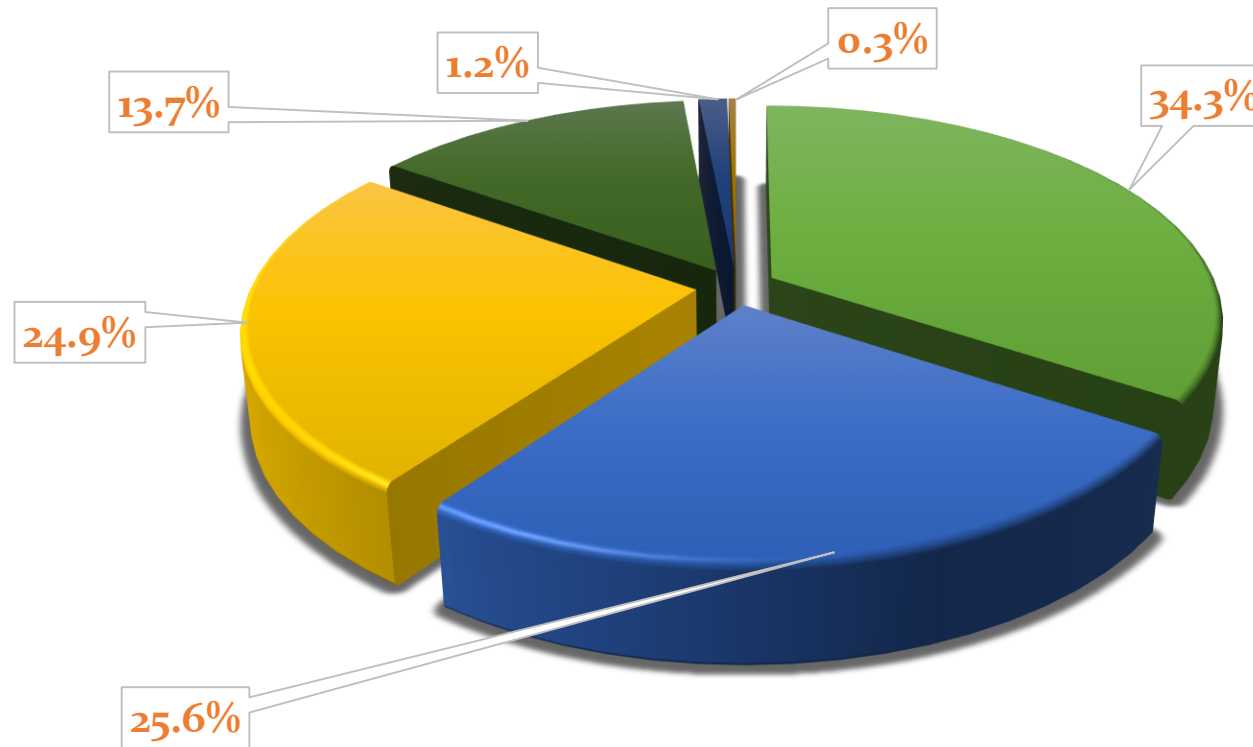


Albuquerque Bernalillo County  
Water Utility Authority



# FY20 Budgeted Expenses

## \$231,347,000

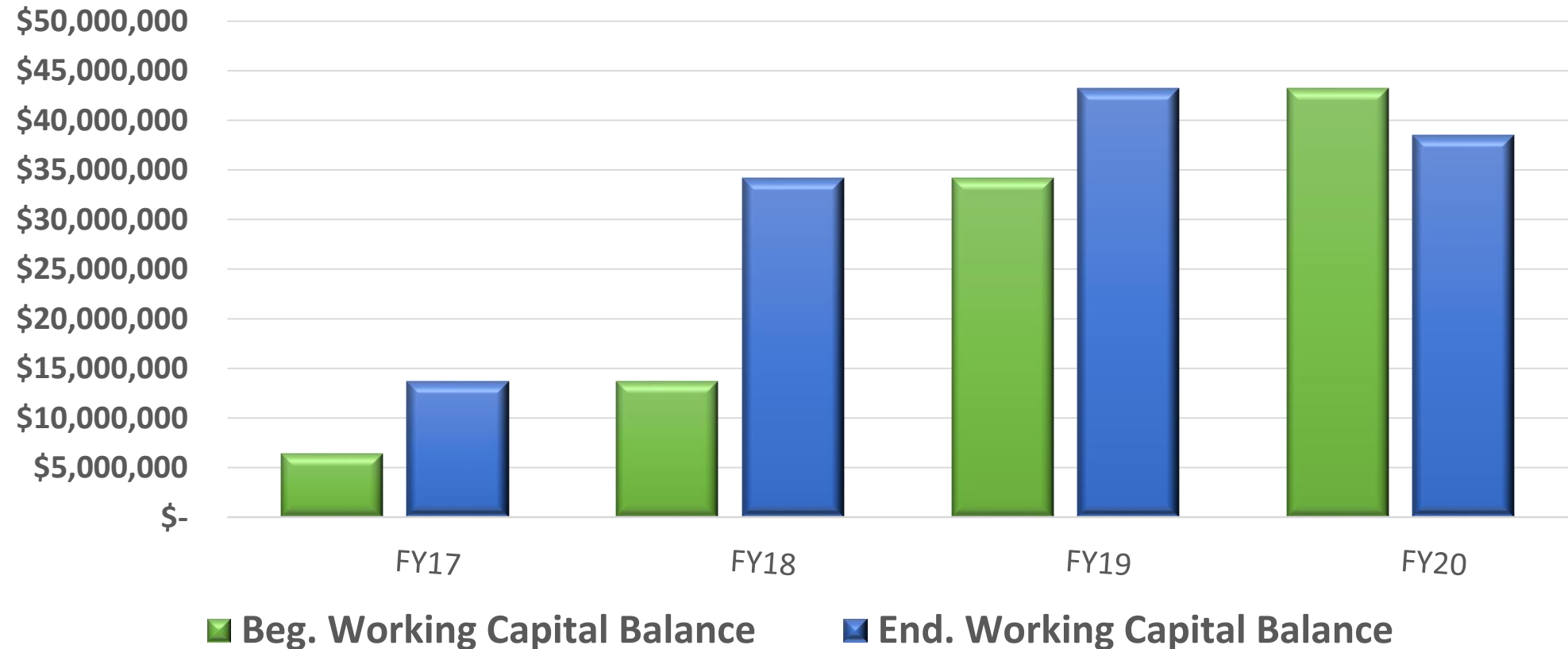


- Debt Service \$79,411,000
- Wages and Benefits \$59,212,000
- Operating Expenses \$57,600,000
- Transfer to Other Funds \$31,618,000
- Risk \$2,799,000
- Workers Comp \$707,000



# FY20 Working Capital Projected Balance

Working Capital projected to meet 1/12<sup>th</sup> Reserve Requirement



Albuquerque Bernalillo County  
Water Utility Authority



# Recent Awards & Recognition

## **Exemplary Source Water Protection Award** (AWWA, 2018)

Partnering with other agencies to ensure surface- and groundwater quality

## **Platinum Award for Utility Excellence** (AMWA, 2018)

High-quality, affordable water; responsive customer service, attention to resource management, infrastructure renewal and environmental protection

## **Partnership for Safe Water** (AWWA, 2018)

Optimizing water operations and ensuring public health protection

## **Silver Peak Performance** (NACWA, 2018)

Fewer than five permit violations in 2018

## **AAA Bond Rating from S&P (2018)**

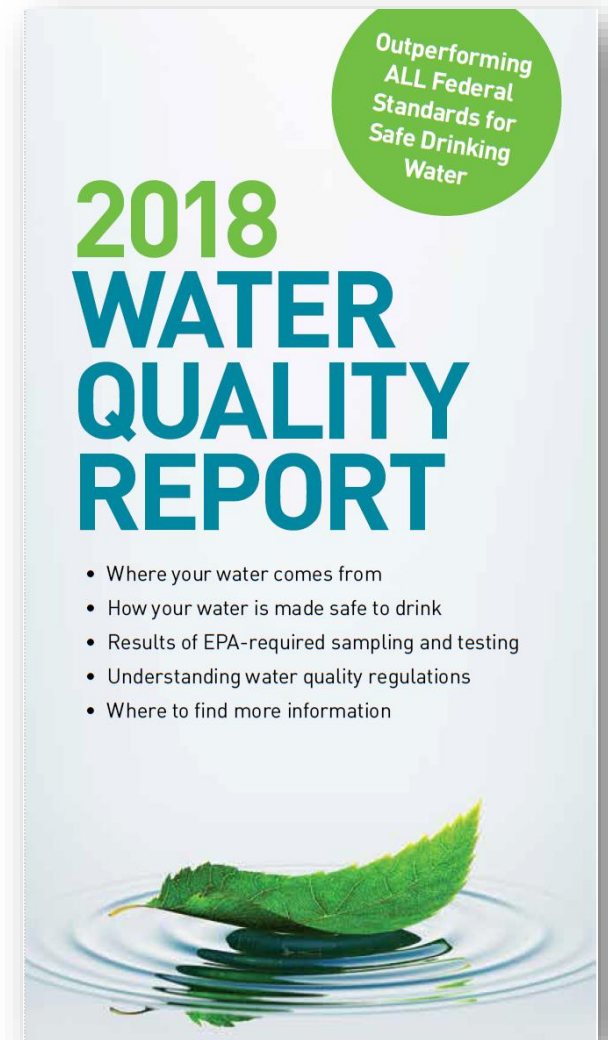
Cited utility's "strong financial management policies and practices...robust planning efforts...[and] strong levels of pay-as-you-go funding



Albuquerque Bernalillo County  
Water Utility Authority

# FY19 Selected Accomplishments

- Exceeded Conservation Target of 127 Gallons Per Capita (125 gpcd)
- Produced 53% of Water Supply from Surface Water Plant Despite Severe Drought Conditions
- Infiltrated 650 acre-feet of SJC water at Bear Canyon Arroyo ASR Project
- Revised the annual Water Quality Report based on Customer Conversations feedback
- Implemented the Water Assistance Fund Donation Program
- Completed of Rivers and Aquifers Protection Plan (RAPP)
- Completed Phase 1 (>2 miles) Los Padillas Waterline Project
- Completed 71% of planned upgrades to Water Reclamation Plant
- Re-accreditation of Water Quality Laboratory through 2020 meeting ISO 17025 certification standards
- Completed upgrade to online application system – **AuthorityWorks**



Albuquerque Bernalillo County  
Water Utility Authority

# FY20 Selected Priorities

- Begin partnership with Explora to produce interactive water exhibits
- Implement water loss control strategies and pressure monitoring projects
- Complete plant operation optimization improvements through AWWA Partnership Programs
- Complete Phase 3 of Maximo Asset Management System
  - Full Asset On-boarding & Full Life-cycle Accounting of Assets
- Update Emergency Response Plan
- Begin construction of the Consolidated Customer Service & Field Operations Facility
- Complete Pharmaceuticals and Personal Care Products (PPCPs) study
- Work with EPA in finalizing NPDES permit
- Finalize construction of the Los Padillas Waterline Project





# FY20 Selected Priorities

## Continue Implementation of Water 2120 Plan

- Complete Environmental Plan
- Continue work on the Groundwater Management Plan
- Continue development of the Reuse Plan
- Begin well capture zone analysis (RAPP)
- Begin Large Scale ASR Operations at water plant and seek additional ASR sites



Albuquerque Bernalillo County  
Water Utility Authority

# FY20 Capital Improvement Plan (CIP) Appropriations

\$68.5 million Appropriation Includes:

- \$58 million Basic Rehab Program

Major Initiatives Include:

- \$23.2 million for Southside Water Reclamation Plant Renewal
- \$9.5 million for Sanitary Sewer Pipeline Renewal
- \$2.69 million NM Legislative Capital Outlay Awarded Projects
- \$4.4 million for Vehicle and Heavy Equipment Replacement
- \$2.0 million Automated Meter Infrastructure (AMI)
- \$1.0 million for Steel Line Replacement



Albuquerque Bernalillo County  
Water Utility Authority

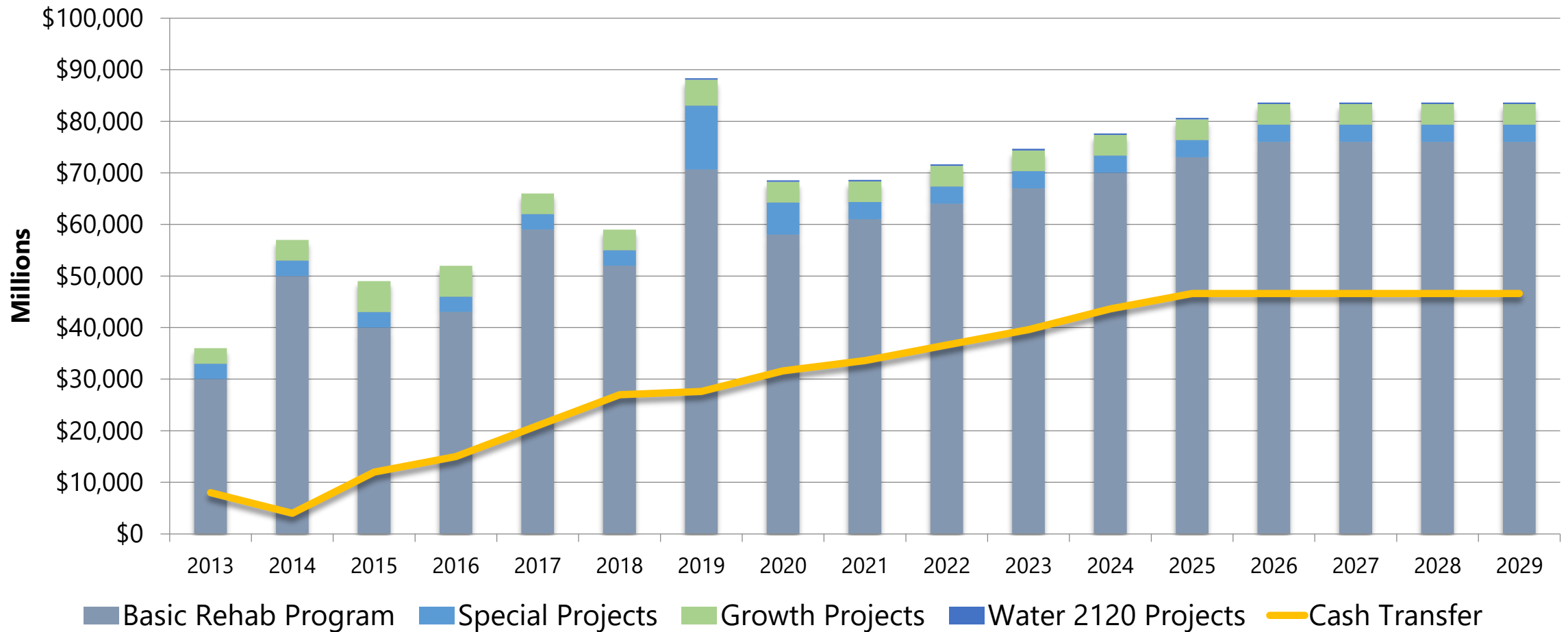
# Southside Water Reclamation Plant

## Primary Clarifier Rehabilitation and Covers

- The clarifiers have open tops, so odor control is difficult
- Renewal project currently under construction to cover the four large primary clarifiers
- Two of four currently covered; all four to be covered by the end of the year



# CIP Spending – Decade Plan



Albuquerque Bernalillo County  
Water Utility Authority





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Meeting Date: April 17, 2019

Staff Contact: Stan Allred, Chief Financial Officer

**TITLE: R-19-9 – Appropriating Funds for the Capital Implementation of the Albuquerque Bernalillo County Water Utility Authority for the Fiscal Year Beginning July 1, 2019 and Ending June 30, 2020**

**ACTION: Introduction April 17, 2019; Final Action May 22, 2019**

**SUMMARY:**

This legislation appropriates funding for the FY20 Capital Implementation Program (CIP). This appropriation provides funding for new projects as well as supplements current appropriations for projects that are ongoing.

**FISCAL IMPACT:**

The FY20 capital implementation program appropriation totals \$68.3 million. \$58.0 million is appropriated for the level one priority basic capital programs, \$4.0 million for growth related projects, \$0.3 million for Water 2120 projects, and \$6.0 million is appropriated for special projects.

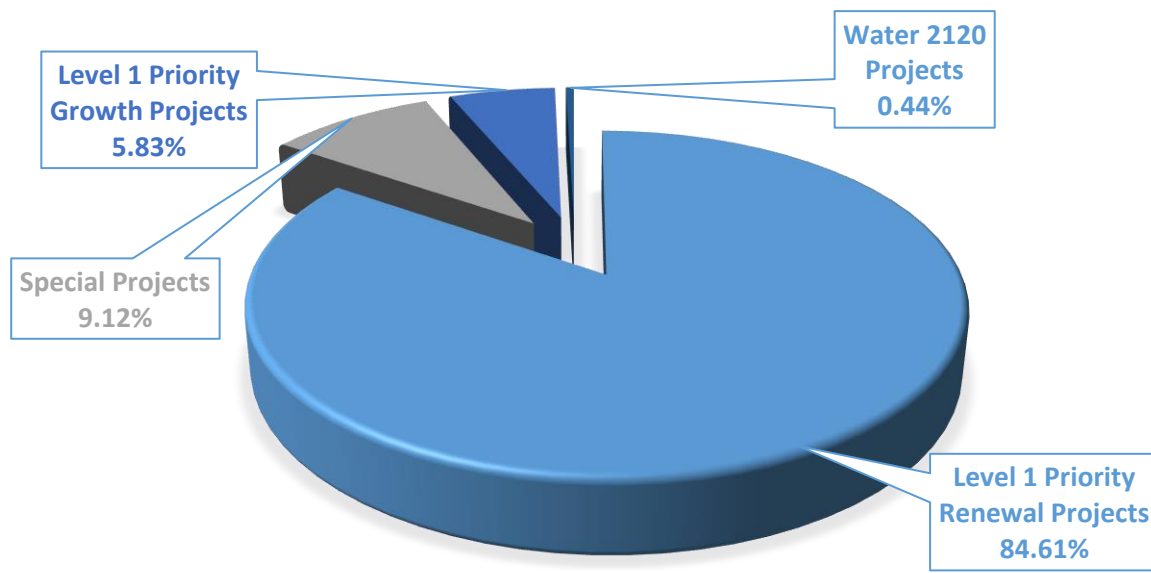
The \$6.0 million for special projects is comprised of \$2.0 million for the Automated Meter Infrastructure (AMI), \$1.0 million for steel water line replacement, \$0.4 million for various renewable energy projects, and \$2.6 million for the State of New Mexico Legislative Capital Outlay awarded projects.

The current Rate Ordinance requires no less than \$30.0 million for Basic rehabilitation program. Additionally, \$2.0 million is budgeted annually for the Automated Meter Infrastructure (AMI) program. There are no appropriations in the proposed FY20 CIP budget for projects that will be funded with revenues from FY21 or later.

The recent rate revenue increases alleviate future borrowing and increases the level of funding for infrastructure rehab projects.

The growth program is funded by Utility Expansion Charge (UEC) revenue which is tied to economic growth in the Water Authority's service area. The non-discretionary portion of the growth program includes funding for the low income connection program managed by Bernalillo County and development repayment agreements as connections are made to the System.

Demonstrated in the graph below is the overall percentage of each CIP category:



#### COMMENTS:

The blueprint for the Basic capital program is the Decade Plan, a ten year plan required to be updated biennially with two, four, six, eight and ten year planning elements. There must always be an approved two year planning element in place before the Board can approve a current year capital program appropriation. FY20 is the first year in the current FY 2020 – FY 2029 Decade Plan. Listed below are the detailed projects for year one:

	<b>FY20 Budget</b>
<b>Basic Program Appropriations:</b>	
Sanitary Sewer Pipeline Renewal	\$9,525,000
Drinking Water Pipeline Renewal	6,150,000
Southside Water Reclamation Plant Renewal	23,220,000
Soil Amendment Facility (SAF) Renewal	50,000
Lift Station and Vacuum Station Renewal	2,950,000
Odor Control Facilities Renewal	250,000
Drinking Water Plant Groundwater System Renewal	4,775,000
Drinking Water Plant Treatment System Renewal	1,750,000
Reuse Line and Plant Rehab	150,000
Compliance	390,000
Shared Renewal	390,000
Franchise Agreement Compliance	3,950,000
Vehicles and Heavy Equipment	4,450,000
<b>Level 1 Priority Renewal Projects Total</b>	<b>\$58,000,000</b>

	<b>FY20 Budget</b>
<b>Special Projects:</b>	
Steel Waterline Rehab	\$1,000,000
Automated Meter Infrastructure (AMI)	2,000,000
Renewable Energy Projects	350,000
Miscellaneous (State of NM Capital Outlay Awards)	2,691,000
<b>Special Projects Total</b>	<b>\$6,041,000</b>
<b>Combined Level 1 Priority Renewal and Special Projects</b>	<b>\$64,041,000</b>
<b>Growth Projects:</b>	
Development Agreements	940,000
Land & Easement Acquisition	500,000
MIS/GIS	2,000,000
Master Plans	500,000
Miscellaneous	60,000
<b>Growth Total</b>	<b>4,000,000</b>
<b>Water 2120 Projects</b>	<b>300,000</b>
<b>Level 1 Priority Growth/Other Projects Total</b>	<b>\$4,300,000</b>
<b>Grand Total</b>	<b>\$68,341,000</b>

### **FY20 Capital Program Highlights**

The sanitary sewer interceptor system is the backbone of the Water Authority's current sewer collection system. It is designed to carry large flows from the collection line system for delivery to the plant for treatment. There are over 242 miles throughout the service area of interceptor lines which range from 12-inch up to 72-inch. 46-percent (approximately 111 miles) of the current interceptors with the system are made of concrete and have suffered substantial hydrogen sulfide corrosion damage along the upper portions of the pipe. This ultimately results in complete pipe failure which could cause a sinkhole to form at any time within the public right-of-way. Fund for evaluation, planning, design, construction, and related activity will be used for sanitary sewer interceptor rehabilitation or complete removal and replacement of severely deteriorated sewer interceptor lines that are beyond feasible rehabilitation.

There are over 2,000 miles of small diameter (4-inch to 10-inch) water lines that serve as the distribution network for the Water Authority's water system. These lines are used to provide domestic metered water service, fire protection, and irrigation uses for our customers. Currently there are over 500-miles of pipe that is deficient either in wall integrity or size that poses potential threats to the Water Authority. As the older steel or cast iron lines become deficient, Water Authority staff will often respond to numerous leaks. These leaks if gone unnoticed do have the potential, under certain circumstances, will become sinkholes which destroy entire roadways and create an incredible liability.

Replacing whole segments aged pipe will reduce ongoing operation and maintenance costs. If aging pipeline is not replaced, the impact of emergency response will increase for these repairs and multiple leaks will occur in the same segment of pipe. This program

will provide funding for evaluation, planning, design, construction, and related activity necessary for the rehabilitation or replacement of water lines that have deteriorated and are past the useful life.

A new screening facility is currently under construction and will be completed during FY20. This facility will remove rags and other larger debris ahead of Lift Station 11A, which lifts sewage into the Southside Water Reclamation Plant (SWRP).

The primary clarifiers are used to remove suspended solids ahead of the aeration basins. Maintaining these units in good working order is important for the downstream processes to work properly and for the plant to meet its NPDES permit requirements. The primary clarifiers handle sewage resulting in deterioration of structural, mechanical, and electrical components. Also, the currently open basins are a source of hydrogen sulfide and other odors. Funding will be used to complete the rehabilitation and make improvements to the existing primary clarifiers. In addition, covers will be added to assist in combating offensive odors.

SWRP electrical systems and electrical gear for many of the facilities such as Cogen, DAF, Compression and Pump stations 1 and 2 have reached or exceeded their 20-year life and need replaced. Funding will be used to provide a redundant set of primary power loops at the facility. Old, obsolete electrical equipment will be replaced with new equipment that meets current building codes.

The Information Technology/GIS funding allocations will be utilized to complete the Asset Management system upgrade. Phase III tasks associated with the project include; Barcoding of fixed assets, completion of the asset on-boarding/decommissioning process, risk-based assessment, condition monitoring for assets, and integrating CC&B and Maximo to maintain large meters.

Other projects include prototyping a Virtual Desktop Infrastructure (VDI) for training rooms to leverage the flexibility and scalability of our Hyper-Converged environment, resulting in cost savings, performance enhancement, and “green” initiatives. Efforts will continue to add redundancy to the Network, Telephony and Security systems which includes the new admin facility at SJTP and SCADA. ITD will work to evaluate and assess our current SCADA environment, and create a master plan to upgrade, replace, and/or consolidate current WUA SCADA Systems that support the Authorities Asset Management plan. SunGard, Kronos and COGNOS will also be upgraded during FY20. ITD will implement Artificial Intelligence (AI) utilizing Splunk for Asset Management, Water Quality initiatives and SCADA. Support all enterprise wide application training initiatives and upgrade all desktops from Windows 7 to Windows 10.

ITD’s security initiatives include the creation of additional Cyber-Security policies to support the Water Authorities Information Security Plan, perform a thorough penetration analysis of our systems and network including all SCADA systems, including all applications that host sensitive data, and reducing risk scores.

The Water Authority has been awarded various Capital Outlay Projects from the 2019 NM State Legislative Session in the amount of \$2.7 million, of which, \$2.1 million is for the purpose of planning, designing, and the construction of the Winrock Wastewater Plant to serve the Winrock site and parks in Bernalillo County and \$0.6 million for various Carnuel Water and Sewer related projects.

Construction will be completed in FY20 of a new Consolidated Customer Service & Field Operations Facility which will replace the leased space at the City of Albuquerque “Pino Yard” facility and will serve as a more centralized location for Water Authority staff. The building will have space for over 200 personnel and offer greater security and control for operations. This facility will be located at the San Juan-Chama Drinking Water Treatment Plant.

The remainder of the Basic rehabilitation program is primarily focused on line contingency work and normal repair and maintenance work in the groundwater plant system with minimal planned projects.

# ALBUQUERQUE BERNALILLO COUNTY WATER UTILITY AUTHORITY

BILL NO. R-19-9

1 **RESOLUTION**

2 **APPROPRIATING FUNDS FOR THE CAPITAL IMPLEMENTATION PROGRAM FOR**  
3 **THE ALBUQUERQUE BERNALILLO COUNTY WATER UTILITY AUTHORITY FOR**  
4 **THE FISCAL YEAR BEGINNING JULY 1, 2019 AND ENDING JUNE 30, 2020**

5 WHEREAS, the Albuquerque Bernalillo County Water Utility Authority (Water  
6 Authority) as a political subdivision of the State of New Mexico is required to budget and  
7 account for all money received or spent in accordance with New Mexico laws; and

8 WHEREAS, the Board, by Ordinance, has established a budget process for the  
9 Authority; and

10 WHEREAS, the Budget Ordinance, requires the Executive Director to formulate  
11 an annual Capital Implementation Program budget for the Water Authority; and

12 WHEREAS, the Budget Ordinance requires the Water Authority Board to approve  
13 or amend and approve the Executive Director's proposed budget; and

14 WHEREAS, the Board has received the Capital Implementation Program Budget  
15 formulated by the Executive Director and has deliberated on it and provided public notice  
16 and input; and

17 WHEREAS, appropriations for the Capital Implementation Program of the Water  
18 Authority must be approved by the Board; and

19 WHEREAS, the appropriation of these Capital Implementation Program funds to  
20 projects with their respective purposes are timely and necessary for Water Authority to  
21 serve its customers.

22 BE IT RESOLVED BY THE WATER AUTHORITY:

23 That the appropriations for the projects as stated below are hereby made.

24 Basic Program Appropriations:

25	Sanitary Sewer Pipeline Renewal	9,525,000
26	Drinking Water Pipeline Renewal	6,150,000
27	Southside Water Reclamation Plant Renewal	23,220,000
28	Soil Amendment Facility (SAF) Renewal	50,000

[+Bracketed Material+] - New  
[-Bracketed Material-] - Deletion

[+Bracketed Material+] - New  
[-Bracketed Material-] - Deletion

1	Lift Station and Vacuum Station Renewal	2,950,000
2	Odor Control Facilities Renewal	250,000
3	Drinking Water Plant Groundwater System Renewal	4,775,000
4	Drinking Water Plant Treatment Systems Renewal	1,750,000
5	Reuse Line and Plant Rehab	150,000
6	Compliance	390,000
7	Shared Renewal	390,000
8	Franchise Agreement Compliance	
9	3,950,000	
10	Vehicles and Heavy Equipment	4,450,000
11	<u>Special Projects:</u>	
12	Steel Waterline Rehab	1,000,000
13	Automated Meter Infrastructure (AMI)	2,000,000
14	Renewable Energy Projects	350,000
15	Miscellaneous (State of NM Capital Outlay Projects)	2,691,000
16	<u>Growth:</u>	
17	Land & Easement Acquisition	500,000
18	Development Agreements	940,000
19	MIS/GIS	2,000,000
20	Master Plans	500,000
21	Miscellaneous	60,000
22	<u>Other:</u>	
23	Water 2120 Project Fund	300,000
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Meeting Date: April 17, 2019  
Staff Contact: Frank Roth, Senior Policy Manager

**TITLE: R-19-7 - Establishing One-Year Objectives for the Albuquerque Bernalillo County Water Utility Authority in Fiscal Year 2020 to Meet Five-Year Goals**

**ACTION: Recommend Approval**

**SUMMARY:**

**Overview of Goal Development**

The Albuquerque Bernalillo County Water Utility Authority (Water Authority) established Five-Year Goals and One-Year Objectives in 2005 to help guide the Water Authority's budget process and address priority issues. In addition, the Water Authority's Budget Ordinance specifies that the Water Authority shall annually review and adopt one-year objectives related to the five-year goals for the Water Authority. The Ordinance also states that the Water Authority's operating budget shall be formulated by the Water Authority's Executive Director and be consistent with the goals and objectives, and that they be major factors in determining funding for Water Authority programs and improvements in both the operating and capital improvements budgets.

The Five-Year Goals adopted by the Water Authority are based on American Water Works Association's (AWWA) business model using fifteen successful quality achievement programs, including the Malcolm Baldrige National Quality Award Program, the Deming Award, and the International Standards Organization series of quality standards. The model characterizes the work of the typical water and wastewater utility around five business systems:

1. Water Supply and Operations
2. Wastewater Collection and Operations
3. Customer Relations
4. Business Planning and Management
5. Organization Development

The Water Authority has participated in several continuous performance programs through AWWA including Benchmarking, Self-Assessment, and Peer Review. Since 2012, the Water Authority has incorporated the EPA's *Effective Utility Management* (EUM) into its strategic planning process which is designed to help utilities to make practical, systematic changes to achieve excellence in performance. The Water Authority has been using the EUM's Ten Attributes framework to identify areas for improvement.



### **Overview of One-Year Objectives**

The One-Year Objectives in this resolution are categorized by the Water Authority's Five-Year Goal areas. The Water Authority has developed guiding goal statements for each goal area which explains the long-term desired result for that goal. The continuous performance programs mentioned above help the Water Authority to identify gaps in service delivery or performance. The Water Authority's performance measures are used to help monitor the Water Authority's performance and to develop performance targets. With the performance measures being used to identify gaps, the One-Year Objectives which are used to address performance or service delivery gaps and improve performance levels. In addition to identifying areas of improvement, some of the Objectives are related to completing projects or improving programs. A few of the objectives are carried over from FY19 either because they require more time to complete, or are ongoing issues.

### **FISCAL IMPACT:**

Objectives are linked to the budget.

# ALBUQUERQUE BERNALILLO COUNTY WATER UTILITY AUTHORITY

BILL NO. R-19-7

1 **RESOLUTION**  
2 **ESTABLISHING ONE YEAR OBJECTIVES FOR THE ALBUQUERQUE**  
3 **BERNALILLO COUNTY WATER UTILITY AUTHORITY IN FISCAL YEAR 2020 TO**  
4 **MEET FIVE YEAR GOALS**

5 WHEREAS, the Water Authority's Budget Policies and Procedures Ordinance  
6 specifies that the Water Authority shall annually review and adopt one-year objectives  
7 related to the five year goals for the Water Authority; and

8 WHEREAS, the Water Authority's operating budget shall be formulated by the  
9 Water Authority's Executive Director and be consistent with the goals and objectives as  
10 established and approved by the Water Authority; and

11 WHEREAS, the Water Authority's adoption of goals and objectives, which will be  
12 valuable in themselves, will be major factors in determining funding for Water Authority  
13 programs and improvements in both the operating budget and capital improvements  
14 budgets.

15 BE IT RESOLVED BY THE WATER AUTHORITY:

16 Section 1. That the Water Authority adopts the following five-year goals and one-  
17 year objectives for Fiscal Year 2020.

18 GOAL 1. WATER SUPPLY AND OPERATIONS: Provide a reliable, safe,  
19 affordable, and sustainable water supply by transitioning to renewable supplies and  
20 minimizing long term environmental impacts on the community and natural resources  
21 while ensuring the ability of the community to grow in a responsible manner.

22 Objective 1. Complete Ground Water Plant Preventive Maintenance to  
23 Corrective Maintenance ratio to at least 60% of all completed maintenance labor hours  
24 by the end of the 4th Quarter of FY20.

25 Objective 2. Complete Surface Water Plant Preventive Maintenance to  
26 Corrective Maintenance ratio to at least 60% of all completed maintenance labor hours  
27 by the end of the 4th Quarter of FY20.

Objective 3. Submit annual distribution and treatment data to the Partnership for Safe Water program for inclusion in the program's annual report of aggregated system water quality data; Continue work on items identified from the Phase 3 Self-Assessment that are not yet considered optimized and submit a progress report to AWWA by the end of the 4th Quarter of FY20.

Objective 4. To improve energy efficiency and reduce operation and maintenance costs, continue the Automated Meter Infrastructure Pressure Monitoring project and assess opportunities for operational efficiency within pressure zone 4ER and the Paseo Del Norte/Eagle Ranch interconnection by the end of the 4th Quarter of FY20.

Objective 5. To ensure the accessibility of valves and reduce interrupted service, create a systemic approach to preventative and corrective valve maintenance by the end of the 4th Quarter of FY20.

Objective 6. To improve the validated water audit inputs for apparent water loss, conduct a statistically significant number of small meter tests to support the water audit and strategic water loss plan by the end of the 4th Quarter of FY20.

Objective 7. Implement water loss control strategies by targeting real and apparent water losses by conducting an apparent loss forensic analysis and evaluating leak detection survey reports; By the end of the 2nd Quarter of FY20, identify areas of improvement and provide recommendations for reducing water loss.

Objective 8. Continue distribution water loss program by locating water leaks from surveying 650 miles of small diameter water lines through conventional leak detection methods and 2,200 miles of small diameter water lines through acoustic leak detection by the end of the 4th Quarter of FY20; Track, evaluate, and report on pilot-scale Echologics acoustic leak detection system on a quarterly basis in FY20.

Objective 9. Maintain water use at or below 127 gallons per capita per day through the end of the 4th Quarter of FY20.

Objective 10. Introduce rebates for organic mulch and flow and moisture sensors by the end of the 2nd Quarter of FY20.

Objective 11. Develop a program to assist low-income customers with water efficiency efforts by the end of the 2nd Quarter of FY20.

Objective 12. Utilizing the NM Bureau of Geology and Minerals study, select the next Aquifer Storage and Recovery project and begin permitting studies by the 4th Quarter of FY20.

Objective 13. Create a new puppet show and coloring book for use in the elementary school education program by the end of the 3rd Quarter of FY20.

Objective 14. Track and report conservation education outreach to service area customers and meet the following targets: 1) 100 Irrigation Audits; 2) 45 Meetings with Landscapers; 3) 30 Meetings with Property Managers; and 4) 2 Water Conservation Open House Meetings by the end of the 4th Quarter of FY20.

Objective 15. To better educate children on the importance of water and resource planning, collaborate with ¡Explora! to design interactive water exhibits for the new STEM center which is planned to open in FY21.

Objective 16. Continue work with the Water Protection Advisory Board through administrative, policy, and technical support through the end of the 4th Quarter of FY20.

Objective 17. Complete a capture zone analysis for Water Authority wells to identify the area most in need of protection surrounding well heads by the end of the 4th Quarter of FY20.

**GOAL 2. WASTEWATER COLLECTION AND OPERATIONS:** Provide reliable, safe and affordable wastewater collection, treatment and reuse systems to protect the health of the Middle Rio Grande Valley by safeguarding the regional watershed, minimizing environmental impacts, and returning quality water to the Rio Grande for downstream users.

Objective 1. Limit overall permit excursions to no more than 5 operating discharge permit violations through the end of the 4th Quarter of FY20.

Objective 2. Beneficially reuse biosolids by diverting 30% of the biosolids to compost through the end of the 4th Quarter of FY20.

Objective 3. Complete Waste Water Plant Preventive Maintenance to Corrective Maintenance ratio to at least 45% of all completed maintenance labor hours by the end of the 4th Quarter of FY20.

Objective 4. Continue work on the Partnership for Clean Water program for the water reclamation treatment to optimize system operations and performance; Continue work on outstanding items identified from the Phase 3 Self-Assessment that

are not yet considered optimized and submit a progress report to AWWA by the end of the 4th Quarter of FY20.

Objective 5. Televis and assess the condition of approximately five percent of the small diameter sanitary sewer system by the end of the 4th Quarter of FY20.

Objective 6. Complete the Capacity Management Operations Maintenance (CMOM) Program Self-Assessment by end of 2nd Quarter of FY20.

Objective 7. Develop and implement a process to capture new construction closed circuit television for inclusion in Maximo and ITpipes Repository after GIS unique identifiers are established; Complete process by end of 4th Quarter of FY20.

Objective 8. Monitor compliance with the Water Authority's Cross Connection Prevention and Control Ordinance. Obtain a compliance rate goal of 75%.

Objective 9. Monitor compliance with the Water Authority's Sewer Use and Wastewater Control Ordinance by continuing to inspect, monitor, and take enforcement action for permitted industrial users, septage waste haulers, food service establishments, and dental offices. Compliance rate goal is 87% for each category.

Objective 10. Implement the Fats, Oils, and Grease (FOG) Policy to reduce impacts on the sewer system by inspecting each Food Service Establishment (FSE) once every three years, working with the Collections section with Sanitary Sewer Overflow (SSOs) investigations, and convene FOG Task Force of other governmental entities to coordinate efforts to reduce FOG discharges. Track and report the number of SSOs due to FOG compared with previous years.

**GOAL 3. CUSTOMER SERVICES:** Provide quality customer services by communicating effectively, billing accurately, and delivering water and wastewater services efficiently based on understanding the needs and perceptions of our customers and the community at large.

Objective 1. Improve customer satisfaction and operational efficiency in achieving the four call-center targets through the 4th Quarter of FY20: 1) Average Wait Time of less than 1:00 minute; 2) Average Contact Time of less than 4:00 minutes; 3) Abandoned Call Ratio of less than 3; 4) First Call Resolution of greater than 95%.

Objective 2. Improve customer satisfaction by achieving a billing accuracy ratio of less than 8 through the 4th Quarter of FY20.

Objective 3. Continue implementation of the Automated Meter Infrastructure (AMI) project by modernizing aging meter infrastructure with smart meters to increase

1 revenue, support conservation efforts, and provide better customer service by the end  
2 of the 4th Quarter of FY20.

3 Objective 4. Provide communications support for high-priority Water Authority  
4 programs and initiatives and conduct public outreach regarding Water Authority  
5 services, policies and projects through the end of the 4th Quarter of FY20.

6 Objective 5. Complete Customer Conversation meetings to engage  
7 customers and obtain input from customers on the Water Authority's activities through  
8 the end of the 4th Quarter of FY20.

9 Objective 6. Conduct a customer opinion survey in order to assess the Water  
10 Authority's performance from the customer's viewpoint from previous surveys by the  
11 end of the 4th Quarter of FY20.

12 GOAL 4. BUSINESS PLANNING AND MANAGEMENT: Maintain a well-  
13 planned, managed, coordinated, and financially stable utility by continuously evaluating  
14 and improving the means, methods, and models used to deliver services.

15 Objective 1. Expend \$58 million in water and wastewater capital rehabilitation  
16 and replacement programs to replace aging, high risk assets that are past their useful  
17 life by the end of the 4th Quarter of FY20. \$1 million shall be dedicated and used for  
18 identifying and replacing steel water pipes in critical or poor condition by the end of the  
19 4th Quarter of FY20.

20 Objective 2. Continue implementation of the Reclamation Rehabilitation  
21 Asset Management Plan by planning, designing and constructing reclamation facility  
22 improvements through the end of the 4th Quarter of FY20.

23 Objective 3. Implement one planned Interceptor Rehabilitation project in  
24 FY20, and complete three interceptor design packages by the 4th Quarter of FY20;  
25 Implement one planned Small Diameter Sanitary Sewer Rehabilitation project in FY20;  
26 Complete design of Grit Collection Station near 12th Street/Interstate 40 by end of the  
27 2nd Quarter of FY20.

28 Objective 4. Complete an update to the 2011 Comprehensive/Utility Wide  
29 Asset Management Plan to provide a detailed gap analysis of the Water Authority's  
30 asset registry by the end of the 4th Quarter of FY20.

31 Objective 5. In order to provide a central location for processes and  
32 procedures, finalize a complete draft of the Utility Development Guide by the end of the

1 2nd Quarter of FY20; Update System Expansion Ordinance to align to the Guide;  
2 Review fee structure for Utility Development deliverables.

3 Objective 6. Continue construction of the Los Padillas water system through  
4 the end of the 4th Quarter of FY20.

5 Objective 7. Begin implementing Phase 1 of the Water Authority's Final  
6 Security Plan based on vulnerability assessments that were performed to reduce  
7 physical security and cyber security risks with a goal of completing hardware  
8 countermeasures selected for adoption by the end of the 4th Quarter of FY20. Update  
9 the Water Authority's Emergency Response Plan by the end of the 4th Quarter of FY20.  
10 Complete the AWWA risk and resilience certificate program to demonstrate compliance  
11 with America's Water Infrastructure Act of 2018.

12 Objective 8. Update the Comprehensive Information Technology Security  
13 Plan and related policies that are aligned with the standards, guidelines, and best  
14 practices of the National Institute of Standards and Technology Cybersecurity  
15 Framework to protect the utility's critical infrastructure from cyber-attacks by the end of  
16 the 2nd Quarter of FY20.

17 Objective 9. Complete a needs assessment of the Supervisory Control and  
18 Data Acquisition (SCADA) system; Implement recommendations of the assessment for  
19 the updated platform to align with the asset management program by the end of the 1st  
20 Quarter of FY20.

21 Objective 10. Complete the Maximo upgrade to provide better service, better  
22 decision making, and stewardship of its resources by the end of the 4th Quarter of  
23 FY20; Upgrade utility Enterprise Applications and expand usage of Splunk data  
24 analytics tool to implement functions for cyber-security, water quality and  
25 telemetry/vehicle location solutions; and replace all 800 MHz radio system with push to  
26 talk technology.

27 Objective 11. Apply artificial intelligence and machine learning to assess  
28 current water quality management strategies using predictive early warning intelligence  
29 to see occurrences in real-time; Develop and implement a pilot program that combines  
30 live data from water delivery operations with a hydraulic model to provide real-time  
31 water quality indicators by the end of the 4th Quarter of FY20.

32 Objective 12. Maintain the Compliance Division Regulatory Compliance  
33 Permit Matrix and the Regulatory Matrix Status Report to respectively maintain

schedules for permit submittals and monitor and report emerging Safe Drinking Water Act (SDWA) and Clean Water Act (CWA) regulations, New Mexico Water Quality Control Commission and Environmental Improvement Board regulations, and local laws ordinances, etc. to identify and assess potential impacts on the Water Authority. Provide quarterly reports through the end of the 4th Quarter of FY20.

Objective 13. Collect, monitor, and report weekly, monthly and quarterly key laboratory performance metrics to include: Water Quality Laboratory results approved and reported for each laboratory section (chemistry, microbiology, metals, and external labs), laboratory productivity (results reported per productive hour), and the percentage of results reported late (turnaround time). Compare to industry benchmarks.

Objective 14. Continue to develop LabVantage application system throughout FY20 to increase the automation of data entry to reduce data entry errors and reduce the amount paper used at the laboratory. Develop dashboards to help analysts and management manage samples and reagents. Expand the collection of electronic data to field analytics, balances, probes, and spectrophotometry instruments stored in the Database of Compliance.

Objective 15. Continue to develop the Environmental Monitoring Program to improve the reliability of results from field instrumentation and sample collection techniques. Develop a program plan based on designated International Organization for Standardization (ISO) standard to address accreditation requirements to include standard operating procedures, document control and records management plans, and a process for demonstration of staff capability. Develop a program-wide audit plan to monitor compliance with standard operating procedures in the field and the laboratories. Implement program plan by the end of the 4th Quarter of FY20.

Objective 16. Transition to International Organization for Standardization (ISO) and the International Electrotechnical Commission (IEC) ISO/IEC 17025:2017. Prepare for the American Association for Laboratory Accreditation (A2LA) biennial on-site assessment of the Water Quality Laboratory including completing required internal audits and annual review and revision of Standard Operating Procedures.

Objective 17. Track external subcontract laboratory costs that are processed by the Water Quality Laboratory. Improve how the Laboratory manages sample submissions to external laboratories and make available the cost of external subcontract laboratory analysis for reporting.



Objective 18. Monitor for Pharmaceuticals and Personal Care Products (PPCPs) in the source water, drinking water and wastewater. Report the findings of voluntary monitoring by the end of the 2nd Quarter of FY20. Compare the results to historical monitoring performed in 2009-2010.

GOAL 5. ORGANIZATION DEVELOPMENT: Sustain a well-informed, trained, motivated, safe, organized, and competitive work force to effectively meet the expectations of the customers, community, and Board in accordance with adopted policies and mandates.

Objective 1. Continue to emphasize Employee Recognition through several initiatives including supervisor training, employee incentive awards, on-the-spot awards, and years of service awards.

Objective 2. Conduct Employee Engagement and Satisfaction Survey by the end of the 2nd Quarter of FY20; assess and communicate the survey results to employees by the end of the 4th Quarter of FY20.

Objective 3. Consistent with the EPA's Utility of the Future (UOTF), develop a program that focuses on employee and leadership development to achieve sustainability, including actions such as hiring and retaining motivated, participative employees, creating a collaborative organization and positive workplace environment, and providing a positive environmental and community impact; the program may examine potential sources of purpose and meaning for employees and encourage projects and communication efforts that enhance a sense of meaning and purpose.

Objective 4. Complete two employee wellness challenges per fiscal quarter focusing on nutrition, physical activity and weight loss, and disease and injury prevention to employees by the end of the 4th Quarter of FY20.

Objective 5. Maintain an average utility-wide vacancy rate of no greater than 5% through the end of FY20.

Objective 6. Reduce injury hours to 2,625 hours or less to improve productivity and reliability of services provided by employees by the end of the 4th Quarter of FY20.

Section 2. That the Executive Director of the Water Utility Authority shall ensure that these goals and objectives are carried out and integrated with the performance plan and submit a report by Goal to the Water Authority Board at least semi-annually on the progress made toward implementation of the one-year objectives.

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Meeting Date: April 17, 2019  
Staff Contact: Cody Stinson, Chief Information Officer

**TITLE: C-19-14 – Approving Supplemental agreement with EMA Inc., in Relation to the Asset Management/Maximo System Upgrade, Phase III**

**ACTION: Recommend Approval**

**SUMMARY:**

The Albuquerque Bernalillo County Water Utility Authority (Water Authority) has successfully upgraded its Enterprise Asset Management System (Maximo) to Maximo v. 7.6, the most current release. Phase I & II initiatives included; A complete inventory of all operational assets so that work order history and all costs for those associated assets can be captured and used for improved future planning, implementation of workflows, standardized work order tracking, Preventative Maintenance program, procurement for Warehouse to achieve Full Life Cycle Accounting to improve capital and operational expenditures, and limited Conditional Monitoring. These improvements spanned business units within core Operations and Maintenance groups including Water Lines/Field Distribution, Groundwater, Surface Water Treatment Plant, Southside Reclamation plant, Collections, and the Warehouse.

The Water Authority's senior management staff is recommending additional funding to be allocated to initiate a Phase III of the project to further enhance the Water Utilities Asset Management Strategy and System. These enhancements will include; Process creation for asset onboarding and decommissioning to support the Utilities Asset Management Program, Risk based Asset Management Planning, CC&B/Maximo interface to manage water meters, additional conditional monitoring with SCADA, upgrade to v. 7.6.1 to leverage additional functions in the latest release of the software, and training.

EMA Inc. is the vendor that was selected via RFP P2015000005 to upgrade and enhance our usage of Maximo and build out the Water Utilities Asset Management plan. They have done an outstanding job leading us through the upgrade and Business Process Improvement initiatives, and to meet our goals for effective Asset Management

**FISCAL IMPACT:**

The total cost is for \$1,380,097.00. The Water Authority has budgeted the CIP funds to cover this agreement.



April 1, 2019

Mr. Cody Stinson  
Chief Information Officer  
Albuquerque Bernalillo County Water Utility Authority  
PO Box 568  
Albuquerque, NM 87103-1293

**Re: Scope of Work for the ABCWUA Maximo Phase III**

Dear Cody:

As part of its continuous improvement of the asset management program, the Authority has implemented processes and procedures to ensure quality data in Maximo, updated procurement processes to support asset life cycle cost accounting, defined policies and procedures for onboarding new assets, and better management of inventory in its warehouses.

During EMA's recent client interviews with Authority executive staff and a cross-section of Maximo users, we discussed successes as well as opportunities for leveraging Maximo to further support the Authority's asset management program. Through those conversations we uncovered opportunities for moving the organization toward a strategic asset management culture. These include:

- Central Engineering staff is unfamiliar with Maximo.
- Not all maintenance activity details are completely and accurately documented in Maximo.
- Varying scales for Risk across different asset classes make it difficult to compare assets when making CIP decisions. There is no visibility of the Risk scores in Maximo.
- Large meters and their maintenance activities are not recorded and tracked in Maximo
- Water Distribution contractors document work in Maximo but don't always select the correct assets. This makes it difficult to accurately record and track lifecycle costs of Water Distribution Assets.
- CC&B staff is hindered in their ability to quickly respond to customer questions because they do not have access to the status of the field activity work orders managed in Maximo.
- PMs at Surface Water, Reclamation, and Groundwater divisions are interval-based. Defining meter-based PMs would reduce the number of reactive work orders and potentially the number of PM work orders.
- Inspections are documented on paper and not always accessible online. A Maximo upgrade would provide functionality for managing inspections in Maximo and provide additional work center functionality.
- IT would like additional resources to respond to Maximo related tickets.
- There are approval inefficiencies associated with using desktop requisitions for preventive maintenance work orders.

The tasks identified in this proposal will help the Authority address these issues.

EMA presents this document to begin planning the Authority's Maximo Phase III Scope of Work. It consists of a preliminary set of proposed tasks for the SOW.

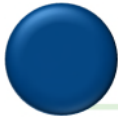
Task	Description
User Training	Provide end-user training for improving WO lifecycle data to Divisions and Asset lifecycle management to Engineering
Implementing Risk Based Asset Management Planning	Import AMP report data into Maximo, define Authority-wide Risk score standard, configuring Start Centers and reports to display asset risk scores.
Optimize WD BPs	Manage large meter maintenance work in Maximo, support lifecycle cost accounting by defining processes to document contract work in Maximo, and optimize the Clevest user interface.
CC&B Maximo Integration	Improve customer response by automating update of Maximo work order status in CC&B.
SCADA Meter Driven PM Work Orders	Improve efficiency by triggering PM work order generation based on SCADA meter reading for Surface Water, Reclamation, and Groundwater Divisions
Maximo Upgrade	Added functionality of Maximo work centers, inspection forms, and support to Authority's Cognos reporting platform.
Data Quality Improvements	Improve quality of classifications and failure hierarchy, define pre-approved job plans to improve efficiency on inventory management and issue parts to O&M staff more quickly
Maximo Support	As-needed technical support for the Maximo environment

Together with you, your staff and ABCWUA Operations, we have refined this scope over the past month. After you have had an opportunity to review the current edition of proposed tasks and timeline, please feel free to contact Ganesh or me to discuss this further.

Sincerely,



Timothy S. Payne  
Executive Vice President  
**EMA, Inc.**



### PROJECT UNDERSTANDING

The Albuquerque Bernalillo County Water Utility Authority (the Authority) has successfully implemented an Asset Management Program using IBM Maximo and has established a strong foundation to support asset management, maintenance, and material management decisions.

The Phase I implementation resulted in loading clean base asset and support data, employing processes and procedures for work management, and providing a well-defined structure for supporting the maintenance cost accounting.

Phase IB focused on implementing the process for requesting materials for maintenance activities and defining approval levels based on material cost, thus supporting accountability for the materials purchased and improved accuracy for reporting material costs.

During Phase II, the Authority implemented practices and procedures to solidify the move toward the Asset Pyramid apex. Phase II activities included using Maximo to support fleet asset management, streamlining the procurement process for efficiency gains, and defining policies and procedures for asset onboarding and decommissioning and inventory management.

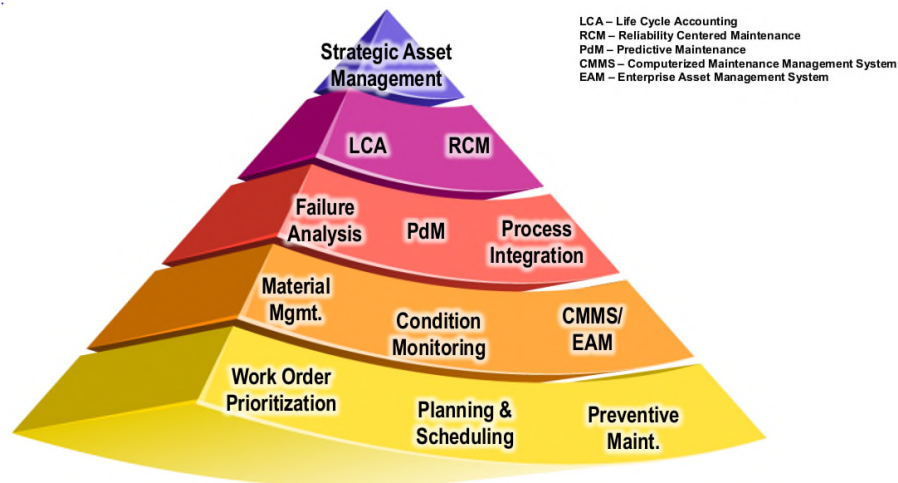


Figure 1: Asset Pyramid

Now that the Authority has improved business practices that support asset management and has leveraged improved use of Maximo for managing assets for almost two years, EMA recommends focusing on the following Phase III activities to move to the apex of the Asset Pyramid.

### SCOPE OF WORK

Although some of the tasks identified for Phase III are not specifically called out in the Asset Pyramid, they are important to sustain the momentum of the earlier phases of the project. These

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tasks will ensure the Authority's staff has the skills and knowledge to maintain the system and leverage it to support asset management activities.

Phase III tasks are broadly grouped into the following categories:

- End-user training for Ground Water (GW), Reclamation, Water Lines (WL), Collections, and Central Engineering (CE)
- Implementing risk scores in Maximo
- Review and optimize WD business processes
- Maintenance optimization
- Integrate CC&B and Maximo
- SCADA meter-driven PM work orders
- Technology and data quality improvements
- General Maximo support
- Project management

## **Task 1 – User Training**

This task identifies the areas of focus for Maximo training for Ground Water, Reclamation, Water Lines, Collections, and Central Engineering staff.

### ***Task 1.1 – End-User Training for Ground Water, Reclamation, Water Lines, Collections, and Surface Water***

It is critical the Maximo data is complete and accurate to support asset management activities such as capital improvement planning and repair-replace decisions. Though the Division has adapted the new processes and practices implemented in previous phases, additional hands-on, one-on-one, and targeted classroom training will help ensure quality data is entered in Maximo. As part of this task, EMA will provide the following role-based training to Divisional staff:

- Asset lifecycle activities, from onboarding to decommissioning
- WO Creation and Asset Selection, WO actuals and failure data entry
- WO QA-QC process
- Leveraging cost, work order, and failure KPI data to identify areas for additional training

EMA will conduct workshop and finalize the process for the following:

- PM work order generation and cancellation process
- Standard process for logging asset downtime

#### **Deliverables:**

- Soft copy of training materials.
- A report listing the training class focus area, number of classes, and attendee count by Division.

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- Metrics on one-on-one training.
  - Authority-wide standard process for PM work order generation and cancellation process
  - Authority-wide standard process for logging asset downtime

### ***Task 1.2 – Maximo Training for CE***

The Central Engineering staff's participation has been key in successful design of the asset onboarding business processes. The engineering staff has not been a Maximo user to date, and it will be beneficial for the Authority to have engineers become familiar with the Maximo application. The following sessions will be part of the training curriculum:

- Maximo application overview and navigation
- Asset, Location, and Work Order applications
- Accessing WO actuals, entering CIP costs, viewing actual costs
- Retrieving and executing Maximo reports; creating ad hoc reports

At the end of this training, engineering staff will be able to navigate Maximo applications, access GIS from within Maximo, and search for assets, locations, and work orders in Maximo. View and enter CIP costs in Maximo and generate reports of interest.

#### **Deliverables:**

- Soft copy of training materials.
- A report listing the training class focus area, number of classes, and attendee count.

### **Task 2 – Implementing Risk-Based Asset Management Planning**

The Authority has commissioned several Asset Management Plan (AMP) reports over the past years. These reports were developed by engineering consultants for the following linear asset and vertical asset groups:

- Linear assets
  - Small diameter water lines
  - Transmission lines
  - Small diameter sewer lines
  - Interceptors
- Vertical assets
  - Vacuum stations
  - Sewer lift stations
  - Water pump stations
  - Wells

- 
- Reservoirs
  - SWRP process areas

EMA reviewed all the AMP reports and submitted the Asset Management Plan Data Requirements Final report to the Authority with several recommendations. The most important of these is to standardize the Consequence of Failure (CoF) and Likelihood of Failure (LoF) score ranges to 1 to 5 and the Business Risk Exposure (BRE) score to a scale of 1 to 25. By using a uniform CoF and LoF score, the Authority can prioritize the CIP budget allocations across various asset classes.

Implementation of the risk-based asset management planning includes the following subtasks.

### ***Task 2.1 – Define CoF, LoF and Risk Matrix***

EMA will coordinate efforts with Central Engineering and O&M staff to clearly state and document the definitions of Consequence of Failure (CoF), Likelihood of Failure (LoF), Risk Mitigation Factor, Business Risk Exposure (BRE) score, and define the Risk Matrix. Going forward, the consultants developing AMP reports will be required to use these definitions when submitting AMP reports to the Authority.

#### **Deliverables:**

- CoF Definition component for all asset classes
- LoF Definition components
- Risk Matrix

### ***Task 2.2 – Import Legacy AMP Data into Maximo***

EMA will configure Maximo Asset application to host the data fields documented in the previous AMP reports for vertical assets. This will include importing LoF, CoF, and Risk scores that are in the 1 to 25 range and relevant additional asset attribute data in to Maximo, with the Authority O&M staff providing support to identify the asset numbers referenced in the AMP reports.

When the Risk data with a scale of 1 to 25 is imported into Maximo, each asset with Risk score shall be associated with an AMP Data Meter Group to host following AMP data elements:

- Asset Condition
- LoF score
- CoF score
- Risk score
- Date of score assignment
- Consultant performing Risk assessment



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EMA will configure a Maximo report that can be run for a selected asset class. The report shall include following fields:

- Asset ID
- Asset description
- Risk score
- CoF or criticality score
- LoF or condition score
- Replacement cost
- Year to Date maintenance (PM and Non-PM) cost
- Total Maintenance (PM and Non-PM) Cost
- At Risk (> 16) since (date and time)

**Outcomes:**

- Display of imported AMP data on the Asset application tab dedicated for AMP data.
- Field Techs to log asset condition data following completion of CIP, Rehabilitation and/or Maintenance activity on the asset
- Ability to view and export work orders based on user selected AMP parameters
- Display of color-coded AMP data on EZMaxMobile, Clevest (Note 1), and desktop work orders
- Ability to search asset(s) using any of the AMP data elements, using 'From' and 'To' date ranges, AMP data source (Vendor, Authority Users)

*Note 1: EMA shall provide the Maximo field name, and Type to be displayed on EZMaxMobile and Clevest UI. The Authority shall coordinate with EZMaxMobile and Clevest to get the fields displayed on mobile UI.*

### **Task 2.3 – Configure Risk Based Start Centers**

At present, the Authority leverages the Asset Management Plan (AMP) reports along with operational and institutional knowledge as the basis for allocating capital funds. Although the risk scores are available in the AMP reports, allocation of capital funds based on the risk scores is challenging because of the varying risk score scales and the lack of processes and procedures to continuously update the risk score as maintenance is performed on some asset classes.

EMA will use the Risk Matrix score definition to display the 'bad actors' for various asset classes on the Maximo Start Center portlets to support data driven CIP budget allocation decisions.

**Deliverables:**

- Coordinate with IT and GIS to display very high RISK (21-25) and high RISK (16-20) linear assets grouped by geographical areas and asset class in descending order of RISK score

- 
- Display very high RISK (21-25) and high RISK (16-20) vertical asset and/or processes areas in descending order of RISK score

### ***Task 2.4 –Updating Condition Score***

When CIP rehabilitation work is performed, Engineering shall be responsible for updating condition scores for rehabilitation or new construction assets. O&M staff shall be responsible for updating the condition scores on the assets when maintenance work is performed as part of non-CIP activity. Based on the condition scores a new LoF, CoF and Risk score will be developed and updated in Maximo.

EMA will train the Engineering, Reclamation, Groundwater staff to update the condition score.

#### **Deliverable:**

- Clear guidelines for updating the asset condition and define process to update the LoF when maintenance and/or rehabilitation work has been completed on the asset.

### **Task 3 - Optimize WD Business Processes**

This task will include reviewing the following WD business processes and updating them to improve efficiency and quality of data entered in Maximo:

- Manage large meter testing
- Contract services cost documentation
- Optimize Clevest design to support LCA, Risk score, and failure data entry

Upon completion of the requirement gathering sessions, for each of the BPs listed above EMA will document the findings in a Functional Requirements (FR) document. The document will be submitted to the Authority for review and acceptance.

Once the FR document is accepted, EMA will use it to create a Technical Specification document. This specification will outline the build and configuration of the system. This will be a working document that will ultimately be turned into as-built documentation.

EMA will configure Maximo to meet the requirements defined in the FR document. This will include screen changes, adding data fields, user security, and Start Center portlets.

At the completion of the build, EMA will perform Unit Test internally to ensure the system is working as configured. When working satisfactorily, EMA will facilitate User Acceptance Testing (UAT). This will include the creation of test scripts by EMA, based on processes and workflows defined in the requirements sessions. The Authority staff will participate in UAT to complete the scripts to determine the acceptability of the system. When the Authority signs off on the system upon completion of UAT, then it is certified as ready to move to Production. If updates are

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warranted as part of UAT, EMA will make the necessary updates, and if needed additional testing will be performed.

When ready, EMA will migrate the configuration and data to the Production environment and prepare it for use. On the appointed day, the system will be live for users. The EMA team will be on-site to support users and provide guidance. EMA will staff each primary location where WD users are for two (2) days. Thereafter, additional support will be provided in a remotely on an as-needed basis.

### ***Task 3.1 – Manage Large Meter Maintenance in Maximo***

EMA will coordinate with CC&B and Water Distribution staff to define the large meter testing form and the job code in Maximo to enable reporting on the maintenance work performed. EMA will configure the User Interface changes, database field additions, security groups, and one report as part of this task.

#### **Deliverables:**

- Functional Requirements document
- Technical Specifications / As-Built document
- End user training documents

### ***Task 3.2 - Contract Services Work Documentation***

EMA will review and design the business process for documenting the contract services employed by the Authority in Maximo. This will allow more accurate life cycle costs associated with WD contract services.

#### **Deliverables:**

- Functional Requirements document
- Technical Specifications / As-Built document
- End user training documents

### ***Task 3.3 - Optimize Clevest Design to Support LCA, Risk Score, and Failure Hierarchy***

EMA will review the current Clevest UI and identify fields to support asset lifecycle cost calculation, asset condition, and failure data entry. EMA will coordinate with Clevest to get the required fields including asset, asset description, and service address on the Clevest User Interface (UI) to support work and asset management functions.

The Clevest updates shall be managed by the Authority staff in close coordination with Clevest team. EMA will oversee roll-out of updated Clevest configuration in to production environment.

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As part of the design optimization, EMA will identify the current functionality supported by Clevest, assess other options to maintain this functionality, cost out those options and the business process changes necessary to maintain or enhance functionality and submit a report with a road map for the transitioning this functionality to EZMaxMobile or another possible solution, the financial impact of transition and projected schedule for the transition.

**Deliverable:**

- Clevest UI Design and Maximo configuration to support lifecycle cost calculation, asset condition, and failure data entry
- Clevest functionality transition roadmap.

## **Task 4 – Integrate CC&B and Maximo**

The CC&B field activities are now exported to Excel daily, and the Dispatch staff manually creates the corresponding work orders in Maximo. Following completion of the work, the Dispatch staff sends the work order status update via email to CC&B, which is then used to update the status of field activities in CC&B.

EMA will lead workshops with the Authority to determine the requirements and design criteria for an integration between Maximo and CC&B. This will result in designing a set of to-be processes to eliminate the need for manually creating and updating both CC&B and Maximo with the status of maintenance work. The configuration will support life cycle cost accounting and define performance metrics for CC&B and Maximo activities.

EMA will create the as needed start center portlets and configure one report as part of this task.

Upon completion of the requirements gathering workshop, EMA will submit the Functional Requirement document. Following approval of the document, EMA will build the integration. After through testing and UAT, the configuration will be deployed in Production environment.

Training material files will be delivered to the Authority in digital (PDF) format. The Authority shall distribute these documents for all participants in the training classes, and they will be used as the training guide during the classes.

EMA will conduct classroom-based end-user training for all new users in the WD Division. This will be hands-on learning, utilizing the training materials created by EMA. EMA anticipates conducting two training courses for the O&M Technicians and one administrator training course for the IT staff.

When ready, EMA will migrate the configuration and data to the Production environment and prepare it for use. On the appointed day, the system will be live for users. The EMA team will be on-site to support the users and provide guidance. EMA will staff two (2) team members for two (2) days. Thereafter, additional support will be provided remotely on an as-needed basis.

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## Task 5 –SCADA Meter-Driven PM Work Orders

In Phase I, integrations were configured to bring in runtime hours as asset meter readings from the Surface Water and Reclamation/Ground Water SCADA systems for a subset of assets. With minor changes to the WKCOMP synonym status in the Work Order Lifecycle during Phase II, the Reclamation Plant was able to roll out meter based Preventative Maintenance schedules for those assets on the Reclamation side.

This task is to continue the implementation of meter-based preventative maintenance and condition monitoring across Surface Water, Reclamation, and Groundwater divisions. Workshops will be conducted to assess the needs in each division for additional assets, meter reading types (e.g., vibration, temperature, flow rate, etc.), preventative maintenance schedules, and condition monitoring points that should be configured in Maximo and included in the integrations. EMA will assist the Authority in data gathering, formatting, reviewing, and loading to Maximo. EMA will provide support to Authority SCADA resources on any changes needed to extract necessary SCADA data. EMA will aid in testing that will be conducted in the Development and UAT environments prior to moving any data and configuration changes to the Production environment. Additional training will be provided for maintaining and adjusting the asset meter configurations and the preventative maintenance schedules as assets are onboarded or decommissioned.

### **Deliverable:**

- Meter-based preventative maintenance and condition monitoring data and configuration changes migrated to Production for Surface Water, Reclamation, and Groundwater divisions.

## Task 6 – Technology and Data Improvements

This section identifies the technology tasks associated with improving data quality.

### ***Task 6.1 – Upgrade to 7.6.1.0***

The Authority's Maximo version is 7.6.0.9. IBM released a newer version, 7.6.1, with work center functionality. The work centers provide a uniform look and feel for accessing Maximo data based on the logged-in user's profile. In addition, the 7.6.1 version supports creating custom inspection forms that can replace the paper inspection forms.

Maximo version 7.6.1 will also support Authority's desire to discover, visualize, and share Maximo Asset Management content by using the Cognos Analytics dashboards, storybooks, and reports.

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**Deliverable:**

- Production and three non-Production environments upgraded from current Maximo 7.6.0.9 version to 7.6.1.

**Task 6.2 – Data Quality Improvements**

EMA will review the following data sets and update them in production environment as a part of this task:

- Classifications, attributes, and domains
- Failure hierarchy
- Assigning critical, compliance, and safety type to asset records
- Defining pre-approved job plans

EMA will review the classifications, attribution, domains and coordinate with O&M to update the classifications based on past EAM implementations. EMA will review and provide additional failure hierarchy values for major asset classes. Following Authority's approval, EMA will load them in Maximo.

EMA will coordinate with O&M to identify Critical, Compliance, and safety assets and update that information on all active assets in Maximo, and coordinate with O&M and Warehouse to update the spare parts list and corresponding lead time for critical, compliance, and safety assets.

EMA will review all existing job plans and configure pre-approved job plans in Maximo

**Deliverable:**

- Assigning critical, compliance, and safety assets type on asset records

**Task 7 – Fleet Business Process and Data Review**

In Late August of 2019, EMA will review the fleet asset, work order, and cost data in Maximo and conduct two, four-hour sessions with Fleet managers to review asset and work order data quality logged into Maximo as well as discuss areas for improvement and introducing new functionality.

**Task 8 – General Maximo Support**

This task will include system maintenance and support on an as-needed basis including creating and updating reports. EMA will perform activities as a part of this task as approved by the Authority's Project Manager or designated delegate.

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## **Task 9 – Project Management**

Project Management activities are included in this scope of work to ensure the project is successful and remains on task and schedule. There are five tasks related to project management as described below.

### ***Task 9.1 – General Project Management***

This includes typical PM activities such as coordination, resource management, invoicing, client interaction, project facilitation, meeting minutes, deliverable review, and other associated activities.

### ***Task 9.2 – PIC and Executive Oversight***

This task is to provide officer level oversight of the project to ensure that PMO standards are met and client objectives are achieved. This also provides an outlet for the Authority to escalate any issues and negotiate any changes in scope or contract.

### ***Task 9.3 – Status Reporting***

EMA will provide regular status reporting to the Authority on project activities, risks, issues, progress, and schedule. EMA and the Authority will agree on the frequency and format of these updates.

### ***Task 9.4 – Stakeholder Meetings***

On a quarterly basis, EMA will meet face to face with project stakeholders to discuss upcoming activities and progress to date. This activity is intended to maintain engagement by all stakeholders and facilitate any change management that needs to occur.

### ***Task 9.5 – Phase III Kickoff***

On-site kickoff of the Phase III project. EMA will present the schedule, focus areas, project understanding, project vision, and the project team.

## PHASE III PROJECT COSTS

The following is EMA's high-level cost estimate to provide the scope of work described above.

Table 1: Cost estimate

Task #	Description	Hours	Cost
1	User Training	868	\$187,860
2	Implementing Risk-Based Asset Management Planning	384	\$73,640
3	Optimize WD BPs	832	\$158,180
4	CC&B Maximo Integration	624	\$122,320
5	SCADA Meter-Driven PM Work Orders	144	\$29,520
6	Technology and Data Improvement	1,272	\$142,800
7	Fleet Business Process and Data Review	60	\$10,800
8	General Maximo Support	560	\$208,060
9	Project Management	712	\$251,635
<b>Subtotal</b>		<b>5,456</b>	<b>\$1,184,815</b>
Travel & Expenses			\$128,000
<b>Total</b>			<b>\$1,312,815</b>
Gross Receipts Tax (5.125%)			\$67,282



Costs are based on the following EMA project positions and rates.

*Table 2: Hourly rates by project position*

Position	Hourly Rate
Principal in Charge	\$350
Project Manager	\$255
System Architect II	\$205
System Architect I	\$180
Solution Architect	\$210
Support	\$130

## SCHEDULE

EMA anticipates beginning this project on or around April 15, 2019. At the start of the project, EMA and the Authority will discuss the order in which tasks should be completed. There are some dependencies, but there can be some shifting of tasks earlier or later in the project based on various factors.

*Table 3: Schedule of Tasks*

Set of Tasks	Timeframe	Duration
User Training	Early in Project	1 - 2 months
Risk Based AMP	Early in Project	2 - 3 months
SCADA Meter Driven PM WO	Early in Project	1 month
Optimize WD BPs	Early to Mid-Project	2 - 3 months
CC&B – Maximo Integration	Early to Mid-Project	3 - 4 months
Data Quality Improvements	Early to Mid-Project	3 - 4 months
Fleet Implementation Overview	Mid Project	1 – 2 Week
Upgrade to 7.6.1.0	Mid to Late Project	1 month

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Set of Tasks	Timeframe	Duration
Ongoing Support	Ongoing	N/A
Project Management	Ongoing	N/A

The total project duration will be approximately twelve to fourteen months. This will depend on resource availability and whether the Authority wants to overlap tasks or run them in a linear approach.

## RESOURCES

EMA is proposing the following resources for this project. This team will provide consistency and leverage existing knowledge of the Authority and the Maximo system. Every team member has experience from Phase I.

**Tim Payne**, Principal in Charge – Tim will continue in the role of PIC providing executive oversight and ensuring PMO standards are held throughout the project.

**Ganesh Pai**, Project Manager and Functional Architect – Ganesh will remain working with the Authority in the capacity of PM and subject matter expert for functional design.

**Mike Slaughter**, Project Coordinator – Mike will also continue in his role as the coordinator for the project, assisting with project management, training, documentation, and support.

**John Buzzard**, System Architect II – John will take the lead role on the project acting in both a technical and functional capacity.

**Ray DeFelice**, System Architect I – Ray will help with requirements documentation, system design, testing, and training.

**Patrick Fuller**, Solution Architect – Patrick will work with John on the design and build tasks within the project. He brings significant experience with integrations and Maximo configuration.

**Rodrigo Dombrowski**, Solution Architect – Rodrigo will work with John on the design and build tasks within the project. He brings significant experience with integrations, GIS and Maximo configuration.

## ASSUMPTIONS

- The Authority will continue to provide system access to the EMA team.
- The Authority is responsible for providing meeting space, conference rooms, and amenities as needed to facilitate the project.

- 
- Travel expenses will be billed as actual, the amount included herein is only an estimate based on costs experienced in Phase II.
  - No additional software licensing is included in this proposal. If additional licenses are necessary, EMA will provide those licenses to the Authority through our IBM Reseller agreement, however that will be provided as a separate quotation.
  - Work will be performed both on-site and offsite for this project, at EMA's discretion.
  - The Authority will continue to provide project management and change management resources to the project.

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## **OPTIONAL TASK X – MAINTENANCE OPTIMIZATION**

The Authority's business strategy is to continuously improve and optimize its use of material, asset, and labor resources. Some Divisions already are proactively analyzing readings to alter PMs in order to avoid unnecessarily expending resources. To expand and standardize these efforts, EMA believes the Authority would benefit from a formal Optimized Maintenance Program.

Optional Task X includes the activities to introduce an Optimized Maintenance Program to plant assets. The program will include instruction in:

- Optimized Maintenance concepts
- Development of a bundling tool to gather PM Preventative Maintenance (PM), Predictive Maintenance (PdM) and Corrective Maintenance (CM) tasks.
- A pilot to demonstrate the Optimized Maintenance workshops, process, and tasks. Staff involvement in the training and workshops will allow EMA to test the practices of the Optimized Maintenance Program and make adjustments for technology, data availability and staff participation.

Following the pilot, additional process areas can be completed using the updated practices.

The Maintenance Optimization subtasks are described below.

### ***Task X.1 – Maintenance Optimization Overview and Kick-off***

EMA will conduct a half-day workshop to discuss the Maintenance Optimization pilot and tasks. This workshop will discuss how a process area is defined and selected and what tasks are required by the facility staff to support the analysis.

The outcome of the workshop will identify the process that will be assessed, identify the staff that will attend training and participate in the analysis, and schedule the training and workshop dates.

### ***Task X.2 – Staff Training***

EMA recommends training staff members who will be involved in the Optimized Maintenance Workshops in the workshop process and the identification of failure modes, root cause analysis, and predictive maintenance. EMA proposes a three-day training session for 15 staff members. Staff will utilize ISO training materials that will be purchased for each attendee.

Training will occur over three consecutive days.

### ***Task X.3 – Maintenance Optimization Process***

The maintenance optimization process will separate a facility into discrete areas that can be analyzed and addressed in a maintenance optimization workshop (approximately 100 assets). A process area will be selected, and the following tasks will be completed.

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Each maintenance optimization workshop will follow the same steps and tasks including:

- Request for data and gathering data and drawings. This will include exports of data from Maximo, operations and maintenance manuals from vendors and contractors and system drawings. Collection and transmittal of data will be completed by the Authority staff.
- Documentation review by the EMA team
- Conduct a site visit to review the process and interview supervisors
- Maintenance optimization workshop (two weeks of meetings)
- Complete the analysis of the data and develop the initial bundling document
- Bundling review workshop
- Delivery of the process report and the spreadsheet for loading tasks into Maximo

Following the pilot process, modifications and updates will be made to the methodology. This can include adding additional resources to gather data, contacting vendors and distributors for additional documentation, changing the staff attending specific meetings and changing the formats of the reports and documents. The updated methodology will be used on future process and further refinement will occur if needed as more process areas are completed.

#### ***Task X.4 – Maintenance Bundling Tool***

The maintenance bundling tool will be used to gather, analyze, and modify the outcomes of the failure mode analysis and optimized maintenance practices in a single Excel document. This document is then utilized to format the PMs and PdM information so it can be loaded into Maximo without further data manipulation. Development of the bundling tool fields to match the Authority's installation will be completed in parallel with the pilot workshop and process area. It will be tested and will be ready for use when the bundling effort is complete.

#### ***Task X.5 – Pilot Review***

Following the completion of the pilot, a subset of the staff involved in the workshop, along with Management Staff, Maximo Administrators, and the EMA team, will conduct a lessons-learned workshop. This will identify improvements in the process of collecting data, assigning staff, and using the bundling tool. These practices will then be documented, and the team can assess which processes are a priority to move forward with.

A roadmap will be developed to identify the schedule that the Authority can use to assess future process areas. An online workshop will discuss where maintenance activities can be most impacted and improved by maintenance optimization and where construction or new equipment will require the set-up of PM schedules. The roadmap will identify what processes are a priority. The Authority can use this roadmap to plan Maintenance Optimization activities for the following 12 months.

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### **Pilot Schedule**

The pilot process will be completed over a two- to three-month period. The process can be completed in a shorter period but providing breaks between activities will minimize the impact to the Maintenance staff as key individuals are required for long workshops, impacting their availability to complete maintenance tasks.

### **Outcomes**

At the end of the Maintenance Optimization tasks, the Authority will have an Optimized Maintenance Program in place. Using proactive data analysis, the Authority will be able to use this program to maximize return on expenditures of labor, materials, and parts resources for maintenance activities.

The following is EMA's high-level cost estimate to provide the scope of work described above for the optional Maintenance Optimization task.

*Table 4: Maintenance Optimization cost estimate*

Description	Hours	Cost
Maintenance Optimization tasks	376	\$92,000
Project Management	66	\$17,780
<b>Subtotal</b>	<b>442</b>	<b>\$109,780</b>
<b>Travel &amp; Expenses</b>		\$10,086
<b>Total</b>		<b>\$119,866</b>
<b>Gross Receipt Tax (5.125%)</b>		\$6,143



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Meeting Date: April 17, 2019

Staff Contact: John M. Stomp, Chief Operating Officer

**TITLE: C-19-15 – Approval of Memorandum of Understanding (MOU) with the Village of Tijeras**

**ACTION: Recommend Approval**

**Summary:**

The Water Authority and the Village of Tijeras entered into an agreement for return flow credits in 2010 which expired in 2015. The Village has requested a new MOU to provide return flow credits to provide additional time for the Village to acquire additional water rights in accordance with their permit with the Office of the State Engineer.

While the Water Authority retains ownership of the return flows, this MOU allows for the granting of these return flow credits to the Village on an annual basis as long as the Village customers remain in good standing with their accounts.

The Village has its own water system and only wastewater from the Village's water customers would apply to the Village's return flow credit under the MOU.

The MOU will be executed immediately upon the board's approval and will expire in five years following execution.

**FISCAL IMPACT:**

None.

## **MEMORANDUM OF UNDERSTANDING**

Village of Tijeras  
P. O. Box 9  
Tijeras, New Mexico 87059

Albuquerque Bernalillo County Water  
Utility Authority  
P.O. Box 1293  
Albuquerque, New Mexico 87103-1293

This Memorandum of Understanding ("MOU") is entered into on the date last entered below by and between the Village of Tijeras ("Village") and the Albuquerque Bernalillo County Water Utility Authority ("Water Authority").

WHEREAS, the purpose of this MOU is to set forth the agreement between the Village and Water Authority with respect to the return flow credits associated with Village water accounts that are discharging into the Water Authority wastewater system; and

WHEREAS, the Village and the Water Authority have agreed that a portion of the water diverted from Village wells under State Engineer Permit No. RG-51777 and S-1973 Combined is returned to the Rio Grande via the Water Authority wastewater system; and

WHEREAS, there are presently 16 Village water accounts that are connected to the Water Authority wastewater system with active Water Authority wastewater accounts; and

WHEREAS, nothing in this MOU shall be construed to grant the Village a water right or permanent right to return flows which are owned solely by the Water Authority;

NOW, THEREFORE, IT IS AGREED between the Village and the Water Authority that:

1. Under this MOU, the Water Authority, at its sole discretion, may grant return flow credits approved by the State Engineer on a monthly basis to the Village based on the actual metered flows as measured at the Water Authority's Lift Station #27 or as otherwise determined by the Water Authority;
2. The return flows granted to the Village in a particular month will be reported by the Village to the Office of the State Engineer no later than the 10<sup>th</sup> day of the next month.
3. The Village shall provide to the Water Authority copies of monthly diversion records as submitted to the Office of the State Engineer under Permit No. RG-51777 and S-1973 Combined. The monthly records shall be provided to the Water Authority no later than the 10<sup>th</sup> day of the next month.
4. No later than February 1 of each year the Village shall provide to the Water Authority an updated list of all Village water accounts and their corresponding Water Authority wastewater account numbers. The Village shall notify all new water customers in writing that a Water Authority wastewater account must be established prior to connecting to the Water Authority's wastewater system and a copy of that notification



shall be provided to the new services office of the Water Authority. Any unauthorized connections or delinquent accounts identified by the Water Authority must be remedied to the Water Authority's satisfaction within thirty (30) days of receipt of notification from the Water Authority. Remedial actions for an unauthorized connection or delinquent account may include, but are not limited to, the Village withholding water service and/or the Water Authority establishing a lien against the subject property.

5. The Village shall not receive return flow credit from any Water Authority wastewater customers who do not receive water service from the Village.
6. By entering into this MOU, the parties do not intend to create any right, title or interest in or for the benefit of any person other than the parties. No person shall claim any right, title or interest under this MOU or seek to enforce this MOU as a third-party beneficiary of this MOU.
7. Term. Five (5) years from the date last entered below, this MOU shall automatically terminate. It is the intent of the parties that this MOU will be renewed after it is reviewed and amended by the parties as necessary.
8. Termination. If, through any cause, a party shall fail to fulfill in a timely and proper manner its obligations under this MOU or performance of the obligations become impracticable, either party shall thereupon have the right to terminate this MOU by giving written notice to the other party of such termination and specifying the effective date at least ninety (90) days before the effective date of such termination.
9. Liability. Neither party shall be responsible for liability incurred as a result of the other party's acts or omissions in connection with this Agreement. Any liability incurred in connection with this Agreement is subject to the immunities and limitations of the New Mexico Tort Claims Act, § 41-4-1 et seq., NMSA 1978, as amended.
10. Assignment. This MOU shall not be assigned without the prior written consent of the Water Authority.
11. Changes. Changes to this MOU are not binding unless made in writing, signed by both parties.
12. Construction and Severability. In case any one or more of the provisions contained in this MOU or any application thereof shall be invalid, illegal or unenforceable in any respect, the validity, legality and enforceability of the remaining provisions contained herein and any other application thereof shall not in any way be affected or impaired thereby.
13. Appropriations. Notwithstanding any other provisions in this MOU, the terms of this MOU are contingent upon the Water Authority receiving the appropriations necessary for the performance of this MOU. If sufficient appropriations and authorizations are

not received by the Water Authority, this MOU may be terminated at the end of the Water Authority's current fiscal year upon ninety (90) days written notice given by the Water Authority to the Village.

14. Applicable Law. Each party shall abide by all applicable federal and state laws and regulations. This MOU shall be governed by and construed in accordance with the laws of the State of New Mexico.
15. Entire Agreement. This MOU incorporates all the agreements, covenants and understandings between the parties hereto concerning return flow credits, and all such agreements, covenants and understandings have been merged into this MOU. This MOU expresses the entire understanding between the parties with respect to said return flow credits. No prior agreement or understanding, verbal or otherwise, of the parties or their agents shall be valid or enforceable unless embodied in this MOU.
16. Approval Required. This MOU shall not become effective until signed by both parties.

IN WITNESS WHEREOF, the parties have executed this MOU on the dates entered below.

**VILLAGE OF TIJERAS**

By: Gloria Chavez  
Gloria Chavez  
Mayor

3/25/19  
Date

**ALBUQUERQUE BERNALILLO COUNTY  
WATER UTILITY AUTHORITY**

By: \_\_\_\_\_  
Mark S. Sanchez  
Executive Director

\_\_\_\_\_  
Date

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Meeting Date: April 17, 2019  
Staff Contact: John M. Stomp, Chief Operating Officer

**TITLE: C-19-16 - Storage Agreement with Ohkay Owingeh for San Juan-Chama water in Abiquiu Reservoir**

**ACTION: Recommend Approval**

**Summary:**

The Pueblo of Ohkay Owingeh (Pueblo) has requested 10,000 acre-feet of storage for San Juan-Chama water in Abiquiu Reservoir. The Water Authority currently has storage agreements with numerous San Juan-Chama contractors and this agreement would add to that list of entities using the Water Authority's space.

This agreement is consistent with the terms and conditions in the other San Juan-Chama Contractors agreements. The Water Authority has the available space within the existing 170,900 acre-feet storage agreement with the Corps of Engineers. The agreement is set to expire on Dec. 31, 2039.

The Agreement will be executed immediately upon the board's approval.

**FISCAL IMPACT:**

None.

1  
2 Agreement between  
3 Ohkay Owingeh and the  
4 Albuquerque Bernalillo County Water Utility Authority for  
5 Storage Space in Abiquiu Reservoir  
6

7 This Agreement for Storage Space in Abiquiu Reservoir (Agreement) between the  
8 Albuquerque Bernalillo County Water Utility Authority (Water Authority), a political  
9 subdivision of the State of New Mexico and the Ohkay Owingeh (Pueblo), a sovereign,  
10 federally-recognized Indian tribe, is made as of the date of the final signature hereto.  
11

12  
13 **Recitals**  
14

15 **WHEREAS**, pursuant to NMSA 1978, § 72-1-10, the Water Authority is legal successor to  
16 the interest and rights of the City of Albuquerque for storage space in Abiquiu Reservoir  
17 under Contract No. DACW47-86-C-0009 dated March 20, 1986 with the U.S. Army Corps of  
18 Engineers (Corps); and  
19

20 **WHEREAS**, the Water Authority has the right to store up to 170,900 acre-feet under the  
21 referenced contract and has the ability to suballot storage space to other parties subject to  
22 approval from the Corps; and  
23

24 **WHEREAS**, the Water Authority has and continues to implement the San Juan-Chama  
25 Drinking Water Project to divert and fully utilize the Water Authority's 48,200 acre-feet of  
26 San Juan-Chama water for drinking water purposes; and  
27

28 **WHEREAS**, the Water Authority currently has about 82,000 acre-feet of San Juan-Chama  
29 Project Water stored in Abiquiu and is awaiting delivery of the final portion of its 2018 and  
30 the full 2019 allocation of San Juan-Chama water; and  
31

32 **WHEREAS**, the Pueblo on October 24, 2001, entered into Contract No. 01-WC-40-6830  
33 with the United States providing for the delivery of up to 2,000 acre feet of water per year for  
34 a permanent supply of San Juan-Chama Project water to Ohkay Owingeh; and  
35

36 **WHEREAS**, the Pueblo has entered into a subcontract with the U.S. Bureau of Reclamation,  
37 dated February 5, 2018, pursuant to which the Bureau has leased for four years the Pueblo's  
38 2,000 acre feet annual allocation of San Juan Chama Project water; and  
39

40 **WHEREAS**, the Pueblo wishes to cumulatively store its San Juan Chama Project water in  
41 Abiquiu Reservoir as the Pueblo's Project water and space become available, and  
42

43 **WHEREAS**, the Pueblo manages its water resources to provide for the health and welfare of  
44 its members now and in the future, and storage of water in Abiquiu Reservoir promotes that  
45 goal; and

1  
2 **WHEREAS**, the Water Authority desires to continue its good working relationship with the  
3 Pueblo on storage and other water resources matters; and  
4

5 **NOW**, therefore, upon the mutual consideration described by the Agreement, including the  
6 covenants and promises contained herein, the adequacy of which is acknowledged by the  
7 parties, the Water Authority and the Pueblo agree as follows:  
8

9 **Agreement**  
10

11 The Water Authority agrees:  
12

- 13 1. To provide to the Pueblo a total of up to 10,000 acre-feet of storage space for San  
14 Juan Chama Project water in Abiquiu Reservoir until December 31, 2039. The  
15 amount of storage space available to the Pueblo shall be determined by the Water  
16 Authority in its sole discretion, based on the amount of space needed by the Water  
17 Authority for its own purposes.  
18
- 19 2. To work with the Pueblo to develop, to the extent feasible, a long-term storage  
20 agreement in Abiquiu Reservoir for San Juan-Chama Project water up to elevation  
21 6,220 feet MSL in coordination with and subject to the approval of the U.S Army  
22 Corps of Engineers (Corps).  
23
- 24 3. To provide the Pueblo with as much advance written notice as practicable but no  
25 less than sixty (60) days whenever exercising the Water Authority's right to require  
26 that the Pueblo withdraw its water from the suballotted storage space when the  
27 Water Authority determines, in its sole discretion, that it needs that space for its  
28 own storage.  
29

30 The Pueblo agrees:  
31

- 32 1. To provide written notification to the Water Authority at least thirty (30) days  
33 prior to the Pueblo's decision to deposit water in Abiquiu Reservoir under the  
34 terms of this Agreement.  
35
- 36 2. To provide payment of 10% of the deposited water every time the Pueblo deposits  
37 its San Juan Chama Project water into the Water Authority's Abiquiu space. The  
38 10% payment of deposited water by the Pueblo under this Agreement shall be  
39 transferred to the Water Authority's space in Abiquiu Reservoir within thirty (30)  
40 days of deposit. By February 1<sup>st</sup> each year, the Pueblo shall provide a written  
41 report of deposits and withdrawals from the suballotted space to the Water  
42 Authority for the preceding calendar year.  
43
- 44 3. To not store San Juan-Chama Project water that is suballotted, purchased or  
45 otherwise acquired from any third party without the prior written approval by the  
46 Water Authority.

4. To take the necessary steps to immediately move the Pueblo's San Juan-Chama Project water from Abiquiu Reservoir to Elephant Butte Reservoir if the Water Authority determines that suballotted water storage space is not available in Abiquiu Reservoir.
5. To work with the Water Authority to acquire additional storage easements in Abiquiu Reservoir up to elevation 6230.00 MSL. The Pueblo recognizes that the real property interests acquired by any additional storage easements will belong solely to the Water Authority, and that any additional water storage those easements allow must be coordinated with, and subject to the approval of, the Corps.
6. To release the Pueblo's San Juan-Chama Project water from El Vado Reservoir or Heron Reservoir to Abiquiu Reservoir in order to provide recreational benefits on the Rio Chama during recreational weekends as established by the Corps in cooperation with the Water Authority and federal agencies, except that such releases shall be determined in the Pueblo's sole discretion and shall not be subject to the direction of the Water Authority or any state or federal agency.
7. To be responsible for its proportional share of evaporative losses that occur on Pueblo San Juan-Chama Project water stored in Abiquiu from the effective date of this Agreement. The Pueblo agrees to cooperate with the U.S. Bureau of Reclamation in its monthly evaporative loss computation, including providing any necessary documentation to ensure that these losses are deducted from the Pueblo's account.
8. To be responsible for its proportional share of the annual financial cost for storage calculated according to the total amount of water deposited by the Pueblo in Abiquiu Reservoir that year as a percentage of the total 170,900 acre-feet charged to the Water Authority. The proportional share of the cost shall be based on the annual fiscal-year billing provided to the Water Authority by the Corps and shall be payable by the Pueblo to the Water Authority within thirty (30) days of receipt of written notice from the Water Authority

Both parties agree:

1. The amount stored and the storage deadline may be extended by written mutual consent by the Authority's Executive Director and the Pueblo's Representative if executed prior to December 31, 2039.
2. To work cooperatively in developing a long-term agreement in Abiquiu Reservoir for the Pueblo and other water management entities for San Juan-Chama Project water up to elevation 6220.00 MSL in coordination with and subject to the approval of the Corps.

- 1       3.     Any claim of liability against the Water Authority arising from its obligations  
2             under this Agreement is subject to the immunities and limitations of the New  
3             Mexico Tort Claims Act, NMSA 1978, §§ 41-4-1 through 41-4-30, as amended.  
4             Except as expressly provided by the New Mexico Tort Claims Act, the Water  
5             Authority does not waive its sovereign immunity, any defense or any limitation of  
6             liability provided by applicable law. No provision in this Agreement shall be  
7             construed to modify, abrogate or waive any provision of the New Mexico Tort  
8             Claims Act. None of the provisions contained within this Agreement are intended  
9             to create in the public or any member thereof a third party beneficiary or to  
10            authorize anyone not a party to the Agreement to maintain a suit or any claim  
11            whatsoever, pursuant to the provisions of this agreement.  
12  
13       4.     Any claim of liability against the Pueblo shall be subject to the limited waiver of  
14             sovereign immunity provided herein. The Pueblo agrees to waive its immunity from  
15             unconsented suit solely for the limited purpose of enforcement of its obligations under  
16             this Agreement by the Water Authority and no other party. This waiver applies to  
17             claims seeking specific performance and/or damages, but it shall not be construed to  
18             include claims seeking special damages or consequential damages.  
19  
20       5.     The Water Authority designates Mark S. Sanchez, Executive Director, or his designee,  
21             as the Water Authority's Representative and person to receive notifications from the  
22             Pueblo under this Agreement. The Pueblo designates Larry Phillips, Director, Natural  
23             Resources Department, or his designee, as the Pueblo's Representative and person to  
24             receive notifications from the Water Authority under this Agreement.  
25  
26       6.     This Agreement may be signed in counterparts, and each signed copy shall be deemed  
27             an original.  
28

29   IN WITNESS WHEREOF, the Ohkay Owingeh and the Albuquerque Bernalillo County  
30   Water Utility Authority have caused this Agreement to be executed and delivered by its duly  
31   authorized representatives as of the date specified below.  
32  
33  
34  
35

1 ALBUQUERQUE BERNALILLO COUNTY  
2 WATER UTILITY AUTHORITY  
3  
4

5 \_\_\_\_\_  
6 Mark S. Sanchez, Executive Director  
7 Albuquerque Bernalillo County Water Utility Authority  
8

\_\_\_\_\_  
Date

9 OHKAY OWINGEH  
10  
11

12 \_\_\_\_\_  
13 Ron Lovato  
14 Governor  
15  
16

17 \_\_\_\_\_  
18 Larry Phillips  
19 Natural Resource Division Director  
20  
21

22 Approved as to Form:  
23  
24

25 \_\_\_\_\_  
26 Curtis G. Berkey  
27 Counsel for Ohkay Owingeh  
28

29 Acknowledged by:  
30

31 UNITED STATES OF AMERICA  
32  
33

34 \_\_\_\_\_  
35 Jennifer Faler, Area Manager, Albuquerque Area Office, Bureau of Reclamation  
36

37 Approved by:  
38

39 U.S. ARMY CORPS OF ENGINEERS  
40  
41

42 \_\_\_\_\_  
James L. Booth, LTC District Commander, U.S. Army Corps of Engineers





Meeting Date: April 17, 2019

Staff Contact: Diane Agnew, Water Quality Hydrologist

**TITLE: Status Update for the Kirtland Air Force Base Bulk Fuels Facility Fuel Leak Cleanup**

**SUMMARY:**

The Water Authority continues to monitor the progress of corrective action activities being conducted by the U.S. Air Force and the Air Force Civil Engineering Center (AFCEC) to address the Bulk Fuels Facility (BFF) jet fuel leak that has contaminated the aquifer near the Ridgecrest Well Field. Recent activities have included the following:

- Drilling and installation of new groundwater monitoring wells screened across the water table to address outstanding data gap;
- Collection of soil cores in the source area to define the nature and extent of remaining fuel in the ground;
- Preliminary testing of the bioventing interim measure;
- Continued operation of the pump and treat system interim measure; and
- Continued site monitoring of groundwater and soil vapor.

On February 25, 2019 the New Mexico Environment Department sent Kirtland Air Force Base (KAFB) a letter detailing five items that the Air Force is required to be in compliance with their Resource Conservation and Recovery Act (RCRA) permit. In the letter are deadlines for delivering data, reports, and work plans necessary to continue progress towards remediating the contamination and failure to meet the deadlines will be considered by the NMED to be violations of the permit and subject to enforcement action.

NMED and the Air Force have held three informational meetings and one public meeting since their last presentation to the Water Authority governing board in March 2018. The NMED and Air Force are co-hosting a public meeting Thursday, April 25, 2019.

**STAFF COMMENTS:**

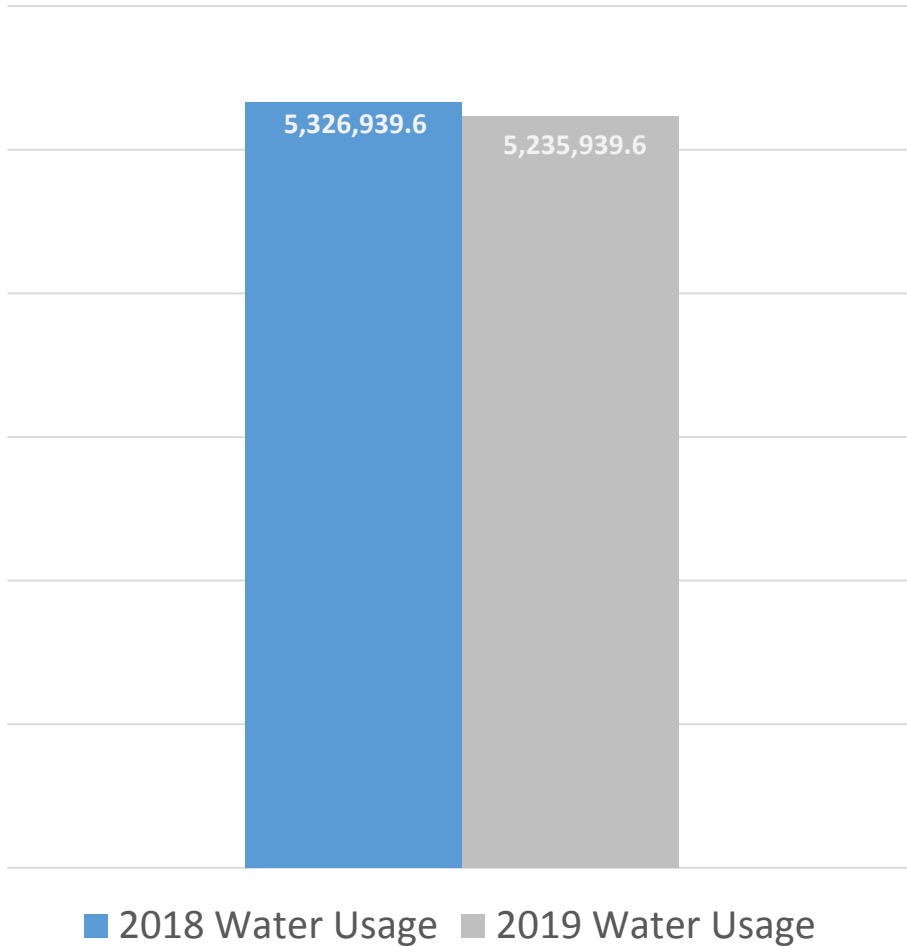
The interim pump and treat system is currently operational and consists of four groundwater extraction wells. Groundwater monitoring data from the Fourth Quarter of 2018 show an overall reduction of the ethylene dibromide (EDB) plume footprint north of Ridgecrest Drive. During a recent stakeholder meeting, the Air Force claimed that the pump and treat system has removed greater than 80 percent of the EDB in groundwater;

we believe that this statement may overrepresent the removal of EDB. The existing pump and treat system was designed to reduce EDB concentrations north of Ridgecrest Drive, but was not designed to remove EDB north of KAFB nor in the source area. Water Authority staff continue to remain concerned about data gaps in the source area and about how the Air Force is evaluating performance of the pump and treat system.

**FISCAL IMPACT:**

None

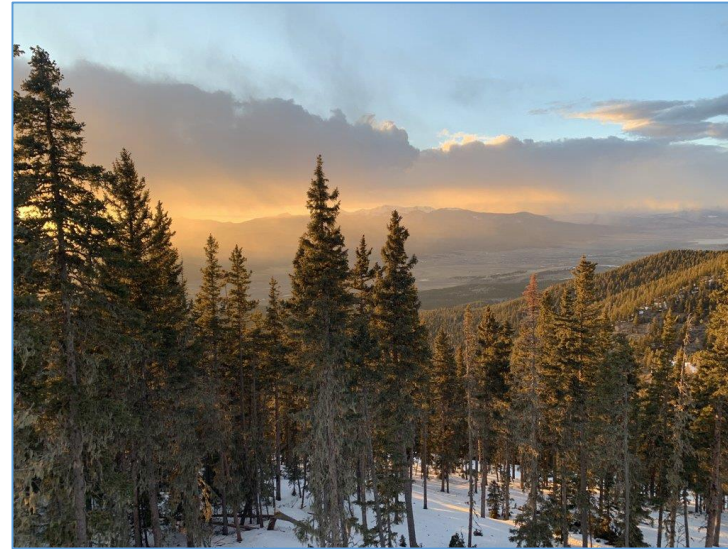
## Water Usage



**~ 92m million gallons less used  
in 2019 compared to 2018.**

**2019 Rainfall (Jan-Mar) = 2.1"**

**2018 Rainfall (Jan-Mar) = 1"**



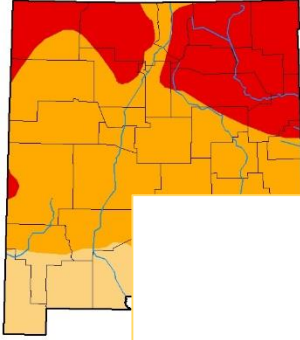
Albuquerque Bernalillo County  
Water Utility Authority

U.S. Drought Monitor  
New Mexico

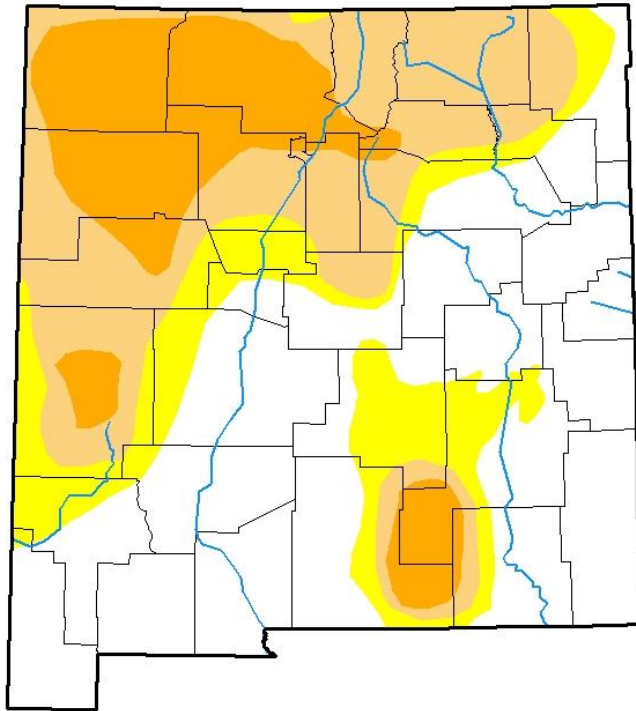
March 13, 2018  
(Released Thursday, Mar. 15, 2018)  
Valid 8 a.m. EDT

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	0.08	88.92	88.91	17.89	25.00	0.00
Last Week 03-06-2018	0.08	88.92	88.91	17.89	25.00	0.00
3 Months Ago 01-01-2018	16.45	89.54	16.23	0.00	0.00	0.00
Start of Calendar Year 01-01-2018	7.01	92.99	45.97	4.76	0.00	0.00
Start of Water Year 09-25-2017	85.15	14.04	0.00	0.00	0.00	0.00
One Year Ago 03-13-2017	76.02	23.98	3.24	0.00	0.00	0.00

Intensity:  
D0 Abnormally Dry D1 Extreme Drought  
D2 Moderate Drought D3 Exceptional Drought



U.S. Drought Monitor  
New Mexico



April 2, 2019  
(Released Thursday, Apr. 4, 2019)  
Valid 8 a.m. EDT

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	46.45	53.55	38.74	16.06	0.00	0.00
Last Week 03-26-2019	45.20	54.80	38.74	16.06	0.00	0.00
3 Months Ago 01-01-2019	37.99	62.01	44.71	35.03	19.67	14.17
Start of Calendar Year 01-01-2019	37.99	62.01	44.71	35.03	19.67	14.17
Start of Water Year 09-25-2018	0.40	99.60	93.27	59.56	31.84	15.53
One Year Ago 04-03-2018	0.08	99.92	98.57	78.12	38.87	0.00

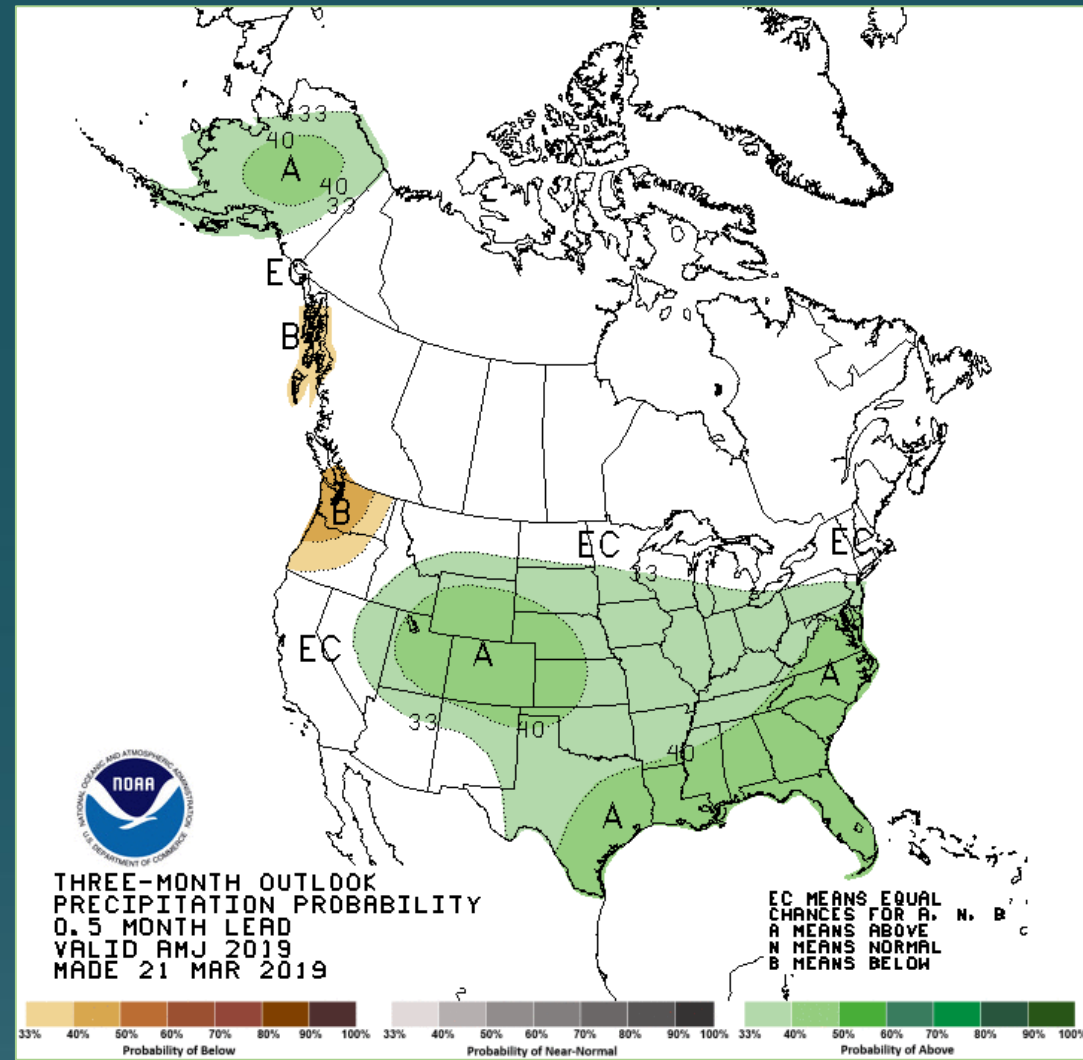
Intensity:  
D0 Abnormally Dry D3 Extreme Drought  
D1 Moderate Drought D4 Exceptional Drought  
D2 Severe Drought

The Drought Monitor focuses on broad-scale conditions.  
Local conditions may vary. See accompanying text summary  
for forecast statements.

Author:  
Curtis Riganti  
National Drought Mitigation Center



<http://droughtmonitor.unl.edu/>



# More Trees....



**Water 2120 Policy J** The Authority shall identify and provide resources to preserve and protect valued environmental resources of the region.

**6.** The Water Authority should work with the City and County to provide incentives to increase beneficial tree canopy coverage within Bernalillo County and MRG.

## Why this is significant?

Various studies suggesting tree canopy in Albuquerque and greater area has decrease considerably.

- Siberian Elms and other trees planted in '30's + 40's nearing end of lifespan
- Diversity of trees is needed
- Lower future urban energy (cooling) demand



Albuquerque Bernalillo County  
Water Utility Authority



# Update on Trees....

- 1,287 desert-friendly trees planted via Treebate in 2018
- City Parks & Recs Forestry Department planted ~300 mature trees in 2017 and 2018 planting season
- BernCo Parks & Recs planted ~ 50 mature trees in 2018 planting season
- ....other initiatives

