



Technical Customer Advisory Committee

AGENDA

Members

Melissa Armijo	Amy Miller
Andrew Bernard	Ege Richardson
Janie Chermak	Ron Schwarzwald
Mike Hightower	Scott Verhines
Dave Hill	

Thursday, August 16, 2018	4:00 PM	ABCGC – 7th Floor Conference Room 7096
1. Call to Order		4:00-4:05
2. Approval of Agenda		4:00-4:05
3. Approval of June 7, 2018 Action Summary		4:00-4:05
4. Presentation on Customer Opinion Survey Results		4:05-4:20
5. Presentation and Discussion of Water Quality Report		4:20-5:20
6. Public Comment		5:20-5:25
7. Adjournment		5:25

NOTICE TO PERSONS WITH DISABILITIES: If you have a disability and require special assistance to participate in this meeting, please contact the Water Utility Authority Office, Suite 5012, Albuquerque/Bernalillo County Government Center, phone 289-3100, as soon as possible prior to the meeting date.



Technical Customer Advisory Committee

ACTION SUMMARY

June 7, 2018

Members Present:

Janie Chermak
Mike Hightower
Dave Hill
Ege Richardson
Scott Verhines

Members Excused:

Melissa Armijo
Andrew Bernard
Amy Ewing
Amy Miller

Water Authority Staff Present:

Frank Roth, Senior Policy Manager
Kate Mendoza, Water Resources Specialist
Anthony Montoya, Chief Engineer
Damian Luna, Principal Engineer
Kristopher Cadena, Principal Engineer
Jane Rael, Senior Engineer

Others Present:

John Fleck
Elaine Hebard

Item 1 – Call to Order - Note presence of quorum

The meeting was called to order at 4:03 pm by Chair Ege Richardson.

Item 2 – Approval of Agenda

Scott Verhines made a motion to approve the agenda. Dave Hill seconded the motion. The motion passed on a 4-0 vote.

For: 4 Chermak, Hill, Richardson, Verhines
Against: 0
Excused: 5 Armijo, Bernard, Ewing, Hightower, Miller

Item 3 – Approval of April 5, 2018 Action Summary

Dave Hill made a motion to approve the action summary. Janie Chermak seconded the motion. The motion passed on a 4-0 vote.

For: 4 Chermak, Hill, Richardson, Verhines
Against: 0
Excused: 5 Armijo, Bernard, Ewing, Hightower, Miller

Item 4 – Status Report on Customer Conversations

Kate Mendoza provided a status report on the 2018 Customer Conversation program. Committee members acknowledged how well the meetings were organized, the benefits of the customer outreach program, and the discussion topics of watershed protection and groundwater contamination. Members commented on high level of engagement of customers on the discussion topics and questions.

Mike Hightower entered the meeting at this time.

Item 5 – Presentation on Capital Program Planning Coordination

Damian Luna provided an overview of the Capital Improvement Program (CIP) discussing the coordination component with the different agencies. He discussed the utilization of the utility's Asset Management Plan to guide renewal and replacement decisions based business risk. He also provided two examples of project coordination within the City of Albuquerque.

It was also requested that Water Authority staff provide a presentation to the TCAC on the updated Asset Management Plan when it is completed.

Item 6 – Presentation on Water Authority Utility Development

Kristopher Cadena provided an overview of the Utility Development Section. He reviewed the Section's responsibilities and current workload. He distinguished between an availability statement and serviceability letters. He also reviewed the requirements of development inside and outside of the service area. He demonstrated the features of a pilot Online Availability Tracking System. Some features that are planned to be added include a Search function, Days Pending by tracking number, and an auto-email function sending the requester the executed availability statement. Committee members provided recommendations on the utility development process:

- Develop an expedited process to shorten the review/approval process at additional charge
- Increase the awareness and availability of staff for pre-submittal meetings with developers to improve the completeness of requests
- Create two separate tracks of simple and complex development requests; the simple requests would have a quicker turn-around time and would not be stuck behind more complex time-consuming requests

Item 7 – Public Comment

There was no public comment.

Item 8 – Adjournment

The meeting concluded at 5:40 pm.

ALBUQUERQUE BERNALILLO COUNTY WATER UTILITY AUTHORITY JUNE 2018

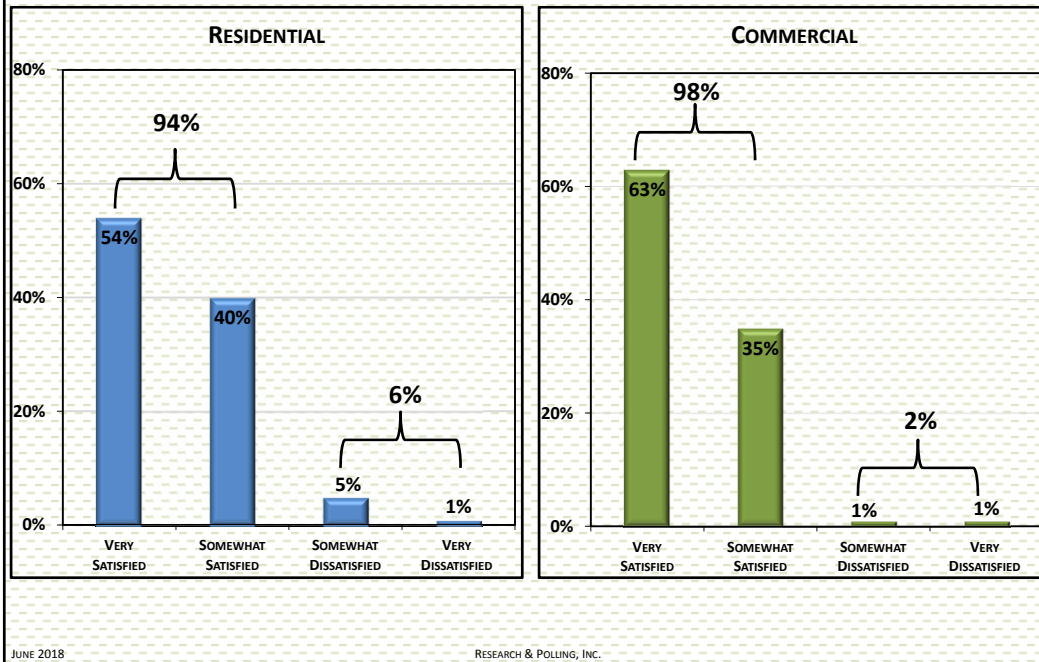
PRESENTED BY:
BRIAN SANDEROFF, PRESIDENT



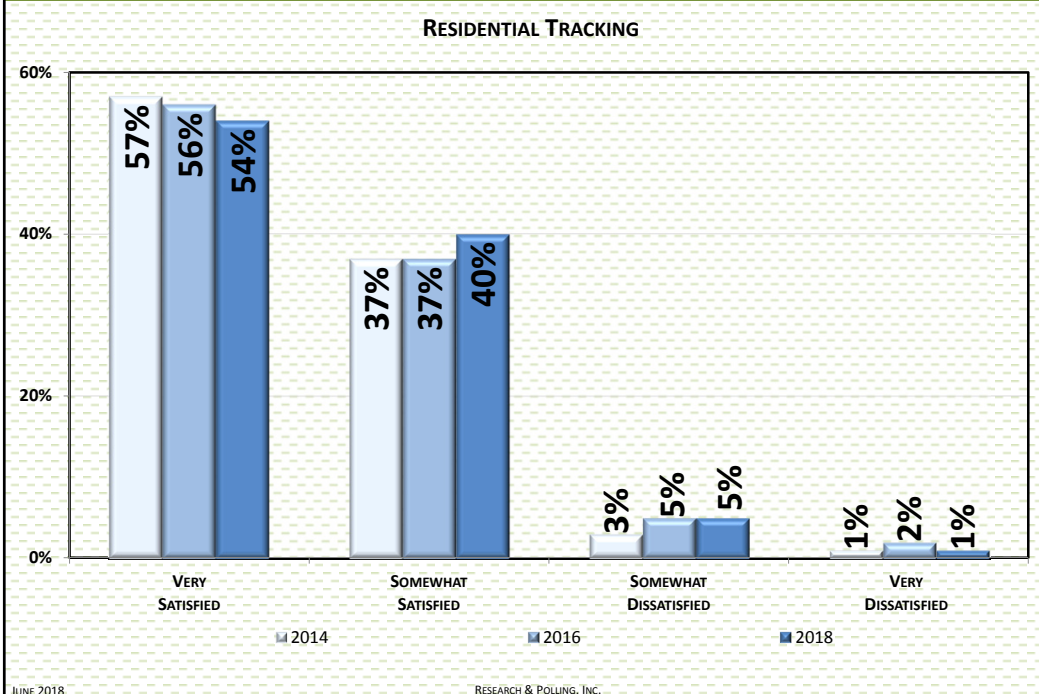
METHODOLOGY

RESEARCH OBJECTIVES:	<ul style="list-style-type: none"> • CUSTOMER SATISFACTION WITH THE SERVICES PROVIDED BY THE WATER AUTHORITY • IMPORTANCE OF VARIOUS SERVICES AND PROGRAMS
RANDOM SAMPLE:	502 RESIDENTIAL CUSTOMERS 105 COMMERCIAL CUSTOMERS
INTERVIEWS:	TELEPHONE SURVEYS USING LANDLINES AND CELLPHONES
FIELD DATES:	JANUARY 23, 2018 - FEBRUARY 13, 2018
MARGIN OF ERROR:	4.4% AT 95% CONFIDENCE LEVEL (RESIDENTIAL CUSTOMERS)

OVERALL SATISFACTION WITH THE SERVICES PROVIDED BY THE WATER AUTHORITY

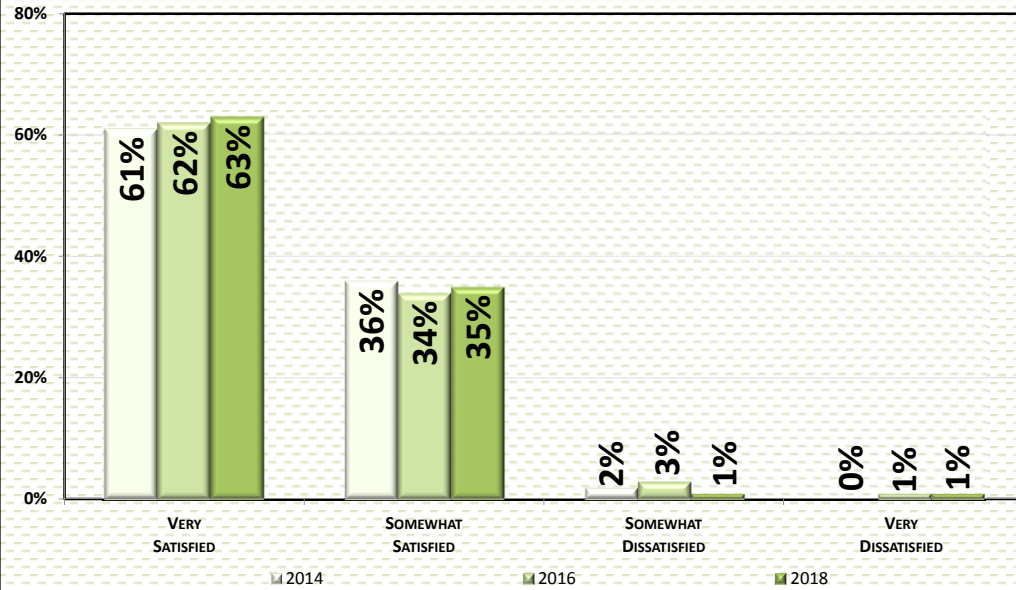


OVERALL SATISFACTION WITH THE SERVICES PROVIDED BY THE WATER AUTHORITY



OVERALL SATISFACTION WITH THE SERVICES PROVIDED BY THE WATER AUTHORITY

COMMERCIAL TRACKING



JUNE 2018

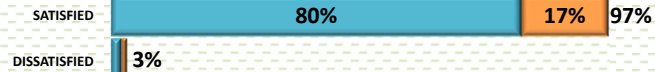
RESEARCH & POLLING, INC.

5

RESIDENTIAL SATISFACTION WITH RELIABILITY OF SERVICES AND CONDITION OF INFRASTRUCTURE

RELIABILITY

RELIABILITY AND AVAILABILITY OF WATER TO YOUR HOME



RELIABILITY OF WASTEWATER DRAINAGE FROM YOUR HOME TO THE CITY SEWER LINE



NOTE: RESULTS ARE SIMILAR AMONG COMMERCIAL CUSTOMERS.

INFRASTRUCTURE

CONDITION OF THE SEWER LINES THROUGHOUT THE CITY SUCH AS THE NUMBER OF OVERFLOWS/BACKUPS YOU OBSERVE AT THE CITY SEWER LINES OR MANHOLES



CONDITION OF THE WATER LINES THROUGHOUT THE CITY SUCH AS THE NUMBER OF LEAKS YOU OBSERVE

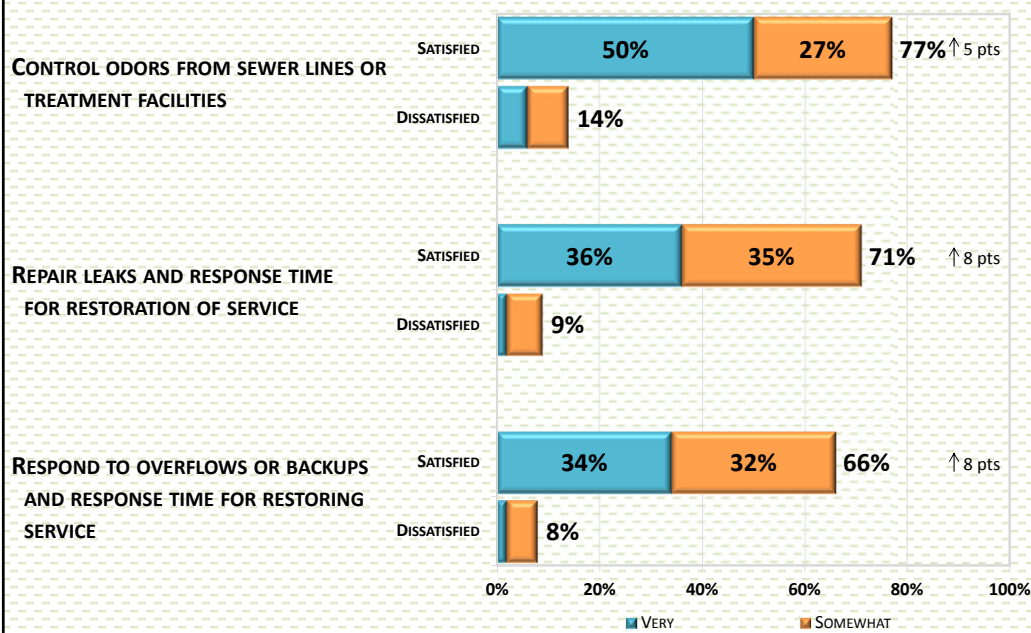


COMMERCIAL CUSTOMERS ARE SLIGHTLY MORE SATISFIED.

RESEARCH & POLLING, INC.

6

RESIDENTIAL SATISFACTION WITH EFFECTIVENESS OF REPAIRS AND ODOR CONTROL

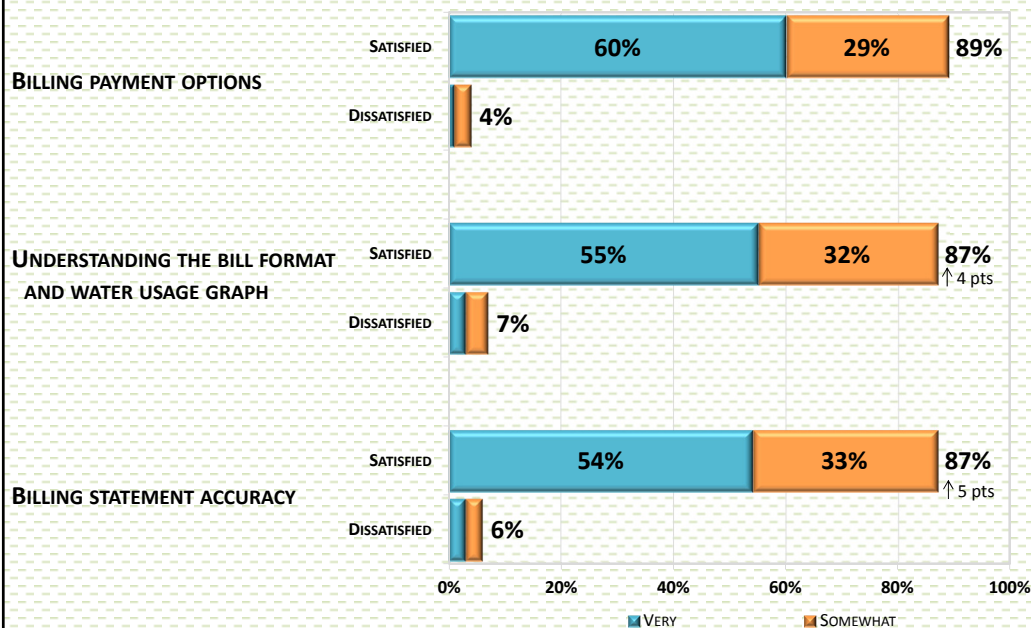


JUNE 2018

RESEARCH & POLLING, INC.

7

RESIDENTIAL SATISFACTION WITH BILLING

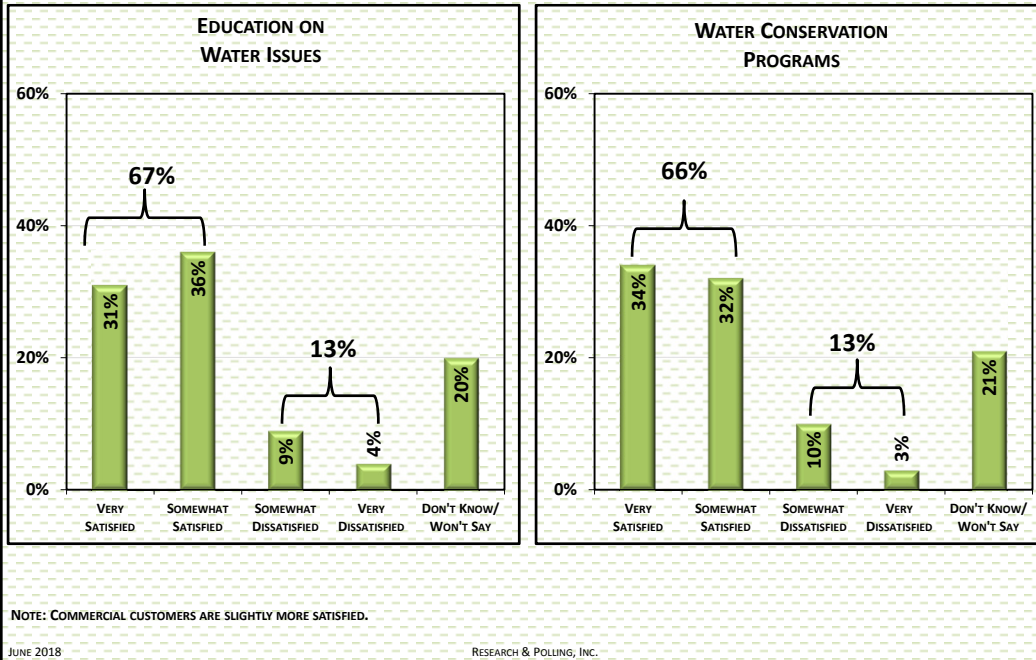


JUNE 2018

RESEARCH & POLLING, INC.

8

RESIDENTIAL SATISFACTION WITH EDUCATION ON WATER ISSUES AND WATER CONSERVATION PROGRAMS



CONTACTED THE WATER AUTHORITY

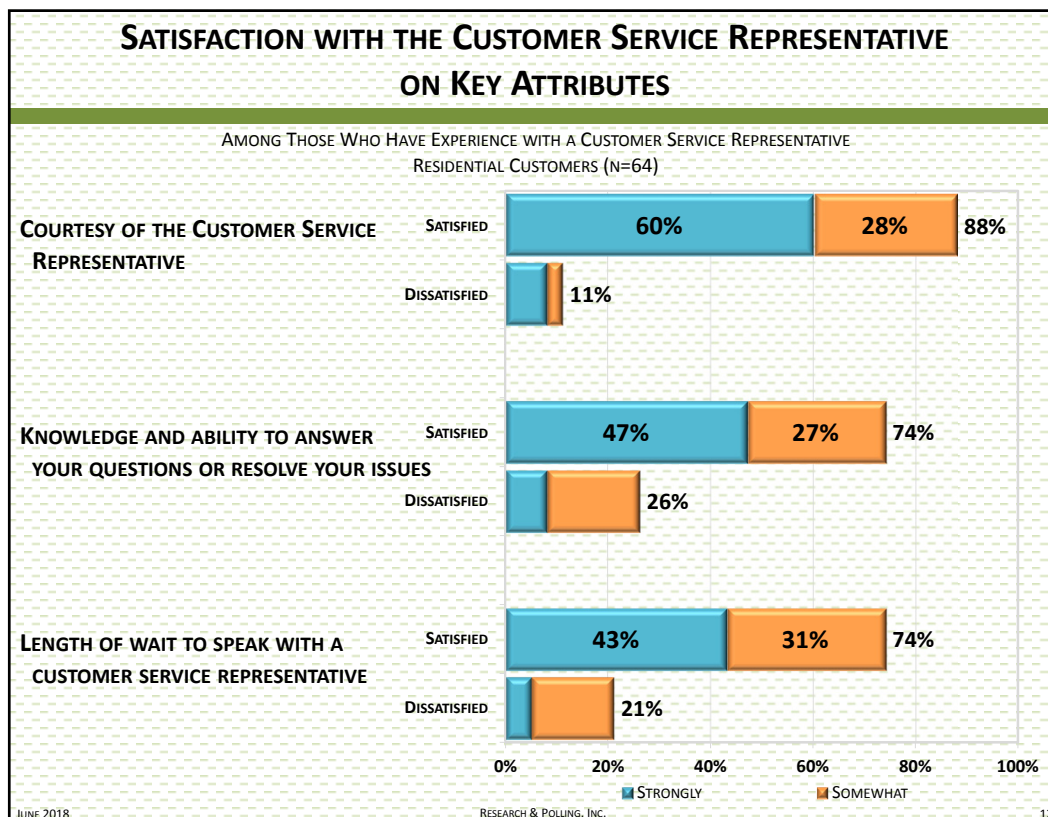
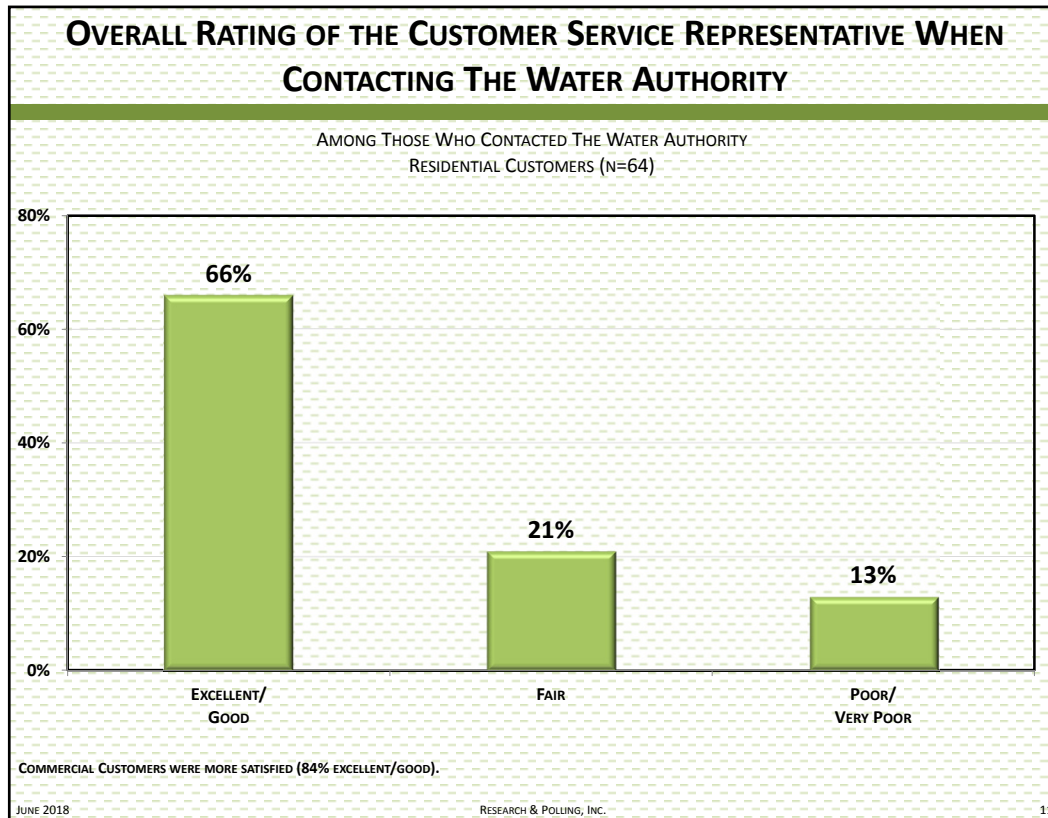
AMONG RESIDENTIAL CUSTOMERS WHO CONTACTED THE WATER AUTHORITY

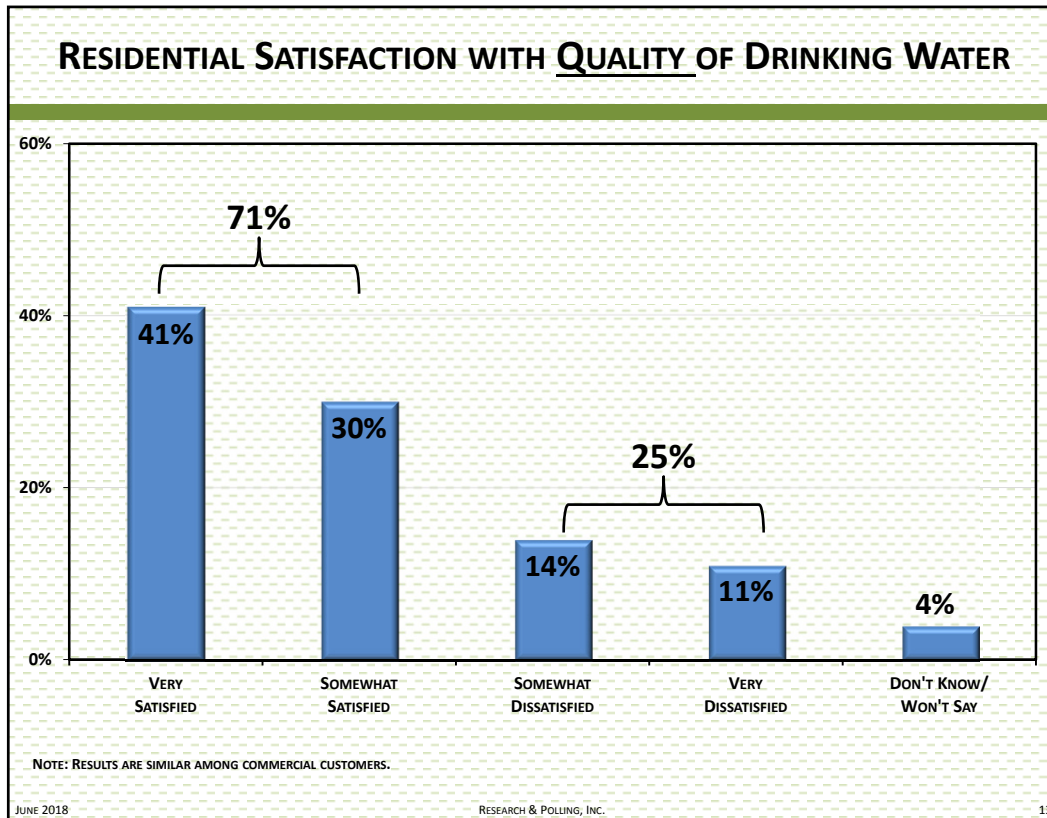
CONTACTED THE WATER AUTHORITY ABOUT PROBLEMS OR QUESTIONS WITH A BILL IN THE PAST 2 YEARS	WAYS OF COMMUNICATING WITH THE WATER AUTHORITY	
	<div>16%</div> <div>→</div>	TELEPHONE
		73%
		27%
	E-MAIL	2%

JUNE 2018

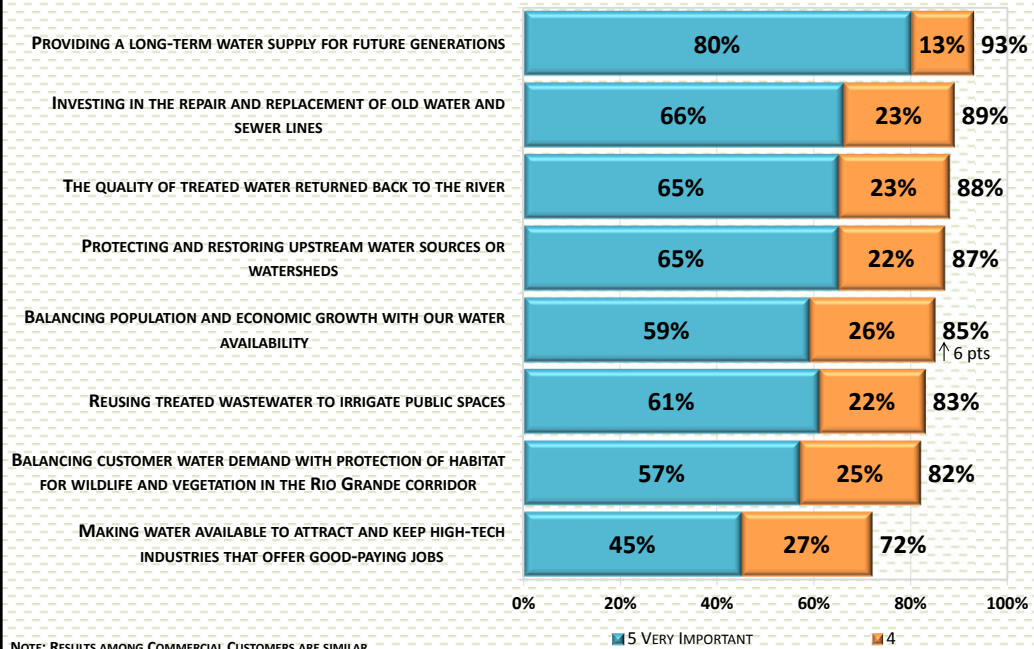
RESEARCH & POLLING, INC.

10





PERCEIVED IMPORTANCE OF WATER CONSERVATION AND ENVIRONMENTAL ISSUES

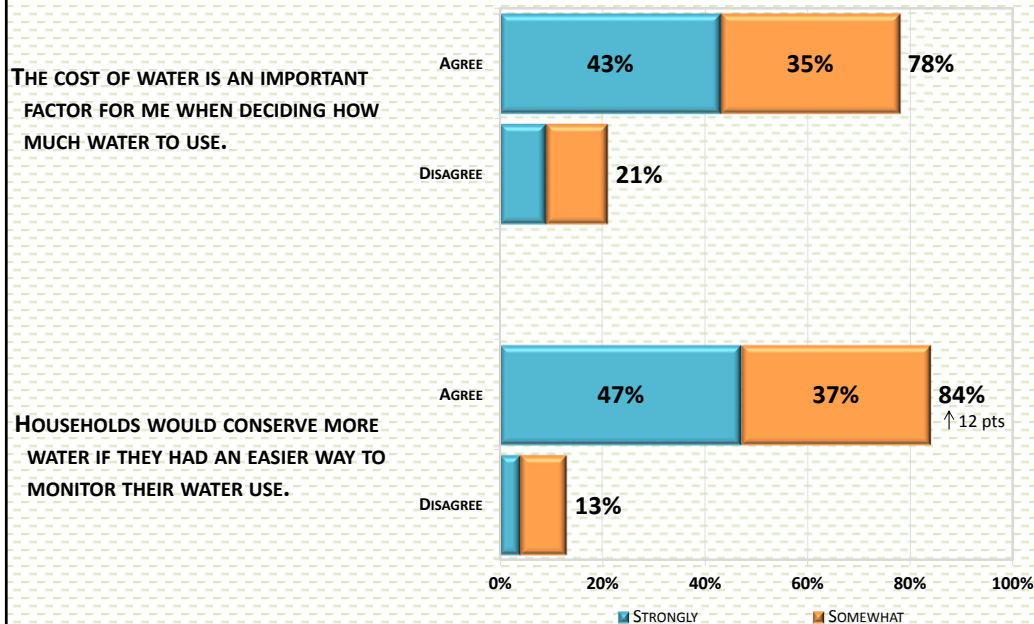


JUNE 2018

RESEARCH & POLLING, INC.

15

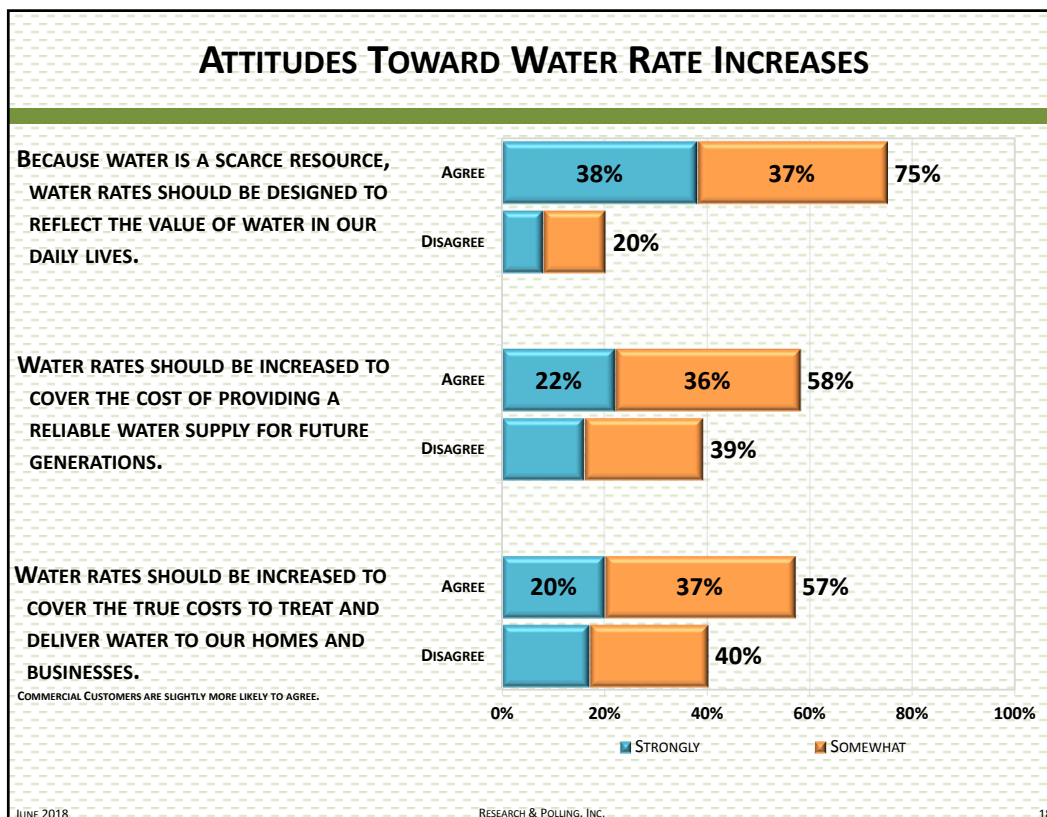
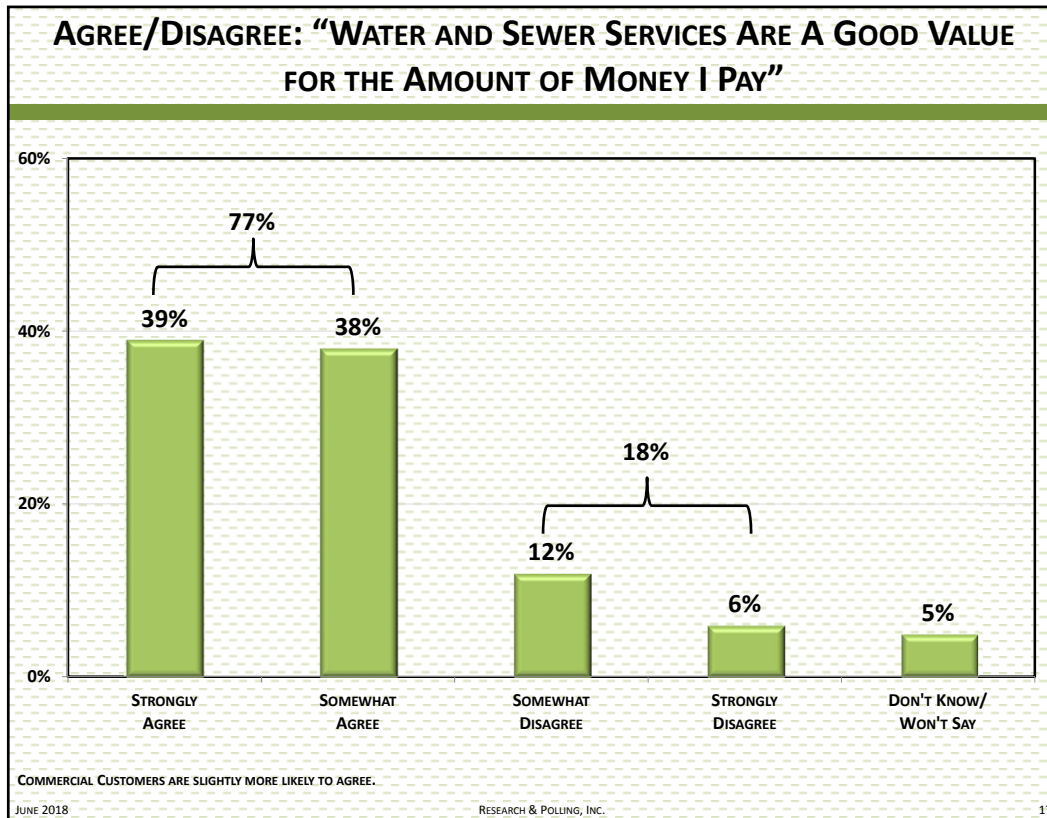
WATER CONSERVATION MANAGEMENT

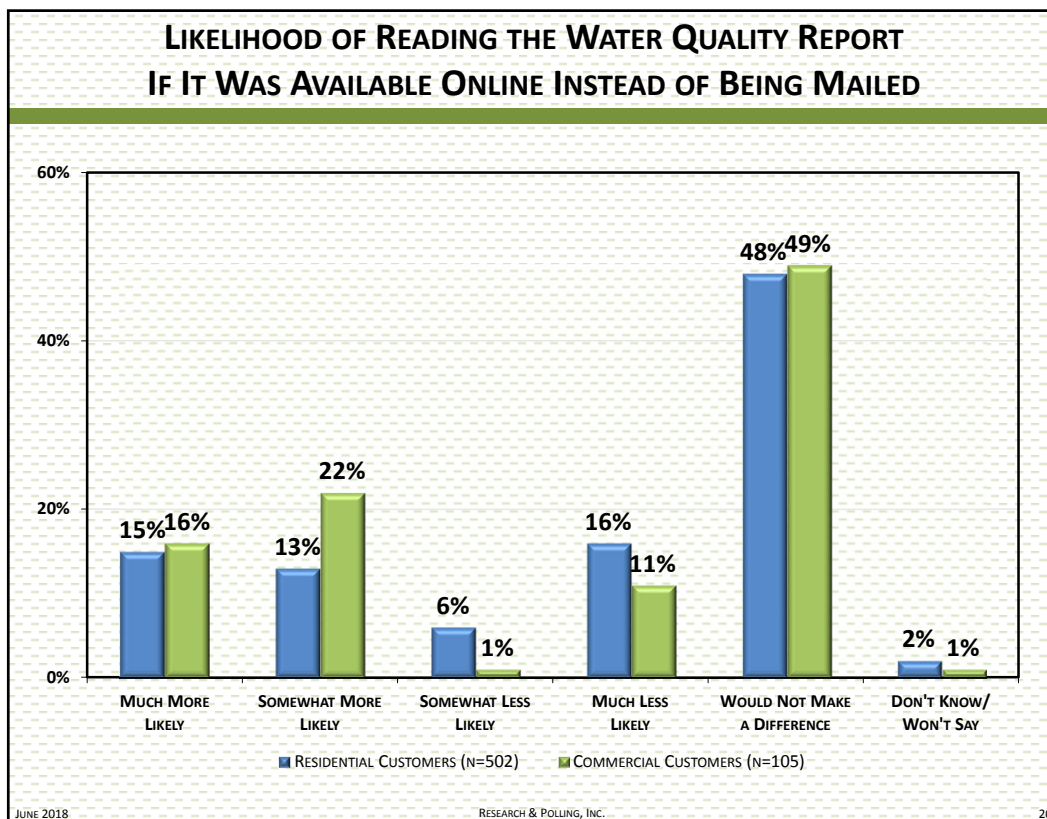
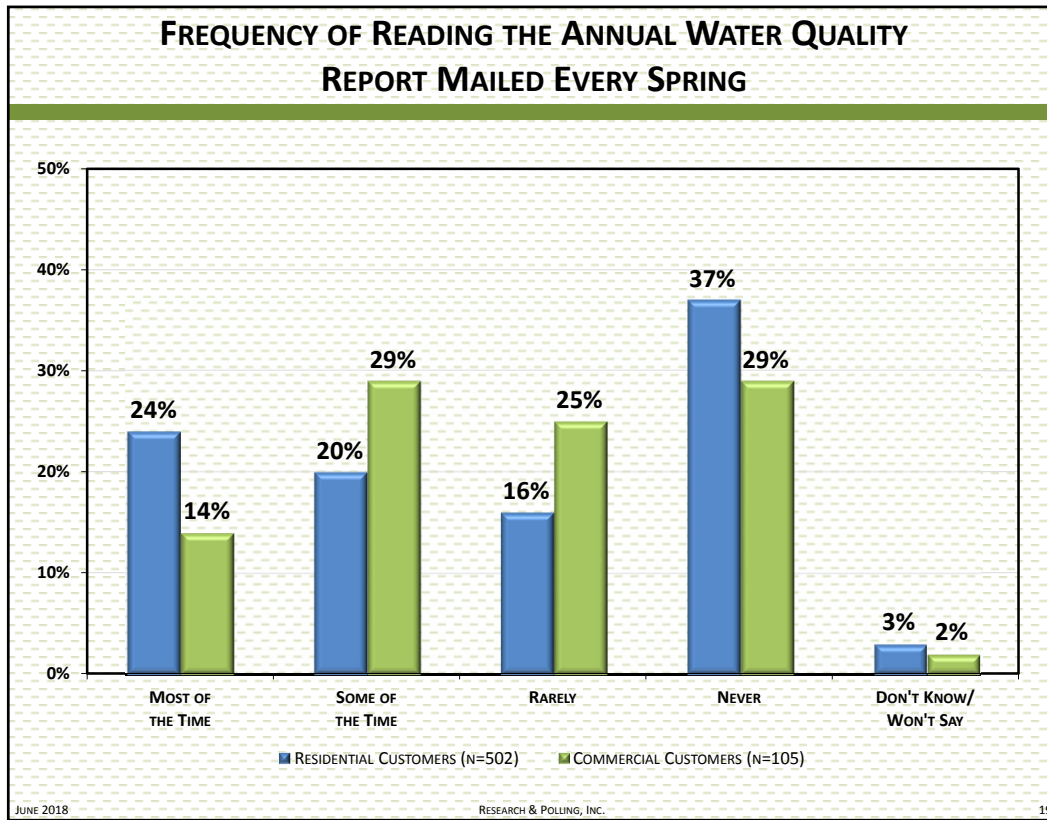


JUNE 2018

RESEARCH & POLLING, INC.

16







2017 WATER QUALITY REPORT



Albuquerque Bernalillo County
Water Utility Authority

Drinking Water News

We know that the quality of your drinking water is important to you. Water Authority employees take drinking water quality and standards very seriously. Every year, thousands of water samples are collected to test the quality of water delivered to your home.

Our water meets or exceeds all federal and state standards for drinking water quality, and has also been recognized for its good taste. In 2015 the Water Authority tied with Boston for third place in the annual American Water Works Association national water taste test.

Inside this report, you'll find information about:

- Your drinking water from the source to the tap
- Results of USEPA required sampling
- Water education opportunities
- Potential sources of lead in drinking water
- Water 2120: Securing Our Water Future
- 2018 lead & copper rebate program

*How to get a copy of this report in Spanish:
Noticia en Español: Este reporte contiene
información muy importante acerca de la
calidad del agua. Para recibir una copia
en español, llamen al 505-842-9287
o visita la pagina:
www.abcwua.org/Download_Report.aspx*

The Water 2120 Plan . . .



The Albuquerque Bernalillo County Water Utility Authority administers the water and wastewater utility for all of Albuquerque and the metro area of Bernalillo County. The New Mexico State Legislature created the Albuquerque Bernalillo County Water Utility Authority in June of 2003.

• Chair	Trudy E. Jones	City of Albuquerque	Councilor, District 8
• Vice-Chair	Debbie O'Malley	County of Bernalillo	Commissioner, District 1
• Members	Pat Davis	City of Albuquerque	Councilor, District 6
	Timothy M. Keller	City of Albuquerque	Mayor
	Klarissa J. Peña	City of Albuquerque	Councilor, District 3
	Steven Michael Quezada	County of Bernalillo	Commissioner, District 2
	Lonnie Talbert	County of Bernalillo	Commissioner, District 4
• Ex-Officio Member	Pablo R. Rael	Village of Los Ranchos	Board Trustee
• Executive Director	Mark S. Sanchez		

ABCWUA
P.O. Box 568
Albuquerque, NM 87103
www.abcwua.org

Creative input by Elizabeth Anderson, P.E.

Cover photo by Jeff Hanselmann,
Hanselmann Photography, LLC.

Design and graphics by Jan Underwood,
Information Illustrated.

Monthly board meetings are held at the Vincent E. Griego Joint Chambers of the Albuquerque Bernalillo County Government Center. Meeting schedules and agendas are available at www.abcwua.org/Meetings_and_Agendas.aspx

WATER 2120: Securing Our Water Future

The Water Authority's water resources management plan is in action. The plan will help meet the water needs of our community for the next 100 years.

In September of 2016, the Water Authority Board adopted the new plan. State and federal agency support included the U.S. Fish and Wildlife Service, the Interstate Stream Commission, the U.S. Bureau of Reclamation, and the Army Corps of Engineers, and an environmental group, the Nature Conservancy. Core policies of the plan focus on making the best use of our existing water supplies rather than seeking new sources.

Plan Overview

- The plan builds on our community's past success in reducing our use. Adding surface water to the drinking water supply has reduced our impact on ground water levels within the Albuquerque basin.
- By making investments now in conservation, aquifer storage and recovery (ASR), storm-water capture, wastewater reuse, and other alternatives, our community can stretch existing supplies for several decades. These strategies will help secure a future water supply through all climate and growth scenarios.

Key Elements

- **Conservation:** For the past 20 years, our water use has declined steadily while our population has continued to grow. (See page 10 for more information.)
- **A diverse supply portfolio:** The Water Authority has six sources of supply: surface water, ground-water, aquifer storage and recovery (ASR), non-potable surface water for turf irrigation, and two reuse projects for turf irrigation. The plan calls for continued use of these existing alternatives and adds storm-water capture to the portfolio.
- **New storage capacity:** Expanding our use of reuse water and storm-water capture will require new storage capacity (e.g., reservoirs and underground storage). The aquifer storage and recovery (ASR) project described on page 7 will provide new storage capacity.
- **Groundwater management and preservation:** Groundwater levels in the aquifer are rising for the first time in decades primarily due to our transition to surface water. **WATER 2120** establishes a management level and policies for maintaining the aquifer as a long-term community resource.
- **Environmental and cultural responsibility:** Our new plan means there will be no need to acquire more pre-1907 water rights. This leaves more water available for agriculture. It also emphasizes the management and preservation of the environmentally-sensitive watersheds where our surface water supply originates.

Further **Water 2120** Plan details are available at
www.abcwua.org/Water_Resources_Management_Strategy.aspx.



The sources of Albuquerque's water are the underground aquifer and surface water from the San Juan-Chama Drinking Water Project. That is, water from the Colorado River Basin via a series of diversions, tunnels, reservoirs, and rivers.

Water Quality Protection

The Water Protection Advisory Board also serves to advise the Water Authority on all matters related to the quality and protection of our drinking water. The member governments appoint Board Members to represent the City of Albuquerque, the County of Bernalillo and the Water Authority.

The mission of the Board is to:

- Study issues that impact drinking water quality
- Implement the Water Quality Protection Policy and Action Plan
- Promote decisions that support the protection of water quality
- Be advocates for the resources of our community

Priorities for the Board include:

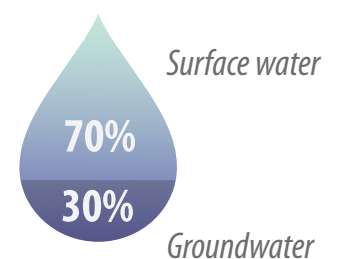
- Cleanup of groundwater contamination sites
- Preventing surface water contamination
- Historic landfills in Albuquerque
- Active USEPA Superfund sites

Board meetings are held the second Friday of each month. Meeting agendas and annual reports of the Board's activities are available on our website.

www.abcwua.org/Water_Protection_Advisory_Board_1.aspx



2017 Water Production



Current members of the Board are Kerry J. Howe, Ph.D., Chair, Russell D. Pederson, P.E., Vice-Chair, Suzanne Busch, P.E., J. Steve Glass, Julia Maccini, Roland Penttila, Caroline Scruggs, Ph.D., and Jennifer Thacher.

Key Terms for Reading This Report

Cryptosporidium is a microbial pathogen found in surface water throughout the U.S. We monitor the river for *Cryptosporidium*. If ingested, these parasites may produce symptoms of nausea, stomach cramps, diarrhea, and associated headaches. Current test methods do not allow us to determine if the organisms are dead or if they are capable of causing disease. *Cryptosporidium* is reported in oocysts, which are spores of the organism. During the 24-month sampling period, only one (1) cryptosporidium oocyst was measured in our source water.

Based on the levels of *Cryptosporidium* found in source water, the USEPA requires water systems to use specific treatment techniques and to demonstrate their efficiency. The San Juan-Chama Drinking Water Plant was designed to provide a multi-barrier approach (pre-sedimentation, clarification, and filtration) to removing *Cryptosporidium* in order to meet the USEPA requirements.

Detected: The concentration of a substance measured at or above the detection limit.

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

Maximum Residual Disinfectant Level (MRDL): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Parts Per Billion (PPB): Parts per billion or micrograms per liter ($\mu\text{g/L}$). 1 PPB = 0.001 PPM. Example: 1 drop of water in an Olympic-size swimming pool.

Parts Per Million (PPM): Parts per million or milligrams per liter (mg/L). 1 PPM = 1,000 PPB. Example: 4 drops of water in a 55-gallon barrel.

picoCuries per liter (pCi/L): A measure of radioactivity.

Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.

Responses to Frequently Asked Questions (FAQs) are provided at www.abcwua.org.

WHAT THE USEPA SAYS ABOUT DRINKING WATER CONTAMINANTS

The Safe Drinking Water Act (SDWA) defines “contaminant” as any physical, chemical, biological or radiological substance or matter in water (www.epa.gov/ccl/definition-contaminant). Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency’s Safe Drinking Water Hotline (800-426-4791).

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring

minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or human activity.

Contaminants in drinking water sources may include:

Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.

Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.

Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

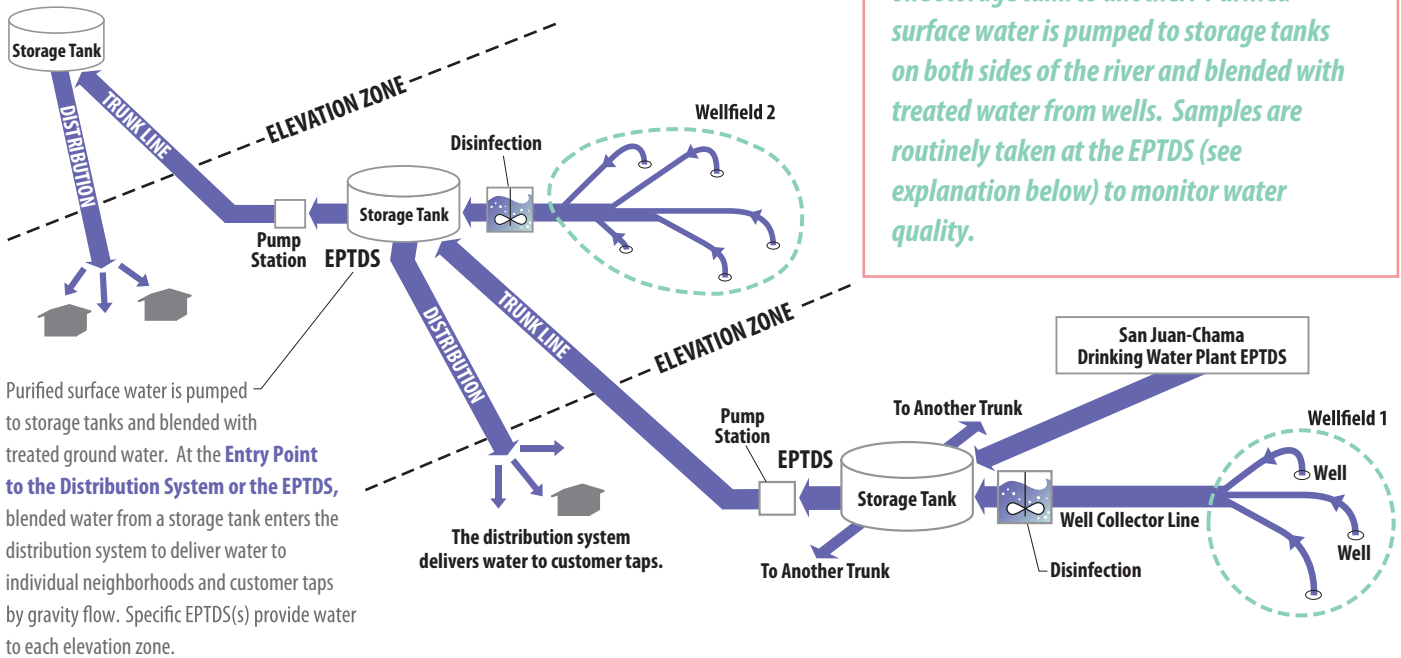
In order to ensure that tap water is safe to drink, USEPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. The U.S. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

At left - Lab Analyst Leah Gainer filters a water sample at the Water Quality Lab.



Water Distribution and Monitoring

Ground water is moved from the wells to storage tanks via large-diameter pipelines. The water is treated including disinfection with sodium hypochlorite, which is generated on-site from table salt and water. (The product is similar to weak chlorine bleach.)

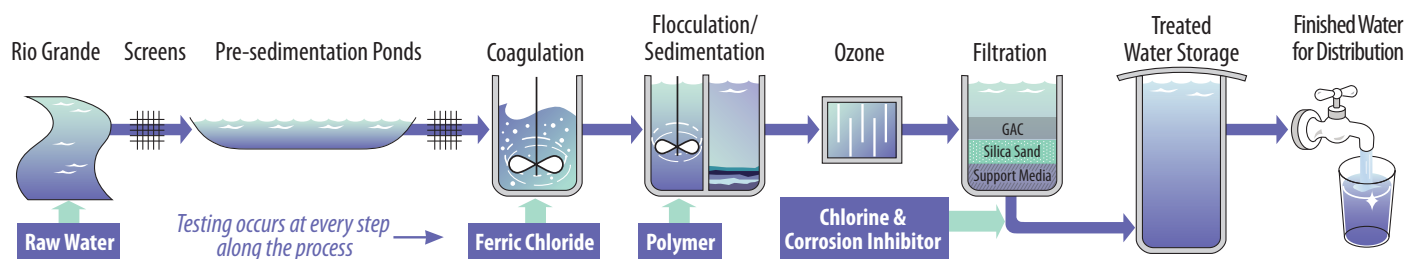


2017 Results of Compliance Monitoring at Entry Points to the Distribution System

USEPA sets regulations that limit the amount of certain substances in drinking water. USEPA defines where and how often samples for each substance must be collected. The table below shows the substances found in the most recent water quality testing done at the Entry Points to the Distribution System (EPTDS) to comply with USEPA.

Substance	Sample Collection Years	Minimum Detected	Average Detected	Maximum Detected	San Juan-Chama Drinking Water Plant	Maximum Contaminant Level (MCL)	Maximum Contaminant Level Goal (MCLG)	Detection Limit	Source	Health Effects Language
Metals										
Arsenic	2014-2017	Zero PPB	2 PPB	9 PPB	Zero PPB	10 PPB	Zero PPB	1 PPB	Erosion of natural volcanic deposits.	See note page 6.
Barium		Zero PPM	Zero PPM	0.2 PPM	Zero PPM	2 PPM	2 PPM	0.1 PPM	Erosion of natural deposits.	
Chromium		Zero PPB	1 PPB	8 PPB	Zero PPB	100 PPB	100 PPB	1 PPB	Erosion of natural deposits.	
Minerals										
Fluoride	2014-2017	0.25 PPM	0.48 PPM	1.24 PPM	0.39 PPM	4 PPM	4 PPM	0.10 PPM	Erosion of natural deposits.	Not Applicable
Nutrients										
Nitrate	2016-2017	Zero PPM	0.38 PPM	2.99 PPM	0.26 PPM	10 PPM	10 PPM	0.10 PPM	Erosion of natural deposits.	Not Applicable
Organics										
Total Xylenes	2017	Zero PPM	0.0001 PPM	0.0031 PPM	Zero PPM	10 PPM	10 PPM	0.0005 PPM	Discharge from petroleum or chemical factories.	See note page 6.
Radionuclides										
Gross Alpha Particle Activity	2010-2017	Zero pCi/L	0.8 pCi/L	2.5 pCi/L	Zero pCi/L	15 pCi/L	Zero pCi/L	0.7-1.1 pCi/L	Erosion of natural deposits.	Not Applicable
Radium 226+228		Zero pCi/L	0.16 pCi/L	0.41 pCi/L	0.05 pCi/L	5 pCi/L	Zero pCi/L	0.01-0.18 pCi/L	Erosion of natural deposits.	Not Applicable
Uranium		Zero PPB	2 PPB	9 PPB	Zero PPB	30 PPB	Zero PPB	1.0 PPB	Erosion of natural deposits.	Not Applicable
Disinfectants										
Chlorine	2017	Zero PPM	Not Applicable	Not Applicable	Not Applicable	TT = Maintain required chlorine level or restore within 4 hours.	Not Applicable	Not Applicable	Disinfectant (sodium hypochlorite).	Not Applicable
TT met at 100% of sites.										

How Surface Water is Treated and Tested



Treatment

Safe Drinking Water Act standards are designed to provide maximum protection for the public's health. Surface water is treated according to these health based standards at the San Juan-Chama Drinking Water Plant. Here's how:

- Surface water withdrawn from the Rio Grande is treated with a coagulant (ferric chloride) to remove particles. Polymer helps by making small particles clump together.
- Ozone gas kills bacteria and viruses. Ozone also breaks down naturally-occurring organic material.
- A multistage filtration system is used to remove any remaining microscopic particles from the water. Granular activated carbon (GAC) removes taste and odor compounds found in surface water.
- Chlorine is added to disinfect the water and protects the quality. Corrosion inhibitor protects pipes and home plumbing.

The entire treatment process is designed to provide drinking water that meets or exceeds all state and federal Safe Drinking Water Act standards for water quality.

Testing

The Water Authority tests your water for more contaminants than are required by law. We also test many regulated and unregulated contaminants more frequently than required by law. To ensure water quality and safety, we:

- Collected about 4,500 water samples in 2017 and conducted nearly 40,000 analyses of those samples.
- Continually monitor water quality in "real time" 24 hours a day, 365 days a year.
- Conduct tests for 90 regulated contaminants as well as more than 50 unregulated contaminants.
- Conduct daily process sampling and monitoring of the surface water treatment plant to ensure treatment goals are met.

While not all of these tests are required, this sampling is important for identifying potential areas of improvement. This testing ensures that water quality is maintained all the way to the customers' tap.

USEPA sets regulations that limit the amount of certain substances in drinking water. USEPA defines where and how often samples for each substance must be collected and how they must be analyzed. The table below shows only the substances found in compliance monitoring for the finished water at the San Juan-Chama Drinking Water Plant. For surface water, USEPA also requires that specific treatment techniques are used and shown to be effective.

2017 Results of Compliance Monitoring at the San Juan-Chama Drinking Water Plant

Substance	Maximum Contaminant Level (MCL)	Maximum Contaminant Level Goal (MCLG)	Minimum Detected	Average Detected	Maximum Detected	Detection Limit	Source
Microbiological							
<i>Cryptosporidium</i> (untreated water) ¹	TT	Zero Oocysts/L	Zero Oocysts/L	0.004 Oocysts/L	0.093 Oocysts/L	1 Oocyst	Human and animal fecal waste.
Turbidity <i>A measure of cloudiness of the water. It is a good indicator of the effectiveness of filtration.</i>	1 NTU ² in all finished water samples, 95% of the finished water samples must be less than 0.3 NTU	Zero NTU	0.02 NTU	Not Applicable	0.37 NTU		Soil runoff.
			Lowest monthly percentage: 160 of 161 samples or 99.4% of the samples taken in one month were less than 0.3 NTU.				
Total Organic Carbon (TOC)	TT	Not Applicable	Zero PPM	0.8 PPM	1.5 PPM	1.0 PPM	Naturally present in the environment.
Minerals							
Fluoride	4 PPM	4 PPM	0.39 PPM	0.39 PPM	0.39 PPM	0.10 PPM	Erosion of natural deposits.
Nutrients							
Nitrate	10 PPM	10 PPM	0.26 PPM	0.26 PPM	0.26 PPM	0.10 PPM	Erosion of natural deposits.
Disinfection By-Products							
Bromate (for health effects – page 6, top right)	10 PPB	Zero PPB	1.1 PPB	2.0 PPB	4.2 PPB	1.0 PPB	By-product of drinking water disinfection.
Substance	Maximum Residual Disinfectant Level (MDL)	Maximum Residual Disinfectant Level Goal (MRDLG)	Minimum Detected	Average Detected	Maximum Detected	Source	
Disinfectants							
Chlorine	4 PPM	4 PPM	0.7 PPM	1.4 PPM	1.7 PPM		Disinfectant (sodium hypochlorite).

¹ Summary of results from samples collected over 24 months, between April 2015 and May 2017. ² Nephelometric Turbidity Unit

Regulated Contaminants

The United States Environmental Protection Agency (USEPA) limits the amount of certain substances in drinking water. Those substances are called regulated contaminants. The tables on the following three pages show only the regulated contaminants found in the most recent compliance monitoring.

Special Notes from the USEPA

FOR IMMUNO-COMPROMISED PERSONS:

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. USEPA/Centers for Disease Control guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline: 800-426-4791.

HEALTH EFFECTS:

While your drinking water meets USEPA's standard for arsenic, it does contain low levels of arsenic. USEPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. USEPA continues to research the health effects of low levels of arsenic,

which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

Some people who drink water containing **barium** in excess of the MCL over many years could experience an increase in their blood pressure.

Some people who drink water containing **bromate** in excess of the MCL over many years may have an increased risk of getting cancer.

Some people who drink water containing **chromium** in excess of the MCL over many years could experience allergic dermatitis.

Some people who drink water containing **xlenes** in excess of the MCL over many years could experience damage to their nervous system.

Sodium levels for all distribution zones range from 20 to 91 PPM. The system-wide average is 37 PPM. For more information on variation of sodium and other substances, visit www.abcwua.org.

2017 Compliance Results of

Distribution System Monitoring

USEPA sets regulations that limit the amount of certain substances in drinking water. USEPA defines where and how often samples for each substance must be collected. The table below shows the substances found in the most recent water quality testing done in the Distribution System to comply with USEPA.

Substance Detected	Safe Level ¹	DETAILED INFORMATION							
Microbiological		Source	Year of Samples	Minimum Detected	Average Detected	Maximum Detected	Maximum Contaminant Level (or equivalent)	Maximum Contaminant Level Goal (or equivalent)	Detection Limit
Total Coliform (240 samples each month)	Yes	Coliforms are bacteria that are normally present in the environment.	2017	Not Applicable	Not Applicable	2 of 248 samples or 0.81% of samples taken in a month had detectable total coliform bacteria. No total coliform bacteria was detected in any repeat sample at any location.	Presence of coliform bacteria in 5.0% or more of samples in any month.	0% of samples with detectable coliform bacteria.	Not Applicable
Disinfectants									
Chlorine	Yes	Disinfectant (sodium hypochlorite).	2017	0.2 PPM	0.8 PPM	1.9 PPM	4 PPM (MRDL)	4 PPM (MRDLG)	NA
Disinfection By-Products		Source	Year of Samples	Range of Results		Maximum Detected	Maximum Contaminant Level (or equivalent)	Maximum Contaminant Level Goal (or equivalent)	Detection Limit
Total Trihalomethanes (TTHMs)²	Yes	By-product of chlorination.	2017	1-56 PPB ⁴		42 PPB (highest LRAA ⁵).	80 PPB	Not Applicable	0.50 PPB
Haloacetic Acids (HAA5s)³	Yes	By-product of chlorination.	2017	0-19 PPB ⁴		14 PPB (highest LRAA ⁵).	60 PPB	Not Applicable	0.50 PPB
Lead & Copper		Source	Year of Samples	90th Percentile	No. of Samples that Exceed Action Level	Maximum Detected	Action Level ⁶	Maximum Contaminant Level Goal	Detection Limit
Zones 1-20 (50 samples every three years)									
Lead	Yes	Corrosion of household plumbing.	2015	2 PPB	Zero	4 PPB	15 PPB	Zero PPB	1.0 PPB
Copper	Yes		2015	0.29 PPM	Zero	0.47 PPM	1.3 PPM	Zero PPM	0.01 PPM

¹ Meets USEPA standards for safe drinking water. ² TTHMs are the sum of the concentrations of the trihalomethane compounds. ³ HAA5s are the sum of the concentrations of the haloacetic acid compounds. ⁴ The range represents the minimum and maximum of all quarterly analytical results at all 12 locations. ⁵ The Locational Running Annual Average (LRAA) is the average of analytical results for samples taken at a particular monitoring location during the previous four calendar quarters. ⁶ Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow. The Action Level is compared to the concentration detected in the 90th percentile sample.

The Third Unregulated Contaminant Monitoring Rule (UCMR3)

What is the Unregulated Contaminant Monitoring Rule?

The 1996 amendments to the Safe Drinking Water Act (SDWA) require that once every five years, the USEPA issues a list of no more than 30 unregulated contaminants to be monitored by public water systems (PWSs). The Unregulated Contaminant Monitoring Rule (UCMR) provides EPA and other interested parties with scientifically valid data on the occurrence of contaminants in drinking water. These data serve as a primary source of occurrence and exposure information that the agency uses to develop regulatory decisions.

What does this information mean to me?

Contaminant monitoring is part of a larger process that USEPA, states, tribes, water systems, and other partners use to protect drinking water. Health information is necessary to know whether these contaminants pose a health risk, but it is often incomplete for unregulated contaminants. Some contaminants may be harmful at low levels; others may be harmful only at much higher levels. UCMR examines what is in the drinking water, but additional health information is needed to know whether these contaminants pose a health risk. We are required to collect samples from the finished drinking water and report the substances detected along with the average and range of results.

Unregulated substances detected during UCMR3 in 2015: Laboratory Minimum Reporting Level (MRL*)

Substance Name	MRL	Range of Results	Average of Results
1,4-dioxane	0.07 PPB	<0.07 to 0.19 PPB	<0.07 PPB
Chlorate	20 PPB	<20 to 169 PPB	88 PPB
Chromium, total	0.2 PPB	<0.2 to 9 PPB	0.96 PPB
Chromium-6	0.03 PPB	<0.03 to 7.3 PPB	0.97 PPB
Molybdenum	1 PPB	<1.1 to 7.5 PPB	3.1 PPB
Strontium	0.3 PPB	144 to 631 PPB	379 PPB
Vanadium	0.2 PPB	<0.2 to 14 PPB	3.4 PPB

* MRL is the lowest concentration that can be detected by laboratory equipment.

More information about the Unregulated Contaminant Monitoring Program is available at www.epa.gov/dwucmr.

*To find out more about the water quality at your house,
use the interactive distribution map at www.abcwua.org/Water_Report.aspx,
or call the Water Quality Information Line at 289-3653.*

Aquifer Storage and Recovery (ASR)

An important part of **WATER 2120** is increasing our ability to store water during times of plenty to prepare for times when the supply decreases. ASR is storing water underground during periods of low demand/winter where it won't evaporate, so that it will be available during periods of high demand such as summer or during a drought.

At the Bear Canyon ASR Project located at Spain and Wyoming, water is infiltrated into the aquifer through the arroyo. This creates a stream for residents to enjoy from October - March.

At the San Juan-Chama Drinking Water Plant, a large storage project is being developed (see photo). Two wells have been drilled at the site, one that goes all the way into the water table and one that stops about 20 feet above the water table. Both of these wells will be tested this winter for their capacity to store water in our aquifer.



Source Water Monitoring and Protection

If any regulated contaminant is detected, the Water Authority will restrict use of the source and investigate treatment options.

Ground Water Monitoring

Ground water measurements are conducted by the United States Geological Survey (USGS) for the Water Authority every winter. Well water quality is monitored annually in each production well. While water quality in a single well varies little from year to year, water quality in wells in different parts of the aquifer can vary significantly. Wells near known or suspected soil or ground water contamination sites are monitored more frequently. The Water Authority continues to sample nearby wellfields monthly to ensure that the Kirtland Air Force Base Bulk Fuels Facility Spill contamination has not reached our water supply.

Information on the fuel spill can be found at www.kirtlandjetfuelremediation.com.

Surface Water Monitoring

The San Juan-Chama Drinking Water Project is designed to produce drinking water that meets or exceeds all USEPA standards for regulated substances, no matter the quality of source water.

The chemical and biological characteristics of surface water from the Rio Grande are monitored quarterly. Samples are collected by both the USGS and the Water Authority. Monitored substances include general chemistry, metals, organics, and radionuclides.



New Mexico Environment Department Source Water Assessments

The New Mexico Environment Department (NMED) completed a source water assessment to determine how susceptible each Water Authority well is to contamination, based on aspects such as construction methods, geology, and proximity to contamination sites. Based on these aspects, the assessment then ranked each water source on its susceptibility to contamination. NMED concluded that “the Albuquerque Water System is well maintained and operated, and sources of drinking water are generally protected from potential sources of contamination”. The Water Authority is currently working with NMED to update the source water assessment.

To request a copy of the source water assessment for the Albuquerque Water System (System Number 10701), or for the North West Service Area (formerly New Mexico Utilities, Inc., System Number 10901), contact NMED Drinking Water Bureau, District 1 Office, in Albuquerque at 505-222-9500. Please include your name, address, and telephone number and the name and number of the water system in your request.

2018 Customer Conversations: Source Water Protection

This year's Customer Conversations will focus on source water protection with activities highlighting keeping our watersheds healthy and protecting our aquifer. As part of our 100-year water resources management strategy (**Water 2120**), the Water Authority is updating its source water protection plan to ensure we continue to have outstanding water quality for our future water supply. If you are interested in attending a Customer Conversation meeting, **you must register in advance** at www.abcwua.org/Customer-Conversations-Registration.aspx

Locations and dates are listed below:

- May 1st, 6:00 – 8:00 p.m., South Valley Senior Center, 2008 Larrazolo Rd. SW
- May 8th, 6:15 – 8:15 p.m., Manzano Mesa Multi-Generational Center, 501 Elizabeth St. SE
- May 16th, 6:00 – 8:00 p.m., Don Newton-Taylor Ranch Community Center, 4900 Kachina St. NW
- May 30th, 6:00 – 8:00 p.m., North Domingo Baca Multigenerational Center, 7521 Carmel Ave. NE

Drinking water issues in the news . . .

Lead in Drinking Water

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The Water Authority is responsible for providing high quality drinking water, but cannot control the variety of materials used in home plumbing components. When water has been sitting in your pipes unused for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using it for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at www.epa.gov/safewater/lead

2017 Customer Requested Testing

Parameter	Minimum	Maximum	90th Percentile	Action Level
Lead PPB	0.0	4.7	1.6	15
Copper PPM	0.00	0.46	0.24	1.3

2015 USEPA Required Testing

Parameter	Minimum	Maximum	90th Percentile	Action Level
Lead PPB	0	4	2	15
Copper PPM	0.03	0.47	0.29	1.3

The highest concentration of lead was measured in a sample from a home built prior to 1940.

In March of 2016, the Water Authority began offering free lead and copper testing to customers. In 2017, 53 samples were tested.

The Water Authority will test your water for lead at no expense. Please visit our website to complete a Sample Collection Request form (www.abcwua.org/lead-survey.aspx) or call 289-3653 to schedule a sample collection.

Lead and Copper Rebate Program

Was your home built between the years of 1982 and 1987? Does your home still have the original plumbing? If so, you might qualify for a one-time **\$20 rebate** on your water bill.

The U.S. Environmental Protection Agency (EPA) requires water systems to collect samples and analyze them for lead and copper every three years. The Albuquerque Bernalillo County Water Utility Authority must collect samples from 50 qualifying homes this year between the months of June and September.

To find out if your residence qualifies, please apply online at www.abcwua.org/lead-rebate.aspx or call the Water Quality Information Line at 505-289-3653 for assistance. The rebate will be given to the first 50 customers who qualify.

Water Protection and Education

Achieving our goal of a secure water supply for future generations is possible, but only if we educate our citizens – particularly our children – about responsible stewardship of our water resources.

Our award-winning education program consists of four key components:

- The River is Ours (RIO) Program offers full-day field trips to the Rio Grande for all APS 4th graders
- Hands-on classroom presentations for grades 1-12
- Puppet shows for grades K-2
- Tours of our wastewater treatment plant for grades 4 and above

Our website (www.abcwua.org/education/educators.html) has free educational materials, classroom curriculum, and other resources available for teachers.

The Water Authority's education program reaches over 20,000 students each year. In 2016, we received a Public Communication and Outreach Award from the Water Environment Foundation. In 2017, we received the Public Information and Education Award from the National Association of Clean Water Advocates. All of our curriculum correlates with Common Core, Next Gen, and NM Standards for Science and Social Studies.



Customer Involvement

Water Conservation Plan Updates

The Water Authority recently adopted an update to the Water Conservation Plan. The update sets a new conservation goal of 110 gallons per capita per day (GPCD) by 2037. The current GPCD is 128, so a reduction of less than 1 gallon per person per day each year is needed to reach the goal.

The Water Authority will be launching new programs to help reach our new conservation goal:

- **Garden Website and Newsletter** – The website and monthly newsletter will cover topics on efficient horticultural practices, landscape maintenance, irrigation principles and seasonal tips. The newsletter won't begin until at least Fall of 2018, but you can sign up now by emailing aarber@abcwua.org.
- **Professional Landscape Dripline Rebate** – Customers with inefficient tree irrigation systems will be able to take advantage of this rebate via the Treebate program.
- **Efficient Irrigation and Pre-xeriscape Conversion Consultations** – Sign up for a free educational home visit to learn how to water more efficiently and get information on turf-to-xeriscape conversions.

In order to allow funding for some new outdoor programs, some of the indoor rebate programs will be ending or changing:

- The washing machine rebate program will only offer rebates for the most water-efficient machines.

- Rebates for high-efficiency toilets, urinals, showerheads, hot water recirculation systems, and swamp cooler thermostats will only be available through September 30, 2018.
- WaterSmart Gardening workshops will continue, emphasizing a broad range of topics to provide customers with the most up-to-date information on growing food and irrigating landscapes efficiently, but rebates will no longer be offered for these classes.

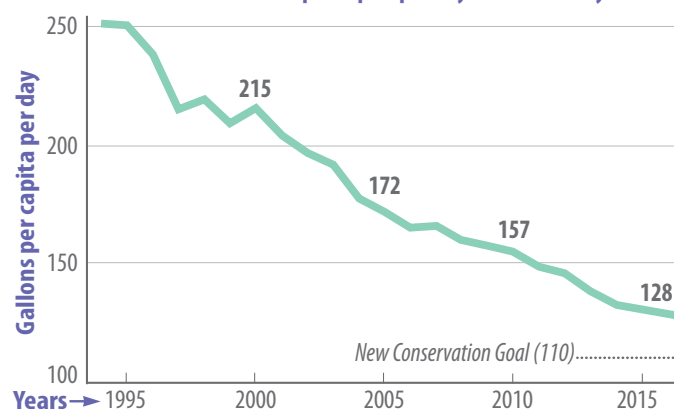


New rebates and exciting Rebate Program updates will be taking place in 2018 and beyond.

Visit our website at www.abcwua.org/Water_Saving_Rebates.aspx for details on changes to the Rebate Program to look for in the coming years.

Water Use in Albuquerque

Gallons of water used per capita per day in the last 24 years



Gallons per capita per day (GPCD) is calculated by dividing the entire annual production of the Water Authority by the total population served and then dividing that number by 365. The amount of water used by individuals for home use is about half of the GPCD.

Information Websites

Albuquerque Bernalillo County Water Utility Authority www.abcwua.org
 City of Albuquerque www.cabq.gov
 Bernalillo County www.berncounty.gov
 Bernalillo County Water Conservation www.berncounty.gov/water
 NM Environment Department
 Drinking Water Bureau www.env.nm.gov/dwb
 American Water Works Association www.awwa.org
 USEPA www.epa.gov/safewater

How to Contact Us

Emergency repair hotline 842-WATR(9287)
 General and billing information 842-WATR(9287)
 Water quality information 289-3653
 Report water waste 842-WATR(9287)
 Report unusual activity at water facilities 842-WATR(9287)
 Pollution prevention/industrial pretreatment 289-3419
 Water protection policy & action plan 289-3025
 Cross-connections 289-3417
 Water quality email waterquality@abcwua.org
 Check us out on Facebook





VISIT OUR WEBSITE AT WWW.ABCWUA.ORG,
AND USE THE NEW INTERACTIVE DISTRIBUTION ZONE MAP
TO SEARCH FOR YOUR ADDRESS AND BROWSE WATER QUALITY DATA.

HAVE QUESTIONS ABOUT WATER QUALITY IN YOUR DISTRIBUTION ZONE?
CALL THE WATER QUALITY INFORMATION LINE AT 289-3653.

