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Meeting Date: April 22, 2020  
Staff Contact: Elizabeth Anderson, P.E., Chief Planning Officer

**TITLE: R-20-8 – Establishing One-Year Objectives for the Albuquerque Bernalillo County Water Utility Authority in Fiscal Year 2021 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 FY20 either because they require more time to complete or are ongoing issues.

### **FISCAL IMPACT:**

Objectives are linked to the budget.



1 aggregated system water quality data. Maintain individual and combined filter effluent  
2 turbidity less than 0.1 NTU more than 95% of time in operation. Continue work on items  
3 identified from the Phase 3 Self-Assessment that are not yet considered optimized and  
4 submit a progress report to AWWA by the end of the 4th Quarter of FY21. Complete  
5 and submit the application for the Phase IV Presidents Award in the Partnership for  
6 Safe Water-Treatment by end of the 4th Quarter of FY21.

7           Objective 4.       To improve energy efficiency and reduce operation and  
8 maintenance costs, continue deployment of automated meter infrastructure pressure  
9 monitoring infrastructure in reduced pressure zones by the end of the 4th Quarter of  
10 FY21; Through hydraulic modeling assess opportunities for operational efficiency by  
11 eliminating redundant pressure reducing stations in pressure zone 4ER by the end of  
12 the 4th Quarter of FY21.

13           Objective 5.       To improve reliability and reduce interrupted water service,  
14 exercise 4,000 isolation valves by the end of the 4th Quarter of FY21.

15           Objective 6.       To improve the validated water audit inputs for apparent  
16 water loss, test a minimum of 300 small meters to support the water audit and strategic  
17 water loss plan by the end of the 4th Quarter of FY21.

18           Objective 7.       As part of the water distribution system preventative  
19 maintenance program, pilot a flushing program that uses a systematic approach to flush  
20 water lines, filtering the water before returning it to distribution by the end of the 4th  
21 Quarter of FY21. Monitor and report the occurrence of complaints before and after  
22 flushing to evaluate whether the flushing program improved water quality in the pilot  
23 area. Utilize the new unidirectional flushing (UDF) module of the InfoWater hydraulic  
24 model to assist the pilot program by the end of the 4th Quarter of FY21.

25           Objective 8.       Work with the Non-Revenue Water Loss Committee on the  
26 implementation of water loss control strategies by identifying areas of improvement  
27 recommended in the water loss report and reporting activities through the end of the 4th  
28 Quarter of FY21.

29           Objective 9.       Locate water leaks by surveying 650 miles of small diameter  
30 water lines through conventional leak detection methods and 2,200 miles of small  
31 diameter water lines through acoustic leak detection by the end of the 4th Quarter of  
32 FY21; Track, evaluate, and report on pilot-scale Echologics acoustic leak detection  
33 system on a quarterly basis in FY21. Evaluate current locations for both Echologics and

1 Zonescan leak detection system redeployment, perform fleet-wide Zonescan battery  
2 replacement, and mobilize these devices to the decided location by the end of the 4th  
3 Quarter of FY21.

4 Objective 10. Maintain water use at or below 125 gallons per capita per  
5 day through the end of the 4th Quarter of FY21.

6 Objective 11. Develop criteria and evaluate all the possible sites  
7 considered for aquifer storage and recovery (ASR) projects by the beginning of the 1st  
8 Quarter of FY21.

9 Objective 12. Track and report conservation education outreach to service  
10 area customers and meet the following targets: 1) 100 Irrigation Audits; 2) 45 Meetings  
11 with Landscapers; 3) 30 Meetings with Property Managers; and 4) two Water  
12 Conservation Open House Meetings by the end of the 4th Quarter of FY21.

13 Objective 13. To better educate children on the importance of water and  
14 resource planning, continue to collaborate with ¡Explora! to design interactive water  
15 exhibits for the new STEM center which is planned to open in FY21.

16 Objective 14. Implement Water 2120 through the end of the 4th Quarter of  
17 FY21.

Plan	Status	Completion Date
Conservation Plan	Finalized/Being Implemented	March 2018
Rivers and Aquifers Protection Plan	Finalized/Being Implemented	September 2019
Groundwater Management Plan	Draft	4 <sup>th</sup> Quarter FY21
Environmental Plan	Draft	4 <sup>th</sup> Quarter FY21
Reuse Plan	Draft	2 <sup>nd</sup> Quarter FY21

18 Analyze proposed water conservation rebate compliance with rebate ordinance by the  
19 end of the 1st Quarter of FY21.

20 Objective 15. Implement the Rivers and Aquifers Protection Plan (RAPP),  
21 the Water Authority's source water protection plan through: 1) Updating of the potential  
22 sources of contamination (PSOC) inventory with capture zones by the end of the 2nd  
23 Quarter of FY21; 2) Tracking and review of site data and documents for priority  
24 groundwater contamination sites through the end of the 4th Quarter of FY21; 3)  
25 Collaboration and coordination with other agencies, including support of the Water

1 Protection Advisory Board (WPAB) and the Office of Natural Resources Trustee through  
2 the end of the 4th Quarter of FY21; and 4) Contracting with the NM Bureau of Geology  
3 and Mineral Resources to provide an update to the Middle Rio Grande Basin Water  
4 Quality Study by the end of the 4th Quarter of FY21.

5 Objective 16. Provide leadership and support of the Middle Rio Grande  
6 Endangered Species Collaborative Program (ESA Collaborative Program) through: 1)  
7 Assisting in the development and implementation of a long-term plan and 2)  
8 Participating in the development of adaptive management practices for the program.

9 Objective 17. Complete acquisition of easements for additional storage in  
10 Abiquiu Reservoir by the end of the 4th Quarter of FY21. Continue towards permitting  
11 and environmental approvals for storage of native water in Abiquiu Reservoir through  
12 the 4th Quarter of FY21.

13 Objective 18. Initiate analysis and evaluation for storage of San Juan-  
14 Chama or native water at various locations in the Middle Rio Grande and report by the  
15 end of the 4th Quarter of FY21.

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

21 Objective 1. Limit overall permit excursions to no more than 5 operating  
22 discharge permit violations through the end of the 4th Quarter of FY21.

23 Objective 2. Beneficially reuse biosolids by diverting at least 30% of the  
24 biosolids to compost through the end of the 4th Quarter of FY21.

25 Objective 3. Complete Waste Water Plant Preventive Maintenance to  
26 Corrective Maintenance ratio to at least 45% of all completed maintenance labor hours  
27 by the end of the 4th Quarter of FY21.

28 Objective 4. Continue work on the Partnership for Clean Water program  
29 for the water reclamation treatment to optimize system operations and performance;  
30 Continue work on outstanding items identified from the Phase 3 Self-Assessment that  
31 are not yet considered optimized and submit a progress report to AWWA by the end of  
32 the 4th Quarter of FY21.

1 Objective 5. Televis and assess the condition of approximately 5% of  
2 the small diameter sanitary sewer system by the end of the 4th Quarter of FY21.  
3 Confirm that CCTV (“video”) data is uploaded to Maximo and the ITpipes Repository.  
4 Provide report summarizing the video data and update the Asset Management Plan to  
5 reflect the new data by the end of the 4th Quarter of FY21.

6 Objective 6. Implement recommendations from the WATS odor and  
7 corrosion control model identify potential locations for new chemical stations on the  
8 Tijeras and Westside Interceptors by the end of the 4th Quarter of FY21.

9 Objective 7. Monitor compliance with the Water Authority’s Cross  
10 Connection Prevention and Control Ordinance. Prepare update on the implementation  
11 of new software program (XC2) by the end of 1st Quarter of FY21. Obtain a compliance  
12 rate goal of 75% through the end of the 4th Quarter of FY21.

13 Objective 8. Monitor compliance with the Water Authority’s Sewer Use  
14 and Wastewater Control Ordinance by continuing to inspect, monitor, and take  
15 enforcement action for permitted industrial users, septage waste haulers, food service  
16 establishments, and dental offices. The compliance rate goal is 87% for each category  
17 through the end of the 4th Quarter of FY21.

18 Objective 9. Implement the Fats, Oils, and Grease (FOG) Policy to  
19 reduce impacts on the sewer system by inspecting each Food Service Establishment  
20 (FSE) once every three years, working with the Collections section with Sanitary Sewer  
21 Overflow (SSOs) investigations, to coordinate efforts to reduce FOG discharges. Track  
22 and report the number of SSOs due to FOG compared with previous years through the  
23 end of the 4th Quarter of FY21.

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

28 Objective 1. Improve customer satisfaction and operational efficiency in  
29 achieving the four call-center targets through the 4th Quarter of FY21: 1) Average Wait  
30 Time of less than 1:00 minute; 2) Average Contact Time of less than 4:00 minutes; 3)  
31 Abandoned Call Ratio of less than 3; 4) First Call Resolution of greater than 95%.  
32 Develop a metric for call quality by the end of the 1st Quarter of FY21. Track and report  
33 data through the end of the 4th Quarter of FY21.

1 Objective 2. Improve customer satisfaction by achieving a billing  
2 accuracy ratio of less than 8 errors per 10,000 bills through the 4th Quarter of FY21.

3 Objective 3. Continue implementation of the Automated Meter  
4 Infrastructure (AMI) project by replacing 30,000 aging water meters with smart meters to  
5 increase revenue, support conservation efforts, and provide better customer service by  
6 the end of the 4th Quarter of FY21.

7 Objective 4. Develop a Strategic Plan for Internal Communications by the  
8 end of the 2nd Quarter of FY21. Finalize and begin implementation of the plan during  
9 the 3rd Quarter of FY21 and report activities quarterly.

10 Objective 5. Complete Customer Conversation meetings to engage  
11 customers and obtain input from customers on the Water Authority's activities through  
12 the end of the 4th Quarter of FY21.

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

16 Objective 1. Expend \$61 million in water and wastewater capital  
17 rehabilitation and replacement programs to replace aging, high risk assets that are past  
18 their useful life by the end of the 4th Quarter of FY21. \$1 million shall be dedicated and  
19 used for identifying and replacing steel water pipes in critical or poor condition by the  
20 end of the 4th Quarter of FY21.

21 Objective 2. Prepare a report on the status of the implementation of the  
22 Reclamation Rehabilitation Asset Management Plan including activities completed and  
23 remaining work by the end of the 1st Quarter of FY21. Continue implementation of the  
24 Reclamation Rehabilitation Asset Management Plan by planning, designing and  
25 constructing reclamation facility improvements through the end of the 4th Quarter of  
26 FY21.

27 Objective 3. Prepare interceptor rehabilitation program utilizing the latest  
28 CCTV ("video") data and submit by the end of the 1st Quarter of FY21. Implement at  
29 least one planned Interceptor Rehabilitation project in FY21, and complete at least three  
30 interceptor design packages by the 4th Quarter of FY21; Implement at least one  
31 planned Small Diameter Sanitary Sewer Rehabilitation project in FY21.

1 Objective 4. Complete the remaining facility-specific asset management  
2 plans and complete an update to the 2011 Comprehensive/Utility Wide Asset  
3 Management Plan by the end of the 4th Quarter of FY21.

4 Objective 5. Review alignment of the Utility Development Guide with  
5 applicable rules and ordinances and propose modifications needed by the end of the  
6 2nd Quarter of FY21. Complete a draft of the Utility Development Guide by the end of  
7 the 4th Quarter of FY21.

8 Objective 6. Develop Operating Plans for Centralized Engineering, Field,  
9 Water Resources, and Asset Management, to be used to inform/train new staff and for  
10 existing staff to use as resource by the end of the 4th Quarter of FY21.

11 Objective 7. Develop an Asset Management Strategic Plan by the end of  
12 the 2nd Quarter of FY21. Establish a baseline of percent complete on the Strategic  
13 Asset Management Program (SAMP) Asset Registry and establish target(s) for  
14 improved accuracy of data by the end of the 2nd Quarter of FY21. Monitor SAMP Asset  
15 Registry accuracy and report status towards achieving target(s) by the end of the 4th  
16 Quarter of FY21.

17 Objective 8. To promote a continued Culture of Security in accordance  
18 with the AWWA G430 standard within the Water Authority, develop policies and  
19 procedures that include strategies for internal communication and trainings on security-  
20 related topics. Track and measure metrics that are directly related to National  
21 Infrastructure Protection Plan (NIPP) Water Sector-Specific Plan (SSP) and America's  
22 Infrastructure ACT (AWIA). Conduct at least 2 table-top exercises for security that  
23 include representatives from across the organization. Based on the countermeasures  
24 identified in Phase 1 of the Water Authority's Final Security Plan implement at least 5 of  
25 the countermeasures by the end of the 4th Quarter of FY21.

26 Objective 9. Complete the annual update and review of the  
27 Comprehensive Information Technology Security Plan and related policies that are  
28 aligned with the standards, guidelines, and best practices of the National Institute of  
29 Standards and Technology (NIST) Cybersecurity Framework by the end of the 4th  
30 Quarter of FY21. Track and measure metrics that are directly related to NIST standards.  
31 Incorporate specific standards and policies that directly relate to the utilities Supervisory  
32 Controls and Data Acquisition (SCADA) systems.

1 Objective 10. Complete human machine interface (HMI) selection and a  
2 system integrator for the utility's Supervisory Control and Data Acquisition (SCADA)  
3 system by the end of the 2nd Quarter of FY21; Implement both short-term and long-  
4 term goals directly tied to the sequencing of migrating to a single SCADA platform for  
5 surface water, ground water, reclamation and collections systems by the end of the 4th  
6 Quarter of FY21.

7 Objective 11. Complete the Maximo upgrade by the end of the 4th Quarter  
8 of FY21; Migrate all mobile functions to EZMAXMOBILE ("mobile app for work order  
9 tracking"), including the Water Authority's AMR/AMI ("automated meter reading  
10 infrastructure") program, Line Spotting (NM One Call), New Services and Water Lines  
11 mobile functions. Enhance SCADA integration to leverage Predictive  
12 Failure/Maintenance through the end of the 4th Quarter of FY21.

13 Objective 12. Migrate all mobile and cellular devices from Verizon to AT&T  
14 to leverage FirstNet, AT&T's public safety priority band for enhanced communication.  
15 Utilize AT&T's Push-To-Talk (PTT) functionality to replace connection to the City of  
16 Albuquerque's citizens band (CB) radio system by the end of the 1st Quarter of FY21.

17 Objective 13. Complete a gap analysis to identify current and future GIS  
18 needs by the end of the 2nd Quarter of FY21. Follow up on action items and report  
19 status quarterly through the end of the 4th Quarter of FY21.

20 Objective 14. Redesign the Water Authority web site, including the  
21 customer portal, resulting in a user-friendly, intuitive user experience that provides  
22 customers with the ability to complete tasks such as managing their account, monitoring  
23 water usage data, and start/stop services. All tasks will be completed and operational by  
24 the end of the 3rd Quarter of FY21.

25 Objective 15. Identify opportunities to apply machine learning to assess  
26 current operations by the end of the 2nd Quarter of FY21. Opportunities might include  
27 strategies that use predictive analytics on near real-time data for early warning of  
28 potential issues and opportunities to integrate capabilities of the Water Authority's  
29 existing modeling tools. Select at least one area to begin development of machine  
30 learning applications and start work by the end of the 4th Quarter of FY21. Expand  
31 usage of Splunk data analytics tool to implement functions for cyber-security, water  
32 quality, and/or asset management by the end of the 4th Quarter of FY21.

1           Objective 16.    Maintain the Compliance Division Regulatory Compliance  
2 Permit Matrix and the Regulatory Matrix Status Report to respectively maintain  
3 schedules for permit submittals and monitor and report emerging Safe Drinking Water  
4 Act (SDWA) and Clean Water Act (CWA) regulations, New Mexico Water Quality  
5 Control Commission and Environmental Improvement Board regulations, local laws  
6 ordinances, and issues involving emerging contaminants to identify and assess  
7 potential impacts on the Water Authority. Provide quarterly reports through the end of  
8 the 4th Quarter of FY21.

9           Objective 17.    Collect, monitor, and report weekly, monthly and quarterly  
10 key laboratory performance metrics to include: Water Quality Laboratory results  
11 approved and reported for each laboratory section (chemistry, microbiology, metals, and  
12 external labs), laboratory productivity (results reported per productive hour, results sent  
13 to subcontract laboratories in lieu of in-house testing), and the percentage of results  
14 reported late (turnaround time). Maintain less than 10 percent results reported late per  
15 quarter and provide quarterly results through end of the 4th Quarter of FY21.

16          Objective 18.    Continue to develop LabVantage (“laboratory information  
17 management system”) throughout FY21 to increase the automation of data entry to  
18 reduce data entry errors and reduce the amount paper used at the laboratory. Begin  
19 tracking data entry errors and set target for reduction by the end of the 2nd Quarter of  
20 FY21. Develop at least one dashboard to help analysts and management manage  
21 samples and reagents by the end of the 4th Quarter of FY21. Expand the collection of  
22 electronic data to field analytics, balances, probes, and spectrophotometry instruments  
23 stored in the Database of Compliance by the end of the 4th Quarter of FY21.

24          Objective 19.    Utilize the Environmental Monitoring Program to monitor the  
25 reliability and consistency of results from Compliance field instrumentation and sample  
26 collection techniques. Conduct and report on internal audits of sampling procedures  
27 and report results as they pertain to regulatory requirements and standard operating  
28 procedures. Issue corrective action response requests as needed and track and report  
29 on their progress. Ensure Compliance Division field instruments are calibrated as  
30 necessary and that personnel demonstrate proficiency in sample collection and  
31 measurement. Monitor and report on CARR closure duration quarterly through the end  
32 of the 4th Quarter of FY21.

1 Objective 20. Maintain accreditation with the American Association for  
2 Laboratory Accreditation (A2LA) by addressing any changes resulting from the on-site  
3 assessment of the Water Quality Laboratory. Conduct internal audits, Standard  
4 Operating Procedure (SOP) revisions, and identify actions to address risks and  
5 opportunities as required by ISO/IEC 17025:2017. Implement any changes resulting  
6 from the 2019 Methods Update Rule. Track and report on corrective actions and risk  
7 assessment responses. Maintain a closure duration of less than 60 days per corrective  
8 action response report (CARR) and an average completion of less than 30 days for all  
9 CARRs per fiscal year through the end of the 4th Quarter of FY21.

10 Objective 21. Prepare for the Revised Lead and Copper Rule by  
11 developing a system for a lead service line inventory and to identify and track  
12 monitoring at all schools and child-care centers in the service area by the end of the 4th  
13 Quarter of FY21.

14 Objective 22. Evaluate water and sewer rate structures to ensure equity  
15 within the structures by the end of the 4th Quarter of FY21. Complete an affordability  
16 study that utilizes the methodology described in the 2019 report titled “Developing a  
17 New Framework for Household Affordability and Financial Capability Assessment in the  
18 Water Sector” prepared for AWWA, NACWA and WEF.

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

23 Objective 1. Emphasize Employee Recognition through initiatives such  
24 as employee incentive awards, on-the-spot awards, and years of service awards  
25 through the 4th Quarter of FY21.

26 Objective 2. Complete two employee wellness challenges per fiscal  
27 quarter focusing on nutrition, physical activity and weight loss, and disease and injury  
28 prevention to employees with a 60 percent or greater overall completion rate by the end  
29 of the 4th Quarter of FY21. Increase time spent stretching to 4,125 hours to improve  
30 productivity and wellness of employees by the end of the 4th Quarter of FY21.

31 Objective 3. Maintain an average utility-wide vacancy rate of no greater  
32 than 5% through the end of FY21. Maintain an average number of days to fill positions  
33 of 40 days or less and report quarterly through the end of the 4th Quarter of FY21.

1           Objective 4.     To promote a continued Culture of Safety in the Water  
2 Authority, provide a variety of job-related safety trainings, opportunities for recognition  
3 and safety communications to create awareness and promote good work practices.  
4 Create a system to track and report the total hours of safety training offered and percent  
5 attendance by working group by the end of the 1st Quarter of FY21. Track and report  
6 the hours of training offered and percent attendance by working group through the end  
7 of the 4th Quarter of FY21. Reduce injury hours to 2,600 hours or less to improve  
8 productivity and reliability of services provided by employees by the end of the 4th  
9 Quarter of FY21.

10           Objective 5.     Provide employees with job-related training and monitor  
11 hours of training completed. Maintain an average of at least 25 hours of training per  
12 employee through the end of the 4th Quarter of FY21.

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